Quarterly Monitoring Report
Qtr 4 2015

London
Luton
Airport

INTRODUCTION

The purpose of this report is to advise the community of statistics concerning aircraft operations at London Luton Airport (LLA) and related complaints during the period October to December 2015.

KEY MONITORING INDICATORS – 4th QUARTER 2015

Parameter		4th Quarter 2015	4th Quarter 2014
Total Aircraft Movements	↑	28,269	24,651
Night Movements (23.00 – 07.00)	↑	2,821	2,496
Early Morning Movements (06.00 – 07.00)	↑	994	915
Total Passenger Number	↑	2,863,315	2,360,052
24hr CDA (% achievement)	-	86%	86%
Day CDA (% achievement)	↓	86%	87%
Night CDA (% achievement)	↑	84%	83%
Track Violations	-	23	-
Departure Noise Infringements (Day)	↑	3	0
Departure Noise Infringements (Night)	↑	2	1
Noise Monitor Results			
No. Day (Night) > 85 dB(A)	-	2 (0)	4 (0)
No. Day (Night) > 76 dB(A)	-	1,460 (165)	2,038 (209)
No. Day (Night) > 70 dB(A)	-	8,209 (786)	7,939 (690)
Night Noise Contour Area (48 dB $L_{Aeq, 8h}$)	↑	22.8km^2	20.4km^2
Noise Complaints	↑	224	155
Complainants	↑	94	73
Number of New Complainants	↑	32	23
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns (>5 Complainants)	-	Flamstead Harpenden Kensworth South Luton St Albans	Harpenden St Albans
Westerly/Easterly Runway Split (%)	-	72/28	74/26

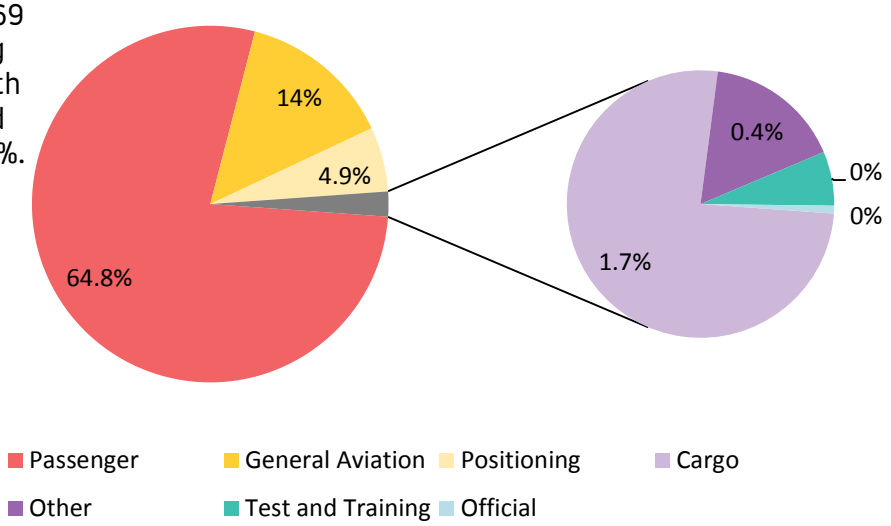
1 AIR TRAFFIC DATA

1.1 Aircraft Movements

There were a total of 28,269 aircraft movements during this quarter (compared with 24,651 for the same period in 2014), an increase of 15%.

This resulted in an average 307 movements per 24 hours (compared to 268 last year).

Total Aircraft Movements (%)



A breakdown of these movements is shown below:

	Commercial				Non-Commercial*					Total
	Cargo	*Passenger*	*Positioning*		*Military*	*Official*	*Other*[1]	*General Aviation*[2]	*Test & Training*	
			Other	*STN*						
Oct 2015	174	8,479	578	18	0	2	35	1,480	7	**10,773**
Nov 2015	168	6,701	515	17	3	0	23	1,330	22	**8,779**
Dec 2015	144	6,846	512	16	0	4	42	1,140	13	**8,717**
QTR Total	**486**	**22,026**	**1,605**	**51**	**3**	**6**	**100**	**3,950**	**42**	**28,269**

1.2 Passenger Statistics

A total of 2,863,315 passengers passed through LLA during the period October to December 2015 (compared with 2,360,052 for the same period last year), 2,786,657 on scheduled flights (97.3%) and 76,658 on charter flights (2.7%). This represents an increase in passengers of 21% year on year and equates to an average 31,123 passengers per 24 hours (compared to 25,653 during the fourth quarter last year).

	Domestic	EU	Non-EU	Total
Oct 2015	88,822	767,969	294,766	**1,151,557**
Nov 2015	79,616	549,347	217,124	**846,087**
Dec 2015	73,065	555,465	237,141	**865,671**
QTR Total	**241,503**	**1,872,781**	**749,031**	**2,863,315**

** Non-Commercial relates to aircraft not operating for hire or reward.*

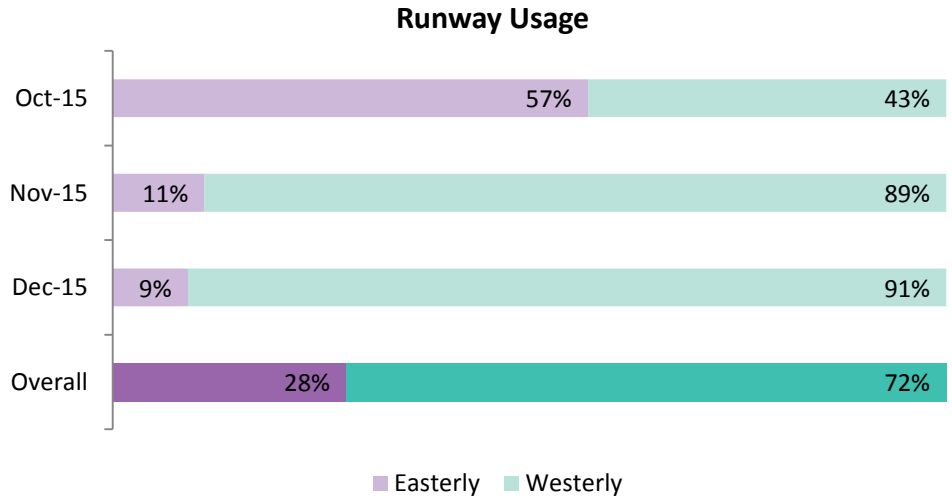
[1] Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base

[2] General Aviation incorporates Private Aircraft, Helicopters and Business Jets

1.3 Runway Usage

The direction of operation is determined by wind direction. Aircraft operating in a westerly direction take off towards the west and land from the east. Aircraft operating in an easterly direction take off towards the east and land from the west.

The runway usage split during this period was 28% easterly and 72% westerly (compared to 26% / 74% for the same quarter last year). The breakdown of these statistics, on a monthly basis, is as follows:



1.4 Night Flying Restrictions

As from 1st April 2015 London Luton Airport introduced new Night Restrictions as part of the planning conditions.

These restrictions have been put in place to limit and mitigate noise disturbance from aircraft operating at night, to prohibit aircraft of certain types from operating, as well as limiting the number of occasions on which aircraft may take off or land.

The night flying restrictions contain a 12 month period aircraft movement limit and a 12 month period quota count limit. The quota count (QC) means that points are allocated to different aircraft types according to how noisy they are. The noisier the aircraft type, the higher the points allocated. This provides an incentive for airlines to use quieter aircraft types.

1.4.1 Definitions

The 'Night Quota Period'

The 'Night Quota Period' is from 23:30 to 06:00 hours local, during which period aircraft movements (take-off or landing) are restricted by a limit on the number of movements with noise quotas as an additional measure.

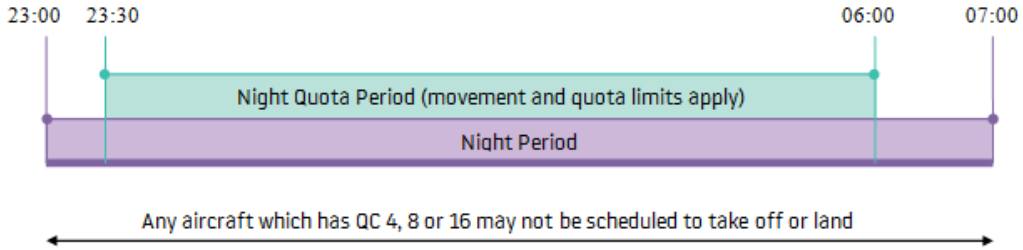
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take off and landing. The points are then allocated to different aircraft types according to how noisy they are. The table overleaf records to QC bands identified by the certified noise levels, and gives some typical example aircraft, some of which operate from LLA:

Certificated noise level (EPNdB)	Quota count	Typical aircraft
Greater than 101.9	QC 16	Some Boeing 747-100/200 Antonov 124/225
99 to 101.9	QC 8	Some Boeing 747-400 McDonnell Douglas DC-8
96 to 98.9	QC 4	Boeing 737-200ADV McDonnell Douglas DC-10
93 to 95.9	QC 2	Boeing 777-200 Airbus A300-600 Airbus A330
90 to 92.9	QC 1	Airbus A320/A321 Some Boeing 737-800 Boeing 757-200 Boeing 787-8
87 to 89.9	QC 0.5	Airbus A319/A320 Boeing 737-400 Boeing 737-800 Boeing 787-8
84 to 86.9	QC 0.25	Airbus A319/A320 Global Express Dassault Falcon 7X/900/2000
Less than 84	QC 0	Challenger series (eg CL600) BAe ATP Cessna 525/550

The 'Early Morning Shoulder Period'

The 'Early Morning Shoulder Period' is 06:00 to 07:00 hours local. During this period aircraft movements (take-off or landing) are restricted by a limit on the number of movements (the same as the Night Quota Period).

1.4.2 Restrictions at London Luton Airport



1.4.3 Aircraft movement and quota count limits (per 12 month period)

Condition 11(f) requires that for the Night Quota Period (2330 - 0600) the following limits shall not be exceeded:

(i) Total annual movements by aircraft per 12 month period shall be limited to 9,650;
(ii) The total annual noise quota in any 12 month period shall be limited to 3,500.

Condition 11(h) requires that for the Early Morning Shoulder Period (0600 – 0700) the total annual movements by aircraft in any 12 month period shall be limited to 7,000.

The table overleaf provides the aircraft movement and quota count for the period October to December 2015, and shows total annual movements and noise quota per 12 month period and compares those against the limits set by planning conditions.

	Night Quota Period (2330-0600)		Early Morning Shoulder (0600-0700)
	Movements *Limited to 9,650*	*Quota Count* *Limited to 3,500*	*Movements* *Limited to 7,000*
Jan 2015	348	128.25	232
Feb 2015	305	109.25	226
Mar 2015	357	128.00	293
Apr 2015	575	204.25	447
May 2015	723	245.00	487
June 2015	811	270.25	511
July 2015	786	289.25	521
Aug 2015	700	259.00	544
Sept 2015	772	280.50	523
Oct 2015	658	239.00	469
Nov 2015	413	162.75	269
Dec 2015	396	164.50	256
QTR Total	**1,467**	**566.25**	**994**
Total for preceding 12 months	*6,844*	*2,480*	*4,778*

1.5 Day/Night Ratio of Movements - Actual

There were 2,821 night operations during the quarter (compared to 2,496 for the fourth quarter 2014), an average 31 movements per night (compared to 27 last year). Arriving aircraft accounted for 58% of total night movements and the average ratio of total aircraft operations during the quarter was 90% day / 10% night (in line with 90% / 10% for the same quarter last year).

N.B. The figures quoted for 2014 cover the revised night period that has been extended by one hour, between 23:00 hrs and 07:00 hrs, as opposed to a shorter night period that was previously used.

	Day Movements (0700-2300)			Night Movements (2300-0700)					Total
	Day movements			*Night Quota Period (2330-0600)*		*Early Morning Shoulder (0600-0700)*		Total Night Movements (2300 – 0700)	
	A	D	Total	A	D	A	D		
Jan 2015	3,228	3,319	6,547	218	130	112	120	659	7,206
Feb 2015	3,268	3,358	6,626	186	119	104	122	597	7,223
Mar 2015	3,783	3,877	7,660	214	143	121	172	735	8,395
Apr 2015	4,001	4,058	8,059	404	171	103	344	1,156	9,215
May 2015	4,618	4,774	9,392	539	184	96	391	1,367	10,759
June 2015	4,834	5,062	9,896	620	191	96	415	1,483	11,379
July 2015	5,023	5,256	10,279	598	188	92	429	1,499	11,778
Aug 2015	4,769	4,894	9,663	554	146	90	454	1,410	11,073
Sept 2015	4,748	4,902	9,650	577	195	104	419	1,465	11,115
Oct 2015	4,687	4,816	9,503	480	178	108	361	1,270	**10,773**
Nov 2015	3,924	4,068	7,992	259	154	120	149	787	**8,779**
Dec 2015	3,882	4,071	7,953	263	133	106	150	764	**8,717**
QTR Total	**12,493**	**12,995**	**25,448**	**1,002**	**465**	**334**	**660**	**2,821**	**28,269**
Total for preceding 12 months	*50,765*	*52,495*	*103,220*	*4,912*	*1,932*	*1,252*	*3,526*	*13,192*	*116,412*

1.6 Day/Night Ratio of Movements – Forecast

	2016 Forecast of Aircraft Movements		
	Day Movements (0700 – 2300hrs)	*Night Movements (2300 to 0700hrs)*	*Total*
January 2016	7,674	743	8,417
February 2016	7,742	672	8,414
March 2016	8,971	830	9,801
April 2016	9,500	1,349	10,849
May 2016	11,028	1,602	12,630
June 2016	11,568	1,728	13,296
July 2016	12,053	1,765	13,818
August 2016	11,440	1,672	13,112
September 2016	11,340	1,715	13,055
October 2016	11,170	1,474	12,644
November 2016	9,365	888	10,253
December 2016	9,365	867	10,232
Total for following 12 months	121,214	15,306	*136,520*

2 DEPARTING AIRCRAFT

2.1 Departure Route Analysis

The following table reports the average and total number of departures on each flight route, differentiating between easterly (08) and westerly (26) operations. Night movements quoted below departed between 23:00 hrs and 07:00 hrs.

		Departures											Total
		MATCH/ DETLING			*COMPTON*		*OLNEY*		*Other**		Helicopter		
		08	26 Conv	26 RNAV	08	26	08	26	08	26	08	26	
Oct 2015	Daytime	1,468	99	1,020	865	676	352	258	29	32	0	17	**4,816**
	Night-time	136	6	86	159	115	33	27	0	1	0	1	**564**
Nov 2015	Daytime	251	180	1,921	132	914	58	540	5	47	0	20	**4,068**
	Night-time	16	2	116	20	116	8	47	0	5	0	0	**330**
Dec 2015	Daytime	252	188	1,886	103	989	62	528	10	45	0	8	**4,071**
	Night-time	1	11	117	6	116	1	46	0	4	0	2	**304**
QTR	**Total**	**2,124**	**486**	**5146**	**1,285**	**2926**	**514**	**1446**	**44**	**134**	**0**	**48**	**14,153**
	Daily Average	*23*	*5*	*56*	*14*	*32*	*6*	*16*	*0*	*1*	*0*	*1*	*154*

2.2 Departure – Track Keeping

All propeller-driven aircraft with Maximum Take Off Mass (MTOM) over 5,700kg and all jet aircraft leaving London Luton Airport are required to follow specific departure routes known as Noise Preferential Routes (NPRs). The obligations of NPRs for conventional SIDs cease when a height of 3,000ft QNH (between 07:00hrs to 23:00hrs local time) and 4,000ft QNH (during night time, 23:00hrs to 07:00hrs local time) has been reached. The obligations of the RNAV1 NPR ceases when a height of 4,000ft QNH has been reached at all times. An NPR is a corridor 3 kilometres wide (2km for the RNAV route), within which aircraft are deemed to be flying on track.

Once aircraft have cleared the designated NPR zone Air Traffic Control (ATC) can instruct the pilots to fly a more direct heading towards their destination. This is known as vectoring.

On the 1st April 2015 London Luton Airport implemented a Track Violation Penalty System as part of the noise planning conditions. Using the current Aircraft Noise and Track Monitoring System the Airport's specialist Flight Operations Department observes the radar tracks and investigate with required input from ATC and airlines. Where the aircraft is clearly flying outside the corridor, i.e. 250m outside, the aircraft is identified as causing a "possible" track violation.

As always, safety prevails and there may be cases which involve vectoring an aircraft sooner than at the NPR height restriction. If there is valid justification that could explain the deviation from the track, then the operator causing it will be exempt from the fine. Valid justifications include:

- Safety or operational reasons
- Weather avoidance
- Emergencies

* *This category relates to Test/Training flights or short positioning flights.*

From the start of November there have been exceptionally strong south-westerly winds, sometimes reaching 45-50knots at aerodrome level and being even stronger at 3,000 - 4,000ft. This has caused the aircraft to undertake a tighter turn of the RNAV route and slightly drift outside the NPR. Unfortunately, this is not something which can be avoided with the current departure procedures, aircraft are not able to account for weather conditions such as high winds, and therefore remain on the nominal track in the centre of the NPR corridor. Those departures have been excluded from the Track Violation Penalty System due to weather avoidance.

The table below shows track keeping performance over the previous 3 month period. The on track performance for the quarter was 99.27%

	Number of Violations	Total Penalties Collected
Oct 2015	11	£9,750
Nov 2015	8	£6,000
Dec 2015	4	£3,000
QTR	**23**	**£18,750**

The breakdown of the violations is shown in the table below.

	Airline or Aircraft Operator	Aircraft Type/Occurrence
Oct 2015	Air Hamburg	C56X/1
	Blue Jet	C680/1
	Cirrus Middle East	LJ60/1
	Eagle Airlines Austria	CL30/1
	European Air Transport	ATP/2
	FlyJet	LJ60/1
	Hyperion Aviation	CL60/1
	Privately owned aircraft	B737/1; GLF4/1; GLF5/1
Nov 2015	Globeair AG	C510/1
	Mjet	A319
	NetJets	H25B/1
	Nordjet	C550/1
	Privately owned aircraft	B732/1; BBJ3/1; EA50/1; FA50/1
Dec 2015	Aero Vision	FA50/1
	Atlasjet	A320/1
	GainJet Aviation S.A	CL60/1
	Privately owned aircraft	GLF4/1

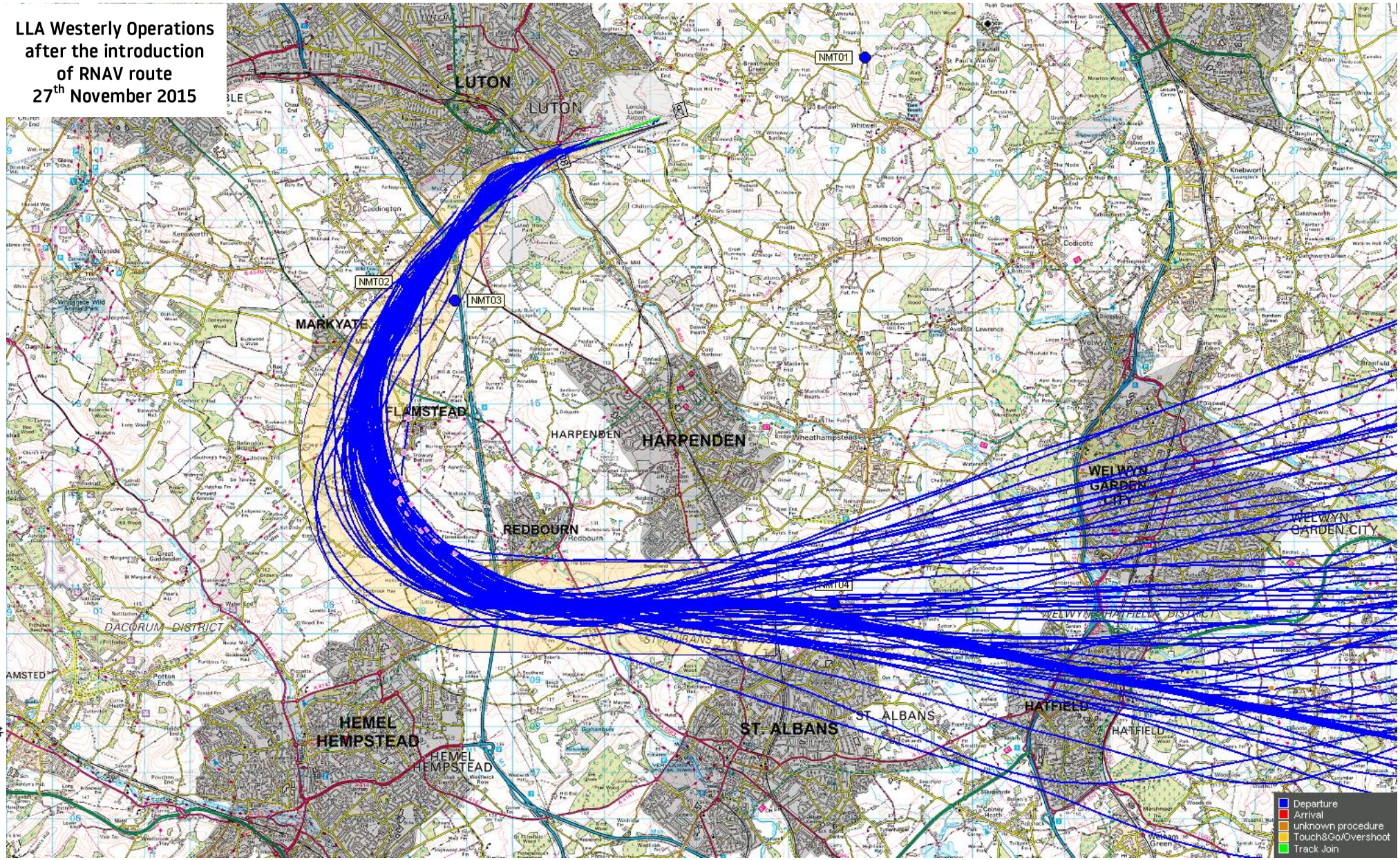
2.3 Area Navigation (RNAV) departure route

Following the implementation of the Area Navigation (RNAV1) technology for departing flights leaving the airport along the Match/Detling flight routes during westerly operations, the Airport started to closely monitor and assess the route performance.

The majority of flights using the RNAV procedure have improved track keeping which has created many positive effects within local communities. There has been some on-going work with Swanwick ATC centre to reduce the number of aircraft being vectored before the Railway Line.

The Airport is planning to monitor the noise produced from aircraft in South Luton and Sandridge areas to assess noise levels and compare them with pre-implementation levels as part of Post Implementation Review. The map overleaf shows actual flown tracks of LLA aircraft operations on the RNAV route within the third quarter of 2015.

LLA Westerly Operations after the introduction of RNAV route 27th November 2015



3 ARRIVING AIRCRAFT

3.1 Arrivals Route Analysis

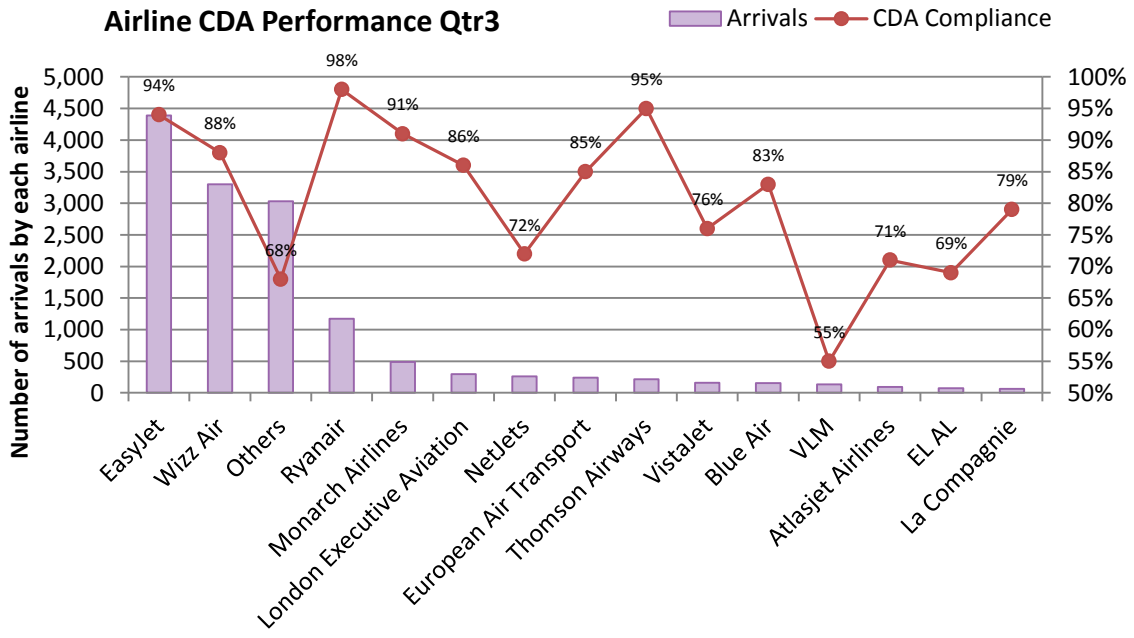
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters. Night movements quoted below landed between 23:00 hrs and 07:00 hrs.

		Arrivals			Total
		08	26	Heli	
Oct 2015	Daytime	2,660	2,008	19	**4,687**
	Night-time	420	286	0	**706**
Nov 2015	Daytime	410	3,494	20	**3,924**
	Night-time	65	391	1	**457**
Dec 2015	Daytime	368	3,506	8	**3,882**
	Night-time	8	450	2	**460**
QTR	**Total**	**3,931**	**10,135**	**45**	**14,116**
	Daily Average	*43*	*110*	*0*	*153*

The table below shows the percentage of flights that achieved a Continuous Descent Approach (CDA), which involves continuous descent with no more than one section of level flight greater than 2.5Nm in length following descent from an altitude of 5000ft.

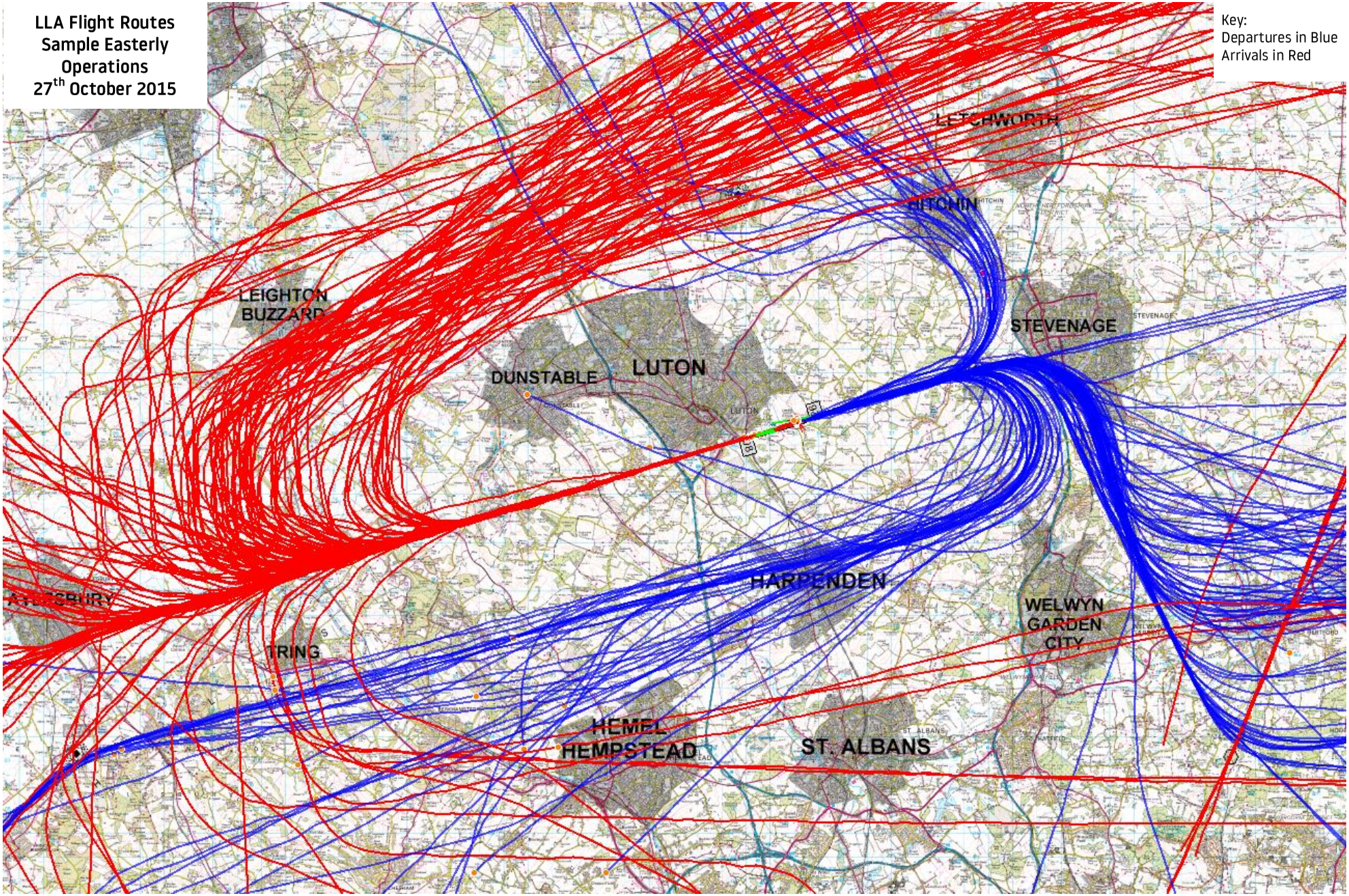
	All Arrivals			08 Easterly Arrivals			26 Westerly Arrivals		
	% CDA			*% CDA*			*% CDA*		
	Total	*Day*	*Night*	*Total*	*Day*	*Night*	*Total*	*Day*	*Night*
Oct 2015	**90%**	90%	86%	**91%**	92%	86%	**88%**	88%	86%
Nov 2015	**84%**	84%	85%	**93%**	92%	98%	**83%**	83%	83%
Dec 2015	**83%**	83%	79%	**93%**	93%	75%	**82%**	82%	80%
QTR Total	**86%**	*86%*	*84%*	**92%**	*92%*	*87%*	**84%**	*84%*	*82%*

The overall CDA achievement was 86% with several major LLA operators achieving higher performance – easyJet, Ryanair, Monarch and Thomson Airways.

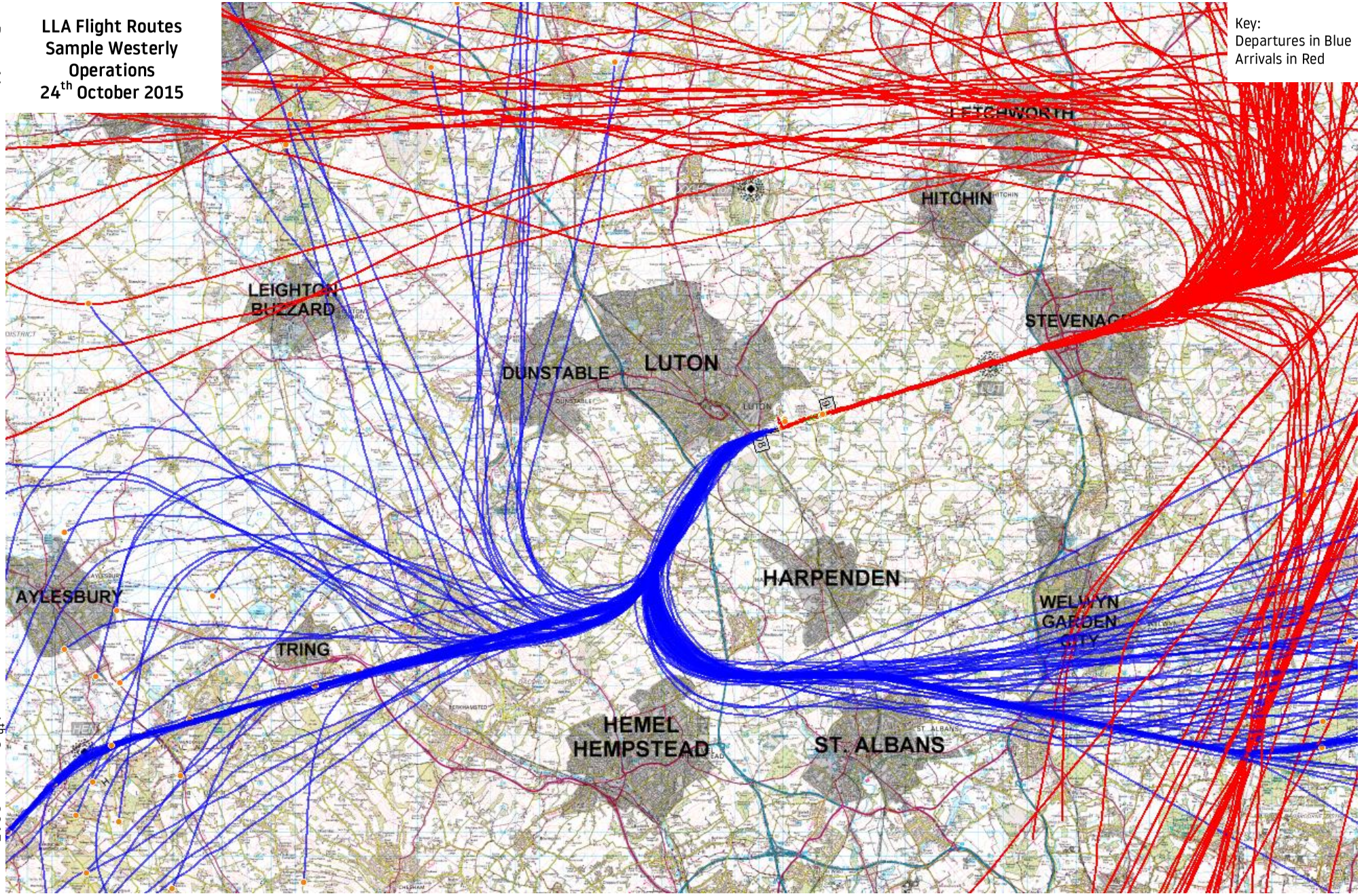


Maps on page overleaf, extrapolated from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown tracks of LLA aircraft operations (arrivals and departures during both easterly and westerly operations) for a typical 24 hour period within the third quarter of 2015.

LLA Flight Routes Sample Easterly Operations 27th October 2015



LLA Flight Routes
Sample Westerly Operations
24th October 2015



4 AIRCRAFT NOISE

During the 4th quarter of 2015, the maximum noise levels less than 79 dB(A) was recorded by 99% of correlated departing aircraft, compared with 98% for the same quarter last year.

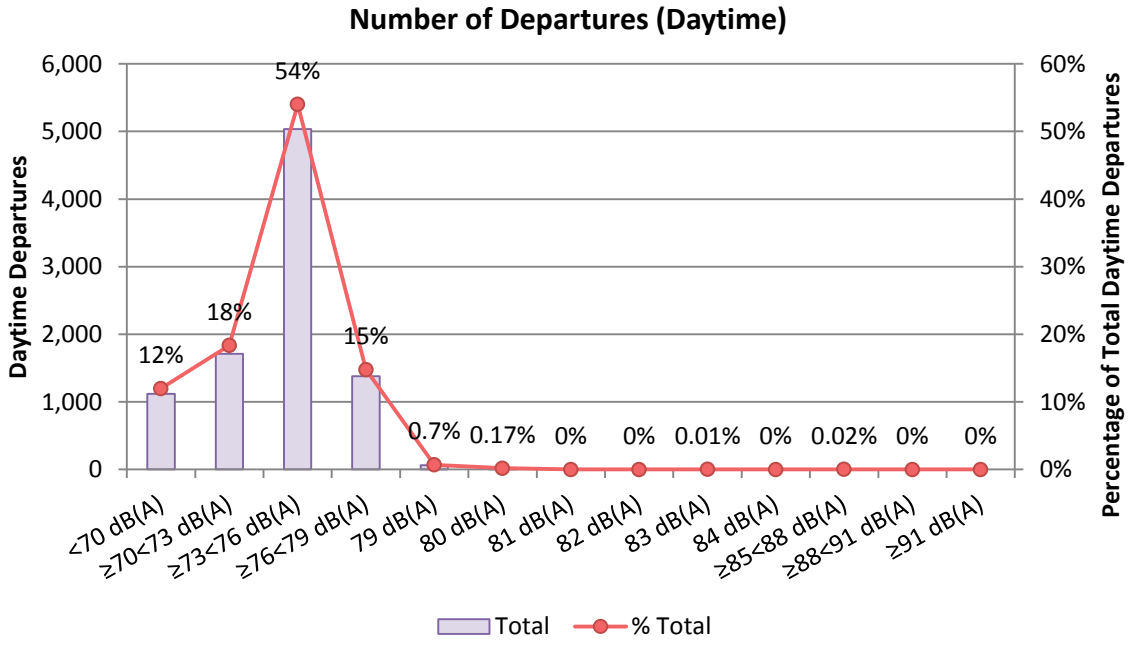
The maximum noise level less than 76 dB(A) was recorded by 84% of correlated departing aircraft significantly increased compared to 77% for the same period last year, indicating that more modern and quiet aircraft are operating at the airport.

There were two violations of the night-time noise level in this quarter, and a total of three violations of the 82 dB(A) day noise violation level, compared to one night noise violation in 2014.

4.1 Daytime Noise Levels – October to December 2015

The following table identifies daytime noise levels correlated to departing aircraft at the fixed noise monitoring terminals.
(*Any aircraft exceeding the Daytime Noise Violation Limit of 82dB(A), between 07:00 hrs and 23:00 hrs, is fined accordingly*)

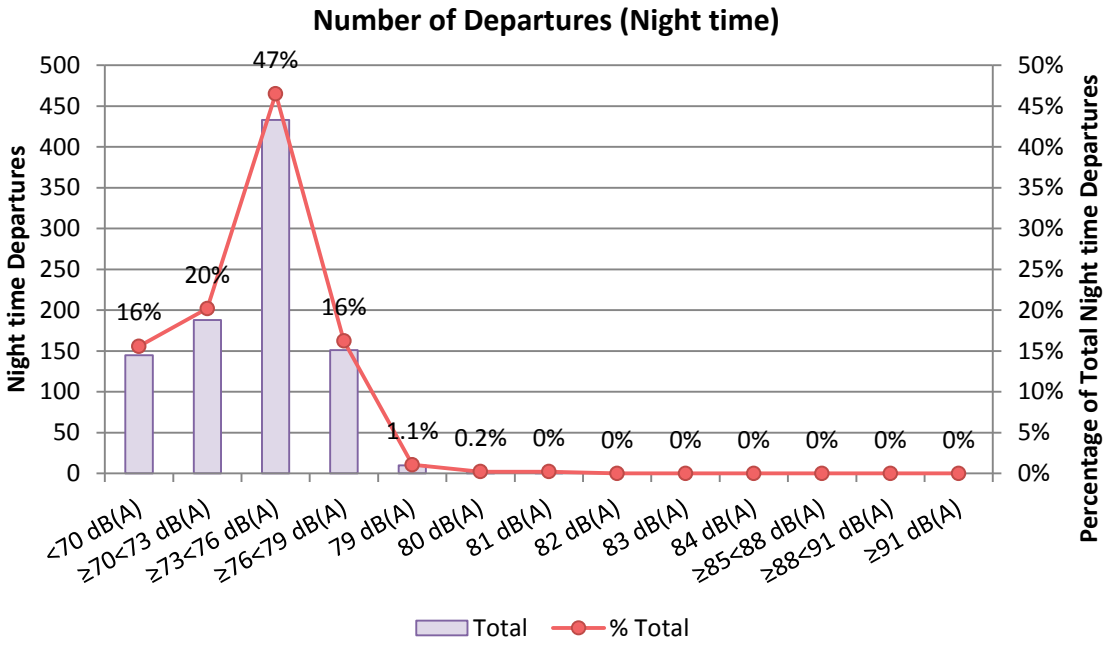
	Number of Departures (Daytime)													Total
db (A)	<70	>=70 <73	>=73 <76	>=76 <79	79	80	81	82	83	84	>=85 <88	>=88 <91	>=91	
Oct	597	768	2,319	560	18	6	0	0	0	0	1	0	0	**4,269**
Nov	239	499	1,136	317	27	6	0	0	0	0	1	0	0	**2,225**
Dec	282	445	1,582	500	19	4	0	0	1	0	0	0	0	**2,833**
QTR	**1,118**	**1,712**	**5,037**	**1,377**	**64**	**16**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**9,327**



4.2 Night Noise Levels – October to December 2015

The following table identifies the night noise levels correlated to departing aircraft at the fixed noise monitor terminals.
(Any aircraft exceeding the Night Noise Violation Limit of 80dB(A), between 23:00 hrs and 07:00 hrs, is fined accordingly)

	Number of Departures (Night time)													Total
db (A)	<70	>=70 <73	>=73 <76	>=76 <79	79	80	81	82	83	84	>=85 <88	>=88 <91	>=91	
Oct	80	113	249	84	3	0	0	0	0	0	0	0	0	**529**
Nov	31	34	86	35	2	2	0	0	0	0	0	0	0	**190**
Dec	34	41	98	32	5	0	2	0	0	0	0	0	0	**212**
QTR	**145**	**188**	**433**	**151**	**10**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**931**



N.B. The detection thresholds for the noise monitoring terminals are set at the lowest level to record the maximum number of aircraft noise events. However, a number of smaller aircraft types, such as business jets and propeller aircraft, get very close to but do not reach the detection threshold. Ambient background noise is also an important factor as strong winds and specific incidents such as loud road traffic, emergency vehicle sirens, lawn mowers, drills etc. can register noise levels louder than an aircraft overhead, which results in not all aircraft movements being correlated to noise events. Generally the louder noise events have more certainty of being correlated with aircraft movements.

4.3 Noise Violations during Qtr4 (October to December 2015)

There were three daytime noise violations and two night noise violations during the quarter.

	Date/Time (Local)	Aircraft Type	Noise Level
Daytime	19/10/2015 14:27 hrs	B732 (Executive Jet)	86 dB(A)
	27/11/2015 13:54 hrs	B732 (Executive Jet)	85 dB(A)
	19/12/2015 13:46 hrs	B732 (Executive Jet)	83 dB(A)
Night-time	02/12/2015 01:05 hrs	B734 (Blue Air)	81 dB(A)
	18/12/2015 02:51 hrs	A306 (MNG airlines)	81 dB(A)
Total Penalties Collected			**£900**

5 NOISE CONTOURS

5.1 Night Noise Contours – October to December 2015

5.1.1 Contour Production

Aircraft movement data for use in the contour production has been supplied by LLAOL. The contour production methodology is the same as that used for the 2015 Q3 contours. It includes terrain data, and was produced using INM software Version 7.0d. The validation is based on measured results in 2014 at the fixed noise monitors, and user-defined profiles for the most common aircraft have been implemented, based on information provided by easyJet and measured results from the mobile noise monitor while it was stationed in south Luton (Ludlow Avenue) in December 2014 and January 2015.

5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A9457-NN15-Q4 and presented at values from 48 to 72 dB $L_{Aeq,8h}$. The area of each noise contour is given in Table 1 below and compared with the values for the previous quarter (July – September 2015) and the values for the equivalent quarter during the previous year (October – December 2014).

Contour Value (dB $L_{Aeq,8h}$)	Contour Area (km^2)		
	Oct – Dec 2014	*Jul – Sep 2015*	*Oct – Dec 2015*
48	20.4	35.4	22.8
51	11.6	20.2	12.7
54	6.6	10.7	6.7
57	3.6	5.7	3.7
60	1.7	3.1	1.9
63	1.0	1.7	1.2
66	0.6	1.0	0.7
69	0.4	0.6	0.5
72	0.3	0.4	0.3
W/E Split (%)	75/25	74/26	69/31

Table 1: Area of Night Noise Contours

N.B. The runway split percentage in Table 1 is based only on night time (2300 – 0700) movements, and as a result there might be discrepancies between the figures quoted in a Runway Usage diagram and this Table.

5.1.3 Aircraft Movements

The aircraft movements for the night noise contours as supplied by LLAOL are summarised in Table 2 below, and compared with the movements from the previous quarter and the equivalent quarter in the previous year. Only aircraft types with at least 10 movements have been presented. For aircraft types with less than 10 movements in a period or types that were not explicitly presented in previous periods, 'n/a' is shown.

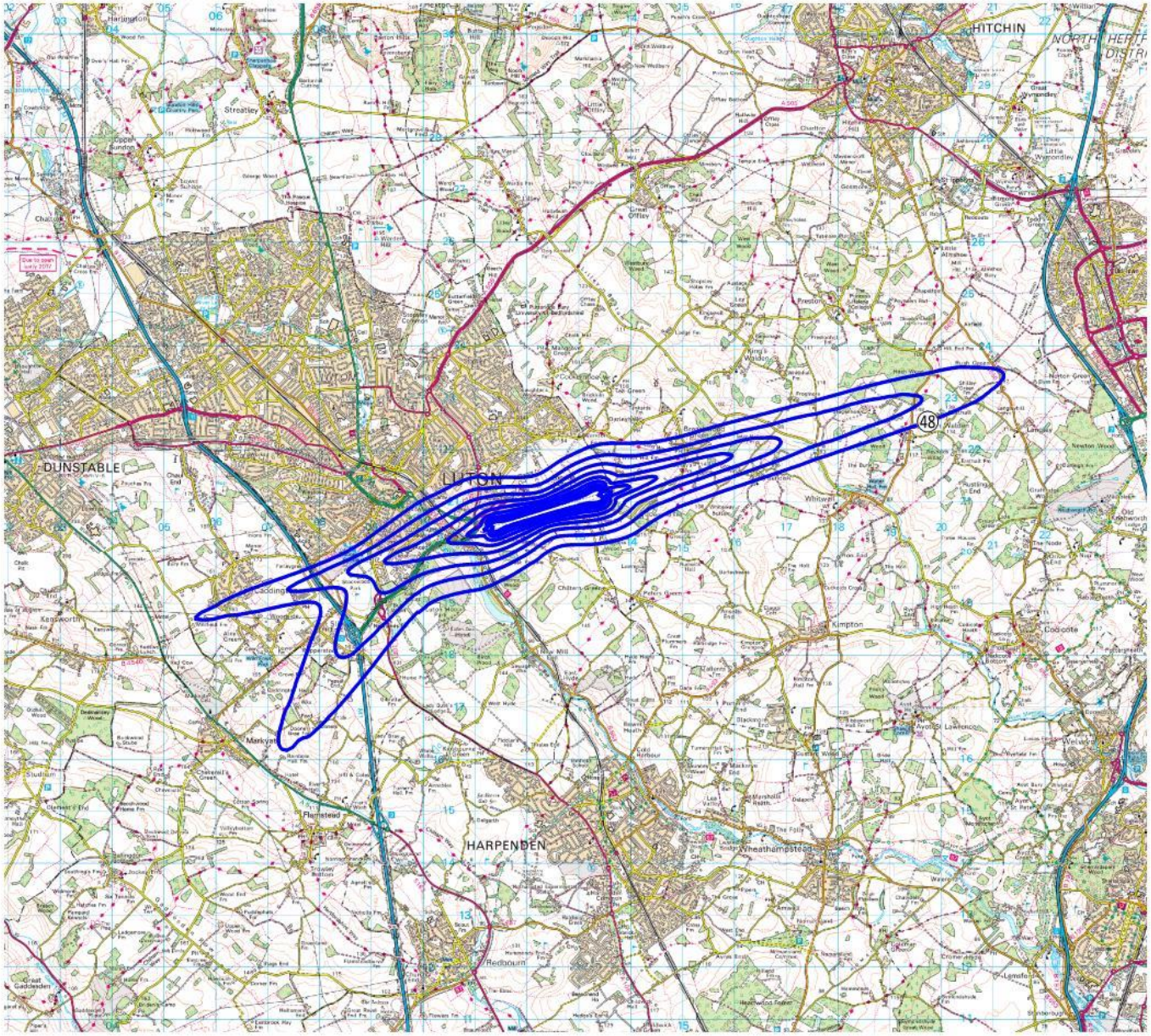
INM Aircraft Type	Oct – Dec 2014	Jul – Sep 2015	Oct – Dec 2015
B733	40	49	28
B734	63	140	69
B737	14	10	11
B738	382	688	413
B752	47	114	131
A306	131	196	185
A319	277	1025	329
A320	553	1124	643
A321	76	202	118
B462	n/a	18	n/a
CL600	111	97	89
CL601	22	43	30
C441	14	n/a	10
C500	18	19	11
C510	16	31	25
C525	25	31	41
C56X	35	58	45
C680	12	10	10
D328	120	27	88
E145	37	46	54
F100	96	68	74
GLF4	68	61	52
GLF5	250	242	292
LJ35	26	15	13
Other	46	52	11
Total	**2479**	**4366**	**2815**

Table 2: Night-time Aircraft Movement Numbers by Aircraft Type

5.1.4 Noise Contour Comparison

Compared with the same quarter in 2014 the total number of movements has increased by around 14%. The fleet mix is largely similar. The modal split has changed with 69% of aircraft operations on runway 26, compared to 75% in the same quarter in 2014. The area within the 48 dB(A) noise contour has increased by around 12% compared to the same quarter last year. This is largely due to the increase in the number of movements.

As in previous years, the number of movements, and therefore the contour area, has decreased significantly compared to the previous quarter (July – September 2015).



LEGEND:

Noise Contours,
48 to 72 dB $L_{Aeq,8h}$ in 3 dB steps

REVISIONS

Bickerdike
Allen
Partners
Architecture
Acoustics
Technology

121 Salusbury Road, London, NW6 6RG
Email: mail@bickerdikeallen.com T: 0207 625 4411
www.bickerdikeallen.com F: 0207 625 0250

London Luton Airport
Regular Contouring

Airborne Aircraft Noise Contours
Oct-Dec 2015 Average Night time

DRAWN: DR CHECKED: DC

DATE: 17/02/2016 SCALE: 1:100000@A4

FIGURE No:

A9457/NN15/Q4

6 COMPLAINTS

6.1 Total Complaints relating to LLA aircraft operations

	4th QTR 2014	4th QTR 2015
Total No. of Complaints relating to LLA aircraft operations	155	224
No. of Complainants	73	94
No. of Events eliciting a complaint	518 (172*)	365 (304*)
Average No. of Complaints per Complainant	2.1	2.4
Average No. of Events per Complainant	7.1# (2.4*)	3.9 (3.2*)
Average No. of Events per Complaint	3.3# (1.1*)	1.6 (1.3*)
No. of Aircraft Movements per Complaint	159	126
No. of Aircraft Movements per Event	47.6# (143*)	77 (93*)

During the last quarter a total of 224 complaints relating to LLA aircraft operations (on average just over 2 complaints per 24 hours) were received by the Flight Operations Department, compared with 155 for the same period last year. This was an increase of 44%.

The monthly breakdown of total complaints and events eliciting a complaint relating to LLA aircraft operations is as follows:

Oct 2015	115 complaints	(202 events)
Nov 2015	53 complaints	(95 events)
Dec 2015	56 complaints	(68 events)

(Where a high proportion of events originate from one or more sources, these are identified in the above table)

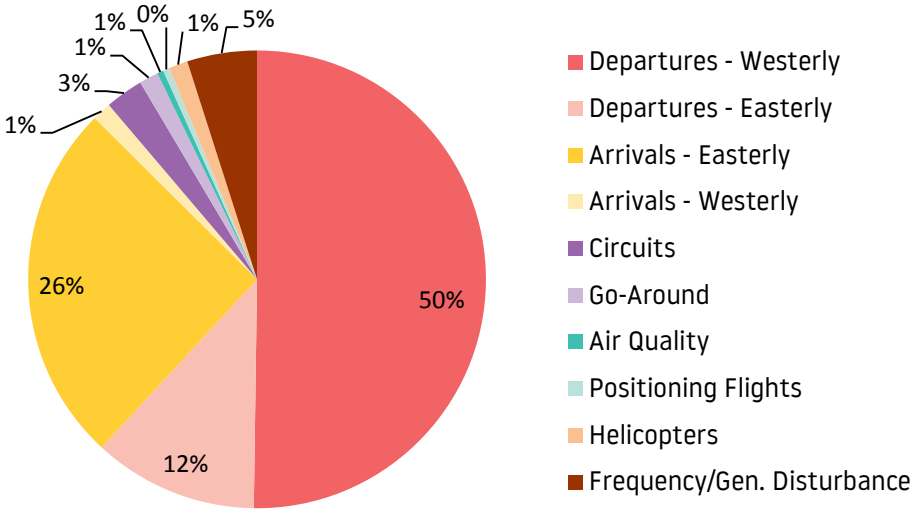
** Figures excluding events reported by one resident of St Albans. These events all involved westerly departures following the 26 Match/Detling heading, for which a revised RNAV1 flight route was implemented in summer 2015. This was to help improve track-keeping away from highly populated areas.*

A further 9 complaints (reporting 7 specific events) not attributable to LLA traffic were received throughout the quarter, compared to 12 complaints (13 events) for the period October to December last year.

Within the 224 complaints received during the quarter, a total of 365 events (eliciting a complaint) were listed, compared to 518 events for the same period last year. It should be noted, however, that 17% of events this quarter were reported by just one individual in St Albans.

6.2 Nature of Disturbance

The chart represents the areas of concern reported with regard to aircraft activity during the period Oct to Dec 2015.



Within the 112 complaints concerning westerly departures, 6 complaints involved aircraft on the Match/Detling conventional flight route, whilst 92 complaints related to the Match/Detling RNAV route, 10 were of a general nature, 2 related to aircraft on the Compton heading, 2 involved aircraft on the Olney heading and 4 correlated to aircraft on an off-airways routing.

With regard to the 28 complaints attributed to easterly departures, 17 related to aircraft following the Compton flight route, 7 involved aircraft on the Match/Detling heading, 2 aircraft on the Olney route, 1 related to off airways routing and 1 was of a general nature.

Whilst 53 of the 57 complaints concerning easterly arrivals reported general disturbance, 4 related specifically to aircraft following the arrivals routing from the Lorel Holding Point.

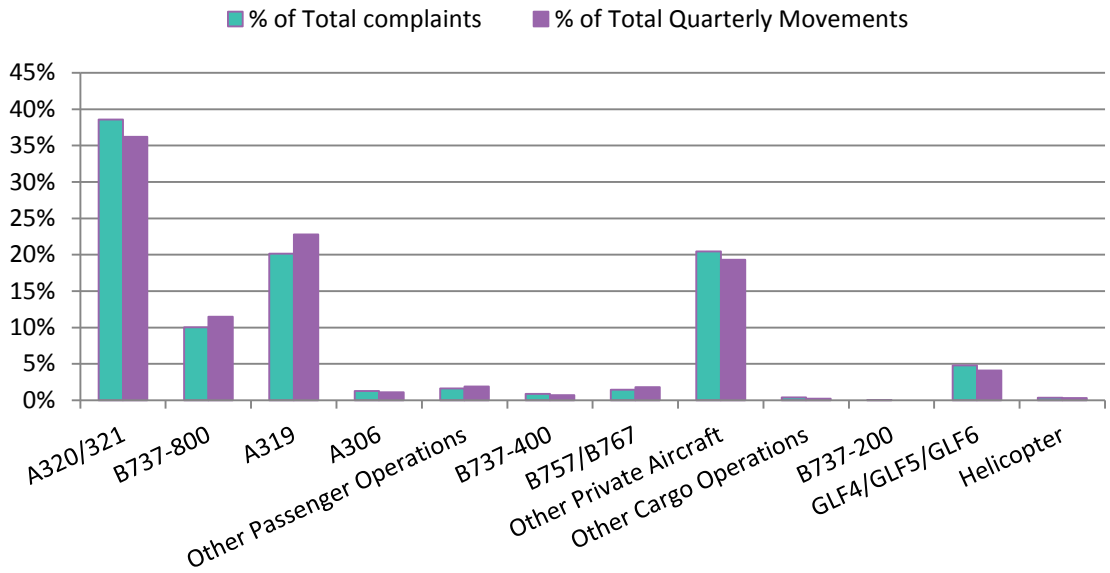
50 Complainants reported concerning noise disturbance at night (compared to 25 Complainants for the same Quarter last year)

Departing aircraft accounted for 48% of the 107 night complaints and 44% involved arrivals. A further 3% of night complaints reported disturbance from a calibration flight whilst, 6% reported disturbance from general noise during the night period. Cargo flights, involving A306 aircraft and ATP postal flights were reported in 23% of night complaints.

107 (48%) Complaints concerning night noise disturbance from LLA operations

6.3 Complaints by aircraft type

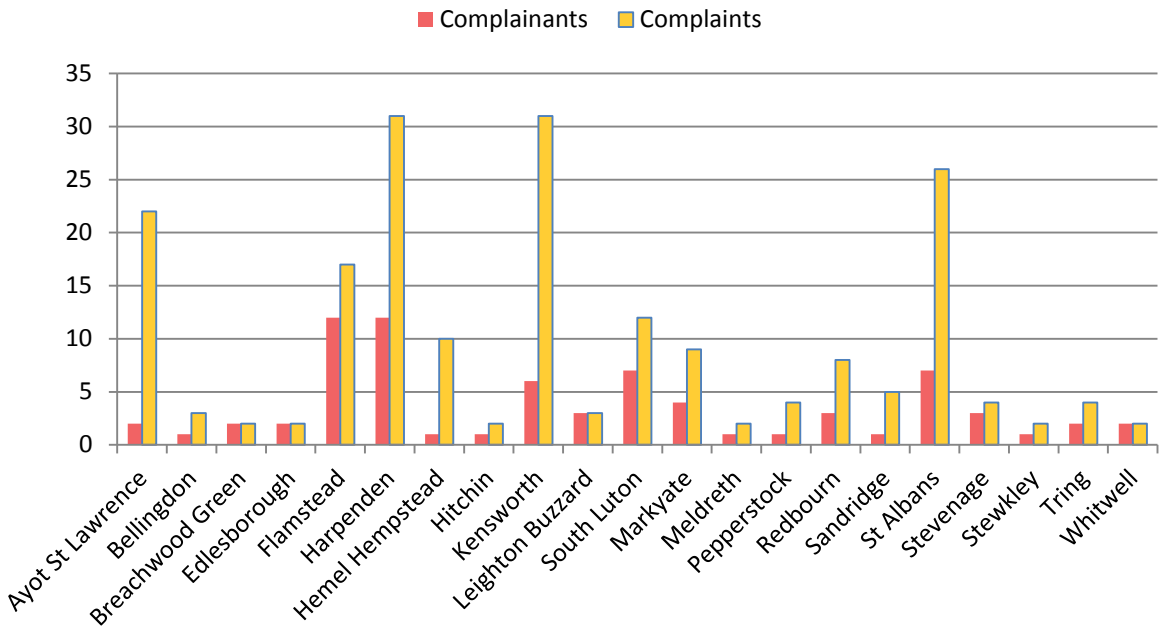
Within the 224 complaints registered during the quarter a total of 131 complaints (58%) were clearly correlated to a specific aircraft type, although many complaints were of a general nature. The diagram below shows aircraft types generating complaints.



6.4 Origin of Complaints

The chart below identifies the areas around the Airport from which more than one complaint relating to LLA aircraft operations was received during the period October to December 2015.

The communities with one complaint include Bassingbourn, Berkhampstead, Caddington, Dagnall, Digswell, Eaton Bray, Hartley Whitney, Heath and Reach, Knebworth, Pitstone, Poynders End, Royston, Slip End, St Leonards, Welwyn and Wheathampstead.



6.5 Communication Method

The following table shows the mode of communication used to contact London Luton Airport regarding noise.

Communication Method	% of Total Complaints
E-mail*	83%
Telephone	14%
Letter	0%
TraVis	1%

* During the period Oct to Dec 2015 a total of 188 complaints were reported to the Flight Operations Department by e-mail. Within this total 62% (117) were sent directly to noise@ltn.aero, and the other 38% of e-mail complaints (71) being submitted via the noise complaint template on the website www.london-luton.co.uk

Any concerns relating to aircraft operations associated with London Luton Airport can also be reported to the Flight Operations Department by the following means:

Postal Address Flight Operations Department
London Luton Airport
Navigation House
Airport Way
Luton, Bedfordshire
LU2 9LY

Direct Telephone (01582) 395382 (24 hours)

7 COMMUNITY RELATIONS

7.1 Community Visits to Airport

Invitations are often extended to local residents and LLACC members to visit the Flight Operations Team for a demonstration of the Aircraft Noise & Track Monitoring System, to discuss specific concerns and to view the specific tracks of LLA aircraft operations in their area.

On the 2nd October, three Hertfordshire councillors attended a meeting at the airport to discuss concerns relating to Markyate. Similarly on the 23rd October, LLA welcomed members of CCB/CCG to visit the airport for a meeting discussing expansion plans and the new noise conditions. On the 10th November 2015 Ashwell Parish Council representative, Richard Slatter, visited the airport to discuss future airspace plans and the possibility of putting RNAV technology on the arrival routes. People against Aircraft Intrusive Noise (PAIN) attended a meeting at the airport on the 3rd December to discuss noise concerns as well as the expansion plans. Finally, HarpendenSky.com organised a meeting at the airport to discuss the RNAV Match/Detling route and future RNP plans.

7.2 Airport Visits to the Community

During the quarter there were two Public Surgeries – one was held in Pepperstock on the 6th November 2015. The other was in Kensworth on 12th November 2015. At each of these surgeries there were more than 40 attendees from the local areas. Many residents had concerns regarding the expansion and the impact this would have to them from both a noise and if there was an increase in movements. The objective at these surgeries is to ensure that everyone who attends is better informed about aircraft operations on their area. More Public Surgeries are scheduled; details of the Public Surgeries can be found on our Noise website, which is updated accordingly.

It should also be noted that, two members of the Flight Operations team visited a resident in Markyate on the 30th November to discuss noise concerns.