Quarterly Monitoring Report
Qtr 2 2017

London
Luton
Airport

INTRODUCTION

The purpose of this report is to advise the community of statistics concerning aircraft operations at London Luton Airport (LLA) during the period April to June 2017.

KEY MONITORING INDICATORS – 2nd QUARTER 2017

Parameter		2nd Quarter 2017	2nd Quarter 2016
Total Passenger Number	↑	4,289,031	3,907,157
Total Aircraft Movements	↑	36,664	35,301
Night Movements (23.00 – 07.00)	↑	4,845	4,404
Early Morning Movements (06.00 – 07.00)	↑	1,809	1,538
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements (*9,650 limit*)	↑	7,635	7,108
Night Quota Count *(3,500 limit)*	↑	2,714.25	2,623.75
Early Morning Shoulder *(7,000 movements)*	↑	5,635	4,942
24hr CDA (% achievement)	↑	91%	90%
Day CDA (% achievement)	-	91%	91%
Night CDA (% achievement)	-	89%	89%
Track Violations	↓	14	16
Departure Noise Infringements (Day)	↓	1	3
Departure Noise Infringements (Night)	↓	0	1
Noise Monitor Results			
No. Day (Night) > 80 dB(A)	-	33 (0)	25 (1)
No. Day (Night) > 75 dB(A)	-	2,070 (362)	1,975 (319)
No. Day (Night) > 70 dB(A)	-	12,476 (1,643)	11,359 (1,352)
Night Noise Contour Area (48 dB $L_{Aeq, 8h}$)		35.1km^2	33.6km^2
Noise Complaints	↑	5,304	609
Complainants	↑	527	163
Number of New Complainants	↑	280	58
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns (>5 Complainants)	-	Childwickbury Flamstead Harpenden Hitchin Kensworth Luton Markyate Redbourn Sandridge St Albans Stevenage Wheathampstead	Childwickbury Flamstead Harpenden Luton Markyate Redbourn St Albans
Westerly/Easterly Runway Split (%)	-	69/31	59/41

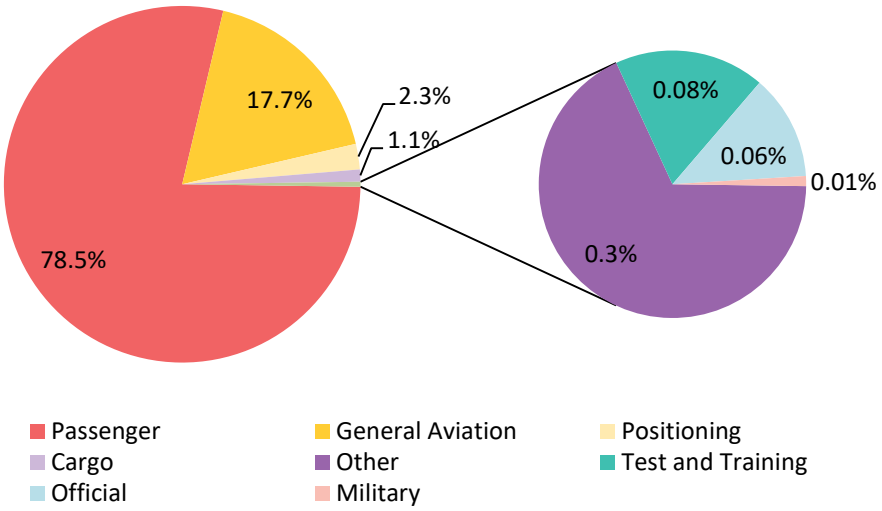
1 AIR TRAFFIC DATA

1.1 Aircraft Movements

There were a total of 36,664 aircraft movements during this quarter (compared with 35,301 for the same period in 2016), an increase of 4%.

This resulted in an average 403 movements per 24 hours (compared to 388 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*						
Apr 2017	126	9,051	253	14	0	2	43	1,805	10	**11,304**
May 2017	138	9,927	267	17	0	8	37	2,291	14	**12,699**
Jun 2017	140	9,797	285	12	2	11	32	2,376	6	**12,661**
QTR Total	**404**	**28,775**	**805**	**43**	**2**	**21**	**112**	**6,472**	**30**	**36,664**

1.2 Passenger Statistics

A total of 4,289,031 passengers passed through LLA during the period April to June 2017 (compared with 3,907,157 for the same period last year), 4,160,800 on scheduled flights (97%) and 128,231 on charter flights (3%). This represents an increase in passengers of 10% year on year and equates to an average 47,132 passengers per 24 hours (compared to 42,936 during the first quarter last year).

	Domestic	EU	Non-EU	Total
Apr 2017	98,657	881,770	361,430	**1,341,857**
May 2017	100,893	990,448	353,628	**1,444,969**
Jun 2017	106,963	1,021,014	374,228	**1,502,205**
QTR Total	**306,513**	**2,893,232**	**1,089,286**	**4,289,031**

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

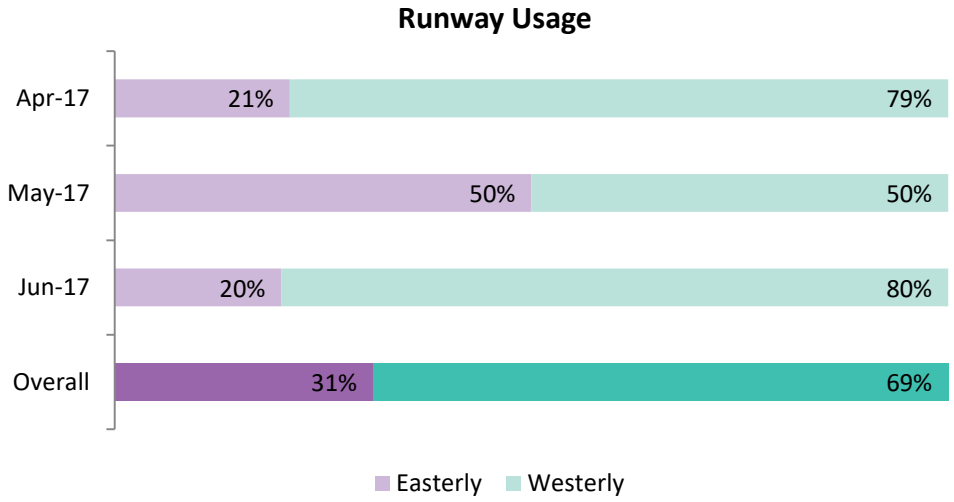
[1] Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base

[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 31% easterly and 69% westerly (compared to 41% / 59% 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) is a point based system that allocates points to different aircraft types according to how noisy they are. The noisier the aircraft type, the higher the points allocated.

1.4.1 Definitions

The 'Night Quota Period'

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

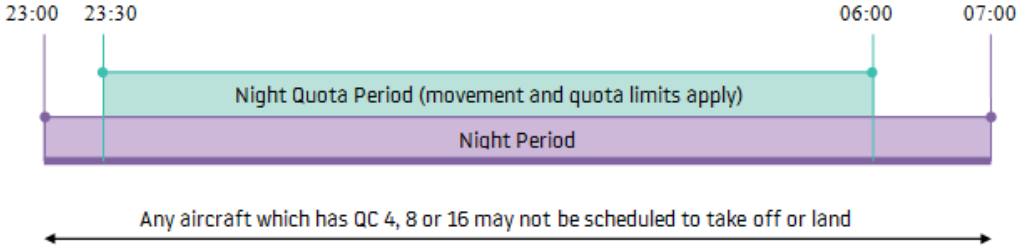
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are then allocated to different aircraft types according to how noisy they are. The table overleaf details the 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	Airbus A320neo BAe ATP Challenger series (eg CL600) Cessna 525/550

The 'Early Morning Shoulder Period'

The 'Early Morning Shoulder Period' is 06:00 to 07:00 hours local. During this period the number of aircraft movements (take-off or landing) is also restricted in a similar way to 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 number of 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 April to June 2017, and shows total movements and noise quota per 12 month period and compares those against the limits set within the planning conditions.

	Night Quota Period (2330-0600)		Early Morning Shoulder (0600-0700)
	Movements Limited to 9,650 Annually	*Quota Count Limited to 3,500 Annually*	*Movements Limited to 7,000 Annually*
Jul 2016	931	312.00	556
Aug 2016	834	299.25	539
Sep 2016	801	270.00	576
Oct 2016	746	253.25	525
Nov 2016	388	156.00	296
Dec 2016	420	178.50	309
Jan 2017	318	127.25	331
Feb 2017	363	141.50	301
Mar 2017	388	147.50	393
Apr 2017	638	224.75	563
May 2017	850	285.75	636
Jun 2017	958	318.50	610
QTR Total	**2,446**	**829.00**	**1,809**
Total for preceding 12 months	*7,635*	*2,714.25*	*5,635*

1.5 Day/Night Ratio of Movements - Actual

There were 4,845 night operations during the quarter (compared to 4,404 for the second quarter 2016), an average 53 movements per night (compared to 48 last year). Arriving aircraft accounted for 56% of total night movements, relating primarily to the last rotation of Luton based passenger aircraft scheduled to land between 23:00 hours local and midnight. 67% of total night departures took off between 06:00 – 07:00 hours local in the morning. The average ratio of total aircraft operations during the quarter was 87% day / 13% night (compared to 87.5% / 12.5% for the same quarter last year).

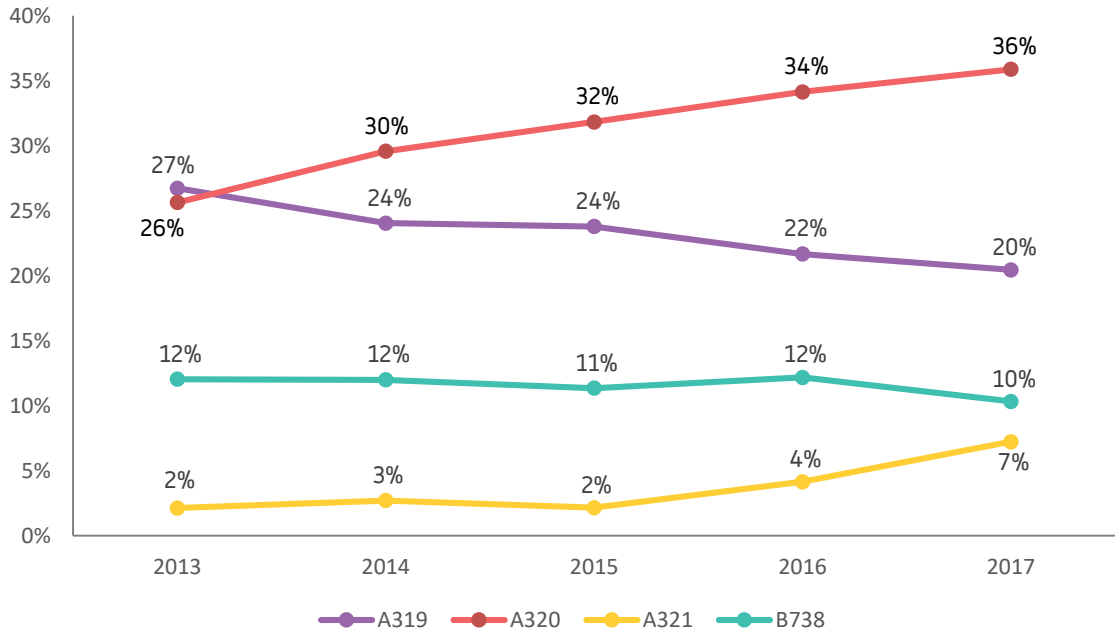
	Day Movements (0700-2300)			Night Movements (2300-0700)					Total
	Day movements			*Night Quota Period (2330-0600)*		*Early Morning Shoulder (0600-0700)*		*Total Night Movements (2300 – 0700)*	
	A	D	Total	A	D	A	D		
Jul 2016	5,433	5,800	11,233	718	213	132	424	1,705	12,938
Aug 2016	5,199	5,478	10,677	631	203	124	415	1,604	12,281
Sep 2016	5,304	5,562	10,866	598	203	150	426	1,588	12,454
Oct 2016	5,224	5,460	10,684	571	175	118	407	1,497	12,181
Nov 2016	4,231	4,305	8,536	238	150	103	193	809	9,345
Dec 2016	4,519	4,648	9,167	277	143	103	206	861	10,028
Jan 2017	4,356	4,380	8,736	201	117	103	228	776	9,512
Feb 2017	4,329	4,388	8,717	241	122	91	210	770	9,487
Mar 2017	4,965	4,999	9,964	253	135	119	274	924	10,888
Apr 2017	4,920	5,004	9,924	468	170	107	456	1,380	**11,304**
May 2017	5,382	5,637	11,019	646	204	154	482	1,680	**12,699**
Jun 2017	5,305	5,571	10,876	726	232	120	490	1,785	**12,661**
QTR Total	**15,607**	**16,212**	**31,819**	**1,840**	**606**	**381**	**1,428**	**4,845**	**36,664**
Total for preceding 12 months	*59,167*	*61,232*	*120,399*	*5,568*	*2,067*	*1,424*	*4,211*	*15,379*	*135,778*

1.6 Day/Night Ratio of Movements – Forecast

	2017/2018 Forecast of Aircraft Movements				
	Day Movements (0700 – 2300hrs)	*Night Quota Period (2330-0600) Limited to 9,650*	*Early Morning Shoulder (0600-0700) Limited to 7,000*	*Total Night Movements (2300-0700hrs)*	*Total*
July 2017	11,235	1,063	622	1,903	13,138
August 2017	11,252	875	602	1,734	12,986
September 2017	11,465	833	640	1,708	13,173
October 2017	11,276	770	585	1,605	12,881
November 2017	9,084	359	327	823	9,907
December 2017	9,767	399	344	889	10,656
January 2018	8,893	328	349	811	9,704
February 2018	8,857	374	318	804	9,661
March 2018	10,121	401	415	966	11,087
April 2018	10,061	665	596	1,450	11,511
May 2018	11,166	888	672	1,764	12,930
June 2018	11,015	1,001	646	1,875	12,890
Total for following 12 months	124,192	7,956	6,116	16,332	*140,524*

1.7 Aircraft Movements by Type

The graph below shows the percentage of aircraft movements for our four main aircraft types. The data goes back 5 years for data comparison purposes.



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	
Apr 2017	Daytime	521	24	2,022	383	1,425	108	449	12	40	0	20	**5,004**
	Night-time	41	1	204	56	269	11	60	3	2	0	2	**649**
May 2017	Daytime	1,363	8	1,390	1,031	1,122	324	315	37	29	4	14	**5,637**
	Night-time	152	2	121	179	154	43	51	5	3	1	2	**713**
Jun 2017	Daytime	572	13	2,202	379	1,707	121	481	17	47	1	31	**5,571**
	Night-time	60	2	249	53	283	25	79	1	0	1	8	**761**
QTR	**Total**	**2,709**	**50**	**6,188**	**2,081**	**4,960**	**632**	**1,435**	**75**	**121**	**7**	**77**	**18,335**
	Daily Average	*97*	*<1*	*98*	*74*	*79*	*23*	*23*	*3*	*2*	*<1*	*<2*	*201*

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 AMSL (between 07:00hrs to 23:00hrs local time) and 4,000ft AMSL (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 AMSL 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.

In April 2015 London Luton Airport implemented a Track Violation Penalty Scheme in connection with the planning conditions. Using the current Aircraft Noise and Track Monitoring System the Airport's specialist Flight Operations Department evaluates the radar tracks and investigates with required input from ATC and airlines. Where the aircraft is clearly flying outside the corridor the aircraft is identified as causing a possible track violation.

As always, safety is paramount 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.*

The table below shows track keeping violations over the previous 3 month period. The on track performance for the quarter was 99.61%. This calculation includes deviations for weather, traffic avoidance and those classed as violations. The breakdown of the violations is shown in the table below.

	Number of Violations	Total Penalties Collected
Apr 2017	5	£4,000
May 2017	4	£3,500
Jun 2017	5	£3,750
QTR	**14**	**£11,250**

	Airline or Aircraft Operator	Aircraft Type/Occurrence
Apr 2017	Air Routing International Corp.	GLF4/1
	Privately owned aircraft	CL60/1; F900/1; GL5T/1
	Wizz Air	A320/1
May 2017	Blue Air	B738/1
	easyJet	A320/1
	Eurocypria Airlines	C25A/1
	Privately owned aircraft	C650/1
Jun 2017	Flight Options	E35L/1
	Privately owned aircraft	CL60/1; F2TH/1
	Quick Air Jet Charter	LJ60/1
	Ryanair	B738/1

3 ARRIVING AIRCRAFT

3.1 Arrivals Route Analysis

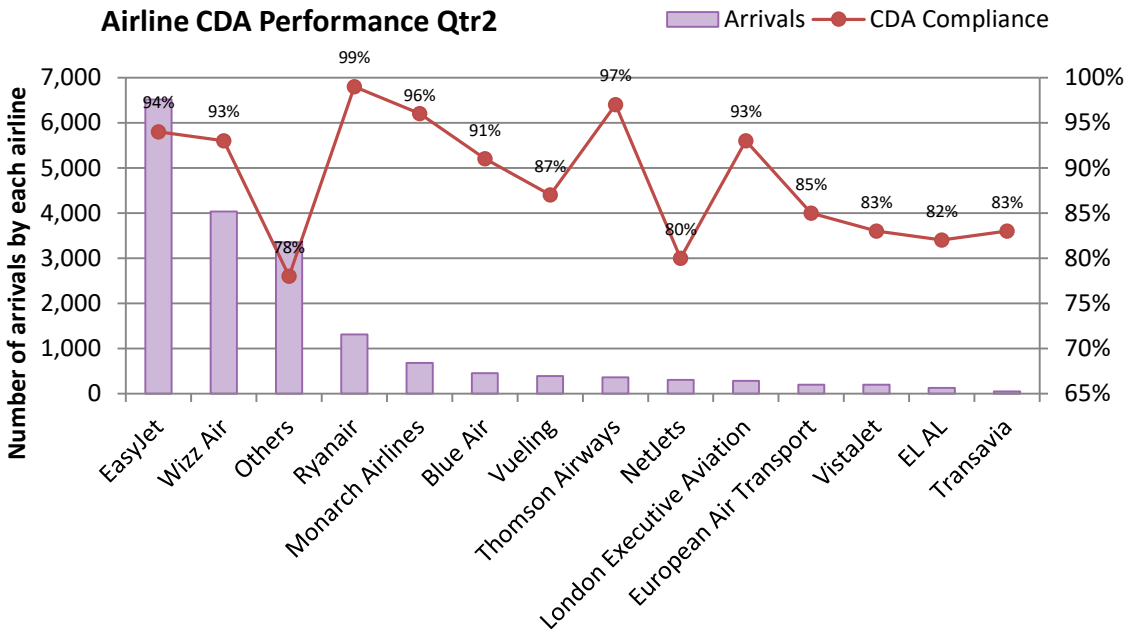
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters between 23:00 hrs and 07:00 hrs.

		Arrivals			Total
		08	26	Heli	
Apr 2017	Daytime	1,056	3,843	21	**4,920**
	Night-time	160	570	1	**731**
May 2017	Daytime	2,695	2,669	18	**5,382**
	Night-time	504	460	3	**967**
June 2017	Daytime	1,074	4,197	34	**5,305**
	Night-time	229	789	6	**1,024**
QTR	**Total**	**5,718**	**12,528**	**83**	**18,329**
	Daily Average	*204*	*199*	*<1*	*201*

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

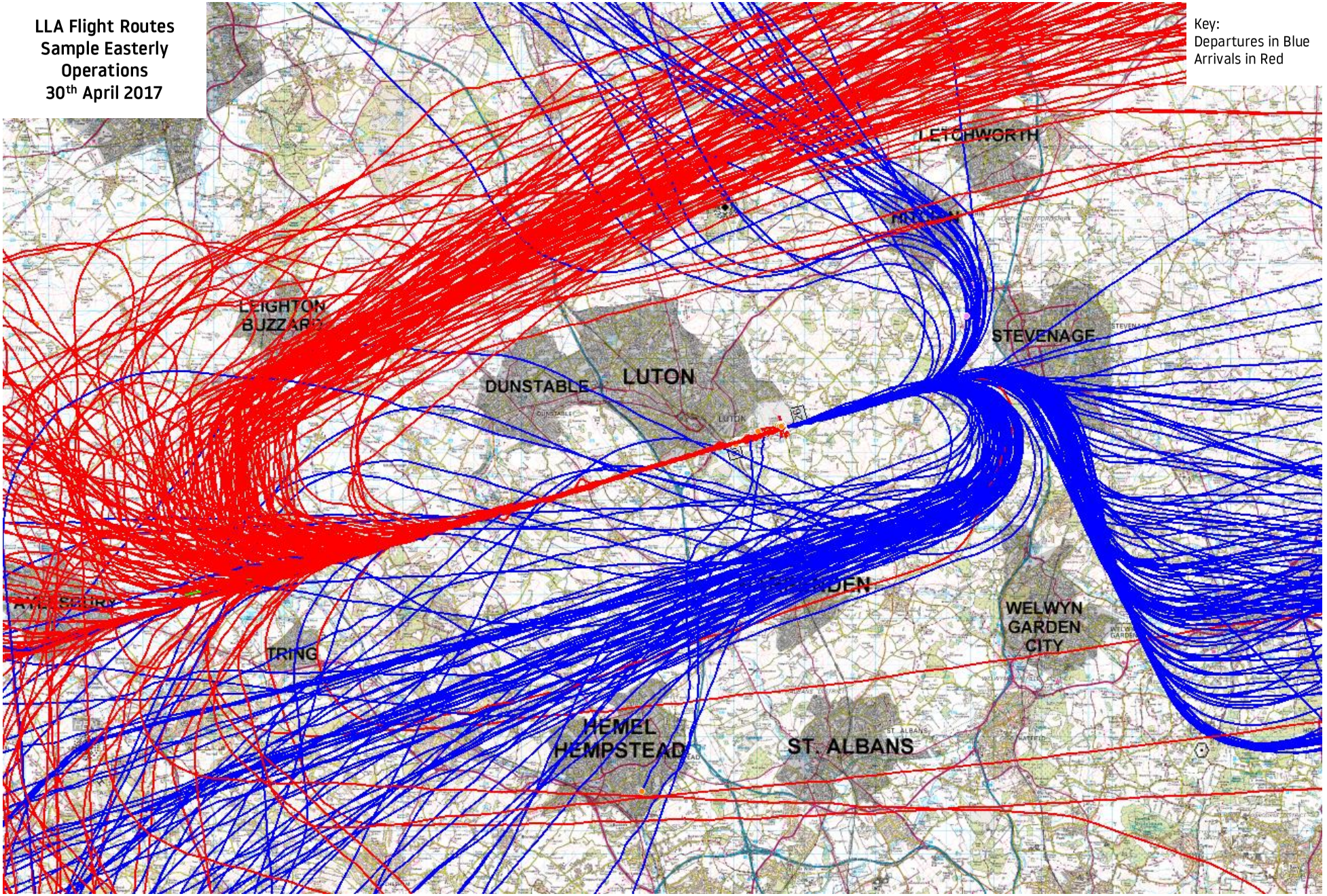
	All Arrivals			08 Easterly Arrivals			26 Westerly Arrivals		
	% CDA			*% CDA*			*% CDA*		
	Total	*Day*	*Night*	*Total*	*Day*	*Night*	*Total*	*Day*	*Night*
Apr 2017	**91%**	91%	88%	**93%**	94%	85%	**90%**	90%	89%
May 2017	**92%**	92%	89%	**95%**	95%	90%	**89%**	89%	89%
Jun 2017	**90%**	90%	90%	**96%**	96%	92%	**89%**	89%	89%
QTR Total	**91%**	91%	89%	**94%**	95%	89%	**89%**	89%	89%

The overall CDA achievement was 91% with several major LLA operators achieving high performance – easyJet, Wizz Air, Ryanair, Monarch, Blue Air, Thomson Airways and London Executive Aviation.

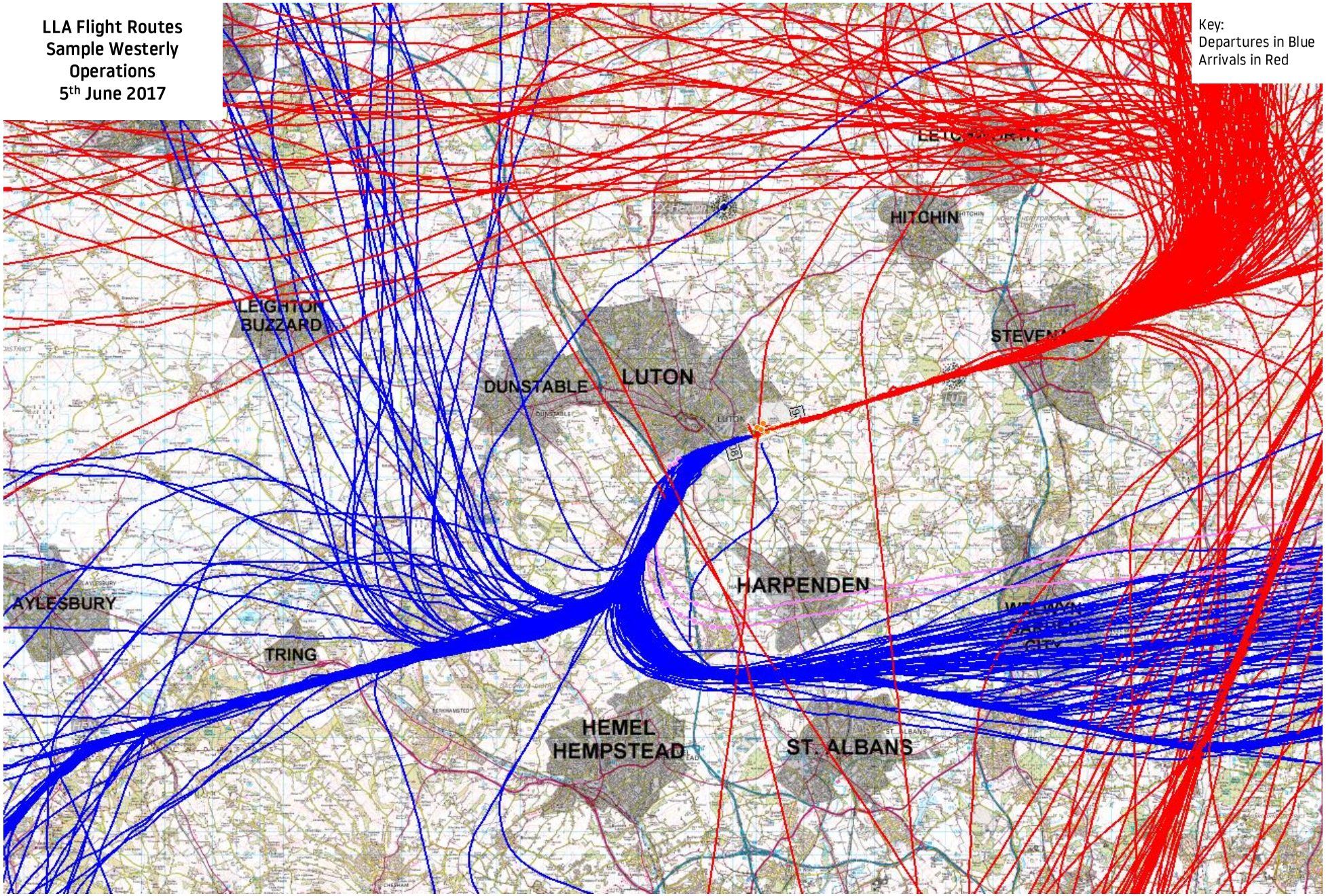


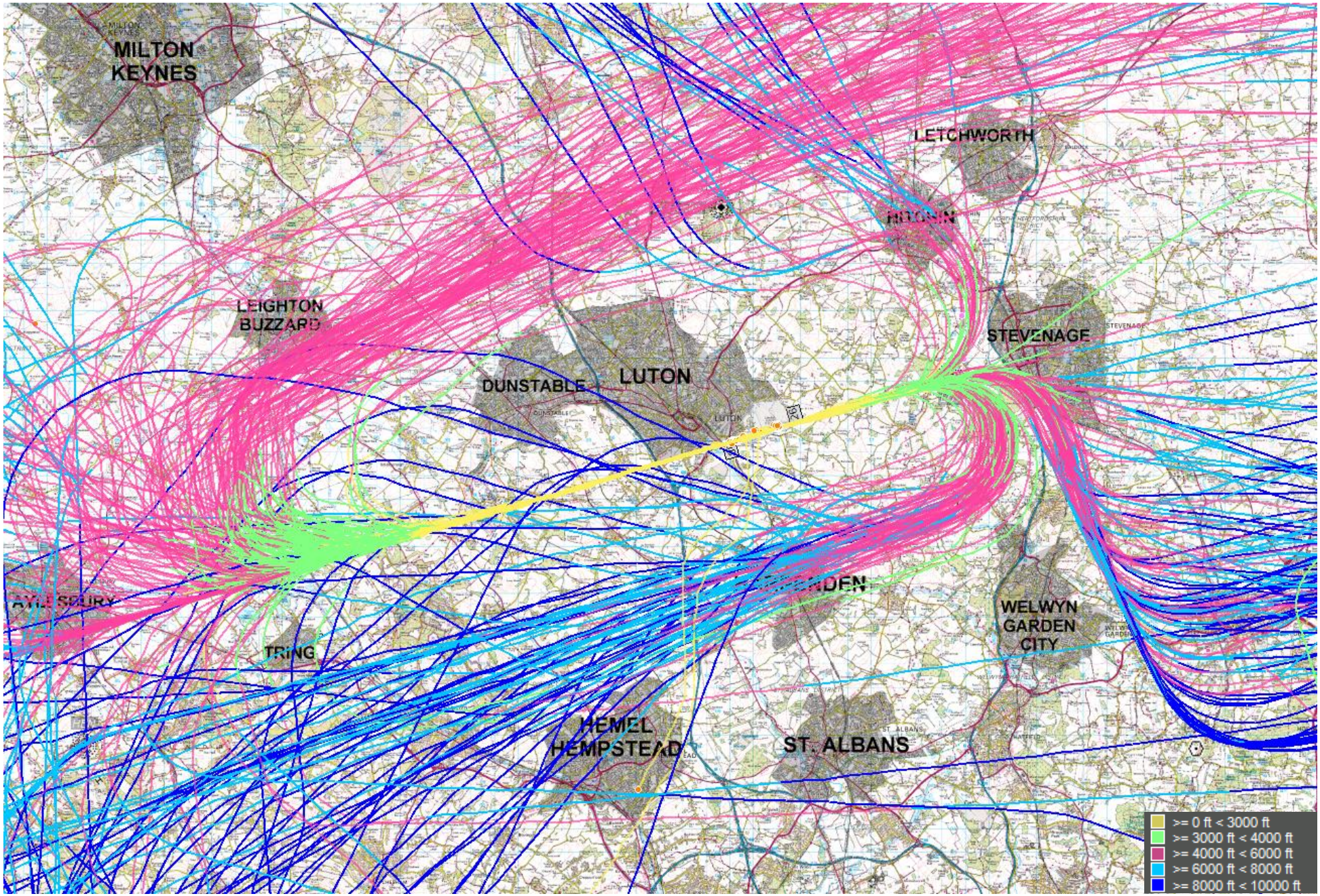
The maps overleaf, extracted from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals in red and departures in blue during both easterly and westerly operations) for a typical 24 hour period within the second quarter of 2017. The colour coding from yellow to dark blue represents different altitude bands up to 10,000ft above mean sea level.

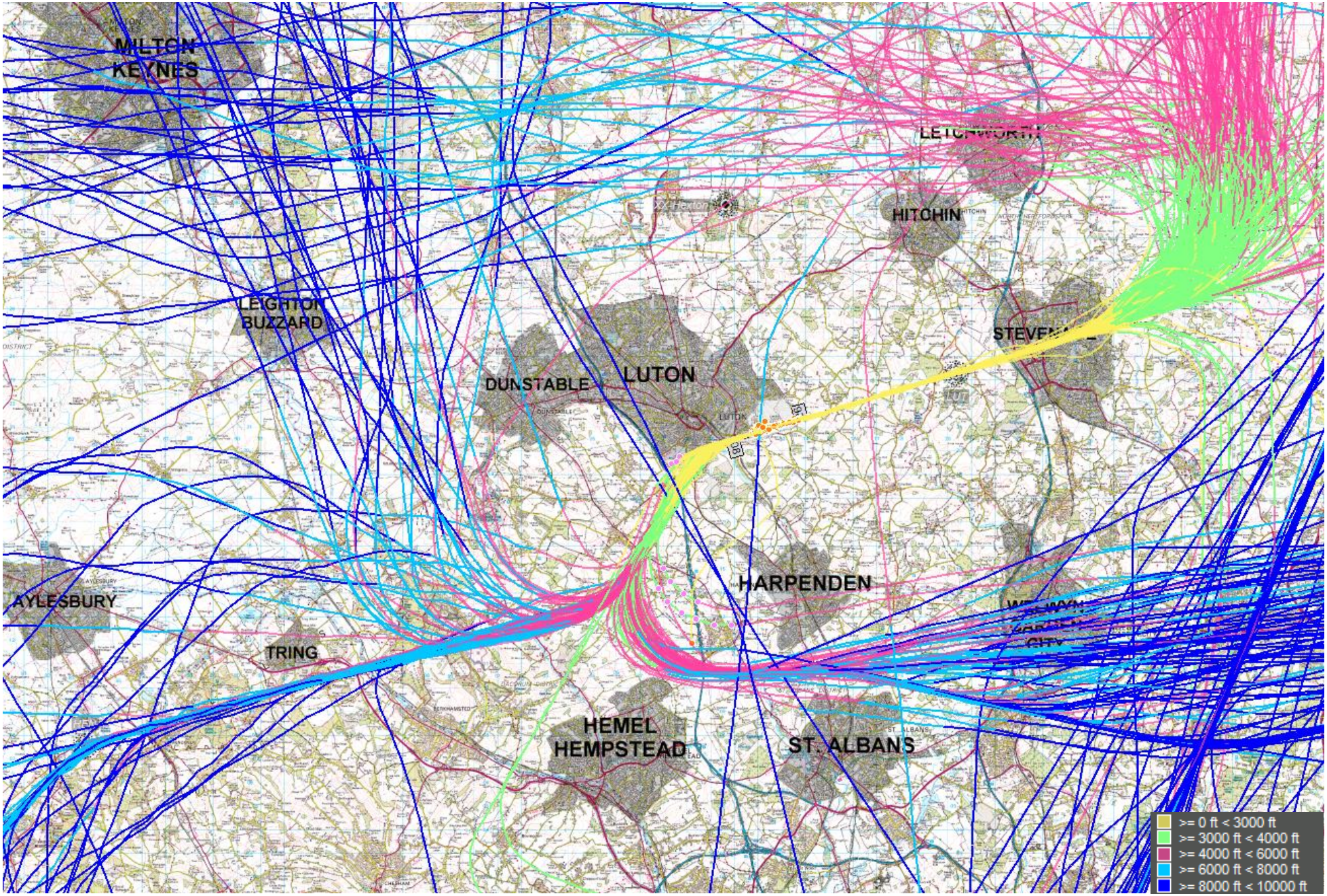
LLA Flight Routes
Sample Easterly
Operations
30th April 2017



LLA Flight Routes
Sample Westerly
Operations
5th June 2017







4 AIRCRAFT NOISE

During the 2nd quarter of 2017, the maximum noise levels less than 79 dB(A) was recorded by 98% of correlated departing aircraft in line with 98% for the same quarter last year.

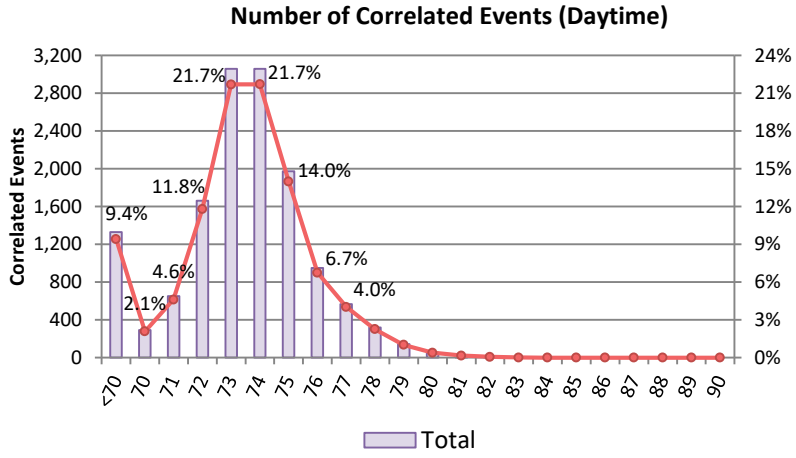
The maximum noise level less than 76 dB(A) recorded by 85% of correlated departing aircraft is also in line with 85% for the same period last year.

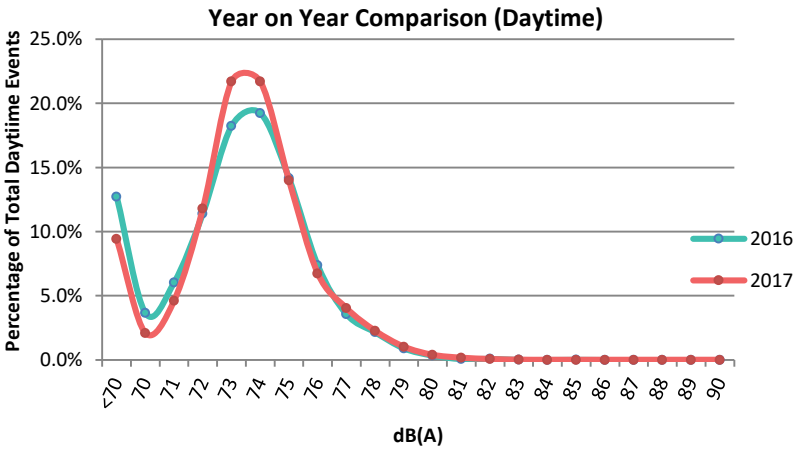
There was one daytime noise violation and no night time noise violations in this quarter, compared to three daytime noise violations and one night time noise violation during the 2nd quarter 2016.

4.1 Daytime Noise Levels – April to June 2017

The following table identifies daytime noise levels correlated to departing aircraft at the fixed noise monitoring terminals; these are rounded to the nearest decibel. In the case of westerly departures, where the noise is monitored from two noise monitor terminals, the table will show the highest value. (*Any aircraft exceeding the Daytime Noise Violation Limit of 82dB(A), between 07:00 hrs and 23:00 hrs, is fined accordingly*)

	db (A)	Apr	May	Jun	QTR
Number of Correlated Events (Daytime)	<70	336	521	471	**1,328**
	70	77	118	99	**294**
	71	161	229	261	**651**
	72	475	590	598	**1,663**
	73	1,006	996	1,057	**3,059**
	74	1,044	1,062	954	**3,060**
	75	657	746	570	**1,973**
	76	311	372	268	**951**
	77	191	211	166	**568**
	78	113	107	99	**319**
	79	51	47	46	**144**
	80	21	22	12	**55**
	81	8	11	4	**23**
	82	3	5	1	**9**
	83	0	1	0	**1**
	84	0	0	0	**0**
	85	0	0	0	**0**
	86	0	0	0	**0**
	87	0	0	0	**0**
	88	0	0	0	**0**
	89	0	0	0	**0**
	90	0	0	0	**0**
Total		**4,454**	**5,038**	**4,606**	**14,098**

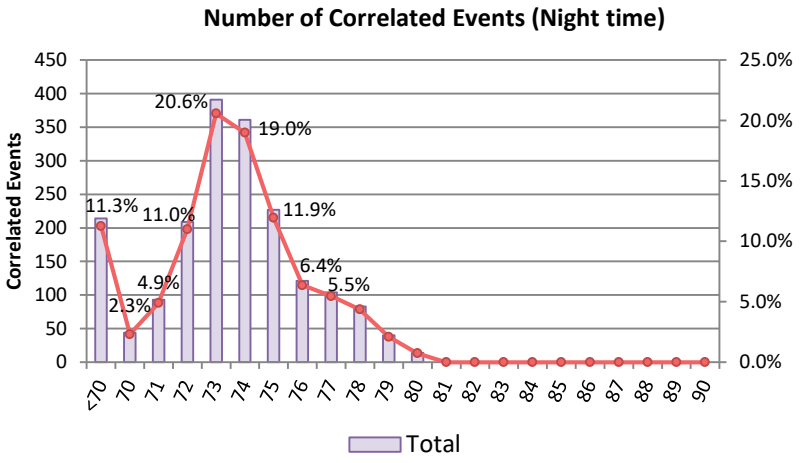


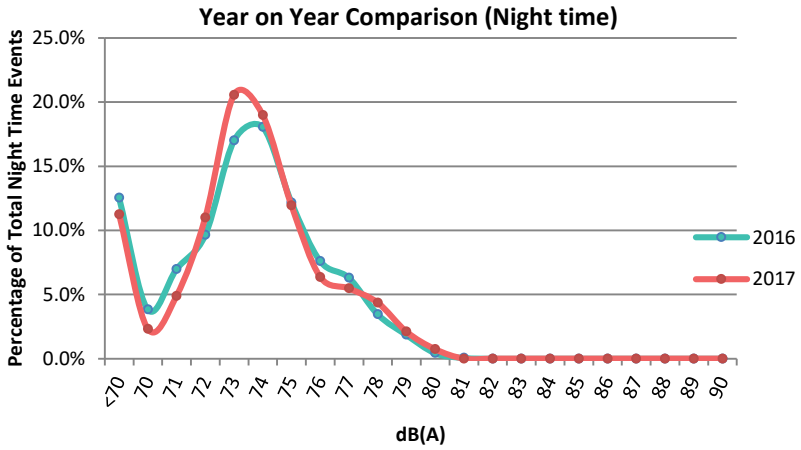


4.2 Night Noise Levels –April to June 2017

The following table identifies the night noise levels correlated to departing aircraft at the fixed noise monitor terminals; these are rounded to the nearest decibel. In the case of westerly departures, where the noise is monitored from two noise monitor terminals, the table will show the highest value. *(Any aircraft exceeding the Night Noise Violation Limit of 80dB(A), between 23:00 hrs and 07:00 hrs, is fined accordingly)*

	db (A)	Apr	May	Jun	QTR
Number of Correlated Events (Night time)	<70	49	85	80	**214**
	70	12	20	12	**44**
	71	25	40	28	**93**
	72	50	83	76	**209**
	73	110	130	151	**391**
	74	131	110	120	**361**
	75	72	73	82	**227**
	76	47	37	37	**121**
	77	39	30	35	**104**
	78	29	22	32	**83**
	79	17	10	13	**40**
	80	10	2	2	**14**
	81	0	0	0	**0**
	82	0	0	0	**0**
	83	0	0	0	**0**
	84	0	0	0	**0**
	85	0	0	0	**0**
	86	0	0	0	**0**
	87	0	0	0	**0**
	88	0	0	0	**0**
	89	0	0	0	**0**
	90	0	0	0	**0**
Total		**591**	**642**	**668**	**1,901**





N.B It should be noted that 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 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.

Weather conditions can also effect the number of noise monitoring events recorded in the table; for example, if winds are greater than 10m/s and temperature is either higher than 25°C or below -10°C, results from noise monitors will be invalid and therefore will not been taken into account.

4.3 Noise Violations during Qtr2 (April to June 2017)

There was one daytime noise violation and no night time noise violations during the quarter.

	Date/Time (Local)	Aircraft Type	Noise Level
Daytime	08/05/2017 13:14 hrs	B732 (Executive Jet)	83 dB(A)
Total Penalties Collected			**£100**

4.4 Noise Insulation Scheme update

In 2016 began our Noise Insulation Scheme, which aims to assist in reducing the noise for properties in our local communities. The scheme covers both residential and non-residential properties. Depending on any existing insulation in the property, double glazing, secondary glazing and ventilation units can be provided. Rooms eligible for insulation include living rooms, dining rooms, kitchen-diners and bedrooms.

So far during 2017, 73 properties have been contacted, out of these properties, only 8 properties accepted the insulation. Included in the 73 properties contacted by LLA were a block of flats, owned by Luton Borough Council. The Flight Operations team, have been discussing the possibility to insulate these flats with Luton Borough Council.

5 NOISE CONTOURS

5.1 Night Noise Contours – April to June 2017

5.1.1 Contour Production

Aircraft movement data for use in the contour production has been supplied by LLA. The contour production methodology has been updated from that used for the 2016 contours. It retains the inclusion of terrain, and the use of the INM software (Version 7.0d), but the validation has been updated. The validation is now based on measured results in 2016 at the fixed noise monitors. User-defined profiles for the most common aircraft have been used, as for the 2016 contours. The main difference for the 2017 validation is that the corrections for the Airbus A319 and A320 departures were adjusted to take account of lower measured noise levels.

This update to the contour prediction methodology is described in the BAP note A11060-N01-NW, dated 8th August 2017.

5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A11060-NN17-Q2 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 (January – March 2017) and the equivalent quarter during the previous year (April – June 2016).

Contour Value (dB $L_{Aeq,8h}$)	Contour Area (km^2)		
	Apr – Jun 2016	*Jan - Mar 2017*	*Apr – Jun 2017*
48	33.6	21.0	35.1
51	18.8	11.5	19.9
54	9.9	6.3	10.5
57	5.4	3.4	5.7
60	2.9	1.8	3.0
63	1.6	1.1	1.6
66	1.0	0.7	1.0
69	0.6	0.5	0.6
72	0.4	0.3	0.4
W/E Split (%)	62/38	70/30	68/32

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 LLA 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	Apr – Jun 2016	Jan – Mar 2017	Apr – Jun 2017
B733	37	36	30
B734	32	10	n/a
B738	718	298	704
B752	152	85	166
A306	134	150	146
A319	811	283	907
A320 (ceo)	1,396	743	1,688
A320 (neo)	n/a	n/a	17
A321	143	86	127
A333	n/a	18	n/a
CL600	75	40	70
CL601	51	32	37
C441	22	11	71
C500	13	n/a	n/a
C510	23	n/a	22
C525	42	31	51
C56X	50	60	52
C680	n/a	n/a	13
D328	124	115	109
E145	74	33	66
F100	44	57	81
GLF4	40	38	50
GLF5	296	246	299
LJ35	56	29	34
Other	50	61	81
Total	**4,383**	**2,462**	**4,821**

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

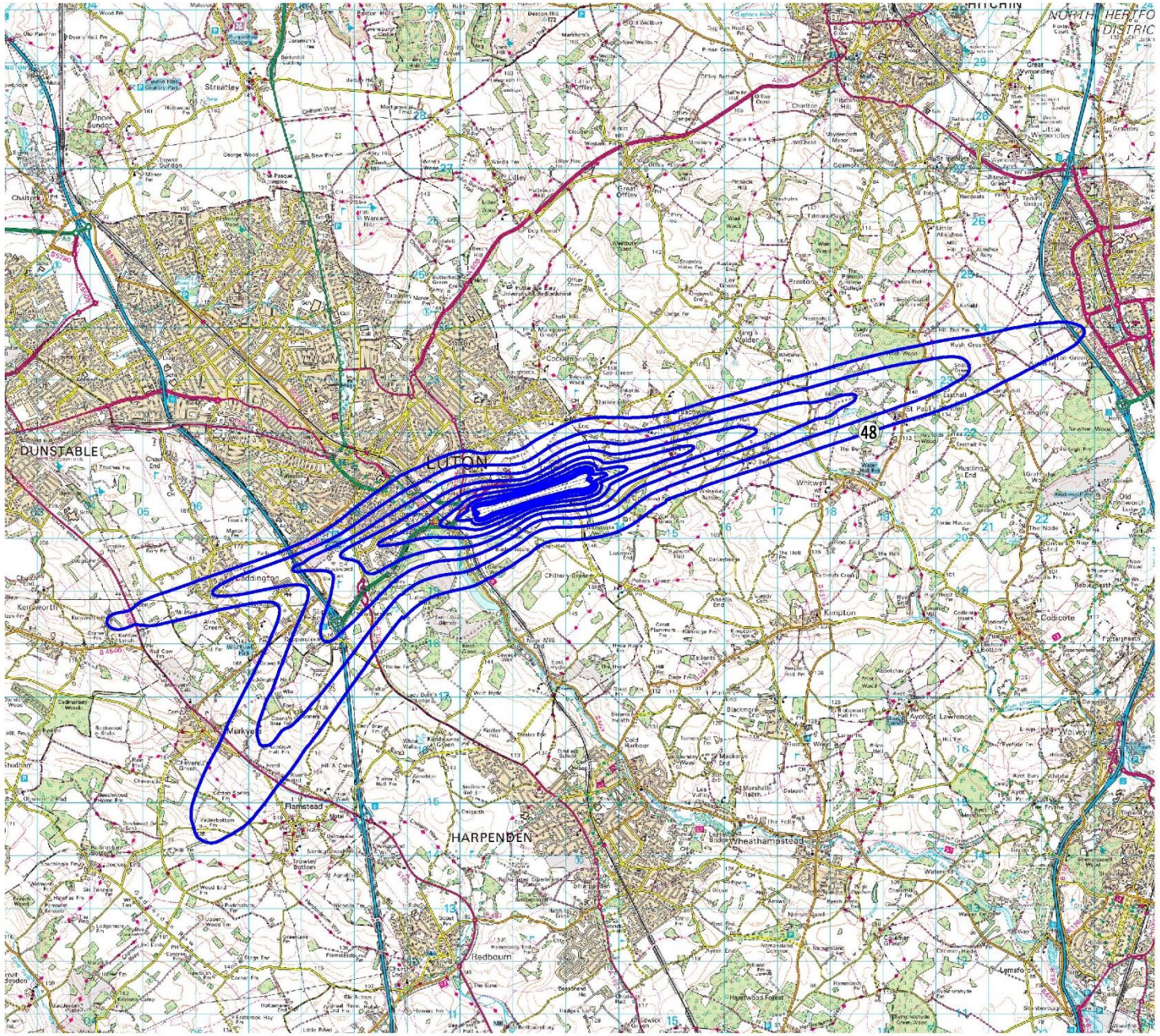
5.1.4 Noise Contour Comparison

Compared with the same quarter in 2016, there has been an increase of 10% in the total number of movements. The aircraft mix has remained similar, with turbofan operations comprising 79% of the total operations in 2017 Q2, compared to 78% the same quarter in 2016. The majority of the increase in movements is due to an increase in operations by the Airbus A320. The number of movements by other aircraft types have remained largely the same as in 2016 Q2.

The modal split has changed compared to the same quarter in 2016, with 68% of movements in 2017 Q2 using runway 26, compared to 62% in 2016 Q2.

The area within the 48 dB(A) noise contour has increased by 5% compared to the same quarter last year. This increase is primarily due to the increase in overall movements, and is partially offset by the validation update. Increases of a similar magnitude are evident across the other contour bands.

The number of movements, and therefore the contour area, has increased compared to the previous quarter (January– March 2017).



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
Apr-Jun 2017 Average Night time

DRAWN: DR CHECKED: NW

DATE: August 2017 SCALE: 1:100000@A4

FIGURE No:

A11060/NN17/Q2

6 COMPLAINTS

6.1 Total Complaints relating to LLA aircraft operations

	2nd QTR 2017	2nd QTR 2016
Total No. of Complaints relating to LLA aircraft operations	5,304	609
No. of Complainants	527	163
No. of General Complaints	1,232	171
No. of Specific Complaints	4,072	438
Average No. of Complaints per Complainant	10.0	3.7
No. of Aircraft Movements per Complaint	7	58

During the last quarter a total of 5,304 complaints relating to LLA aircraft operations (on average just over 58 complaints per 24 hours) were received by the Flight Operations Department. This is compared to the 609 complaints which were received for the same period last year. It should be noted that 66% of complaints were received from 10 individuals.

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

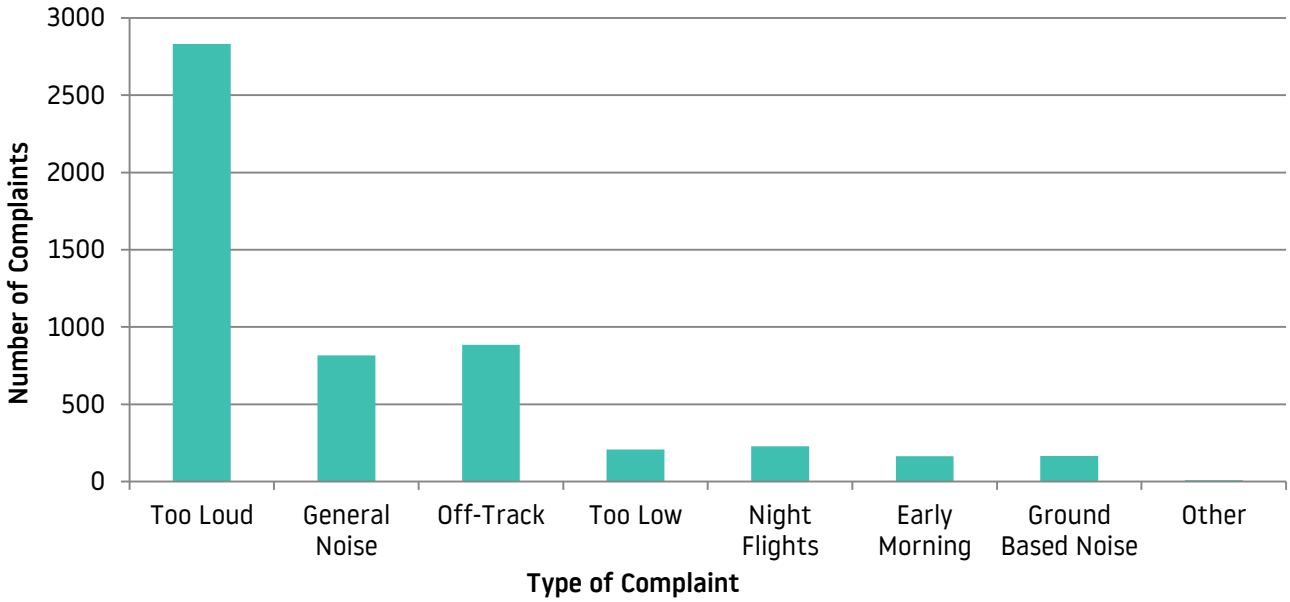
Apr 2017	1,440 complaints	(1,244 Specific Complaints, 196 General Complaints)
May 2017	1,630 complaints	(1,349 Specific Complaints, 281 General Complaints)
Jun 2017	2,234 complaints	(1,479 Specific Complaints, 755 General Complaints)

A further 265 complaints not attributable to LLA traffic were received throughout the quarter, compared to 27 complaints for the period April to June last year.

Out of 527 total complainants, there were 324 that contacted the airport only once meaning that 203 complainants generated 4,980 complaints; therefore the majority of complaints relate to a number of residents complaining to LLA often.

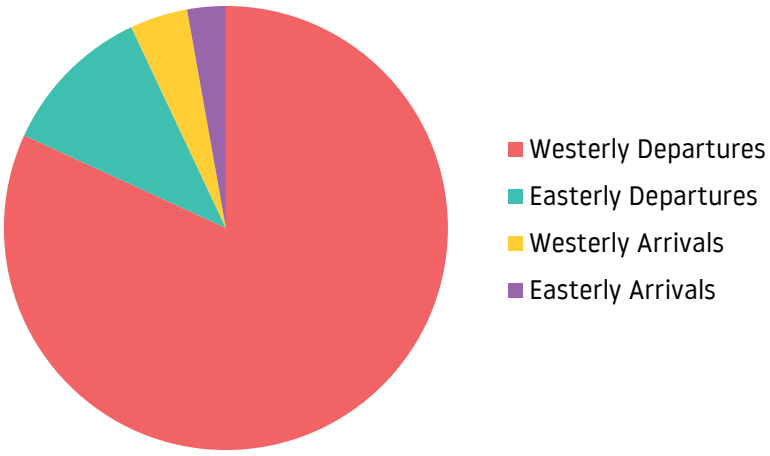
6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from April to June 2017 are listed below.



6.3 Nature of Disturbance

The chart represents the areas of concern reported from specific complaints with regard to aircraft activity during the period April to June 2017.



Within the 3,269 specific aircraft complaints concerning westerly departures, 3,226 complaints involved aircraft on the Match/Detling heading, 20 related to aircraft following Compton flight route, 11 related to aircraft using the Olney route and 12 complaints were recorded about aircraft following an off-airways routing.

With regard to the 445 complaints attributed to easterly departures, 424 related to aircraft following the Compton flight route, 9 aircraft on the Match/Detling route, 5 using the Olney route and 7 following an off-airways routing.

In total the Flight Operations Department received a total of 280 specific complaints regarding arrivals. 112 of these complaints were about easterly arrivals and a further 168 concerning westerly arrivals.

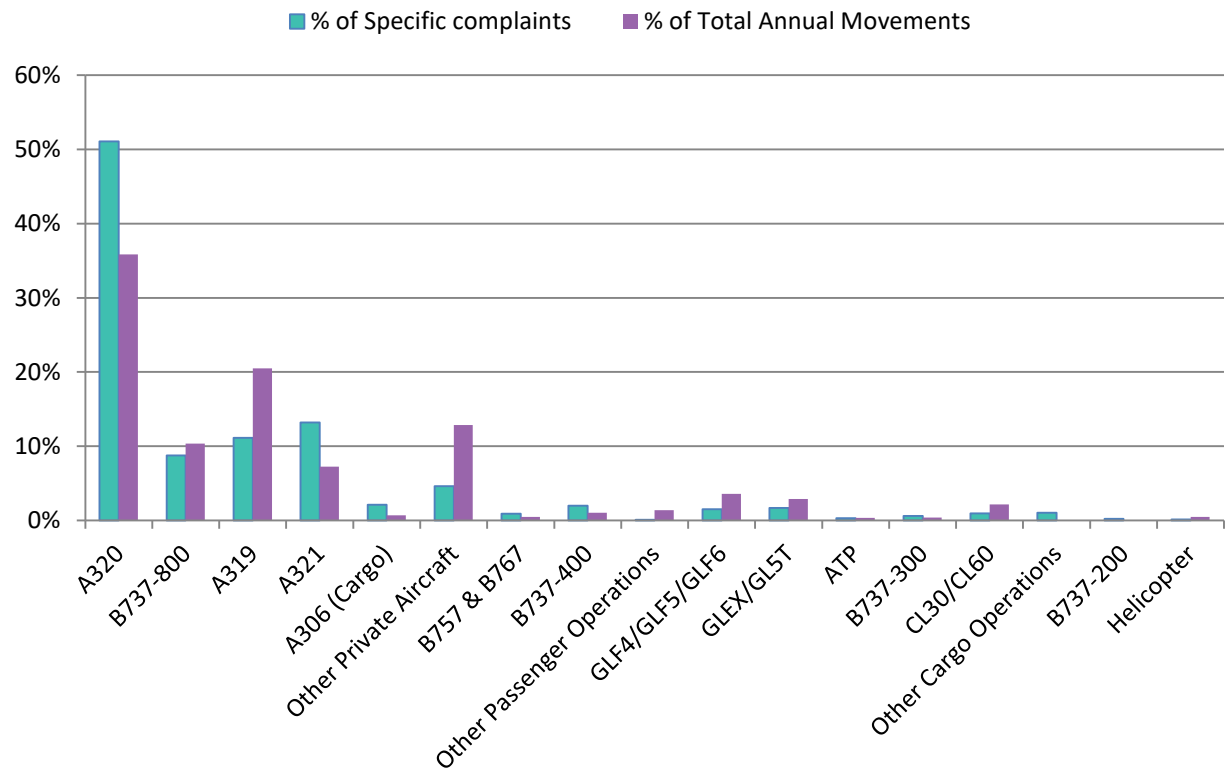
88
Complainants
reported noise disturbance at night (compared to **17** **Complainants** for the same Quarter last year)

Departing aircraft accounted for 67% of the 149 specific night complaints and 33% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 21% of night complaints, whilst passenger aircraft accounted for 65% of night complaints and executive aircraft were correlated to 14% of night complaints.

227 (4%)
Complaints
concerning night noise disturbance from LLA operations

6.4 Complaints by aircraft type

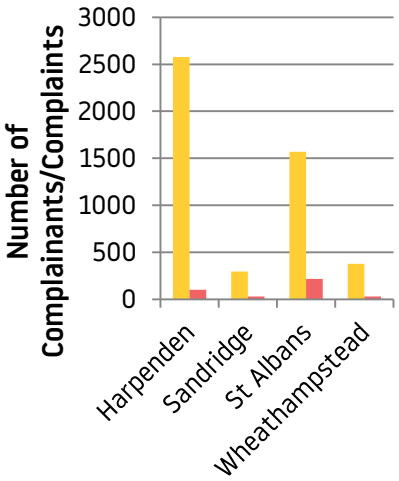
The diagram below shows aircraft types generating specific complaints.

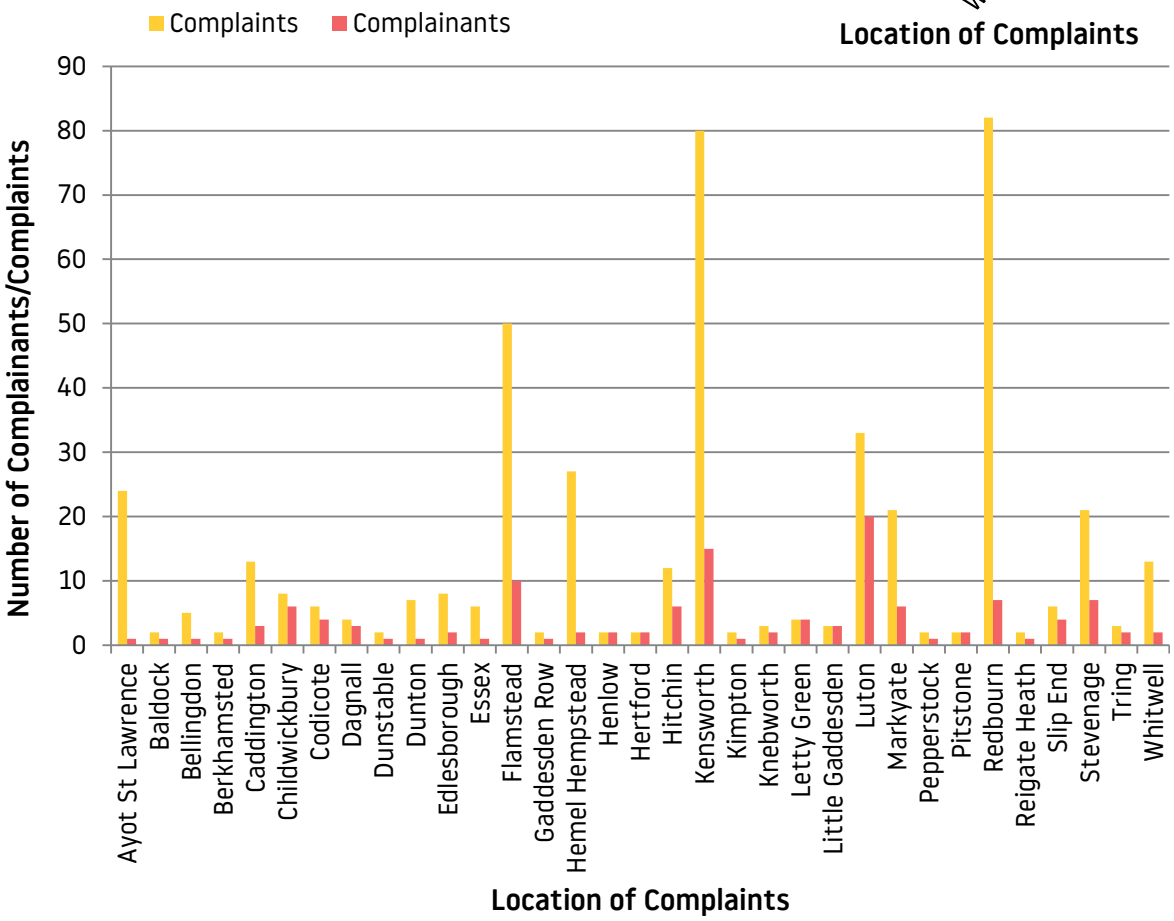


6.5 Origin of Complaints

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 April to June 2017.

The communities with one complaint include Aldbury, Aylesbury, Blackmore End, Bracknell, Burnham Green, Clacton on Sea, Eaton Bray, High Easter, Leighton Buzzard, Linslade, Pirton, Princes Risborough, Royston, Sandhurst, Studham, Tewin, Turville Heath, Welwyn Garden City, Whipsnade and Woodside.





6.6 Complaints Analysis

During Quarter 2 there has been an increase in complaints compared to the same quarter last year; this is thought to be due to a number of reasons:

- The airport has grown considerably during the quarter, in line with the redevelopment plans. This will have caused an increase in the number of movements on all routes.
- 66% of complaints were generated by ten individuals located in; Wheathampstead, Harpenden, Sandridge and St Albans.
- As winds dictated westerly operations for 69% of the time, the largest percentage of complaints related to aircraft using our westerly routes, particularly westerly departures on the Match/Detling route.

6.7 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	26%
TraVis	71%
Telephone	3%

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)

6.8 Response Time

The following table shows the time taken to respond to complaints submitted by our local communities. We aim to respond to 80% of concerns within 8 days and 100% of concerns within 15 days.

Those complaints with longer response times are usually those requiring further investigation with the help of Air Traffic Control. If this is the case, the individual's complaint will be acknowledged and will state that additional investigation is required which may lengthen the response time.

Number of days	% of Total Complaints
0	43%
1	21%
2	12%
3	12%
4	5%
5	2%
6	1%
7	1%
8	1%
9	1%
10	0%
11	0%
12+	0%

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.

15th May – Childwickbury and Redbournbury residents

7.2 Airport Visits to the Community

During the quarter the Flight Operations team arranged public surgeries in South Luton, Leighton Buzzard and Stevenage. Many residents attended these surgeries to ask questions and raise concerns regarding the noise from operations at LLA. The objective of the Public Surgeries is to ensure that the communities have an opportunity to meet face to face with the Flight Operations Department and that everyone who attends is better informed about aircraft operations on their area. More public surgeries are scheduled; details of which can be found at the following website, which is updated accordingly.
http://www.london-luton.co.uk/corporate/community/noise/talking-to-lla

Furthermore, members of the Flight Operations team also conducted visual monitoring with a resident in Harpenden.

Finally, on the 29th June, the airport held an afternoon session at Putteridge bury with local community representatives regarding the Airspace Change Process for the westerly Match/Detling route.