

LONDON CITY AIRPORT

2013 SECTION 106 ANNUAL PERFORMANCE REPORT

APPENDIX 9 REPORT ON OPERATION OF NOISE MANAGEMENT SCHEME

08 July 2014

London City Airport
City Aviation House
Royal Docks
London E16 2PB
Tel: 020 7646 0000
LondonCityAirport.com

London City Airport 
Get closer.

Contents	Page No.
1.0 Introduction.....	4
2.0 Auxillary Power Unit Usage.....	5
3.0 Ground Running of Engines.....	6
4.0 Penalties and Incentives.....	7
5.0 Meetings with Council/Airport Consultative Committee.....	8
6.0 Numbers and Types of Aircraft Operating at LCY.....	9
7.0 NTK Status Reports.....	11
Appendix A: Auxiliary Power Unit Usage	
Appendix B: Ground Running of Engines	
Appendix C: Penalties and Incentives	
Appendix D: Meetings with Airport Consultative Committee	
Appendix E: Numbers of Aircraft Operating at LCY	
Appendix F: NTK Status Reports	

This report and all matters referred to herein remain confidential to the Client unless specifically authorised otherwise, when reproduction and/or publication is verbatim and without abridgement. This report may not be reproduced in whole or in part or relied upon in any way by any third party for any purpose whatsoever without the express written authorisation of Bickerdike Allen Partners. If any third party whatsoever comes into possession of this report and/or any underlying data or drawings then they rely on it entirely at their own risk and Bickerdike Allen Partners accepts no duty or responsibility in negligence or otherwise to any such third party.

Bickerdike Allen Partners hereby grant permission for the use of this report by the client body and its agents in the realisation of the subject development, including submission of the report to the design team, contractor and sub-contractors, relevant building control authority, relevant local planning authority and for publication on its website.

1.0 INTRODUCTION

In Part 7(1) of the Fourth Schedule of the Section 106 Agreement dated 9th July 2009, it states that the Airport and the London Borough of Newham (LBN) are:

“to continue to operate the Noise Management Scheme until the NOMMS has been fully implemented and ensure that the equipment for the combined noise monitoring and track keeping system is properly maintained at all times;”

In accordance with this requirement, the Noise Management Scheme remains in operation currently and this document reports the progress of the relevant requirements as set out in the Section 106 Agreement which require the airport to:-

- to ensure that fixed electrical ground power supplies are used at the airport for conditioning the aircraft prior to engine start-up and for the starting of aircraft engines and that auxiliary power units are not used at the Airport unless their use is demonstrated to the Council to be operationally necessary and unless the Council have given their prior approval in writing to such use;
- to continue to operate a ground engine running scheme in respect of routine daily aircraft operations (separate from ground running) as part of the Noise Management Scheme including the measures to be taken to persuade the operators of aircraft at the Airport to comply with such ground engine running scheme in order to mitigate as far as practicable the emissions from aircraft engines;
- to operate a system of incentives and/or penalties for airlines as part of the Noise Management Scheme at their own expense;
- to hold regular meetings and/or discussions with the Council, the Airport Consultative Committee and such other statutory bodies as may be reasonably nominated by the Council in order to review the operation of the Noise Management Scheme and submit reports of the operation of the Noise Management Scheme to not fewer than two meetings per year of the Airport Consultative Committee;
- to maintain good and sufficient records at all times of the numbers and types of aircraft that in any one day either take off or land at the airport and the following shall apply:
 - (a) the aggregate figures from such records relating to the immediately preceding quarter year shall be submitted to the Council within 30 days of the following dates: 1 January, 1 April, 1 July and 1 October;

- (b) a summary of the aggregate figures for the immediately preceding quarter year shall be published on the Airport Website or the website of the Airport Consultative Committee within 30 days of the following dates: 1 January, 1 April, 1 July and 1 October; and
- (c) all such records shall be available for inspection at all reasonable hours by persons authorised by the Council who have been notified to and approved by LCA in writing.

The airport is also required under the terms of the Temporary Noise Monitoring Strategy, which has been approved by LBN, to provide on a quarterly basis the daily operations status of each noise monitor and the monthly correlation rate of noise events to aircraft departures.

2.0 AUXILLARY POWER UNIT USAGE

A number of aircraft using the airport require from time to time the use of their onboard auxiliary power units (APUs). The needs for usage of these power units as opposed to portable ground power units or the airport's fixed electrical power are varied.

The obvious need is to condition the aircraft cabin when temperatures become uncomfortable as fixed electrical power cannot normally be used for that purpose. In this case, the airport policy is that the maximum running time for an APU should not exceed 10 minutes prior to departure. Permitted use of the APU is contained in operational and safety notice (OSIN) 04/12 in the airport's UK AIP.

The other need arises when there is an incompatibility between aircrafts' systems and the fixed electrical power supply. The need to maintain the same source of supply to avoid interference with aircrafts' onboard computer systems has been raised by users. There is also the rare occurrence where for technical reasons the airport's fixed electrical supply is not available.

The airport normally offers fixed electrical ground power (FEGP) at Stands 1-10. Following the recent apron re-alignment project, seven FEGP locations are no longer correctly positioned and therefore not in use. Work is currently underway to re-align the ground power pits and upgrade the electrical infrastructure to bring into service by December 2014. Work to install FEGP at Stands 21-24 is ongoing to find a functional and safe solution¹.

¹ LCY has a total of 17 stands numbered 1-10, 12-14 and 21-24. The recent re-alignment project saw the elimination of Stand 11.

London City Airport currently has nineteen mobile diesel ground power units (GPU) in operation which service stands 12-14 and 21-24 and other stands where necessary. Results from noise testing has shown that all units comply with the noise criteria set for mobile ground servicing equipment detailed within the IATA 910 – *Airport Handling Manual*².

Appendix A sets out details of the aircraft that require use of their auxiliary power units (APU) to supplement the fixed ground power that is provided by the airport when an aircraft is on a stand on the apron.

3.0 GROUND RUNNING OF ENGINES

3.1 General

The Airport will seek to ensure as far as reasonably practicable that every aircraft operator adopts the operating practice which generates the least amount of noise from aircraft taxiing, manoeuvring or holding on stand, at the runway, and prior to take off, subject to the requirement of ensuring the safe operation of the aircraft at all times. This should involve the minimum power settings necessary and, in the case of propeller aircraft, pitch settings should as far as possible be those which produce the least propeller noise.

An EFPS³ system is installed at London City Airport which provides the ability to monitor the time that aircraft operate engines on the ground, from engine start-up until the time of departure and following the time of landing until engine shut-down. The time of any engine ground running on the apron for maintenances is also monitored. Any excessive or unnecessary operation of aircraft engines will be investigated by the airport. Information will be required from both ATC⁴ and the airline responsible in order that a report can be generated.

² The standard is set that at a distance of 4.6 m, measured from the perimeter for the equipment, noise levels should be less than 85 dB.

³ EFPS – Electronic Flight Process Strips

⁴ ATC – Air Traffic Control

3.2 Ground Running

The ground running of engines is required for testing and maintenance purposes. The airport is required to ensure that the noise level arising from aircraft ground running does not exceed the Ground Running Noise Limit of 60 dB $L_{Aeq,12h}$ ⁵.

Under the 2009 planning permission, ground running is permitted only between the hours of 06.30 and 22.00 hours Monday to Friday, and between the hours of 06.30 and 12.30 on Saturdays, 12.30 and 22.00 hours on Sundays and between 09.00 hours and 22.00 hours on Bank Holidays and Public Holidays (excepting Christmas Day) in locations and orientations agreed with the local planning authority, and employing such noise protection measures as may be agreed with the local planning authority.

Written details of the ground running over the preceding calendar year (1 January to 31 December) are submitted to the Council on an annual basis (in this Annual Performance Report), and include details of the number, duration and power settings of ground runs and the aircraft involved as well as measurements and calculations to demonstrate compliance with the Ground Running Noise Limit⁶.

Appendix B of this report sets out the official record of ground running of engines for test and maintenance for the year 2013 (Table 1), the summary of high power running for the same period (Table 2), and the prediction of ground running noise for comparison with the Ground Running Noise Limit (Table 3). In 2013 LCY's ground running noise level was 58.9 dB $L_{Aeq,12h}$ which is 1.1 dB below the Ground Running Noise Limit of 60 dB $L_{Aeq,12h}$.

4.0 PENALTIES AND INCENTIVES

The airport operates a system of incentives and/or penalties to control noise from departing aircraft at the airport. The system the airport operates uses measured noise data from the airport's Noise and Track Keeping (NTK) system to identify "noisy" and "quiet" aircraft departures to which penalty and credit points are assigned respectively where appropriate. The incidence of 'noisy' or 'quiet' events are then reported to the relevant airline accordingly.

The system works as follows:

⁵ Section 106 Agreement dated 9 July 2009 Fifth Schedule/Part 1/1

⁶ Section 106 Agreement dated 9 July 2009 Fifth Schedule/Part 2/2

The Mean Individual Departure Noise Level (MIDNL)⁷ for each event is compared with the Mean Standard Annual Departure Noise Level (MSADNL)⁸ for the relevant aircraft type established in the previous year of operations to determine a “noisy” departure and a “quiet” departure. Where an individual departure by an aircraft produces an MIDNL at least 4 dB greater than the MSADNL for the aircraft type, a noisy departure classification is given. Where an individual departure by an aircraft type produces an MIDNL at least 5 dB less than the MSADNL for the aircraft type, a quiet departure classification is given. The limits stated above are based on studies carried out by Bickerdike Allen Partners (BAP) and implemented following consultation with the Council.

On a quarterly basis, the airport is required to report to the local authority the number of penalty and credit points established with respect to each airline’s operations. Appendix C of this report sets out the number of penalties and credits identified per month during the year of 2013.

5.0 MEETINGS WITH COUNCIL/AIRPORT CONSULTATIVE COMMITTEE

The airport holds regular quarterly meetings with the London City Airport Consultative Committee (LCACC). The body of the committee is made up of representatives from the Council, public bodies, the airport and airport users, representatives for residents of local and neighbouring communities and non-voting attendees (present to provide advice to members as required, i.e. Metropolitan Police, Department for Transport).

The meetings are open to the press and public, and the committee’s agendas and minutes are widely circulated and available on the committee’s website (www.lcacc.org). The meetings include reports on developments at the airport including changes in routes, flight and passenger numbers. There is a standing item on environmental issues including complaints, enquiries, noise monitoring and management and other requirements of the planning permission and Section 106 Agreement.

⁷ MIDNL – The average of the corrected measured noise levels obtained at a pair of microphones at the end of the runway over which a particular aircraft departs. Corrections are applied to account for the fact that three out of four microphones cannot be located at the required position of 300m sideline and 2000m from start of roll, and for local reflection effects.

⁸ MSADNL –The arithmetic average of all the MIDNL’s for a given aircraft type obtained at both gateway pairs of monitors during the 12 months of the annual categorisation year excluding those departures for which a noisy or quiet classification was given during that year.

Appendix D of this report provides the sections of the meeting minutes from 2013 relevant to the noise management scheme, namely a summary of the operation of the NTK system over each quarterly period and any developments or changes to the scheme.

6.0 NUMBERS AND TYPES OF AIRCRAFT OPERATING AT LCY

The number and types of aircraft which operate at LCY are restricted under the current planning conditions and Section 106 Agreement with the Council.

All aircraft operating at LCY are required to be categorised by their departure noise levels into one of five noise categories. Only aircraft which have been approved by the Council and have been categorised in this manner, provisionally or otherwise, are permitted to land or depart the airport (excepting emergencies).

The 2009 planning permission allows up to 120,000 total aircraft movements per annum, including both scheduled and general aviation aircraft. The planning permission also contains specific limits on daily and weekly movements, as well as limits on the numbers of noise factored movements.

Details of annual aircraft movements and noise factored movements by aircraft type are presented in the airport's annual categorisation report along with details of noise measurements over the preceding year. These can be found in BAP report ref: A1125.57-R01.14-PH.VVdH Annual Categorisation Report 2013 (also included in the 2013 Annual Performance Report).

Under the Section 106 Agreement, the airport is also required to record the numbers and types of aircraft daily that use the airport and submit aggregate figures to the Council on a quarterly basis. The daily records for the number of aircraft movements and noise factored movements in 2013 are presented in Appendix E, where they are compared with the relevant daily, weekly and annual limits.

Appendix E also presents the number of aircraft movements that took place each day during the restricted early morning periods of 06:30 to 06:44 hours and 06:30 to 06:59 hours, during the last operating period (late evening) of weekdays and Sundays from 22:00 to 22:30 hours and on Saturdays from 12:30 to 13:00 hours.

The data shows that throughout 2013, LCA has operated within its planning consent with regard to the number of daily and annual aircraft movements, including those during late evening periods, as well as weekly and annual noise factored movements.

There was one occasion during the year (Friday 11th October) on which there was one additional flight during the early morning period. Although there were only a total of 6 flights

during the overall early morning period (06:30 to 06:59) that day, there was one arrival and two departures during the period of 06:30 to 06:44 (i.e. a total of 3 flights).

A full breakdown of the flights during this time period is detailed in the table below. This information has been directly taken from ATC (NATS) in order to get the precise timings associated to the flights concerned.

Arrival (A) or Departure (D)	Call Sign	Type	Registration	Destination	Runway	ATA/ATD (local)
A	CFE3270	SB20	GCDEB	EGLC	09	06:38:03
D	SWR43Y	RJ1H	HBIXV	LSZH	09	06:41:33
D	CFE78P	E190	GLCYP	LEIB	09	06:44:27
A	BCY30H	F50	OOVLN	EGLC	09	06:55:18
D	SWR441	RJ1H	HBIYV	LSGG	09	06:57:43
A	DLH926	E190	DAECF	EGLC	09	06:58:47
A	BCY70A	F50	OOVLZ	EGLC	09	07:02:12
D	CFE89H	E190	GLCYR	LEPA	09	07:04:10

Table 6.1: Filghts During Exceedance Period

The airport is committed to ensuring that the early morning restrictions are adhered to at all times, unless unavoidable operational circumstances arise on a particular day. The circumstances which caused this occurrence were because of two main contributing factors. The first was the 06:38:03 arrival which arrived earlier than anticipated. However the more defining cause was the departure at 06:44:27.

After investigating this with NATS unfortunately it appears that this was the result of a controller error, however there are still many variables in play. It is difficult to estimate how long a pilot will take to depart once given their take off clearance; the aircraft in question was scheduled to depart at 06:40, so to avoid overly delaying the departing aircraft the controller used their judgment in giving the clearance to take off. There are times when the pilot will take a little longer to run up their engines and roll down the runway and also there are particular days when the aircraft will take longer to get airborne. In this instance, both were quicker than expected so the departure time was 33 seconds early.

NATS have reminded all controllers of the restricted movements before 07:00 local time and the implications if these restrictions are not followed. In addition, NATS will continue to liaise directly and frequently with London City Airport Airfield Operations during this time period to further reduce the chances of such an event reoccurring.

7.0 NTK STATUS REPORTS

Under paragraph A6.0 of the approved Temporary Noise Monitoring Strategy, London City Airport is required to provide quarterly reports of the NTK system to the local authority. Each report is required to record the daily operational status of each Noise Monitoring Terminal (NMT) together with the total monthly correlation rate of noise events to aircraft departures over a specified quarter year period.

Table 1 of Appendix F of this report details the daily operational status of each monitor between 1st January 2013 and the 31st December 2013. Table 2 sets out the monthly correlation rate of noise events to aircraft departures for the same twelve month period, and Table 3 gives a summary of the NTK operational status for each quarter.

In September 2013, London City Airport upgraded its noise and flight track keeping system which included the replacement of the four existing NMTs with four new NMTs. This resulted in 2 days without operational NMTs. Other than this, the noise monitoring system remained in continuous operation throughout the twelve month period between the 1st January 2013 and the 31st December 2013. There were issues with NMT 2 that caused it to be non-operational for periods in August and September. A temporary noise monitor was deployed during the longer of these periods to minimise the loss of data. Despite these issues, the target correlation rate was met in each month. A total of 33,674 aircraft departures were recorded, and an average correlation rate of noise events to aircraft departures of 91% was achieved over this period.

Nick Williams
for Bickerdike Allen Partners

Peter Henson
Partner

APPENDIX A

Auxiliary Power Unit Usage

LONDON CITY AIRPORT: A.P.U. USAGE REQUEST LIST

SCHEDULED AIRCRAFT

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
BAe 146	✓
RJ Series	✓
Airbus A318	✓
Embraer 135	✓
Embraer 170	✓
Embraer 190	✓
ATR 42	✓
ATR 72	✓
DHC 8-100	✓
DHC 8-300	✓
DHC 8-400	✓
Fokker 50	
Dornier 328	✓ (some)
Dornier 328 Jet	✓ (some)
Saab 2000	✓

GENERAL AVIATION AIRCRAFT

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
BE20 Beechcraft 200	
BE9L Beechcraft 900	
BE58 PA Beechcraft Baron	
C90/C90A (Beechcraft)	
B300 Beechcraft	
Hawker 800 XP	✓
Beech 400 A	
C551 (Citation II)	
C560 (Citation V)	

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
C525 CJ1 (Citation Jet 1)	
C525 CJ2 (Citation Jet 2)	
C525 CJ3 (Citation Jet 3)	
C550 (Citation Bravo)	
C56X (Citation Excel)	✓
C560 (Citation Sovereign)	✓
FA900B	✓
FA10 (Falcon 10)	
FA50 (Falcon 50)	✓
F2TH (Falcon 2000EX)	✓
F900EX (Falcon 900EX)	✓
Falcon 7X	✓
Gulfstream 150 (G150)	✓
Bombardier Challenger 604/5	✓
Learjet 40/45	✓
PA34 (Seneca)	
PA31 (Navajo)	
P68C (Partenavia 68)	
P180 (Piaggio Avanti)	
Global 5000/6000	✓

APPENDIX B

Ground Running of Engines

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
JANUARY	03/01/2013	STAND 13	NORTH WEST	GROUND IDLE	D328	GBYHG	16:28	16:36	00:08
JANUARY	07/01/2013	STAND 13	NORTH	GROUND IDLE	D328	GBYMK	08:51	08:55	00:04
JANUARY	07/01/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJE	13:22	13:30	00:08
JANUARY	12/01/2013	STAND 5	NORTH	GROUND IDLE	RJ85	EIRJD	08:47	08:53	00:06
JANUARY	12/01/2013	STAND 24	WEST	HIGH	RJ85	EIRJD	10:51	11:30	00:39
JANUARY	15/01/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJF	11:49	11:54	00:05
JANUARY	17/01/2013	JET CENTRE	EAST	GROUND IDLE	H25B	CSDRP	11:21	11:35	00:14
JANUARY	17/01/2013	JET CENTRE	EAST	GROUND IDLE	H25B	CSDRP	17:11	17:16	00:05
JANUARY	22/01/2013	STAND 6	NORTH WEST	GROUND IDLE	RJ1H	HBIYQ	20:55	20:59	00:04
JANUARY	25/01/2013	STAND 24	WEST	HIGH	E170	GLCYI	11:13	11:24	00:11
JANUARY	25/01/2013	STAND 24	WEST	HIGH	E170	GLCYI	11:54	12:04	00:10
JANUARY	25/01/2013	STAND 24	WEST	HIGH	E170	GLCYI	12:32	12:42	00:10
JANUARY	28/01/2013	STAND 24	WEST	HIGH	E170	GLCYI	11:12	11:36	00:24
JANUARY	28/01/2013	STAND 24	WEST	HIGH	E170	GLCYI	14:02	14:16	00:14
JANUARY	29/01/2013	STAND 13	NORHT	GROUND IDLE	DH8D	LXLGH	20:46	20:58	00:12
FEBRUARY	01/02/2013	STAND 5	NORTH WEST	GROUND IDLE	RJ85	EIRJG	15:37	15:42	00:05
FEBRUARY	09/02/2013	STAND 1	NORTH WEST	GROUND IDLE	RJ85	EIRJG	11:25	11:32	00:07
FEBRUARY	09/02/2013	STAND 21	NORTH WEST	GROUND IDLE	RJ85	EIRJB	11:46	11:52	00:06
FEBRUARY	10/02/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYI	12:44	12:49	00:05
FEBRUARY	13/02/2013	STAND 2	NORTH WEST	GROUND IDLE	D328	GBYHG	11:40	11:43	00:03
FEBRUARY	14/02/2013	STAND 24	NORTH WEST	GROUND IDLE	D328	GBYMK	12:36	12:41	00:05
FEBRUARY	17/02/2013	STAND 9	NORTH WEST	GROUND IDLE	E190	GLCYL	12:36	12:41	00:05
FEBRUARY	22/02/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJF	13:29	13:34	00:05
FEBRUARY	24/02/2013	STAND 24	NORTH WEST	GROUND IDLE	A318	GEUNB	12:41	12:47	00:06
FEBRUARY	25/02/2013	STAND 24	WEST	HIGH	C56X	CSDXZ	14:09	14:24	00:15
FEBRUARY	27/02/2013	JET CENTRE	EAST	GROUND IDLE	H25B	CSDRF	09:47	09:51	00:04

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
FEBRUARY	27/02/2013	JET CENTRE	EAST	GROUND IDLE	C56X	CSDXZ	10:54	10:56	00:02
FEBRUARY	27/02/2013	JET CENTRE	EAST	GROUND IDLE	H25B	CSDRF	11:13	11:18	00:05
FEBRUARY	27/02/2013	STAND 24	WEST	HIGH	C56X	CSDXZ	11:24	11:50	00:26
FEBRUARY	28/02/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJS	11:02	11:08	00:06
FEBRUARY	28/02/2013	JET CENTRE	SOUTH EAST	GROUND IDLE	H25B	CSDRF	12:40	12:45	00:05
MARCH	01/03/2013	STAND 24	WEST	HIGH	D328	HBAEO	19:43	19:49	00:06
MARCH	02/03/2013	STAND 3	NORTH WEST	GROUND IDLE	RJ85	EIRJE	11:02	11:06	00:04
MARCH	02/03/2013	STAND 14	NORTH	GROUND IDLE	D328	GBYMK	11:37	11:43	00:06
MARCH	02/03/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJN	11:26	11:32	00:06
MARCH	08/03/2013	STAND 14	NORTH WEST	GROUND IDLE	RJ1H	HBIXV	08:19	08:27	00:08
MARCH	10/03/2013	STAND 6	NORTH WEST	GROUND IDLE	E170	GLCYE	13:03	13:08	00:05
MARCH	10/03/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYH	13:29	13:38	00:09
MARCH	12/03/2013	STAND 4	NORTH WEST	GROUND IDLE	E170	GLCYF	07:16	07:19	00:03
MARCH	12/03/2013	STAND 23	NORTH WEST	GROUND IDLE	RJ85	EIRJJ	12:06	12:11	00:05
MARCH	12/03/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJU	16:13	16:18	00:05
MARCH	13/03/2013	STAND 21	NORTH WEST	GROUND IDLE	E170	GLCYE	11:26	11:30	00:04
MARCH	16/03/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJF	09:58	10:00	00:02
MARCH	17/03/2013	STAND 14	NORTH WEST	GROUND IDLE	RJ1H	HBIYR	15:53	16:08	00:15
MARCH	17/03/2013	STAND 24	WEST	HIGH	RJ1H	HBIYR	16:44	17:10	00:26
MARCH	18/03/2013	STAND 9	NORTH WEST	GROUND IDLE	E170	GLCYF	10:03	10:07	00:04
MARCH	18/03/2013	STAND 8	NORTH WEST	GROUND IDLE	E190	GLCYP	13:46	13:52	00:06
MARCH	18/03/2013	STAND 9	NORTH WEST	GROUND IDLE	E170	GLCYF	14:31	14:36	00:05
MARCH	20/03/2013	STAND 5	NORTH WEST	GROUND IDLE	RJ85	EIRJH	10:19	10:23	00:04
MARCH	24/03/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYF	13:13	13:19	00:06
MARCH	25/03/2013	STAND 6	NORTH WEST	GROUND IDLE	RJ85	EIRJI	15:37	15:48	00:11
MARCH	26/03/2013	STAND 8	NORTH WEST	GROUND IDLE	RJ1H	HBIYV	17:10	17:14	00:04

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
MARCH	28/03/2013	STAND 23	NORTH WEST	GROUND IDLE	D328	GCCGS	06:30	06:38	00:08
MARCH	31/03/2013	STAND 24	WEST	HIGH	E170	GLCYH	12:59	13:14	00:15
MARCH	31/03/2013	STAND 24	WEST	HIGH	E170	GLCYH	13:26	13:44	00:18
APRIL	02/04/2013	STAND 10	NORTH WEST	GROUND IDLE	D328	GBWIR	11:24	11:30	00:06
APRIL	05/04/2013	STAND 22	NORTH WEST	GROUND IDLE	D328	GBWIR	12:17	12:19	00:02
APRIL	05/04/2013	STAND 12	NORTH WEST	GROUND IDLE	RJ85	EIWXA	12:39	12:50	00:11
APRIL	06/04/2013	STAND 24	NORTH WEST	GROUND IDLE	A318	GEUNB	10:15	10:25	00:10
APRIL	07/04/2013	STAND 24	WEST	HIGH	E190	GLCYP	13:05	13:27	00:22
APRIL	07/04/2013	STAND 24	WEST	HIGH	RJ85	EIRJE	14:14	14:54	00:40
APRIL	07/04/2013	STAND 24	WEST	HIGH	RJ85	EIRJE	15:43	15:58	00:15
APRIL	07/04/2013	STAND 24	WEST	HIGH	RJ85	EIRJE	20:24	20:44	00:20
APRIL	09/04/2013	STAND 23	NORTH WEST	GROUND IDLE	RJ85	EIRJH	12:21	12:27	00:06
APRIL	13/04/2013	STAND 7	NORTH WEST	GROUND IDLE	E190	GLCYL	06:31	06:35	00:04
APRIL	17/04/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJZ	21:37	21:39	00:02
APRIL	20/04/2013	STAND 8	NORTH WEST	GROUND IDLE	RJ85	EIRJH	11:34	11:36	00:02
APRIL	21/04/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYI	12:35	12:41	00:06
APRIL	21/04/2013	STAND 24	WEST	HIGH	E190	GLCYO	13:13	13:33	00:20
APRIL	21/04/2013	STAND 24	WEST	HIGH	E190	GLCYO	13:47	14:11	00:24
APRIL	21/04/2013	STAND 24	WEST	HIGH	E190	GLCYM	15:06	15:46	00:40
APRIL	21/04/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYe	16:26	16:32	00:06
APRIL	23/04/2013	STAND 5	NORTH WEST	GROUND IDLE	RJ85	EIRJZ	13:31	13:33	00:02
APRIL	24/04/2013	STAND 24	WEST	HIGH	E170	GLCYE	13:11	13:19	00:08
APRIL	25/04/2013	STAND 12	NORTH WEST	GROUND IDLE	RJ85	EIRJZ	11:03	11:08	00:05
APRIL	25/04/2013	STAND 24	WEST	HIGH	E170	GLCYE	12:17	12:53	00:36
APRIL	26/04/2013	STAND 24	WEST	HIGH	E170	GLCYD	10:29	10:56	00:27
APRIL	26/04/2013	STAND 24	WEST	HIGH	E170	GLCYD	12:19	12:35	00:16

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
APRIL	29/04/2013	STAND 9	NORTH WEST	GROUND IDLE	E190	GLCYK	18:41	18:47	00:06
MAY	02/05/2013	STAND 3	NORTH WEST	GROUND IDLE	RJ85	EIRJE	10:49	10:50	00:01
MAY	04/05/2013	STAND 1	NORTH WEST	GROUND IDLE	RJ85	EIRJN	09:11	09:13	00:02
MAY	05/05/2013	STAND 7	NORTH WEST	GROUND IDLE	RJ85	EIRJN	14:10	14:12	00:02
MAY	08/05/2013	STAND 24	WEST	HIGH	E170	GLCYH	13:54	14:14	00:20
MAY	10/05/2013	STAND 14	NORTH WEST	GROUND IDLE	RJ85	EIRJB	18:36	18:54	00:18
MAY	10/05/2013	STAND 14	NORTH WEST	GROUND IDLE	RJ85	EIRJB	19:35	19:54	00:19
MAY	11/05/2013	STAND 23	NORTH WEST	GROUND IDLE	RJ85	EIRJI	10:37	10:40	00:03
MAY	12/05/2013	STAND 10	NORTH WEST	GROUND IDLE	E190	GLCYN	13:03	13:09	00:06
MAY	12/05/2013	STAND 7	NORTH WEST	GROUND IDLE	E170	GLCYE	13:32	13:38	00:06
MAY	16/05/2013	STAND 7	NORTH WEST	GROUND IDLE	E170	GLCYE	12:15	12:22	00:07
MAY	17/05/2013	STAND 24	NORTH WEST	GROUND IDLE	SB20	GCDEB	14:50	14:53	00:03
MAY	18/05/2013	STAND 24	WEST	HIGH	E170	GLCYH	08:05	08:30	00:25
MAY	18/05/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJA	11:57	12:01	00:04
MAY	19/05/2013	STAND 24	WEST	HIGH	E190	GLCYM	13:43	14:13	00:30
MAY	20/05/2013	STAND 24	WEST	HIGH	RJ1H	HBIXT	13:42	13:59	00:17
MAY	23/05/2013	STAND 13	NORTH WEST	GROUND IDLE	B462	DAMGL	16:10	16:13	00:03
MAY	24/05/2013	STAND 24	WEST	HIGH	E190	GLCYK	10:23	10:49	00:26
MAY	24/05/2013	STAND 24	WEST	HIGH	E190	GLCYK	14:29	14:47	00:18
MAY	26/05/2013	STAND 24	WEST	HIGH	E170	GLCYD	12:45	13:09	00:24
MAY	26/05/2013	STAND 1	NORTH WEST	GROUND IDLE	RJ85	EIRJY	22:25	22:25	00:00
MAY	27/05/2013	STAND 10	NORTH WEST	GROUND IDLE	RJ85	EIRJI	16:08	16:11	00:03
JUNE	04/06/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJC	12:24	12:29	00:05
JUNE	06/06/2013	STAND 24	NORTH WEST	GROUND IDLE	A318	GEUNB	07:56	08:01	00:05
JUNE	06/06/2013	STAND 24	NORTH WEST	GROUND IDLE	A318	GEUNB	17:10	17:15	00:05

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
JUNE	06/06/2013	STAND 24	NORTH WEST	GROUND IDLE	A318	GEUNB	18:45	18:57	00:12
JUNE	09/06/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYG	12:45	12:54	00:09
JUNE	13/06/2013	STAND 10	NORTH WEST	GROUND IDLE	RJ85	EIRJB	09:34	09:37	00:03
JUNE	14/06/2013	STAND 5	NORTH WEST	GROUND IDLE	E170	GLCYD	19:04	19:12	00:08
JUNE	17/06/2013	STAND 13	NORTH	GROUND IDLE	D328	GBYHG	11:56	12:01	00:05
JUNE	19/06/2013	STAND 14	NORTH WEST	GROUND IDLE	RJ85	EIRJO	14:18	14:25	00:07
JUNE	23/06/2013	STAND 1	NORTH WEST	GROUND IDLE	RJ85	EIRJH	21:18	21:20	00:02
JUNE	26/06/2013	JET CENTRE	EAST	GROUND IDLE	C56X	CSDXQ	13:56	14:00	00:04
JUNE	27/06/2013	STAND 6	NORTH WEST	GROUND IDLE	RJ1H	HBIXX	17:50	17:53	00:03
JUNE	30/06/2013	STAND 21	NORTH WEST	GROUND IDLE	E170	GLCYH	13:27	13:32	00:05
JULY	01/07/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ1H	HBIYZ	16:07	16:09	00:02
JULY	04/07/2013	STAND 7	NORTH WEST	GROUND IDLE	E190	GLCYK	12:41	12:51	00:10
JULY	06/07/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ1H	HBIXQ	09:38	09:42	00:04
JULY	06/07/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ1H	HBIXQ	10:18	10:37	00:19
JULY	07/07/2013	STAND 24	WEST	HIGH	E170	GLCYG	12:41	12:59	00:18
JULY	08/07/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ85	EIRJO	10:55	11:00	00:05
JULY	14/07/2013	STAND 12	NORTH WEST	GROUND IDLE	RJ1H	HBIXP	12:33	12:39	00:06
JULY	14/07/2013	STAND 9	NORTH WEST	GROUND IDLE	E170	GLCYF	13:47	13:56	00:09
JULY	15/07/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYI	16:58	17:09	00:11
JULY	18/07/2013	STAND 24	WEST	HIGH	E170	GLCYE	13:21	13:29	00:08
JULY	22/07/2013	JET CENTRE	SOUTH WEST	GROUND IDLE	FA10	FGSLZ	16:50	17:00	00:10
JULY	26/07/2013	STAND 1	NORTH WEST	GROUND IDLE	E190	GLCYR	06:32	06:35	00:03
JULY	28/07/2013	STAND 24	NORTH WEST	GROUND IDLE	A318	GEUNB	13:40	13:47	00:07
JULY	29/07/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ1H	--	09:55	10:00	00:05
JULY	30/07/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJA	11:13	11:20	00:07
JULY	30/07/2013	STAND 24	WEST	HIGH	RJ85	EIRJA	15:09	15:36	00:27

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
JULY	30/07/2013	STAND 12	NORTH WEST	GROUND IDLE	RJ85	EIRJA	18:32	18:35	00:03
AUGUST	01/08/2013	STAND 13	NORTH	GROUND IDLE	RJ85	EIRJA	19:48	19:51	00:03
AUGUST	02/08/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ85	EIRJA	17:20	17:27	00:07
AUGUST	02/08/2013	STAND 24	WEST	GROUND IDLE	RJ85	EIRJA	20:29	20:34	00:05
AUGUST	02/08/2013	STAND 24	WEST	HIGH	RJ85	EIRJA	20:35	20:47	00:12
AUGUST	04/08/2013	STAND 21	NORTH WEST	GROUND IDLE	E170	GLCYI	13:12	13:20	00:08
AUGUST	05/08/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ1H	HBIYY	06:31	06:36	00:05
AUGUST	07/08/2013	STAND 9	NORTH WEST	GROUND IDLE	F50	OOVLN	11:19	11:27	00:08
AUGUST	11/08/2013	STAND 24	WEST	HIGH	E170	GLCYE	13:14	13:42	00:28
AUGUST	11/08/2013	STAND 24	WEST	HIGH	E190	GLCYL	20:52	21:06	00:14
AUGUST	18/08/2013	STAND 8	NORTH WEST	GROUND IDLE	E170	GLCYF	12:31	12:35	00:04
AUGUST	20/08/2013	STAND 12	NORTH WEST	GROUND IDLE	F50	OOVLJ	08:49	08:56	00:07
AUGUST	20/08/2013	JET CENTRE	SOUTH	GROUND IDLE	C510	GLEAA	09:40	09:52	00:12
AUGUST	21/08/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJN	11:32	11:36	00:04
AUGUST	22/08/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJJ	12:32	12:36	00:04
AUGUST	22/08/2013	STAND 24	WEST	HIGH	E170	GLCYH	13:18	13:41	00:23
AUGUST	30/08/2013	STAND 24	NORTH WEST	GROUND IDLE	E170	GLCYD	14:30	14:36	00:06
SEPTEMBER	04/09/2013	STAND 22	NORTH WEST	GROUND IDLE	RJ85	EIRJD	10:06	10:10	00:04
SEPTEMBER	05/09/2013	STAND 24	NORTH WEST	AIR START	E170	GLCYD	16:19	16:29	00:10
SEPTEMBER	08/09/2013	STAND 7	NORTH WEST	GROUND IDLE	E170	GLCYI	12:58	13:05	00:07
SEPTEMBER	10/09/2013	STAND 1	NORTH WEST	GROUND IDLE	E190	GLCYM	10:16	10:21	00:05
SEPTEMBER	12/09/2013	STAND 24	NORTH WEST	GROUND IDLE	E190	DAECC	08:48	09:00	00:12
SEPTEMBER	16/09/2013	STAND 22	NORTH WEST	GROUND IDLE	RJ85	EIRJA	06:55	06:57	00:02
SEPTEMBER	17/09/2013	STAND 13	NORTH WEST	GROUND IDLE	F50	OOVLN	18:44	18:59	00:15
SEPTEMBER	22/09/2013	STAND 9	NORTH WEST	GROUND IDLE	E170	GLCYI	12:49	12:55	00:06

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
SEPTEMBER	23/09/2013	STAND 24	WEST	HIGH	E170	GLCYD	10:02	10:34	00:32
SEPTEMBER	25/09/2013	STAND 3	NORTH WEST	GROUND IDLE	RJ85	EIRJY	21:18	21:21	00:03
SEPTEMBER	27/09/2013	STAND 13	NORTH WEST	GROUND IDLE	F50	OOVLZ	13:38	13:42	00:04
SEPTEMBER	29/09/2013	STAND 24	WEST	HIGH	E170	GLCYI	12:38	12:54	00:16
SEPTEMBER	29/09/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJZ	13:06	13:10	00:04
SEPTEMBER	29/09/2013	STAND 9	NORTH WEST	GROUND IDLE	E170	GLCYD	13:31	13:39	00:08
OCTOBER	01/10/2013	STAND 13	NORTH	GROUND IDLE	RJ85	EIRJZ	11:37	11:38	00:01
OCTOBER	03/10/2013	STAND 24	WEST	HIGH	RJ85	EIRJZ	20:41	20:52	00:11
OCTOBER	04/10/2013	STAND 7	NORTH WEST	GROUND IDLE	E190	GLCYK	17:52	18:00	00:08
OCTOBER	05/10/2013	STAND 24	WEST	HIGH	E170	GLCYH	08:50	09:03	00:13
OCTOBER	06/10/2013	STAND 6	NORTH WEST	GROUND IDLE	E170	GLCYS	12:43	12:48	00:05
OCTOBER	07/10/2013	STAND 9	NORTH WEST	GROUND IDLE	E190	GLCYP	06:35	06:40	00:05
OCTOBER	07/10/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ85	EIRJI	09:55	10:01	00:06
OCTOBER	07/10/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ85	EIRJI	12:36	12:40	00:04
OCTOBER	12/10/2013	STAND 24	WEST	HIGH	E170	GLCYD	09:02	09:15	00:13
OCTOBER	13/10/2013	STAND 24	WEST	HIGH	E170	GLCYF	13:09	13:31	00:22
OCTOBER	15/10/2013	STAND 13	NORTH WEST	GROUND IDLE	RJ85	EIRJZ	11:21	11:24	00:03
OCTOBER	17/10/2013	STAND 10	NORTH WEST	GROUND IDLE	RJ85	EIRJC	10:07	10:11	00:04
OCTOBER	19/10/2013	STAND 24	WEST	HIGH	E190	GLCYN	10:48	11:07	00:19
OCTOBER	21/10/2013	STAND 1	NORTH WEST	GROUND IDLE	E190	GLCYM	06:31	06:36	00:05
OCTOBER	24/10/2013	STAND 9	NORTH WEST	GROUND IDLE	DH8D	L9L4602	19:06	19:12	00:06
OCTOBER	27/10/2013	STAND 24	WEST	GROUND IDLE	E170	GLCYH	13:10	13:17	00:07
NOVEMBER	01/11/2013	STAND 24	WEST	HIGH	H25B	CSDEV	13:45	14:01	00:16
NOVEMBER	01/11/2013	STAND 5	NORTH WEST	GROUND IDLE	RJ85	EIRJI	16:19	16:26	00:07
NOVEMBER	01/11/2013	STAND 3	NORTH WEST	GROUND IDLE	RJ85	EIRJA	19:44	19:58	00:14

**TABLE 1: OFFICIAL RECORD OF GROUND RUNNING OF ENGINES FOR TEST AND MAINTENANCE
FOR THE YEAR 2013**

MONTH	DATE	LOCATION	A/C ORIENTATION	TYPE OF RUN / POWER SET	A/C TYPE	REG	START TIME	STOP TIME	DURATION (hh:mm)
NOVEMBER	10/11/2013	STAND 9	NORTH WEST	GROUND IDLE	E170	GLCYF	13:20	13:28	00:08
NOVEMBER	12/11/2013	STAND 3	NORTH WEST	GROUND IDLE	RJ85	EIRJS	09:19	09:21	00:02
NOVEMBER	13/11/2013	STAND 24	WEST	HIGH	E170	GLCYH	13:11	13:23	00:12
NOVEMBER	14/11/2013	STAND 10	NORTH WEST	GROUND IDLE	RJ85	EIRJF	11:42	11:47	00:05
NOVEMBER	17/11/2013	STAND 22	NORTH WEST	GROUND IDLE	E170	GLCYI	12:38	12:43	00:05
NOVEMBER	19/11/2013	STAND 24	WEST	HIGH	E170	GLCYH	15:18	15:38	00:20
NOVEMBER	20/11/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJU	10:04	10:10	00:06
NOVEMBER	22/11/2013	STAND 8	NORTH WEST	GROUND IDLE	RJ85	EIWXA	09:31	09:35	00:04
NOVEMBER	24/11/2013	STAND 24	WEST	HIGH	E170	GLCYH	13:25	13:41	00:16
NOVEMBER	25/11/2013	STAND 12	NORTH WEST	GROUND IDLE	DH8D	LXLGH	09:17	09:22	00:05
NOVEMBER	29/11/2013	STAND 5	NORTH WEST	GROUND IDLE	RJ85	EIRJG	15:00	15:07	00:07
DECEMBER	01/12/2013	STAND 8	NORTH WEST	GROUND IDLE	E170	GLCYE	12:39	12:44	00:05
DECEMBER	01/12/2013	STAND 24	WEST	HIGH	E170	GLCYH	14:38	15:03	00:25
DECEMBER	01/12/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJA	19:35	19:43	00:08
DECEMBER	02/12/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJA	06:40	06:42	00:02
DECEMBER	06/12/2013	STAND 10	NORTH WEST	GROUND IDLE	RJ85	EIRJY	09:23	09:27	00:04
DECEMBER	08/12/2013	STAND 24	WEST	HIGH	E170	GLCYI	13:07	13:16	00:09
DECEMBER	12/12/2013	STAND 24	WEST	HIGH	E170	GLCYI	15:42	15:54	00:12
DECEMBER	15/12/2013	STAND 24	WEST	HIGH	E170	GLCYI	13:52	13:59	00:07
DECEMBER	15/12/2013	STAND 24	WEST	HIGH	E170	GLCYI	14:05	14:37	00:32
DECEMBER	19/12/2013	STAND 10	NORTH WEST	GROUND IDLE	RJ85	EIRJZ	15:16	15:20	00:04
DECEMBER	23/12/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJA	16:16	16:19	00:03
DECEMBER	23/12/2013	STAND 4	NORTH WEST	GROUND IDLE	RJ85	EIRJA	18:48	18:51	00:03
DECEMBER	26/12/2013	STAND 10	NORTH WEST	GROUND IDLE	E170	GLCYE	16:41	16:45	00:04
DECEMBER	30/12/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJC	17:44	17:46	00:02
DECEMBER	30/12/2013	STAND 2	NORTH WEST	GROUND IDLE	RJ85	EIRJC	20:27	20:31	00:04

LONDON CITY AIRPORT

**TABLE 2:
SUMMARY OF HIGH POWER GROUND RUNNING
JANUARY 2013 - DECEMBER 2013**

	MINUTES/MONTH	AIRCRAFT TYPE
JANUARY	108	E170 / RJ85
FEBRUARY	41	C56X
MARCH	65	D328 / E170 / RJ1H
APRIL	268	E170 / E190 / RJ85
MAY	160	E170 / E190 / RJ1H
JUNE	0	-
JULY	53	E170 / RJ85
AUGUST	77	E170 / E190 / RJ85
SEPTEMBER	48	E170
OCTOBER	78	E170 / E190 / RJ85
NOVEMBER	64	E170 / H25B
DECEMBER	85	E170
TOTAL	1047	-

LONDON CITY AIRPORT

ENGINE GROUND RUN NOISE 2013 (w.r.t. Ground Running Noise Limit)

TABLE 3 Prediction of Engine Ground Running as Appendix E of Approved Noise Control Scheme

Item (A) Determination of Largest Monthly Duration:

As indicated in Table 2, that occurred in April 2013, specifically -

87 minutes E170
106 minutes E190
75 minutes RJ85
268 minutes total Ground Running

Item (B) Determination of Average Daily Duration During Worst Case

268 minutes in a month of 30 days
8.9 minutes Average Daily Duration

Item (C) Compute Resultant Noise Level at Reference Distance (152 metres)

Resultant Noise Level at 152m

= Reference Noise Level + 10 Log (duration) - 10 Log (12x60)
= 84 + 10 Log (8.9) - 10 Log (12x60)
= 84 + 9.5 - 28.6
= 64.9 dB $L_{Aeq,12h}$

Item (D) Compute Level at Nearest Properties in Newland Street

Aircraft abeam Stand 24.

Noise Level at Newland Street

= Resultant Noise Level - 26.7 Log (255/152)
= 64.9 - 6.0
= 58.9 dB $L_{Aeq,12h}$

LCY Ground Running Noise Limit = 60 dB $L_{Aeq,12h}$

CONCLUSION

In 2013 LCY's Ground Running was 1.1 dB below
the Ground Running Noise Limit.

APPENDIX C

Penalties and Incentives

JANUARY 2013

Aircraft Type	Noisy Events	Quiet Events
BE40	1	0
C550	1	0
C56X	2	1
D328	2	0
E170	2	3
E190	0	6
F2TH	1	0
F900	0	1
FA50	2	0
FA7X	1	0
H25B	1	3
RJ1H	0	1
RJ85	1	0
SB20	0	1

FEBRUARY 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	0	2
C550	0	1
C56X	1	5
E170	9	3
E190	0	2
F900	0	2
FA50	2	1
FA7X	1	0
H25B	2	2
RJ1H	0	1

MARCH 2013

Aircraft Type	Noisy Events	Quiet Events
C25B	2	0
C550	1	0
C56X	7	0
D328	0	3
E170	0	6
F900	0	1
FA10	1	0
FA50	1	0
FA7X	0	1
H25B	4	3
RJ1H	1	0
RJ85	0	4

APRIL 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	0	1
C550	0	1
D328	1	0
E170	1	1
E190	1	6
F2TH	1	0
FA50	1	0
H25B	2	1
SB20	0	1

MAY 2013

Aircraft Type	Noisy Events	Quiet Events
C25B	0	1
C550	0	2
C56X	0	4
E170	1	1
E190	0	1
F2TH	1	0
F900	1	0
FA50	1	0
FA7X	3	0
H25B	14	0
RJ85	1	1

JUNE 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	0	1
C56X	0	2
E170	2	0
E190	1	0
F2TH	1	0
FA50	1	0
H25B	9	0
RJ85	1	0

JULY 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	0	1
C56X	2	2
E170	11	0
E190	2	0
H25B	9	1
RJ85	2	0

AUGUST 2013

Aircraft Type	Noisy Events	Quiet Events
C25B	0	1
C56X	0	2
DH8D	1	0
E170	2	0
E190	1	0
F2TH	1	0
FA7X	2	0
H25B	4	1
RJ85	1	0

SEPTEMBER 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	0	1
C25B	0	1
C56X	0	1
E170	3	0
E190	1	0
F2TH	1	0
F900	3	0
FA7X	2	0
H25B	7	0
RJ85	2	0

OCTOBER 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	1	0
C550	0	1
C56X	6	0
D328	3	0
DH8D	7	0
E170	20	0
E190	25	0
FA7X	2	0
H25B	10	0
RJ1H	1	0
RJ85	12	0
SB20	1	0

NOVEMBER 2013

Aircraft Type	Noisy Events	Quiet Events
C25A	0	1
C56X	1	1
D328	0	1
E170	3	0
E190	1	0
F900	2	0
FA10	0	1
FA7X	3	0
H25B	5	0
RJ85	1	0

DECEMBER 2013

Aircraft Type	Noisy Events	Quiet Events
C25B	0	1
C550	2	0
C56X	3	3
E170	3	0
E190	16	0
F2TH	1	0
F900	1	0
FA7X	1	0
H25B	0	1
RJ85	1	0

APPENDIX D

Meetings with Airport Consultative Committee

MINUTE 9
Environmental Report – January – March 2013

All of the Noise Monitoring Terminals (NMTs) were fully operational during this period, and data received for each day. Between the 14th February and 28th February a deterioration of a telephone line serving NMTs 1, 3 and 4 meant that data could not be downloaded from these noise monitors during this period. Once the cause of the problem was identified connection to the NMTs was re-established and data successfully retrieved. No data was lost during this period.

MINUTE 9
Environmental Report – April – June 2013

All of the Noise Monitoring Terminals (NMTs) were fully operational during this period, and data received for each day.

MINUTE 9
Environmental Report – July – September 2013

In September 2013 London City Airport, at a cost of 1 million pounds over the next 10 years, installed a new Noise and Track Keeping System. This new system is provided by a German company called Topsonic and the installs took only 2 days to complete (24th & 25th September).

The install includes replacing the existing Noise Monitoring Terminal (NMT) hardware with state of the art equipment, upgrading facilities (such as a larger solar panel at NMT 2). Furthermore, LCY now has two portable noise monitor trailers which can be used within the local community. One of the trailers is extremely cutting edge by using renewable energy to power the equipment via solar panels attached to the roof of the unit.

Not only has the hardware been improved but also because this system is rented for this duration we have dedicated call out support team in case of any failures, if they occur. At the next LCACC the Environment Manager will present the system and demonstrate various features of the online software including track keeping visuals and density plots.

MINUTE 9
Environmental Report – October – December 2013

As noted in last quarters report, LCA installed a new Noise Monitoring and Track Keeping System. The system over its first 3 month period is performing well. The new system monitors outages which could affect correlation rates; this includes power failures, calibration tests (performed nightly) and high winds. NMT 1 had a power failure between the 28th and 29th November for approx. 20 hours however was fixed onsite. NMT 2 had a power failure due to loss of voltage from solar panels on 3rd, 4th and 6th October 2013 for approx. 1.6 days in total.

APPENDIX E

Numbers of Aircraft Operating at LCY

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
01/01/2013	90	-	132	-	96	693	2,570	42	-	1,877	-	-	-	-	0	-	
02/01/2013	153	-	592	-	163			439	-		1	3	1	3	0	-	
03/01/2013	167	-	592	-	179			425	-		1	2	1	4	0	-	
04/01/2013	171	-	592	-	184			421	-		1	3	1	3	0	-	
05/01/2013	47	161	100	280	49			53	119		2	3	0	3	-	3	
06/01/2013	114		200		119			86			-	-	-	1	-		
07/01/2013	217	-	592	-	226	1,342	4,050	375	-	2,708	2	4	0	2	0	-	
08/01/2013	225	-	592	-	229			367	-		1	5	1	1	0	-	
09/01/2013	224	-	592	-	231			368	-		1	6	1	0	0	-	
10/01/2013	244	-	592	-	253			348	-		1	3	1	3	0	-	
11/01/2013	223	-	592	-	229			369	-		1	3	1	3	0	-	
12/01/2013	51	169	100	280	50			49	111		1	2	1	4	-	1	
13/01/2013	118		200		123	82	-	-		-	0	-					
14/01/2013	237	-	592	-	246	1,062	4,050	355	-	2,988	0	2	2	4	0	-	
15/01/2013	237	-	592	-	242			355	-		1	4	1	2	1	-	
16/01/2013	143	-	592	-	149			449	-		0	0	2	6	0	-	
17/01/2013	249	-	592	-	261			343	-		1	1	1	5	1	-	
18/01/2013	114	-	592	-	117			478	-		2	4	0	2	2	-	
19/01/2013	49	49	100	280	48			51	231		0	1	2	5	-	2	
20/01/2013	0		200		0	200	-	-		-	-	-					
21/01/2013	189	-	592	-	188	1,337	4,050	403	-	2,713	0	0	2	6	0	-	
22/01/2013	171	-	592	-	175			421	-		1	1	1	5	0	-	
23/01/2013	252	-	592	-	260			340	-		1	4	1	2	0	-	
24/01/2013	256	-	592	-	264			336	-		2	2	0	4	0	-	
25/01/2013	240	-	592	-	252			352	-		1	2	1	4	0	-	
26/01/2013	58	189	100	280	59			42	91		0	2	2	4	-	4	
27/01/2013	131		200		139	69	-	-		-	-	-					

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
28/01/2013	238	-	592	-	246	1,522	4,050	354	-	2,528	2	3	0	3	0	-	
29/01/2013	262	-	592	-	276			330	-		1	2	1	4	0	-	
30/01/2013	262	-	592	-	272			330	-		1	4	1	2	1	-	
31/01/2013	267	-	592	-	280			325	-		2	3	0	3	0	-	
01/02/2013	254	-	592	-	265			338	-		1	3	1	3	0	-	
02/02/2013	58	178	100	280	59			42	102		2	3	0	3	-	1	
03/02/2013	120		200		125			80			-	-	-	0	-	0	-
04/02/2013	266	-	592	-	278	1,537	4,050	326	-	2,513	1	3	1	3	0	-	
05/02/2013	260	-	592	-	271			332	-		1	2	1	4	1	-	
06/02/2013	248	-	592	-	258			344	-		1	2	1	4	0	-	
07/02/2013	271	-	592	-	286			321	-		2	4	0	2	0	-	
08/02/2013	249	-	592	-	261			343	-		0	3	2	3	0	-	
09/02/2013	58	176	100	280	59			42	104		0	1	2	5	-	2	
10/02/2013	118		200		123			82			-	-	-	0	-	0	-
11/02/2013	235	-	592	-	243	1,488	4,050	357	-	2,562	0	1	2	5	1	-	
12/02/2013	252	-	592	-	266			340	-		0	3	2	3	0	-	
13/02/2013	248	-	592	-	257			344	-		1	5	1	1	0	-	
14/02/2013	244	-	592	-	260			348	-		1	3	1	3	0	-	
15/02/2013	256	-	592	-	272			336	-		1	5	1	1	0	-	
16/02/2013	61	183	100	280	63			39	97		2	2	0	4	-	2	
17/02/2013	122		200		127			78			-	-	-	0	-	0	-
18/02/2013	253	-	592	-	263	1,443	4,050	339	-	2,607	1	4	1	2	0	-	
19/02/2013	179	-	592	-	189			413	-		0	0	2	6	0	-	
20/02/2013	258	-	592	-	268			334	-		1	3	1	3	0	-	
21/02/2013	253	-	592	-	265			339	-		0	2	2	4	0	-	
22/02/2013	252	-	592	-	262			340	-		1	4	1	2	0	-	
23/02/2013	60	187	100	280	62			40	93		0	1	2	5	-	2	
24/02/2013	127		200		134			73			-	-	-	0	-	0	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
25/02/2013	256	-	592	-	268	1,506	4,050	336	-	2,544	1	4	1	2	0	-	
26/02/2013	263	-	592	-	273			329	-		1	2	1	4	0	-	
27/02/2013	248	-	592	-	258			344	-		1	4	1	2	0	-	
28/02/2013	256	-	592	-	266			336	-		2	5	0	1	0	-	
01/03/2013	244	-	592	-	253			348	-		1	3	1	3	0	-	
02/03/2013	55	180	100	280	55			45	100		1	1	1	5	-	0	
03/03/2013	125		200		131			75			-	-	-	-	-	0	-
04/03/2013	260	-	592	-	271	1,423	4,050	332	-	2,627	1	4	1	2	0	-	
05/03/2013	255	-	592	-	266			337	-		0	2	2	4	1	-	
06/03/2013	257	-	592	-	268			335	-		2	6	0	0	0	-	
07/03/2013	219	-	592	-	232			373	-		2	6	0	0	0	-	
08/03/2013	179	-	592	-	185			413	-		0	0	2	6	0	-	
09/03/2013	58	191	100	280	59			42	89		1	1	1	5	-	1	
10/03/2013	133		200		141			67			-	-	-	-	-	0	-
11/03/2013	270	-	592	-	287	1,589	4,050	322	-	2,461	0	1	2	5	0	-	
12/03/2013	239	-	592	-	252			353	-		0	1	2	5	1	-	
13/03/2013	259	-	592	-	275			333	-		0	4	2	2	0	-	
14/03/2013	280	-	592	-	295			312	-		0	1	2	5	0	-	
15/03/2013	265	-	592	-	278			327	-		1	5	1	1	0	-	
16/03/2013	59	192	100	280	60			41	88		1	3	1	3	-	2	
17/03/2013	133		200		141			67			-	-	-	-	-	0	-
18/03/2013	275	-	592	-	290	1,538	4,050	317	-	2,512	1	4	1	2	0	-	
19/03/2013	274	-	592	-	289			318	-		1	4	1	2	0	-	
20/03/2013	257	-	592	-	267			335	-		1	3	1	3	0	-	
21/03/2013	259	-	592	-	268			333	-		0	2	2	4	0	-	
22/03/2013	251	-	592	-	261			341	-		1	3	1	3	0	-	
23/03/2013	44	159	100	280	44			56	121		0	2	2	4	-	0	
24/03/2013	115		200		120			85			-	-	-	-	-	0	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
25/03/2013	254	-	592	-	265	1,358	3,515	338	-	2,157	0	2	2	4	0	-	
26/03/2013	239	-	592	-	247			353	-		1	4	1	2	0	-	
27/03/2013	250	-	592	-	265			342	-		1	3	1	3	1	-	
28/03/2013	257	-	592	-	270			335	-		0	2	2	4	0	-	
29/03/2013	164	-	164	-	175			0	-		-	-	-	-	0	-	
30/03/2013	49	133	100	280	49			51	147		1	2	1	4	-	3	
31/03/2013	84		200		88			116			-	-	0	-	-	-	0
01/04/2013	170	-	198	-	173	1,342	3,558	28	-	2,216	-	-	-	-	0	-	
02/04/2013	223	-	592	-	233			369	-		0	1	2	5	0	-	
03/04/2013	227	-	592	-	236			365	-		1	3	1	3	0	-	
04/04/2013	240	-	592	-	252			352	-		1	4	1	2	0	-	
05/04/2013	243	-	592	-	255			349	-		2	5	0	1	0	-	
06/04/2013	64	185	100	280	67			36	95		1	5	1	1	-	3	
07/04/2013	121		200		127			79			-	-	-	-	-	-	0
08/04/2013	259	-	592	-	272	1,507	4,050	333	-	2,543	1	4	1	2	0	-	
09/04/2013	262	-	592	-	271			330	-		1	3	1	3	0	-	
10/04/2013	249	-	592	-	257			343	-		1	4	1	2	0	-	
11/04/2013	255	-	592	-	265			337	-		0	3	2	3	0	-	
12/04/2013	242	-	592	-	248			350	-		1	3	1	3	0	-	
13/04/2013	64	183	100	280	67			36	97		2	3	0	3	-	2	
14/04/2013	119		200		127			81			-	-	-	-	-	0	-
15/04/2013	258	-	592	-	270	1,545	4,050	334	-	2,505	1	3	1	3	0	-	
16/04/2013	255	-	592	-	266			337	-		1	3	1	3	0	-	
17/04/2013	266	-	592	-	280			326	-		1	3	1	3	0	-	
18/04/2013	261	-	592	-	272			331	-		1	4	1	2	0	-	
19/04/2013	258	-	592	-	268			334	-		1	4	1	2	0	-	
20/04/2013	64	180	100	280	67			36	100		1	3	1	3	-	1	
21/04/2013	116		200		122			84			-	-	-	-	-	1	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]	
	Day	Weekend	Day	Weekend	Day	Week		Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
								Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
22/04/2013	256	-	592	-	266	1,596	4,050	336	-	2,454	2	5	0	1	0	-
23/04/2013	261	-	592	-	271			331	-		2	5	0	1	0	-
24/04/2013	283	-	592	-	299			309	-		1	4	1	2	0	-
25/04/2013	276	-	592	-	291			316	-		1	3	1	3	0	-
26/04/2013	260	-	592	-	270			332	-		1	3	1	3	0	-
27/04/2013	61	191	100	280	64			39	89		1	4	1	2	-	2
28/04/2013	130		200		137			70			-	-	-	0	-	
29/04/2013	260	-	592	-	275	1,570	4,050	332	-	2,480	1	4	1	2	0	-
30/04/2013	259	-	592	-	277			333	-		1	5	1	1	0	-
01/05/2013	258	-	592	-	277			334	-		1	3	1	3	0	-
02/05/2013	280	-	592	-	298			312	-		1	5	1	1	0	-
03/05/2013	258	-	592	-	269			334	-		1	6	1	0	0	-
04/05/2013	60	166	100	280	62			40	114		1	3	1	3	-	0
05/05/2013	106		200		112			94			-	-	-	0	-	
06/05/2013	197	-	248	-	202	1,464	3,620	51	-	2,156	-	-	-	-	0	-
07/05/2013	254	-	592	-	266			338	-		1	4	1	2	0	-
08/05/2013	263	-	592	-	275			329	-		1	4	1	2	0	-
09/05/2013	247	-	592	-	258			345	-		1	3	1	3	0	-
10/05/2013	244	-	592	-	255			348	-		1	2	1	4	0	-
11/05/2013	62	198	100	280	64			38	82		1	3	1	3	-	3
12/05/2013	136		200		144			64			-	-	-	0	-	
13/05/2013	281	-	592	-	296	1,661	4,050	311	-	2,389	1	4	1	2	0	-
14/05/2013	271	-	592	-	285			321	-		1	3	1	3	0	-
15/05/2013	279	-	592	-	294			313	-		1	5	1	1	0	-
16/05/2013	286	-	592	-	301			306	-		1	5	1	1	0	-
17/05/2013	274	-	592	-	289			318	-		2	4	0	2	0	-
18/05/2013	65	186	100	280	69			35	94		2	4	0	2	-	0
19/05/2013	121		200		128			79			-	-	-	0	-	

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
20/05/2013	253	-	592	-	270	1,637	4,050	339	-	2,413	1	3	1	3	0	-	
21/05/2013	274	-	592	-	289			318	-		2	5	0	1	0	-	
22/05/2013	276	-	592	-	290			316	-		2	5	0	1	0	-	
23/05/2013	273	-	592	-	285			319	-		1	3	1	3	0	-	
24/05/2013	280	-	592	-	295			312	-		2	4	0	2	0	-	
25/05/2013	79	196	100	280	84			21	84		1	5	1	1	-	1	
26/05/2013	117		200		125			83			-	-	-	-	-	0	-
27/05/2013	195	-	230	-	202	35	-	-	-	-	-	0	-				
28/05/2013	254	-	592	-	265	338	-	0	3	2	3	0	-				
29/05/2013	259	-	592	-	270	333	-	2	6	0	0	0	-				
30/05/2013	269	-	592	-	282	323	-	0	6	2	0	2	-				
31/05/2013	254	-	592	-	262	338	-	2	6	0	0	0	-				
01/06/2013	76	224	100	280	81	24	56	1	5	1	1	-	2				
02/06/2013	148		200		161	52		-	-	-	-	-	0	-			
03/06/2013	268	-	592	-	281	324	-	1	3	1	3	0	-				
04/06/2013	281	-	592	-	296	311	-	1	5	1	1	0	-				
05/06/2013	287	-	592	-	302	305	-	1	4	1	2	0	-				
06/06/2013	282	-	592	-	297	310	-	1	5	1	1	0	-				
07/06/2013	272	-	592	-	285	320	-	1	5	1	1	0	-				
08/06/2013	71	201	100	280	75	29	79	2	4	0	2	-	2				
09/06/2013	130		200		138	70		-	-	-	-	-	1	-			
10/06/2013	271	-	592	-	284	321	-	1	3	1	3	0	-				
11/06/2013	263	-	592	-	276	329	-	1	2	1	4	0	-				
12/06/2013	259	-	592	-	273	333	-	1	3	1	3	3	-				
13/06/2013	291	-	592	-	309	301	-	2	3	0	3	0	-				
14/06/2013	270	-	592	-	282	322	-	1	4	1	2	0	-				
15/06/2013	78	223	100	280	85	22	57	2	4	0	2	-	5				
16/06/2013	145		200		157	55		-	-	-	-	-	1	-			

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
17/06/2013	272	-	592	-	284	1,662	4,050	320	-	2,388	1	4	1	2	0	-	
18/06/2013	285	-	592	-	299			307	-		1	3	1	3	0	-	
19/06/2013	276	-	592	-	291			316	-		1	4	1	2	0	-	
20/06/2013	289	-	592	-	305			303	-		0	3	2	3	0	-	
21/06/2013	254	-	592	-	263			338	-		1	4	1	2	2	-	
22/06/2013	71	208	100	280	74			29	72		2	3	0	3	-	5	
23/06/2013	137		200		147			63			-	-	-	-	-	-	0
24/06/2013	267	-	592	-	280	1,638	4,050	325	-	2,412	1	2	1	4	0	-	
25/06/2013	274	-	592	-	288			318	-		1	5	1	1	0	-	
26/06/2013	273	-	592	-	287			319	-		1	4	1	2	0	-	
27/06/2013	281	-	592	-	296			311	-		1	4	1	2	1	-	
28/06/2013	265	-	592	-	277			327	-		1	4	1	2	0	-	
29/06/2013	70	198	100	280	75			30	82		1	2	1	4	-	3	
30/06/2013	128		200		135			72			-	-	-	-	-	-	0
01/07/2013	276	-	592	-	291	1,638	4,050	316	-	2,412	0	4	2	2	0	-	
02/07/2013	269	-	592	-	282			323	-		0	4	2	2	0	-	
03/07/2013	269	-	592	-	280			323	-		0	2	2	4	0	-	
04/07/2013	275	-	592	-	289			317	-		0	3	2	3	0	-	
05/07/2013	263	-	592	-	275			329	-		0	4	2	2	1	-	
06/07/2013	73	207	100	280	79			27	73		1	3	1	3	-	2	
07/07/2013	134		200		143			66			-	-	-	-	-	-	0
08/07/2013	261	-	592	-	272	1,580	4,050	331	-	2,470	0	4	2	2	0	-	
09/07/2013	270	-	592	-	281			322	-		0	5	2	1	0	-	
10/07/2013	263	-	592	-	275			329	-		0	3	2	3	0	-	
11/07/2013	276	-	592	-	289			316	-		0	4	2	2	0	-	
12/07/2013	250	-	592	-	258			342	-		0	5	2	1	0	-	
13/07/2013	64	194	100	280	67			36	86		0	3	2	3	-	3	
14/07/2013	130		200		138			70			-	-	-	-	-	-	0

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
15/07/2013	257	-	592	-	271	1,559	4,050	335	-	2,491	0	3	2	3	0	-	
16/07/2013	260	-	592	-	275			332	-		0	4	2	2	0	-	
17/07/2013	258	-	592	-	271			334	-		0	3	2	3	0	-	
18/07/2013	270	-	592	-	286			322	-		0	3	2	3	0	-	
19/07/2013	246	-	592	-	256			346	-		1	5	1	1	0	-	
20/07/2013	67	190	100	280	71			33	90		0	3	2	3	-	3	
21/07/2013	123		200		129			77	-		-	-	-	-	-	0	-
22/07/2013	253	-	592	-	270	1,553	4,050	339	-	2,497	0	2	2	4	0	-	
23/07/2013	264	-	592	-	279			328	-		0	1	2	5	0	-	
24/07/2013	258	-	592	-	272			334	-		0	3	2	3	0	-	
25/07/2013	267	-	592	-	284			325	-		0	4	2	2	0	-	
26/07/2013	240	-	592	-	255			352	-		0	3	2	3	1	-	
27/07/2013	64	184	100	280	67			36	96		1	3	1	3	-	7	
28/07/2013	120		200		127			80	-		-	-	-	-	-	1	-
29/07/2013	240	-	592	-	256	1,436	4,050	352	-	2,614	0	2	2	4	0	-	
30/07/2013	233	-	592	-	248			359	-		2	3	0	3	1	-	
31/07/2013	234	-	592	-	249			358	-		0	2	2	4	0	-	
01/08/2013	245	-	592	-	265			347	-		0	2	2	4	0	-	
02/08/2013	221	-	592	-	233			371	-		0	4	2	2	0	-	
03/08/2013	66	178	100	280	68			34	102		0	2	2	4	-	5	
04/08/2013	112		200		117			88	-		-	-	-	-	-	0	-
05/08/2013	219	-	592	-	232	1,368	4,050	373	-	2,682	0	1	2	5	0	-	
06/08/2013	224	-	592	-	237			368	-		1	4	1	2	0	-	
07/08/2013	232	-	592	-	246			360	-		1	3	1	3	0	-	
08/08/2013	221	-	592	-	234			371	-		0	3	2	3	0	-	
09/08/2013	218	-	592	-	229			374	-		0	3	2	3	0	-	
10/08/2013	64	181	100	280	67			36	99		1	2	1	4	-	2	
11/08/2013	117		200		123			83	-		-	-	-	-	-	0	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
12/08/2013	226	-	592	-	239	1,423	4,050	366	-	2,627	0	4	2	2	0	-	
13/08/2013	232	-	592	-	247			360	-		0	3	2	3	0	-	
14/08/2013	226	-	592	-	241			366	-		0	1	2	5	0	-	
15/08/2013	242	-	592	-	261			350	-		0	2	2	4	0	-	
16/08/2013	226	-	592	-	238			366	-		0	4	2	2	0	-	
17/08/2013	66	186	100	280	68			34	94		2	4	0	2	-	3	
18/08/2013	120		200		127			80			-	-	-	0	-	-	-
19/08/2013	219	-	592	-	231	1,356	4,050	373	-	2,694	0	2	2	4	0	-	
20/08/2013	227	-	592	-	240			365	-		0	2	2	4	0	-	
21/08/2013	222	-	592	-	237			370	-		0	1	2	5	0	-	
22/08/2013	225	-	592	-	241			367	-		1	4	1	2	0	-	
23/08/2013	221	-	592	-	233			371	-		1	2	1	4	0	-	
24/08/2013	68	165	100	280	72			32	115		0	4	2	2	-	3	
25/08/2013	97		200		103			103			-	-	-	-	-	-	-
26/08/2013	182	-	230	-	192	1,430	3,598	48	-	2,167	-	-	-	-	0	-	
27/08/2013	241	-	592	-	257			351	-		0	3	2	3	0	-	
28/08/2013	243	-	592	-	258			349	-		1	1	1	5	0	-	
29/08/2013	244	-	592	-	258			348	-		1	4	1	2	0	-	
30/08/2013	246	-	592	-	258			346	-		2	5	0	1	0	-	
31/08/2013	67	194	100	280	71			33	86		2	4	0	2	-	3	
01/09/2013	127		200		135			73			-	-	-	-	-	-	-
02/09/2013	255	-	592	-	268	1,575	4,050	337	-	2,475	1	4	1	2	0	-	
03/09/2013	264	-	592	-	277			328	-		1	5	1	1	0	-	
04/09/2013	270	-	592	-	286			322	-		1	6	1	0	0	-	
05/09/2013	254	-	592	-	272			338	-		1	3	1	3	0	-	
06/09/2013	251	-	592	-	261			341	-		1	6	1	0	0	-	
07/09/2013	72	197	100	280	77			28	83		1	5	1	1	-	2	
08/09/2013	125		200		133			75			-	-	-	-	-	-	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
09/09/2013	280	-	592	-	297	1,679	4,050	312	-	2,371	2	6	0	0	0	-	
10/09/2013	267	-	592	-	284			325	-		1	3	1	3	1	-	
11/09/2013	285	-	592	-	300			307	-		1	4	1	2	0	-	
12/09/2013	281	-	592	-	296			311	-		1	6	1	0	0	-	
13/09/2013	273	-	592	-	285			319	-		2	6	0	0	1	-	
14/09/2013	69	204	100	280	74			31	76		2	5	0	1	-	2	
15/09/2013	135		200		144			65			-	-	-	2	-	-	-
16/09/2013	267	-	592	-	279	1,618	4,050	325	-	2,432	1	4	1	2	0	-	
17/09/2013	270	-	592	-	284			322	-		1	5	1	1	0	-	
18/09/2013	272	-	592	-	285			320	-		0	3	2	3	0	-	
19/09/2013	275	-	592	-	287			317	-		1	5	1	1	0	-	
20/09/2013	261	-	592	-	270			331	-		1	6	1	0	0	-	
21/09/2013	66	201	100	280	70			34	79		1	4	1	2	-	1	
22/09/2013	135		200		144			65			-	-	-	-	-	-	-
23/09/2013	278	-	592	-	294	1,533	4,050	314	-	2,517	1	2	1	4	0	-	
24/09/2013	183	-	592	-	194			409	-		1	2	1	4	0	-	
25/09/2013	252	-	592	-	262			340	-		0	1	2	5	0	-	
26/09/2013	282	-	592	-	299			310	-		1	3	1	3	0	-	
27/09/2013	257	-	592	-	266			335	-		1	5	1	1	0	-	
28/09/2013	68	205	100	280	72			32	75		2	3	0	3	-	1	
29/09/2013	137		200		147			63			-	-	-	-	-	-	-
30/09/2013	275	-	592	-	290	1,619	4,050	317	-	2,431	1	4	1	2	0	-	
01/10/2013	276	-	592	-	290			316	-		2	3	0	3	0	-	
02/10/2013	274	-	592	-	285			318	-		2	4	0	2	0	-	
03/10/2013	277	-	592	-	291			315	-		1	4	1	2	0	-	
04/10/2013	255	-	592	-	265			337	-		0	4	2	2	0	-	
05/10/2013	63	188	100	280	66			37	92		2	5	0	1	-	1	
06/10/2013	125		200		132			75			-	-	-	-	-	-	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
07/10/2013	215	-	592	-	226	1,532	4,050	377	-	2,518	1	1	1	5	0	-	
08/10/2013	259	-	592	-	268			333	-		2	5	0	1	0	-	
09/10/2013	269	-	592	-	280			323	-		0	6	2	0	0	-	
10/10/2013	277	-	592	-	290			315	-		2	6	0	0	0	-	
11/10/2013	254	-	592	-	262			338	-		3	6	-1	0	0	-	
12/10/2013	63	194	100	280	67			37	86		0	3	2	3	-	2	
13/10/2013	131		200		139			69			-	86	-	-	-	-	0
14/10/2013	260	-	592	-	273	1,565	4,050	332	-	2,485	1	3	1	3	0	-	
15/10/2013	270	-	592	-	282			322	-		2	5	0	1	0	-	
16/10/2013	226	-	592	-	233			366	-		0	0	2	6	0	-	
17/10/2013	287	-	592	-	304			305	-		1	3	1	3	1	-	
18/10/2013	251	-	592	-	262			341	-		0	2	2	4	0	-	
19/10/2013	66	197	100	280	70			34	83		0	4	2	2	-	1	
20/10/2013	131		200		140			69			-	83	-	-	-	-	0
21/10/2013	260	-	592	-	272	1,596	4,050	332	-	2,454	2	4	0	2	0	-	
22/10/2013	265	-	592	-	276			327	-		0	2	2	4	1	-	
23/10/2013	263	-	592	-	273			329	-		1	4	1	2	0	-	
24/10/2013	278	-	592	-	292			314	-		0	5	2	1	0	-	
25/10/2013	269	-	592	-	280			323	-		1	5	1	1	1	-	
26/10/2013	66	192	100	280	70			34	88		1	5	1	1	-	2	
27/10/2013	126		200		134			74			-	88	-	-	-	-	1
28/10/2013	205	-	592	-	218	1,541	4,050	387	-	2,509	0	0	2	6	0	-	
29/10/2013	256	-	592	-	270			336	-		2	5	0	1	0	-	
30/10/2013	276	-	592	-	294			316	-		2	5	0	1	0	-	
31/10/2013	278	-	592	-	297			314	-		2	4	0	2	0	-	
01/11/2013	250	-	592	-	263			342	-		0	3	2	3	0	-	
02/11/2013	58	187	100	280	61			42	93		1	6	1	0	-	2	
03/11/2013	129		200		137			71			-	93	-	-	-	-	0

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
04/11/2013	256	-	592	-	271	1,586	4,050	336	-	2,464	1	3	1	3	0	-	
05/11/2013	260	-	592	-	275			332	-		1	2	1	4	0	-	
06/11/2013	270	-	592	-	287			322	-		1	3	1	3	0	-	
07/11/2013	265	-	592	-	282			327	-		0	3	2	3	0	-	
08/11/2013	265	-	592	-	281			327	-		1	3	1	3	0	-	
09/11/2013	58	180	100	280	61			42	100		2	4	0	2	-	0	
10/11/2013	122		200		129			78			-	0	-	-	-	0	-
11/11/2013	254	-	592	-	273	1,569	4,050	338	-	2,481	0	1	2	5	0	-	
12/11/2013	261	-	592	-	279			331	-		1	5	1	1	0	-	
13/11/2013	269	-	592	-	285			323	-		2	5	0	1	0	-	
14/11/2013	257	-	592	-	271			335	-		1	3	1	3	0	-	
15/11/2013	265	-	592	-	280			327	-		0	6	2	0	0	-	
16/11/2013	52	173	100	280	54			48	107		1	5	1	1	-	2	
17/11/2013	121		200		128			79			-	-	-	-	-	0	-
18/11/2013	245	-	592	-	260	1,548	4,050	347	-	2,502	0	0	2	6	0	-	
19/11/2013	262	-	592	-	277			330	-		1	5	1	1	1	-	
20/11/2013	273	-	592	-	294			319	-		1	4	1	2	0	-	
21/11/2013	260	-	592	-	275			332	-		0	4	2	2	0	-	
22/11/2013	259	-	592	-	271			333	-		0	3	2	3	0	-	
23/11/2013	50	165	100	280	51			50	115		2	5	0	1	-	0	
24/11/2013	115		200		121			85			-	-	-	-	-	0	-
25/11/2013	263	-	592	-	280	1,513	4,050	329	-	2,537	1	5	1	1	0	-	
26/11/2013	252	-	592	-	265			340	-		0	3	2	3	0	-	
27/11/2013	258	-	592	-	272			334	-		0	5	2	1	0	-	
28/11/2013	256	-	592	-	270			336	-		1	4	1	2	0	-	
29/11/2013	247	-	592	-	258			345	-		0	1	2	5	0	-	
30/11/2013	49	162	100	280	50			51	118		2	4	0	2	-	1	
01/12/2013	113		200		118			87			-	-	-	-	-	1	-

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]		
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening	Saturday Afternoon
									Day	Weekend		06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59		
02/12/2013	257	-	592	-	272	1,497	4,050	335	-	2,553	2	5	0	1	0	-	
03/12/2013	248	-	592	-	262			344	-		1	4	1	2	0	-	
04/12/2013	264	-	592	-	279			328	-		1	5	1	1	1	-	
05/12/2013	235	-	592	-	247			357	-		0	2	2	4	0	-	
06/12/2013	256	-	592	-	270			336	-		0	1	2	5	0	-	
07/12/2013	34	158	100	280	36			66	122		0	2	2	4	-	2	
08/12/2013	124		200		130			76			-	-	-	0	-	-	-
09/12/2013	259	-	592	-	275	1,192	4,050	333	-	2,858	1	6	1	0	0	-	
10/12/2013	203	-	592	-	213			389	-		2	4	0	2	0	-	
11/12/2013	37	-	592	-	35			555	-		0	0	2	6	0	-	
12/12/2013	225	-	592	-	233			367	-		0	1	2	5	0	-	
13/12/2013	237	-	592	-	251			355	-		1	4	1	2	0	-	
14/12/2013	56	176	100	280	59			44	104		0	4	2	2	-	4	
15/12/2013	120		200		127			80			-	-	-	-	-	-	-
16/12/2013	253	-	592	-	268	1,489	4,050	339	-	2,561	1	1	1	5	0	-	
17/12/2013	243	-	592	-	255			349	-		2	5	0	1	0	-	
18/12/2013	240	-	592	-	255			352	-		0	3	2	3	0	-	
19/12/2013	265	-	592	-	285			327	-		1	3	1	3	0	-	
20/12/2013	238	-	592	-	252			354	-		2	4	0	2	0	-	
21/12/2013	60	165	100	280	64			40	115		0	4	2	2	-	3	
22/12/2013	105		200		112			95			-	-	-	0	-	-	-
23/12/2013	112	-	592	-	123	692	2,695	480	-	2,003	0	3	2	3	0	-	
24/12/2013	116	-	592	-	122			476	-		0	1	2	5	0	-	
25/12/2013	0	-	0	-	0			0	-		-	-	-	-	-	-	
26/12/2013	99	-	100	-	103			1	-		-	-	-	-	0	-	
27/12/2013	162	-	592	-	174			430	-		0	1	2	5	0	-	
28/12/2013	53	157	100	280	57			47	123		1	3	1	3	-	2	
29/12/2013	104		200		112			96			-	-	-	-	-	-	-
30/12/2013	138	-	592	-	149	251	1,184	454	-	933	0	1	2	5	0	-	
31/12/2013	113	-	592	-	119			479	-		0	1	2	5	0	-	

London City Airport: Record of Daily and Noise Factored Aircraft Movements 2013

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		Factored Aircraft Movements ^[1]		Permitted Factored Movements	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements ^[2]	
	Day	Weekend	Day	Weekend	Day	Week		Week	Actual Movements		Factored Movements	Early Morning		Early Morning		Late Evening
							Day		Weekend	06:30-06:44		06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30	
Annual Total	73,640	-	120,000		77,374	-	120,000	46,360	-	42,626	260	1028			42	111

APPENDIX F

NTK Status Reports

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
01/01/2013	Yes	Yes	Yes	Yes	Yes
02/01/2013	Yes	Yes	Yes	Yes	Yes
03/01/2013	Yes	Yes	Yes	Yes	Yes
04/01/2013	Yes	Yes	Yes	Yes	Yes
05/01/2013	Yes	Yes	Yes	Yes	Yes
06/01/2013	Yes	Yes	Yes	Yes	Yes
07/01/2013	Yes	Yes	Yes	Yes	Yes
08/01/2013	Yes	Yes	Yes	Yes	Yes
09/01/2013	Yes	Yes	Yes	Yes	Yes
10/01/2013	Yes	Yes	Yes	Yes	Yes
11/01/2013	Yes	Yes	Yes	Yes	Yes
12/01/2013	Yes	Yes	Yes	Yes	Yes
13/01/2013	Yes	Yes	Yes	Yes	Yes
14/01/2013	Yes	Yes	Yes	Yes	Yes
15/01/2013	Yes	Yes	Yes	Yes	Yes
16/01/2013	Yes	Yes	Yes	Yes	Yes
17/01/2013	Yes	Yes	Yes	Yes	Yes
18/01/2013	Yes	Yes	Yes	Yes	Yes
19/01/2013	Yes	Yes	Yes	Yes	Yes
20/01/2013	Yes	Yes	Yes	Yes	Yes
21/01/2013	Yes	Yes	Yes	Yes	Yes
22/01/2013	Yes	Yes	Yes	Yes	Yes
23/01/2013	Yes	Yes	Yes	Yes	Yes
24/01/2013	Yes	Yes	Yes	Yes	Yes
25/01/2013	Yes	Yes	Yes	Yes	Yes
26/01/2013	Yes	Yes	Yes	Yes	Yes
27/01/2013	Yes	Yes	Yes	Yes	Yes
28/01/2013	Yes	Yes	Yes	Yes	Yes
29/01/2013	Yes	Yes	Yes	Yes	Yes
30/01/2013	Yes	Yes	Yes	Yes	Yes
31/01/2013	Yes	Yes	Yes	Yes	Yes
01/02/2013	Yes	Yes	Yes	Yes	Yes
02/02/2013	Yes	Yes	Yes	Yes	Yes
03/02/2013	Yes	Yes	Yes	Yes	Yes
04/02/2013	Yes	Yes	Yes	Yes	Yes
05/02/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
06/02/2013	Yes	Yes	Yes	Yes	Yes
07/02/2013	Yes	Yes	Yes	Yes	Yes
08/02/2013	Yes	Yes	Yes	Yes	Yes
09/02/2013	Yes	Yes	Yes	Yes	Yes
10/02/2013	Yes	Yes	Yes	Yes	Yes
11/02/2013	Yes	Yes	Yes	Yes	Yes
12/02/2013	Yes	Yes	Yes	Yes	Yes
13/02/2013	Yes	Yes	Yes	Yes	Yes
14/02/2013	Yes	Yes	Yes	Yes	Yes
15/02/2013	Yes	Yes	Yes	Yes	Yes
16/02/2013	Yes	Yes	Yes	Yes	Yes
17/02/2013	Yes	Yes	Yes	Yes	Yes
18/02/2013	Yes	Yes	Yes	Yes	Yes
19/02/2013	Yes	Yes	Yes	Yes	Yes
20/02/2013	Yes	Yes	Yes	Yes	Yes
21/02/2013	Yes	Yes	Yes	Yes	Yes
22/02/2013	Yes	Yes	Yes	Yes	Yes
23/02/2013	Yes	Yes	Yes	Yes	Yes
24/02/2013	Yes	Yes	Yes	Yes	Yes
25/02/2013	Yes	Yes	Yes	Yes	Yes
26/02/2013	Yes	Yes	Yes	Yes	Yes
27/02/2013	Yes	Yes	Yes	Yes	Yes
28/02/2013	Yes	Yes	Yes	Yes	Yes
01/03/2013	Yes	Yes	Yes	Yes	Yes
02/03/2013	Yes	Yes	Yes	Yes	Yes
03/03/2013	Yes	Yes	Yes	Yes	Yes
04/03/2013	Yes	Yes	Yes	Yes	Yes
05/03/2013	Yes	Yes	Yes	Yes	Yes
06/03/2013	Yes	Yes	Yes	Yes	Yes
07/03/2013	Yes	Yes	Yes	Yes	Yes
08/03/2013	Yes	Yes	Yes	Yes	Yes
09/03/2013	Yes	Yes	Yes	Yes	Yes
10/03/2013	Yes	Yes	Yes	Yes	Yes
11/03/2013	Yes	Yes	Yes	Yes	Yes
12/03/2013	Yes	Yes	Yes	Yes	Yes
13/03/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
14/03/2013	Yes	Yes	Yes	Yes	Yes
15/03/2013	Yes	Yes	Yes	Yes	Yes
16/03/2013	Yes	Yes	Yes	Yes	Yes
17/03/2013	Yes	Yes	Yes	Yes	Yes
18/03/2013	Yes	Yes	Yes	Yes	Yes
19/03/2013	Yes	Yes	Yes	Yes	Yes
20/03/2013	Yes	Yes	Yes	Yes	Yes
21/03/2013	Yes	Yes	Yes	Yes	Yes
22/03/2013	Yes	Yes	Yes	Yes	Yes
23/03/2013	Yes	Yes	Yes	Yes	Yes
24/03/2013	Yes	Yes	Yes	Yes	Yes
25/03/2013	Yes	Yes	Yes	Yes	Yes
26/03/2013	Yes	Yes	Yes	Yes	Yes
27/03/2013	Yes	Yes	Yes	Yes	Yes
28/03/2013	Yes	Yes	Yes	Yes	Yes
29/03/2013	Yes	Yes	Yes	Yes	Yes
30/03/2013	Yes	Yes	Yes	Yes	Yes
31/03/2013	Yes	Yes	Yes	Yes	Yes
01/04/2013	Yes	Yes	Yes	Yes	Yes
02/04/2013	Yes	Yes	Yes	Yes	Yes
03/04/2013	Yes	Yes	Yes	Yes	Yes
04/04/2013	Yes	Yes	Yes	Yes	Yes
05/04/2013	Yes	Yes	Yes	Yes	Yes
06/04/2013	Yes	Yes	Yes	Yes	Yes
07/04/2013	Yes	Yes	Yes	Yes	Yes
08/04/2013	Yes	Yes	Yes	Yes	Yes
09/04/2013	Yes	Yes	Yes	Yes	Yes
10/04/2013	Yes	Yes	Yes	Yes	Yes
11/04/2013	Yes	Yes	Yes	Yes	Yes
12/04/2013	Yes	Yes	Yes	Yes	Yes
13/04/2013	Yes	Yes	Yes	Yes	Yes
14/04/2013	Yes	Yes	Yes	Yes	Yes
15/04/2013	Yes	Yes	Yes	Yes	Yes
16/04/2013	Yes	Yes	Yes	Yes	Yes
17/04/2013	Yes	Yes	Yes	Yes	Yes
18/04/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
19/04/2013	Yes	Yes	Yes	Yes	Yes
20/04/2013	Yes	Yes	Yes	Yes	Yes
21/04/2013	Yes	Yes	Yes	Yes	Yes
22/04/2013	Yes	Yes	Yes	Yes	Yes
23/04/2013	Yes	Yes	Yes	Yes	Yes
24/04/2013	Yes	Yes	Yes	Yes	Yes
25/04/2013	Yes	Yes	Yes	Yes	Yes
26/04/2013	Yes	Yes	Yes	Yes	Yes
27/04/2013	Yes	Yes	Yes	Yes	Yes
28/04/2013	Yes	Yes	Yes	Yes	Yes
29/04/2013	Yes	Yes	Yes	Yes	Yes
30/04/2013	Yes	Yes	Yes	Yes	Yes
01/05/2013	Yes	Yes	Yes	Yes	Yes
02/05/2013	Yes	Yes	Yes	Yes	Yes
03/05/2013	Yes	Yes	Yes	Yes	Yes
04/05/2013	Yes	Yes	Yes	Yes	Yes
05/05/2013	Yes	Yes	Yes	Yes	Yes
06/05/2013	Yes	Yes	Yes	Yes	Yes
07/05/2013	Yes	Yes	Yes	Yes	Yes
08/05/2013	Yes	Yes	Yes	Yes	Yes
09/05/2013	Yes	Yes	Yes	Yes	Yes
10/05/2013	Yes	Yes	Yes	Yes	Yes
11/05/2013	Yes	Yes	Yes	Yes	Yes
12/05/2013	Yes	Yes	Yes	Yes	Yes
13/05/2013	Yes	Yes	Yes	Yes	Yes
14/05/2013	Yes	Yes	Yes	Yes	Yes
15/05/2013	Yes	Yes	Yes	Yes	Yes
16/05/2013	Yes	Yes	Yes	Yes	Yes
17/05/2013	Yes	Yes	Yes	Yes	Yes
18/05/2013	Yes	Yes	Yes	Yes	Yes
19/05/2013	Yes	Yes	Yes	Yes	Yes
20/05/2013	Yes	Yes	Yes	Yes	Yes
21/05/2013	Yes	Yes	Yes	Yes	Yes
22/05/2013	Yes	Yes	Yes	Yes	Yes
23/05/2013	Yes	Yes	Yes	Yes	Yes
24/05/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
25/05/2013	Yes	Yes	Yes	Yes	Yes
26/05/2013	Yes	Yes	Yes	Yes	Yes
27/05/2013	Yes	Yes	Yes	Yes	Yes
28/05/2013	Yes	Yes	Yes	Yes	Yes
29/05/2013	Yes	Yes	Yes	Yes	Yes
30/05/2013	Yes	Yes	Yes	Yes	Yes
31/05/2013	Yes	Yes	Yes	Yes	Yes
01/06/2013	Yes	Yes	Yes	Yes	Yes
02/06/2013	Yes	Yes	Yes	Yes	Yes
03/06/2013	Yes	Yes	Yes	Yes	Yes
04/06/2013	Yes	Yes	Yes	Yes	Yes
05/06/2013	Yes	Yes	Yes	Yes	Yes
06/06/2013	Yes	Yes	Yes	Yes	Yes
07/06/2013	Yes	Yes	Yes	Yes	Yes
08/06/2013	Yes	Yes	Yes	Yes	Yes
09/06/2013	Yes	Yes	Yes	Yes	Yes
10/06/2013	Yes	Yes	Yes	Yes	Yes
11/06/2013	Yes	Yes	Yes	Yes	Yes
12/06/2013	Yes	Yes	Yes	Yes	Yes
13/06/2013	Yes	Yes	Yes	Yes	Yes
14/06/2013	Yes	Yes	Yes	Yes	Yes
15/06/2013	Yes	Yes	Yes	Yes	Yes
16/06/2013	Yes	Yes	Yes	Yes	Yes
17/06/2013	Yes	Yes	Yes	Yes	Yes
18/06/2013	Yes	Yes	Yes	Yes	Yes
19/06/2013	Yes	Yes	Yes	Yes	Yes
20/06/2013	Yes	Yes	Yes	Yes	Yes
21/06/2013	Yes	Yes	Yes	Yes	Yes
22/06/2013	Yes	Yes	Yes	Yes	Yes
23/06/2013	Yes	Yes	Yes	Yes	Yes
24/06/2013	Yes	Yes	Yes	Yes	Yes
25/06/2013	Yes	Yes	Yes	Yes	Yes
26/06/2013	Yes	Yes	Yes	Yes	Yes
27/06/2013	Yes	Yes	Yes	Yes	Yes
28/06/2013	Yes	Yes	Yes	Yes	Yes
29/06/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
30/06/2013	Yes	Yes	Yes	Yes	Yes
01/07/2013	Yes	Yes	Yes	Yes	Yes
02/07/2013	Yes	Yes	Yes	Yes	Yes
03/07/2013	Yes	Yes	Yes	Yes	Yes
04/07/2013	Yes	Yes	Yes	Yes	Yes
05/07/2013	Yes	Yes	Yes	Yes	Yes
06/07/2013	Yes	Yes	Yes	Yes	Yes
07/07/2013	Yes	Yes	Yes	Yes	Yes
08/07/2013	Yes	Yes	Yes	Yes	Yes
09/07/2013	Yes	Yes	Yes	Yes	Yes
10/07/2013	Yes	Yes	Yes	Yes	Yes
11/07/2013	Yes	Yes	Yes	Yes	Yes
12/07/2013	Yes	Yes	Yes	Yes	Yes
13/07/2013	Yes	Yes	Yes	Yes	Yes
14/07/2013	Yes	Yes	Yes	Yes	Yes
15/07/2013	Yes	Yes	Yes	No	Yes
16/07/2013	Yes	Yes	Yes	Yes	Yes
17/07/2013	Yes	Yes	Yes	Yes	Yes
18/07/2013	Yes	Yes	Yes	Yes	Yes
19/07/2013	Yes	Yes	Yes	Yes	Yes
20/07/2013	Yes	Yes	Yes	Yes	Yes
21/07/2013	Yes	Yes	Yes	Yes	Yes
22/07/2013	Yes	Yes	Yes	Yes	Yes
23/07/2013	Yes	Yes	Yes	Yes	Yes
24/07/2013	Yes	Yes	Yes	Yes	Yes
25/07/2013	Yes	Yes	Yes	Yes	Yes
26/07/2013	Yes	Yes	Yes	Yes	Yes
27/07/2013	Yes	Yes	Yes	Yes	Yes
28/07/2013	Yes	Yes	Yes	Yes	Yes
29/07/2013	Yes	Yes	Yes	Yes	Yes
30/07/2013	Yes	Yes	Yes	Yes	Yes
31/07/2013	Yes	Yes	Yes	Yes	Yes
01/08/2013	Yes	Yes	Yes	Yes	Yes
02/08/2013	Yes	Yes	Yes	Yes	Yes
03/08/2013	Yes	Yes	Yes	Yes	Yes
04/08/2013	Yes	No	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
05/08/2013	Yes	No	Yes	Yes	Yes
06/08/2013	Yes	No	Yes	Yes	Yes
07/08/2013	Yes	No	Yes	Yes	Yes
08/08/2013	Yes	No	Yes	Yes	Yes
09/08/2013	Yes	Yes	Yes	Yes	Yes
10/08/2013	Yes	Yes	Yes	Yes	Yes
11/08/2013	Yes	Yes	Yes	Yes	Yes
12/08/2013	Yes	Yes	Yes	Yes	Yes
13/08/2013	Yes	Yes	Yes	Yes	Yes
14/08/2013	Yes	Yes	Yes	Yes	Yes
15/08/2013	Yes	Yes	Yes	Yes	Yes
16/08/2013	Yes	Yes	Yes	Yes	Yes
17/08/2013	Yes	Yes	Yes	Yes	Yes
18/08/2013	Yes	Yes	Yes	Yes	Yes
19/08/2013	Yes	Yes	Yes	Yes	Yes
20/08/2013	Yes	Yes	Yes	Yes	Yes
21/08/2013	Yes	Yes	Yes	Yes	Yes
22/08/2013	Yes	Yes	Yes	Yes	Yes
23/08/2013	Yes	Yes	Yes	Yes	Yes
24/08/2013	Yes	Yes	Yes	Yes	Yes
25/08/2013	Yes	Yes	Yes	Yes	Yes
26/08/2013	Yes	Yes	Yes	Yes	Yes
27/08/2013	Yes	Yes	Yes	Yes	Yes
28/08/2013	Yes	Yes	Yes	Yes	Yes
29/08/2013	Yes	Yes	Yes	Yes	Yes
30/08/2013	Yes	Yes	Yes	Yes	Yes
31/08/2013	Yes	Yes	Yes	Yes	Yes
01/09/2013	Yes	Yes	Yes	Yes	Yes
02/09/2013	Yes	Yes	Yes	Yes	Yes
03/09/2013	Yes	Yes	Yes	Yes	Yes
04/09/2013	Yes	Yes	Yes	Yes	Yes
05/09/2013	Yes	Yes	Yes	Yes	Yes
06/09/2013	Yes	Yes	Yes	Yes	Yes
07/09/2013	Yes	Yes	Yes	Yes	Yes
08/09/2013	Yes	Yes	Yes	Yes	Yes
09/09/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
10/09/2013	Yes	Yes	Yes	Yes	Yes
11/09/2013	Yes	Yes	Yes	Yes	Yes
12/09/2013	Yes	Yes	Yes	Yes	Yes
13/09/2013	Yes	Yes	Yes	Yes	Yes
14/09/2013	Yes	Yes	Yes	Yes	Yes
15/09/2013	Yes	Yes	Yes	Yes	Yes
16/09/2013	Yes	Yes	Yes	Yes	Yes
17/09/2013	Yes	Yes	Yes	Yes	Yes
18/09/2013	Yes	Yes	Yes	Yes	Yes
19/09/2013	Yes	Yes	Yes	Yes	Yes
20/09/2013	Yes	Yes	Yes	Yes	Yes
21/09/2013	Yes	No	Yes	Yes	Yes
22/09/2013	Yes	No	Yes	Yes	Yes
23/09/2013	Yes	No	Yes	Yes	Yes
24/09/2013	No	No	No	No	No
25/09/2013	No	No	No	No	No
26/09/2013	Yes	Yes	Yes	Yes	Yes
27/09/2013	Yes	Yes	Yes	Yes	Yes
28/09/2013	Yes	Yes	Yes	Yes	Yes
29/09/2013	Yes	Yes	Yes	Yes	Yes
30/09/2013	Yes	Yes	Yes	Yes	Yes
01/10/2013	Yes	Yes	Yes	Yes	Yes
02/10/2013	Yes	Yes	Yes	Yes	Yes
03/10/2013	Yes	No	Yes	Yes	Yes
04/10/2013	Yes	Yes	Yes	Yes	Yes
05/10/2013	Yes	Yes	Yes	Yes	Yes
06/10/2013	Yes	Yes	Yes	Yes	Yes
07/10/2013	Yes	Yes	Yes	Yes	Yes
08/10/2013	Yes	Yes	Yes	Yes	Yes
09/10/2013	Yes	Yes	Yes	Yes	Yes
10/10/2013	Yes	Yes	Yes	Yes	Yes
11/10/2013	Yes	Yes	Yes	Yes	Yes
12/10/2013	Yes	Yes	Yes	Yes	Yes
13/10/2013	Yes	Yes	Yes	Yes	Yes
14/10/2013	Yes	Yes	Yes	Yes	Yes
15/10/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
16/10/2013	Yes	Yes	Yes	Yes	Yes
17/10/2013	Yes	Yes	Yes	Yes	Yes
18/10/2013	Yes	Yes	Yes	Yes	Yes
19/10/2013	Yes	Yes	Yes	Yes	Yes
20/10/2013	Yes	Yes	Yes	Yes	Yes
21/10/2013	Yes	Yes	Yes	Yes	Yes
22/10/2013	Yes	Yes	Yes	Yes	Yes
23/10/2013	Yes	Yes	Yes	Yes	Yes
24/10/2013	Yes	Yes	Yes	Yes	Yes
25/10/2013	Yes	Yes	Yes	Yes	Yes
26/10/2013	Yes	Yes	Yes	Yes	Yes
27/10/2013	Yes	Yes	Yes	Yes	Yes
28/10/2013	Yes	Yes	Yes	Yes	Yes
29/10/2013	Yes	Yes	Yes	Yes	Yes
30/10/2013	Yes	Yes	Yes	Yes	Yes
31/10/2013	Yes	Yes	Yes	Yes	Yes
01/11/2013	Yes	Yes	Yes	Yes	Yes
02/11/2013	Yes	Yes	Yes	Yes	Yes
03/11/2013	Yes	Yes	Yes	Yes	Yes
04/11/2013	Yes	Yes	Yes	Yes	Yes
05/11/2013	Yes	Yes	Yes	Yes	Yes
06/11/2013	Yes	Yes	Yes	Yes	Yes
07/11/2013	Yes	Yes	Yes	Yes	Yes
08/11/2013	Yes	Yes	Yes	Yes	Yes
09/11/2013	Yes	Yes	Yes	Yes	Yes
10/11/2013	Yes	Yes	Yes	Yes	Yes
11/11/2013	Yes	Yes	Yes	Yes	Yes
12/11/2013	Yes	Yes	Yes	Yes	Yes
13/11/2013	Yes	Yes	Yes	Yes	Yes
14/11/2013	Yes	Yes	Yes	Yes	Yes
15/11/2013	Yes	Yes	Yes	Yes	Yes
16/11/2013	Yes	Yes	Yes	Yes	Yes
17/11/2013	Yes	Yes	Yes	Yes	Yes
18/11/2013	Yes	Yes	Yes	Yes	Yes
19/11/2013	Yes	Yes	Yes	Yes	Yes
20/11/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
21/11/2013	Yes	Yes	Yes	Yes	Yes
22/11/2013	Yes	Yes	Yes	Yes	Yes
23/11/2013	Yes	Yes	Yes	Yes	Yes
24/11/2013	Yes	Yes	Yes	Yes	Yes
25/11/2013	Yes	Yes	Yes	Yes	Yes
26/11/2013	Yes	Yes	Yes	Yes	Yes
27/11/2013	Yes	Yes	Yes	Yes	Yes
28/11/2013	Yes	Yes	Yes	Yes	Yes
29/11/2013	Yes	Yes	Yes	Yes	Yes
30/11/2013	Yes	Yes	Yes	Yes	Yes
01/12/2013	Yes	Yes	Yes	Yes	Yes
02/12/2013	Yes	Yes	Yes	Yes	Yes
03/12/2013	Yes	Yes	Yes	Yes	Yes
04/12/2013	Yes	Yes	Yes	Yes	Yes
05/12/2013	Yes	Yes	Yes	Yes	Yes
06/12/2013	Yes	Yes	Yes	Yes	Yes
07/12/2013	Yes	Yes	Yes	Yes	Yes
08/12/2013	Yes	Yes	Yes	Yes	Yes
09/12/2013	Yes	Yes	Yes	Yes	Yes
10/12/2013	Yes	Yes	Yes	Yes	Yes
11/12/2013	Yes	Yes	Yes	Yes	Yes
12/12/2013	Yes	Yes	Yes	Yes	Yes
13/12/2013	Yes	Yes	Yes	Yes	Yes
14/12/2013	Yes	Yes	Yes	Yes	Yes
15/12/2013	Yes	Yes	Yes	Yes	Yes
16/12/2013	Yes	Yes	Yes	Yes	Yes
17/12/2013	Yes	Yes	Yes	Yes	Yes
18/12/2013	Yes	Yes	Yes	Yes	Yes
19/12/2013	Yes	Yes	Yes	Yes	Yes
20/12/2013	Yes	Yes	Yes	Yes	Yes
21/12/2013	Yes	Yes	Yes	Yes	Yes
22/12/2013	Yes	Yes	Yes	Yes	Yes
23/12/2013	Yes	Yes	Yes	Yes	Yes
24/12/2013	Yes	Yes	Yes	Yes	Yes
25/12/2013	Yes	Yes	Yes	Yes	Yes
26/12/2013	Yes	Yes	Yes	Yes	Yes

DATE	NOISE EVENTS				FIDS
	NMT 1 Events	NMT 2 Events	NMT 3 Events	NMT 4 Events	
27/12/2013	Yes	Yes	Yes	Yes	Yes
28/12/2013	Yes	Yes	Yes	Yes	Yes
29/12/2013	Yes	Yes	Yes	Yes	Yes
30/12/2013	Yes	Yes	Yes	Yes	Yes
31/12/2013	Yes	Yes	Yes	Yes	Yes

A summary of the correlation rate for each month from 1st January 2013 up to and including the 31st December 2013 is given in Table 2 below. In order to calculate the rate of correlation, the number of departures correlated has been compared against the number of operations at London City Airport during the same period. It has been assumed that the number of departures constitute 50% of the total number of operations.

Month	No. Operations	No. Correlated (dep)	Correlation Rate
January	5399	2458	91%
February	5725	2678	94%
March	6062	2974	98%
April	6262	2953	94%
May	6725	3054	91%
June	6534	2995	92%
July	6727	3150	94%
August	5779	2342	81%
September	6486	2767	85%
October	6773	3204	95%
November	6201	2861	92%
December	4969	2238	90%

Table 2 – 2013 Monthly summary of correlation rate

Quarter	Operational Summary
January – March	During the quarterly period from 1 st January 2013 to 31 st March 2013, FIDs was received for all days, and the NMTs were fully operational. A total of 8,110 departure events were successfully recorded and a correlation rate of 91% or above achieved.
April – June	During the quarterly period from 1 st April 2013 to 30 th June 2013, FIDS was received for all days and the NMTs were fully operational. A total of 9,002 departure events were successfully recorded and a correlation rate of 91% or above achieved.
July – September	During the quarterly period from 1 st July 2013 to 30 th September 2013, there was a minor issue with NMT 4 on 15th July and there were issues with NMT 2 that caused it to be non-operational for periods in both August and September. For the longer of these periods, a temporary noise monitor was deployed to minimise the loss of data. In September 2013, London City Airport upgraded its noise and flight track keeping system which included the replacement of the four existing NMTs with four new NMTs. This resulted in 2 days without operational NMTs. Despite these issues, the target correlation rate was met in each month. A total of 8,259 departure events were successfully recorded and a correlation rate of 81% or above achieved.
October – November	During the quarterly period from 1 st October 2013 to 31 st December 2013, there was a minor issue with NMT 2 on 3rd October. A total of 8,303 departure events were successfully recorded and a correlation rate of 90% or above achieved.

Table 3 – 2013 Quarterly operations summary