Quarterly Monitoring Report
Qtr 2 2019

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 2019.

KEY MONITORING INDICATORS – 2nd QUARTER 2019

Parameter		2nd Quarter 2019	2nd Quarter 2018
Total Passenger Number	↑	4,844,885	4,445,844
Total Aircraft Movements	↑	38,129	36,461
Night Movements (23.00 – 06.59)	↑	5,158	4,926
Early Morning Movements (06.00 – 06.59)	↑	1,862	1,736
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements (*9,650 limit*)	↑	8,547	8,468
Night Quota Count (*3,500 limit*)	↑	3106.75	2,930.75
Early Morning Shoulder (*7,000 movements*)	↓	6,152	5,820
24hr CDA (% achievement)	↓	92%	93%
Day CDA (% achievement)	↓	92%	94%
Night CDA (% achievement)	↓	91%	93%
Track Violations	↑	13	7
Departure Noise Infringements (Day)	-	0	0
Departure Noise Infringements (Night)	-	0	0
Noise Monitor Results			
No. Day (Night) > 80 dB(A)	↑	21 (0)	18 (0)
No. Day (Night) > 75 dB(A)	↑	2,412 (329)	1,487 (241)
No. Day (Night) > 70 dB(A)	↑	12,452 (1,765)	11,676 (1,565)
Night Noise Contour Area (48 dB $L_{Aeq, 8h}$)	↑	41.3 km^2	38.3 km^2
Noise Complaints	↑	2,748	2,335
Complainants	↓	292	311
Number of New Complainants	↓	114	152
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns (>5 Complainants)	-	Breachwood Green Caddington Flamstead Harpenden Hitchin Kensworth Knebworth Luton Sandridge St Albans Stevenage Wheathampstead Whitwell	Caddington Flamstead Kensworth Knebworth Luton Markyate Sandridge Stevenage Harpenden St Albans Wheathampstead
Westerly/Easterly Runway Split (%)	-	49/51	44/56

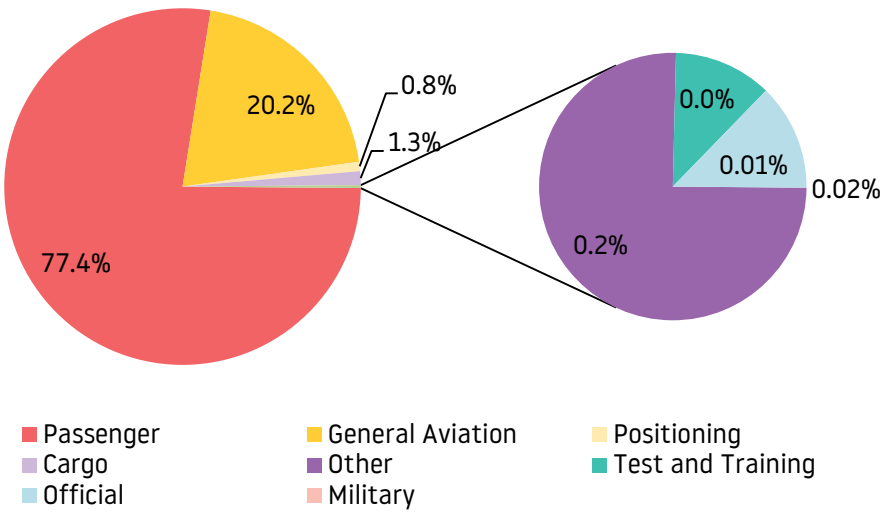
1 AIR TRAFFIC DATA

1.1 Aircraft Movements

There were a total of 38,129 aircraft movements during this quarter (compared with 36,461 for the same period in 2018), increase of 4.6%.

This resulted in an average 419 movements per 24 hours (compared to 400 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 2019	150	9,535	95	9	0	3	24	2,168	6	**11,990**
May 2019	173	10,040	113	4	0	6	29	2,752	0	**13,119**
Jun 2019	155	9,934	90	10	0	4	21	2,800	6	**13,020**
QTR Total	**478**	**29,509**	**298**	**23**	**0**	**13**	**74**	**7,720**	**12**	**38,129**

1.2 Passenger Statistics

A total of 4,844,885 passengers passed through LLA during the period April to June 2019 (compared with 4,445,844 for the same period last year), 4,773,705 on scheduled flights (98.5%) and 71,180 on charter flights (1.5%). This represents an increase in passengers of 9.0% year on year and equates to an average 53,240 passengers per 24 hours (compared to 48,855 during the second quarter last year).

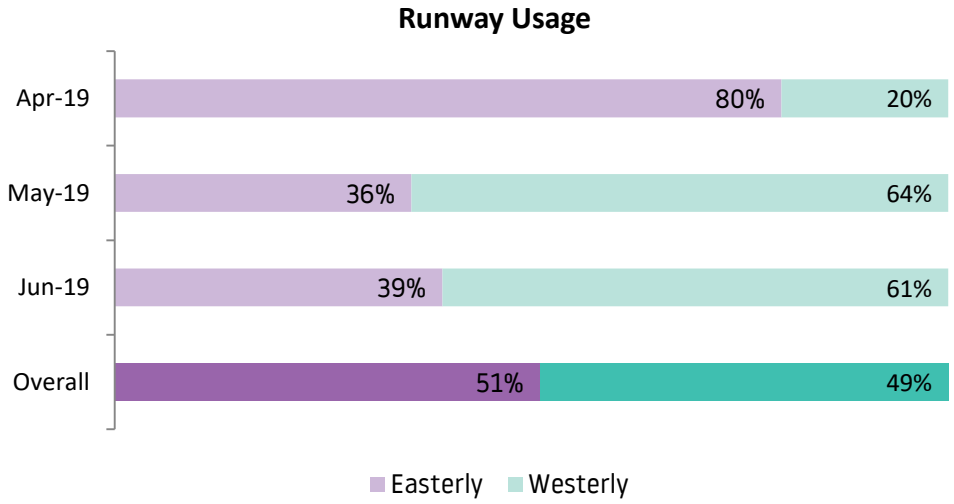
	Domestic	EU	Non-EU	Total
Apr 2019	109,183	1,007,488	418,218	**1,534,889**
May 2019	113,116	1,085,242	438,632	**1,636,990**
Jun 2019	112,164	1,092,716	468,126	**1,673,006**
QTR Total	**334,463**	**3,185,446**	**1,324,976**	**4,844,885**

* *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 51% easterly and 49% westerly (compared to 56% / 44% 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 points 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 05:59 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.

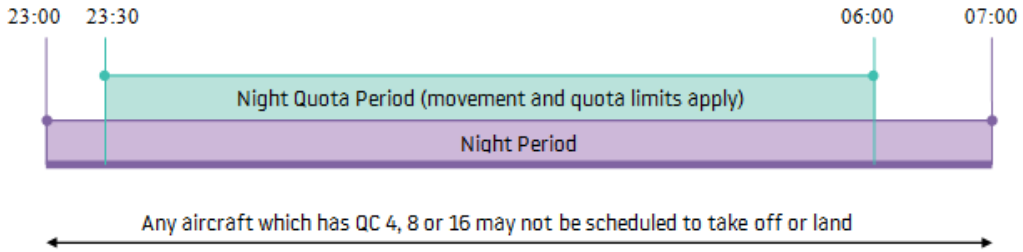
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are then allocated to different aircraft types 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
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 06:59 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 – 0559) 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 – 0659) 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 2019, 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 (2330-0559)		Early Morning Shoulder (0600-0659)
	Movements Limited to 9,650 Annually	*Quota Count Limited to 3,500 Annually*	*Movements Limited to 7,000 Annually*
July 2018	969	356.50	500
August 2018	912	358.00	583
September 2018	742	288.50	595
October 2018	871	282.50	642
November 2018	459	180.25	397
December 2018	533	195.00	395
January 2019	480	194.25	402
February 2019	447	180.25	358
March 2019	508	183.25	418
April 2019	816	266.25	606
May 2019	937	301.25	671
June 2019	873	320.75	585
QTR Total	**2,626**	**888.25**	**1,862**
Total for preceding 12 months	*8,547*	*3106.75*	*6,152*

1.5 Day/Night Ratio of Movements - Actual

There were 5,158 night operations during the quarter (compared to 4,926 for the 2nd quarter 2018), an average 57 movements per night (compared to 54 last year). Arriving aircraft accounted for 58% 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. 72% 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 86% day / 14% night (same as quarter two last year).

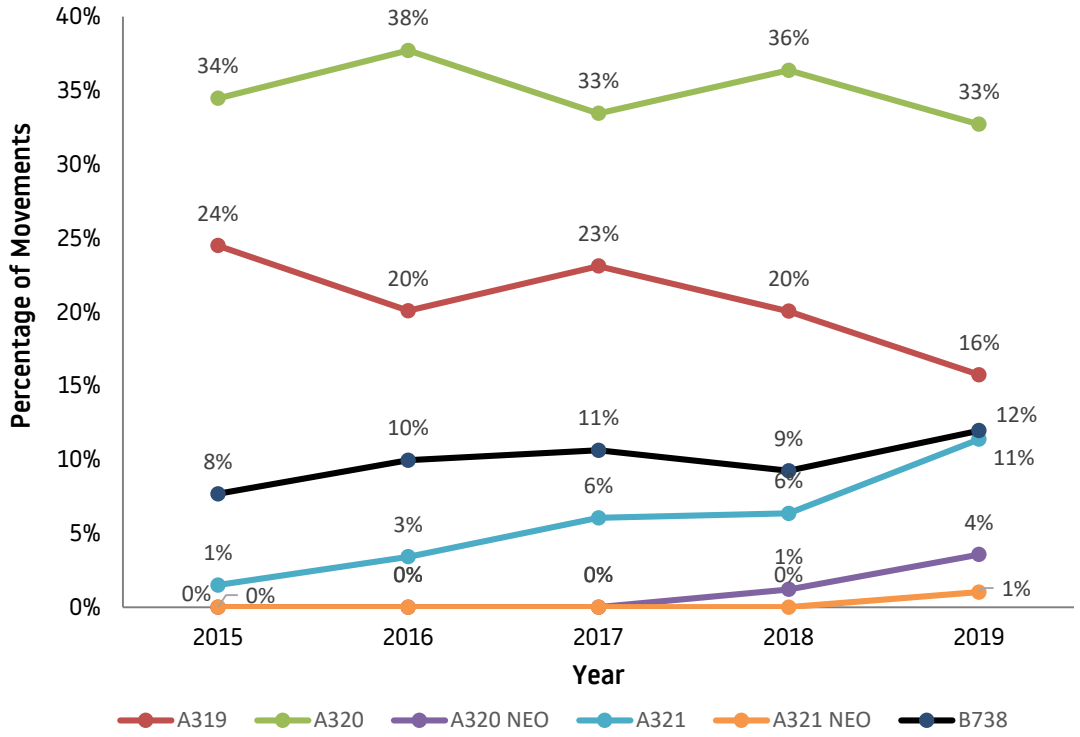
	Day Movements (0700-2259)			Night Movements (2300-0659)					Total
	Day movements			*Night Quota Period (2330-0559)*		*Early Morning Shoulder (0600-0659)*		*Total Night Movements (2300 – 0659)*	
	A	D	Total	A	D	A	D		
July 2018	5,534	5,896	11,430	802	167	49	451	1,646	**13,076**
Aug 2018	5,244	5,540	10,784	746	166	69	514	1,716	**12,500**
Sept 2018	5,231	5,470	10,701	619	123	87	508	1,534	**12,235**
Oct 2018	5,204	5,442	10,646	677	194	124	518	1,716	**12,362**
Nov 2018	4,256	4,345	8,601	307	152	119	278	1,011	**9,612**
Dec 2018	4,715	4,857	9,572	370	163	107	288	1,084	**10,656**
Jan 2019	4,403	4,423	8,826	324	156	89	313	1,019	**9,845**
Feb 2019	4,369	4,425	8,794	286	161	96	262	937	**9,731**
Mar 2019	4,821	4,931	9,752	341	167	111	307	1,094	**10,846**
Apr 2019	5,079	5,301	10,380	661	155	97	509	1,610	**11,990**
May 2019	5,472	5,800	11,272	759	178	114	557	1,847	**13,119**
Jun 2019	5,520	5,799	11,319	723	150	85	500	1,701	**13,020**
QTR Total	**16,071**	**16,900**	**32,971**	**2,143**	**483**	**296**	**1,566**	**5,158**	**38,129**
Total for preceding 12 months	*59,848*	*62,229*	*122,077*	*6,615*	*1,932*	*1,147*	*5,005*	*16,915*	*138,992*

1.6 Day/Night Ratio of Movements – Forecast

	2019/2020 Forecast of Aircraft Movements				
	Day Movements (0700 – 2259hrs)	*Night Quota Period (2330-0559) Limited to 9,650*	*Early Morning Shoulder (0600-0659) Limited to 7,000*	*Total Night Movements (2300-0659hrs)*	*Total*
July 2019	11,892	991	521	1,697	13,589
August 2019	11,224	930	608	1,768	12,992
September 2019	11,150	754	623	1,582	12,732
October 2019	11,237	886	683	1,780	13,017
November 2019	9,063	455	431	1,046	10,109
December 2019	10,121	537	424	1,124	11,245
January 2020	9,050	175	311	855	9,905
February 2020	8,864	150	300	839	9,703
March 2020	10,209	223	399	1,163	11,372
April 2020	10,401	273	590	1,595	11,996
May 2020	11,386	332	675	1,917	13,303
June 2020	11,529	319	561	1,647	13,176
Total for following 12 months	126,126	6,025	6,126	17,013	*143,139*

1.7 Aircraft Movements by Type

The graph below shows the percentage of aircraft movements for our five 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 06:59 hrs.

		Departures											Total
		MATCH/ DETLING			*COMPTON*		*OLNEY*		*Other**		*Helicopter*		
		08	26 Conv	26 RNAV	08	26	08	26	08	26	08	26	
Apr 2019	Daytime	2,142	4	530	1,547	406	482	134	26	5	2	23	**5,301**
	Night-time	265	0	45	240	57	58	12	4	1	0	0	**682**
May 2019	Daytime	1,028	14	1896	742	1,388	228	437	9	26	2	30	**5,800**
	Night-time	121	1	247	102	214	23	59	3	2	0	0	**772**
Jun 2019	Daytime	1,182	18	1,739	865	1,290	232	407	11	19	2	34	**5,799**
	Night-time	169	0	201	117	148	32	42	1	0	0	0	**710**
QTR	**Total**	**4,907**	**37**	**4,658**	**3,613**	**3,503**	**1,055**	**1,091**	**54**	**53**	**6**	**87**	**19,064**
	Daily Average	*53*	*<1*	*61*	*39*	*38*	*11*	*11*	*<1*	*<1*	*<1*	*<1*	*209*

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 06:59hrs 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 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.*

The table below shows track keeping violations over the previous 3-month period. The on track performance for the quarter was 98.7%. 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 2019	3	£3,000
May 2019	1	£1,000
Jun 2019	9	£9,000
QTR	**13**	**£13,000**

	Airline or Aircraft Operator	Aircraft Type/Occurrence
Apr 2019	Blue Air	B734/1
	Privately owned aircraft	GLEX/1; F2TH/1
May 2019	Privately owned aircraft	GLF6/1
Jun 2019	Privately owned aircraft	GLEX/4; GLF5/2; H25B/2; C680/1;

3 ARRIVING AIRCRAFT

3.1 Arrivals Route Analysis

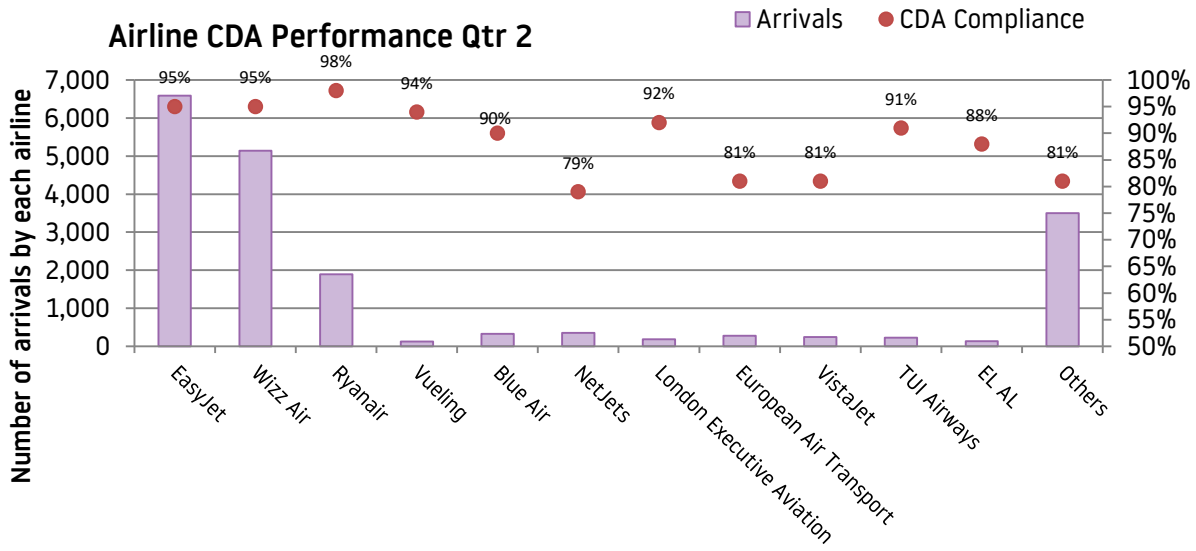
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters between 23:00 hrs and 06:59 hrs.

		Arrivals			Total
		08	26	Heli	
Apr 2019	Daytime	4,013	1,041	25	**5,079**
	Night-time	778	150	0	**928**
May 2019	Daytime	1,975	3,466	31	**5,472**
	Night-time	418	656	1	**1,075**
Jun 2019	Daytime	2,114	3,370	36	**5,520**
	Night-time	366	625	0	**991**
QTR	**Total**	**9,664**	**9,308**	**93**	**19,065**
	Daily Average	*106*	*102*	*1*	*209*

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*
Apr 2019	**93%**	94%	88%	**94%**	95%	88%	**90%**	90%	87%
May 2019	**92%**	92%	91%	**94%**	95%	93%	**90%**	90%	91%
Jun 2019	**92%**	92%	93%	**94%**	95%	91%	**91%**	90%	93%
QTR Total	**92%**	92%	91%	**94%**	95%	90%	**90%**	90%	91%

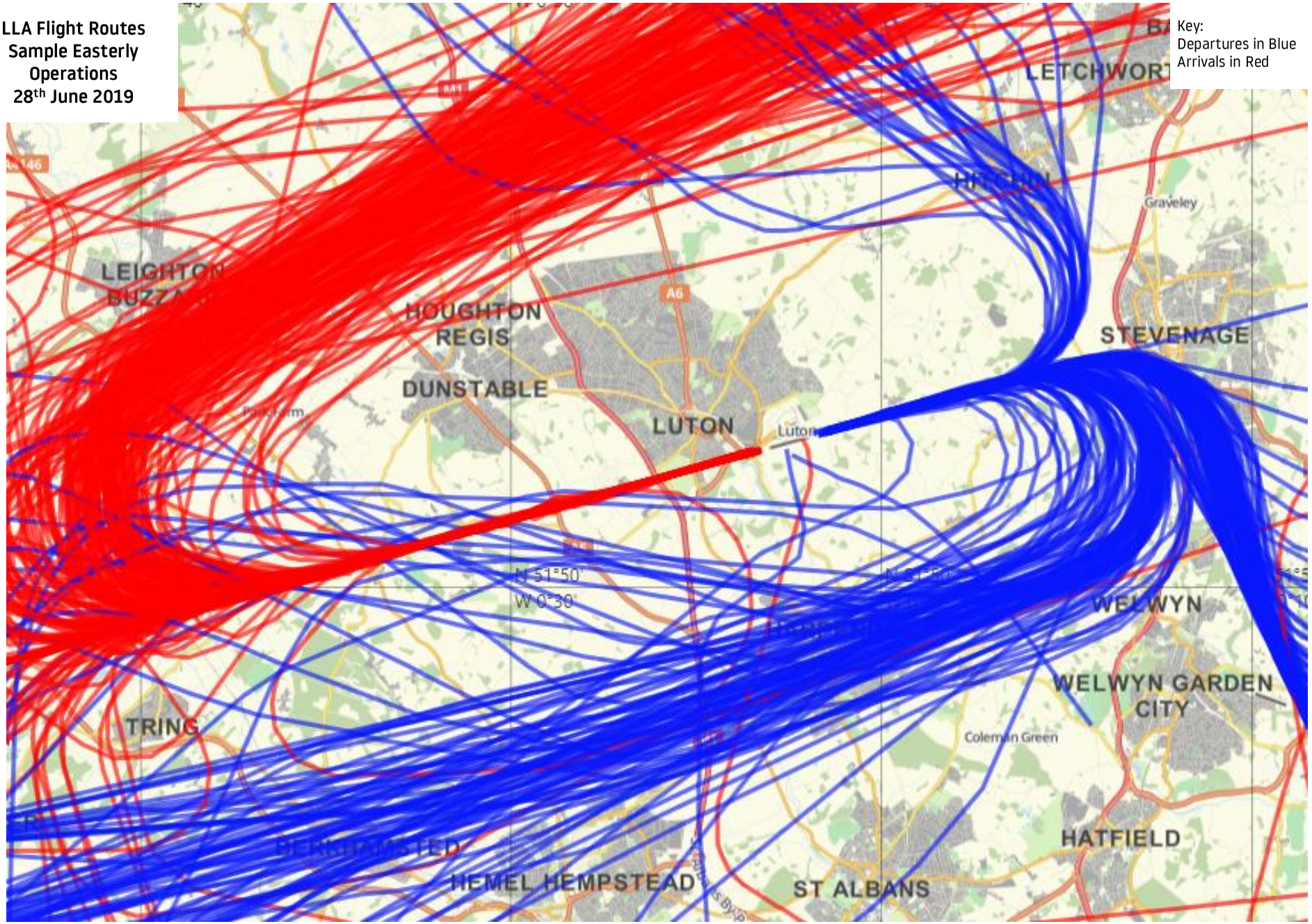
The overall CDA achievement was 92% with several major LLA operators achieving high performance – Ryanair.



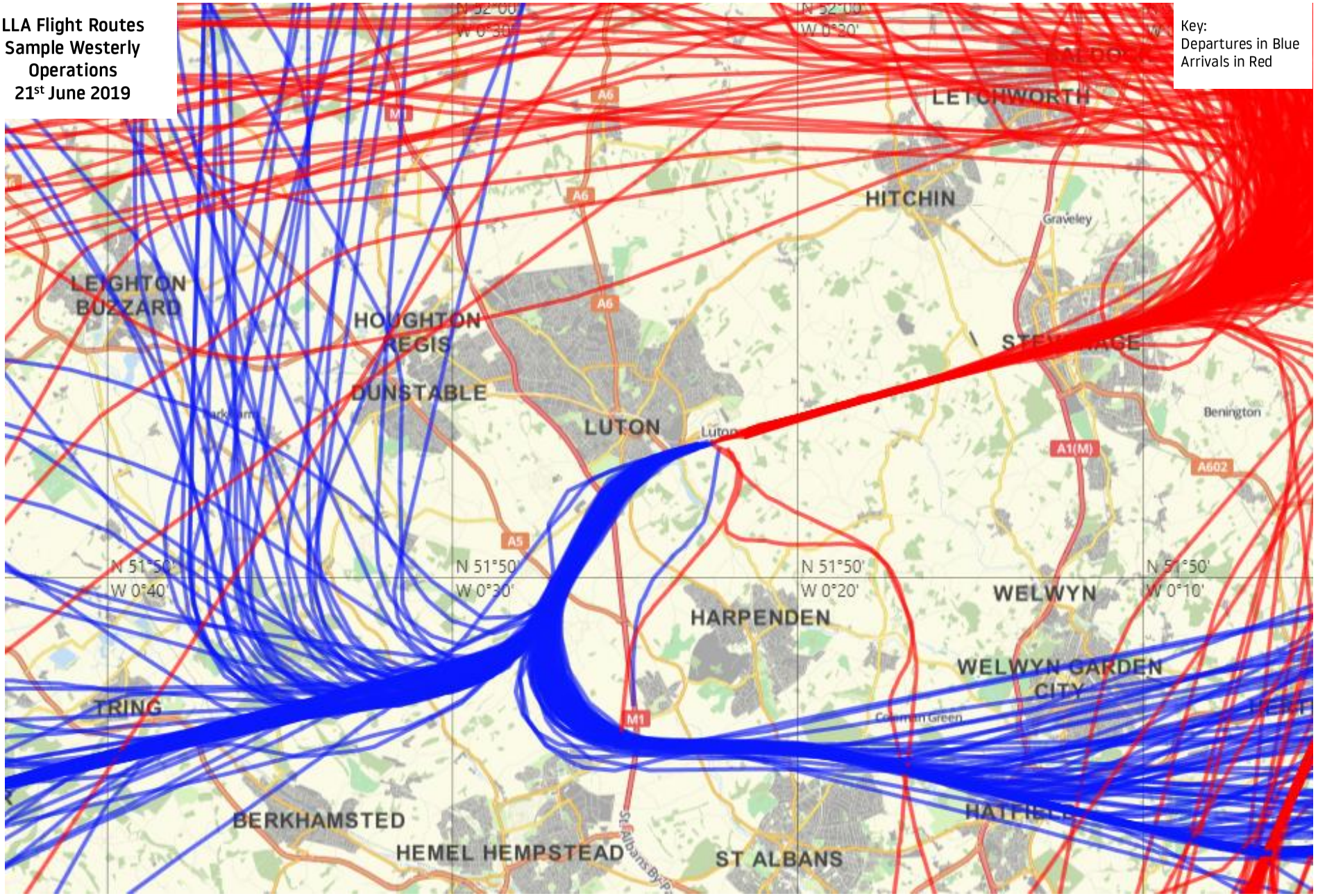
The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) for a typical 24-hour period within the second quarter of 2019.

LLA Flight Routes Sample Easterly Operations 28th June 2019

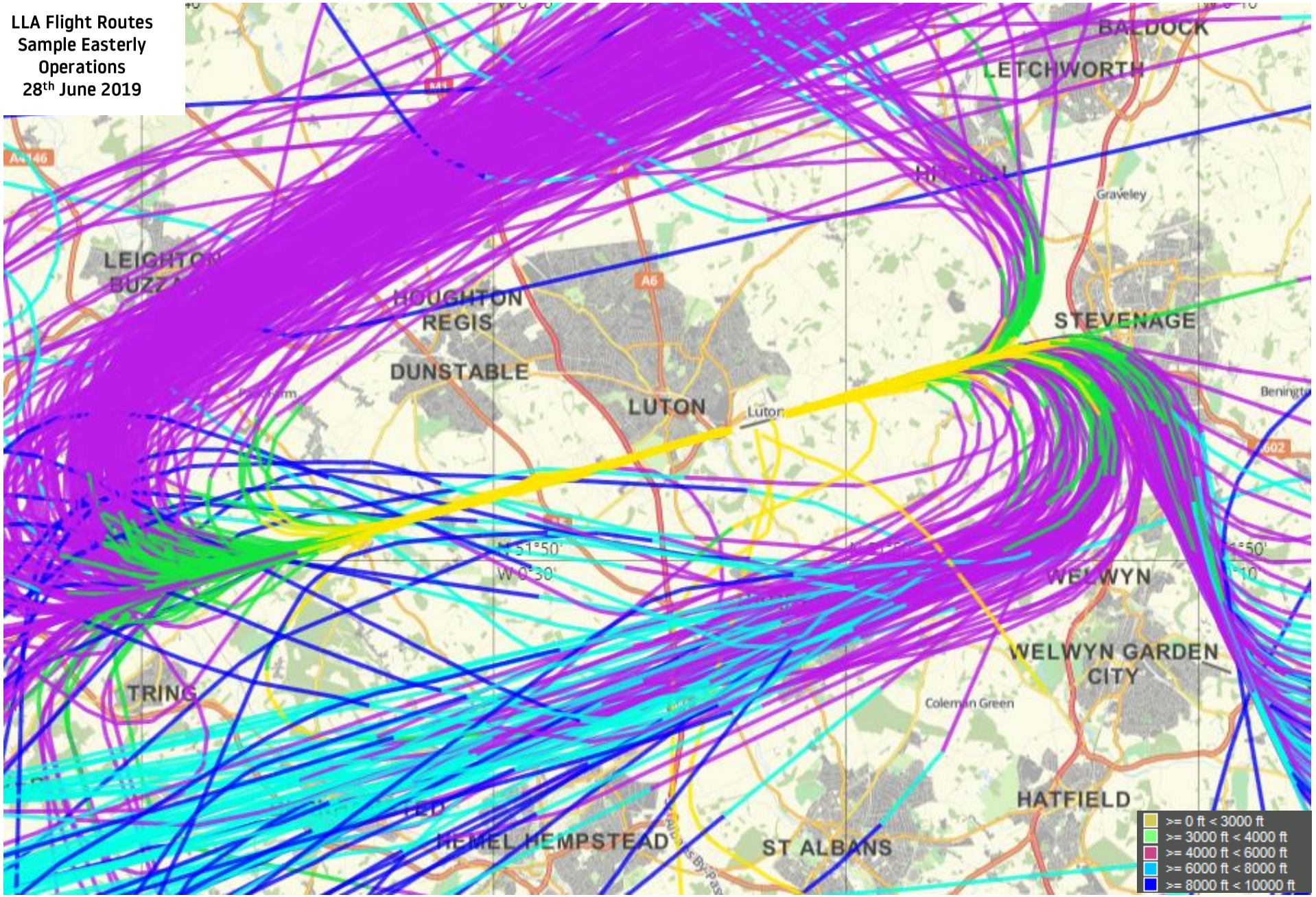
Key:
Departures in Blue
Arrivals in Red



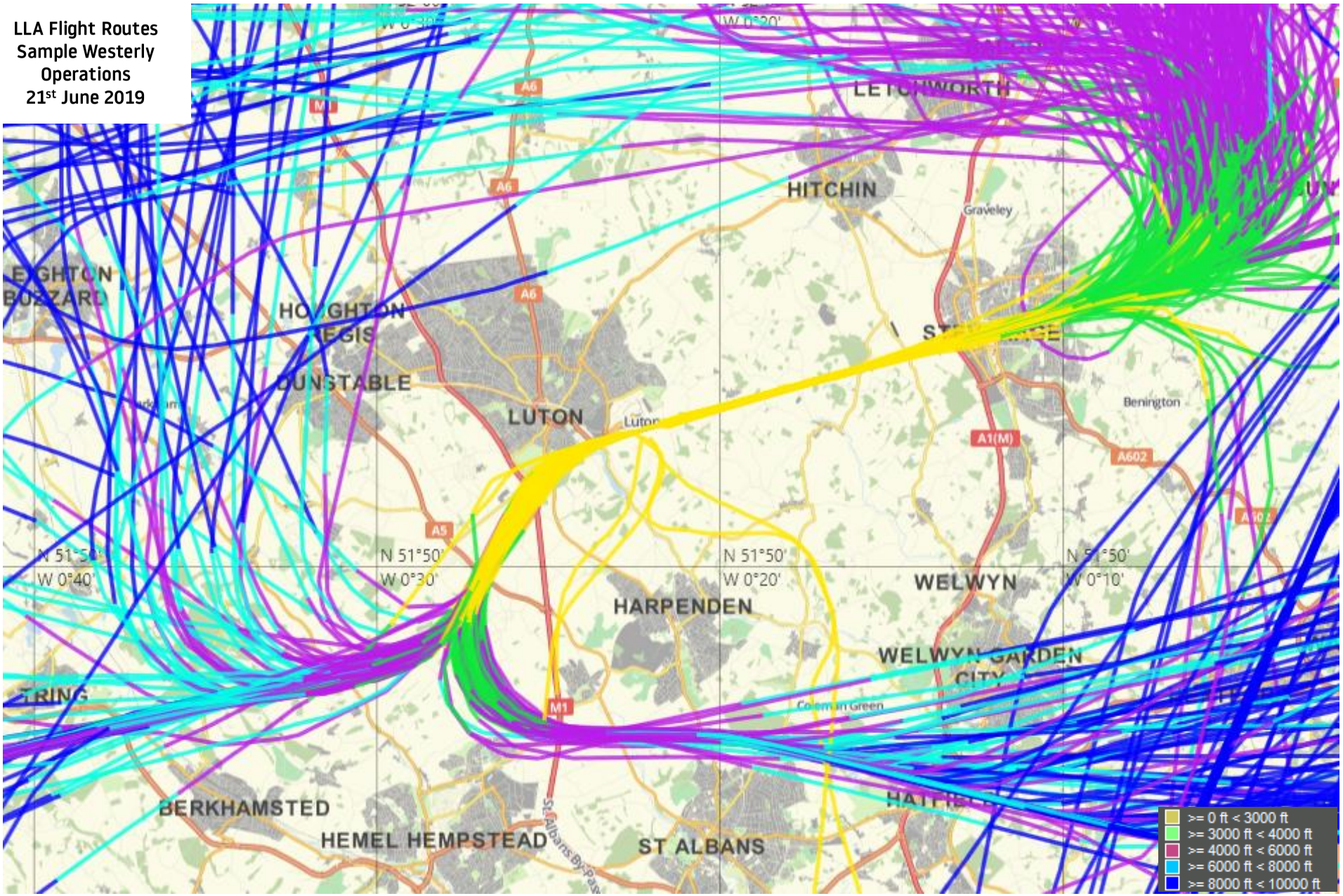
LLA Flight Routes
Sample Westerly Operations
21st June 2019



LLA Flight Routes
Sample Easterly
Operations
28th June 2019



LLA Flight Routes
Sample Westerly
Operations
21st June 2019



4 AIRCRAFT NOISE

During the 2nd Quarter of 2019, the maximum noise levels less than 79 dB(A) was recorded by 99% of correlated departing aircraft, as figure as the same quarter last year.

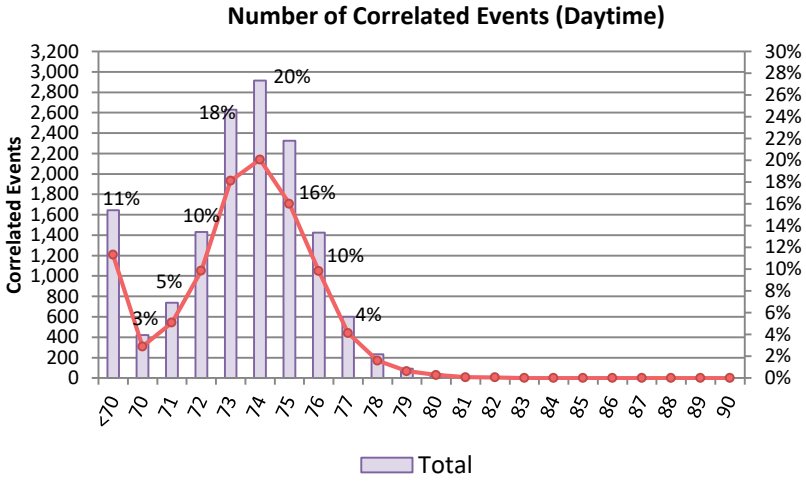
The maximum noise level less than 76 dB(A) was recorded by 83% of correlated departing aircraft, slightly decreased compared to 89% for the same period last year.

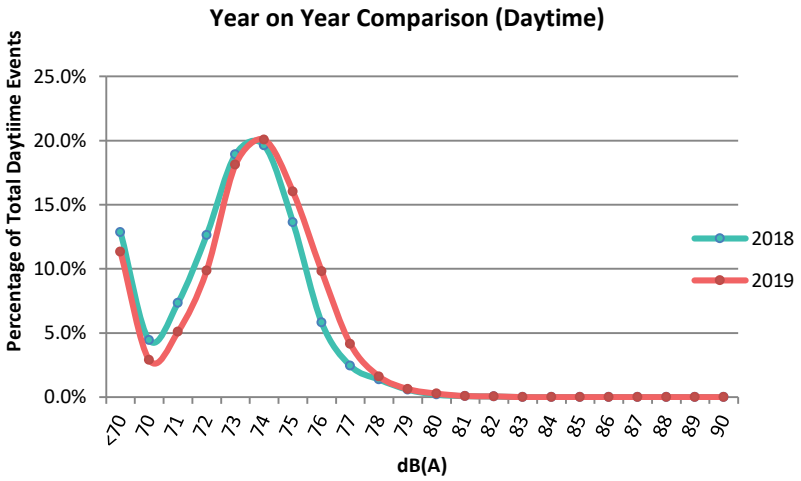
There were no noise violations in this quarter, and no noise violations during the 2nd quarter 2018.

4.1 Daytime Noise Levels – April to June 2019

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 22:59 hrs, is fined accordingly*)

	db (A)	Apr	May	Jun	QTR
Number of Correlated Events (Daytime)	<70	411	586	647	**1,644**
	70	121	129	170	**420**
	71	242	225	272	**739**
	72	397	501	534	**1,432**
	73	750	884	996	**2,630**
	74	836	1,064	1,014	**2,914**
	75	755	809	761	**2,325**
	76	481	528	416	**1,425**
	77	149	272	179	**600**
	78	66	109	59	**234**
	79	27	42	23	**92**
	80	14	16	10	**40**
	81	5	5	2	**12**
	82	3	3	3	**9**
	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		**4,257**	**5,173**	**5,086**	**14,516**

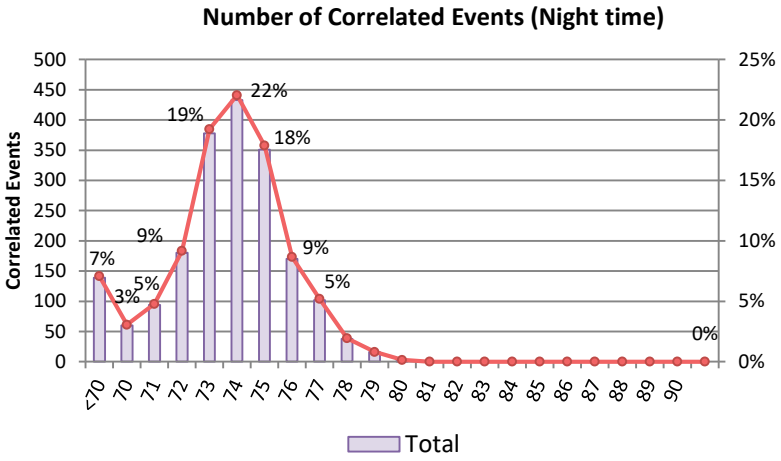


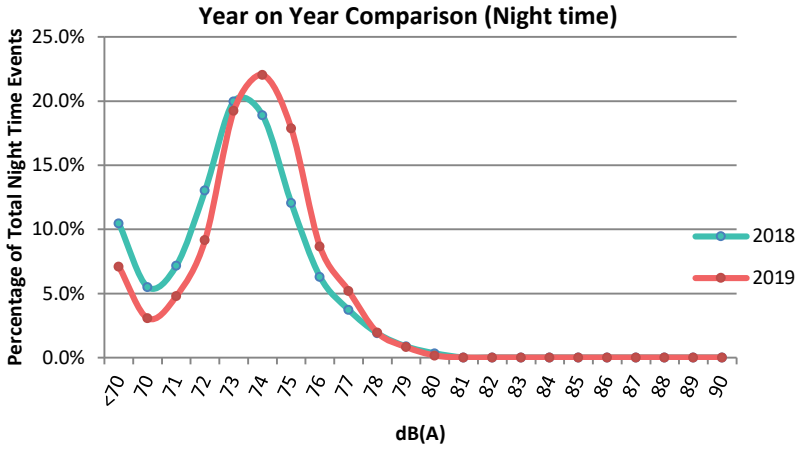


4.2 Night Noise Levels – April to June 2019

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 06:59 hrs, is fined accordingly)*

	db (A)	Apr	May	Jun	QTR
Number of Correlated Events (Night time)	<70	44	50	45	**139**
	70	19	24	17	**60**
	71	34	28	32	**94**
	72	64	40	76	**180**
	73	120	132	126	**378**
	74	116	154	163	**433**
	75	80	132	139	**351**
	76	48	70	52	**170**
	77	33	44	25	**102**
	78	8	24	6	**38**
	79	2	10	4	**16**
	80	0	1	2	**3**
	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		**568**	**709**	**687**	**1,964**





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 Quarter (April to June 2019)

There were no daytime or night time noise violations during the quarter.

4.4 Noise Insulation Scheme Update

Our Noise Insulation Scheme 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.

During the second quarter of 2019, out of the 42 properties contacted, 21 accepted insulation. 16 of these properties had noise insulation fitted in Q2, these were all located in Bedfordshire.

5 NOISE CONTOURS

5.1 Night Noise Contours – April to June 2019

5.1.1 Contour Production

Aircraft movement data for use in the contour production has been supplied by LLAOL. The contour production methodology has been updated from that used for the 2018 contours. Terrain data is included, and the contours have been produced using the INM software (Version 7.0d), however the validation has been updated. The validation is now based on measured results in 2018 at the fixed noise monitors. User-defined profiles for the most common aircraft have been used, as for the 2018 contours.

This update to the contour prediction methodology is described in the BAP note A11060-N39-DCH, dated 9th August 2019. Re-computation of the Q1 night contours using the latest methodology indicated that the effect of the update was a relatively small increase in contour area of around 2%.

5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A11060-NN19-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 2019), which have been re-computed using the latest prediction methodology, and the equivalent quarter during the previous year (April – June 2018).

Contour Value (dB $L_{Aeq,8h}$)	Contour Area (km^2)		
	Apr – Jun 2018	*Jan – Mar 2019*	*Apr – Jun 2019*
48	38.3	29.1	41.3
51	21.4	16.6	23.2
54	11.5	9.3	12.9
57	6.3	5.4	6.9
60	3.4	2.7	3.7
63	1.8	1.5	1.9
66	1.1	0.9	1.2
69	0.7	0.6	0.7
72	0.4	0.4	0.5
W/E Split (%)	44/56	90/10	48/52

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	Apr – Jun 2018	Jan - Mar 2019	Apr – Jun 2019
1900D	n/a	n/a	19
737300	13	n/a	n/a
737400	75	101	112
737800	634	317	631
757RR	222	137	197
A300-622R	133	155	157
A319-131	1,017	161	764
A320-211 (ceo)	1,734	1,050	2,051
A320-211 (neo)	179	98	295
A321-232 (ceo)	326	474	488
A330-301	22	26	n/a
BEC58P	n/a	n/a	11
CL600	15	22	16
CL601	45	38	44
CNA441	30	n/a	n/a
CNA500	11	n/a	n/a
CNA525C	30	10	12
CNA560XL	31	31	18
CNA680	12	n/a	n/a
CNA750	11	14	n/a
DO228	n/a	27	n/a
EMB145	18	27	23
F10062	33	35	55
GIV	28	18	16
GV	212	231	166
LEAR35	18	14	12
Other	45	62	70
Total	**4,894**	**3,048**	**5,157**

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

5.1.4 Noise Contour Comparison

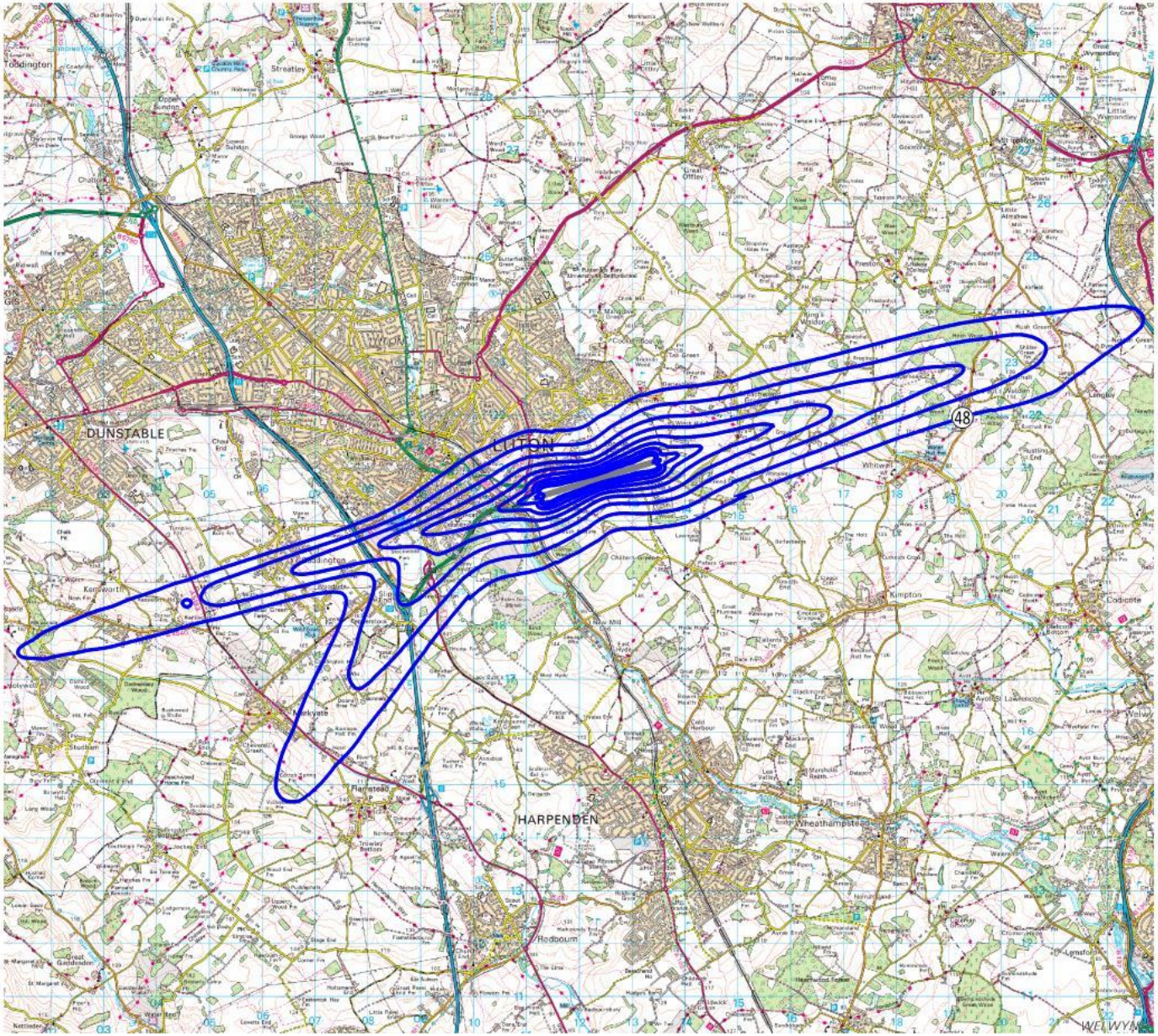
Compared with the same quarter in 2018, there has been a 5% increase in the total number of movements. The aircraft mix has remained broadly similar. The proportion of passenger turbofan operation comprised 91% of the total operations in 2019 Q2, compared to 89% in the same quarter in 2018. Movements by the Airbus A319 have reduced, while movements by the A320ceo, A320neo and A321 have increased.

The modal split is similar to that in the same quarter in 2018, with 48% of movements in 2019 Q2 using runway 26, compared to 44% in 2018 Q2.

The area within the 48 dB(A) noise contour has increased by 8% compared to the same quarter last year. This increase is due to the increase in total movements, the changes to the aircraft fleet mix and the effect of the updated validation. The contour shape is very similar to the 2018 Q2 contours.

The proportion of modernised aircraft types has increased compared to 2018 Q2. Around 13% of operations by the Airbus A320 were by the quieter modernised A320neo variant in 2019 Q2, compared to around 9% in 2018 Q2.

The number of movements, and therefore the contour area, has increased compared to the previous quarter (October – December 2019).



This drawing contains Ordnance Survey data © Crown Copyright and database right 2019.

LEGEND:

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

REVISIONS

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London Luton Airport
Regular Contouring

Airborne Aircraft Noise Contours
Apr-Jun 2019 Average Night time

DRAWN: DCH CHECKED: DR

DATE: August 2019 SCALE: 1:100000@A4

FIGURE No:

A11060/NN19/Q2

6 COMPLAINTS

6.1 Total Complaints relating to LLA aircraft operations

	2nd QTR 2019	2nd QTR 2018
Total No. of Complaints relating to LLA aircraft operations	2,748	2,335
No. of Complainants	292	311
No. of General Complaints	507	485
No. of Specific Complaints	2,241	1,850
Average No. of Complaints per Complainant	9.4	7.5
No. of Aircraft Movements per Complaint	13.9	16

During the last quarter a total of 2,748 complaints relating to LLA aircraft operations (on average 30 complaints per 24 hours) were received by the Flight Operations Department. This is compared to the 2,335 complaints which were received for the same period last year. It should be noted that 67% were received by 10 individuals.

The monthly breakdown of total complaints relating to LLA aircraft operations is as follows:

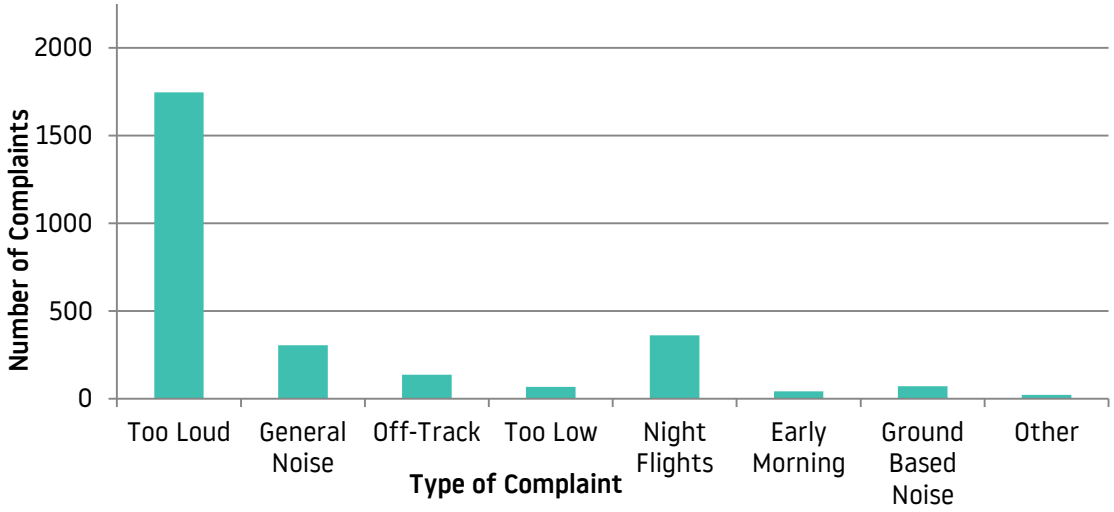
Apr 2019	585 complaints	(444 Specific Complaints, 141 General Complaints)
May 2019	1,420 complaints	(1,218 Specific Complaints, 202 General Complaints)
Jun 2019	743 complaints	(579 Specific Complaints, 164 General Complaints)

A further 38 complaints not attributable to LLA traffic were received throughout the quarter, compared to 309 complaints for the period April to June last year.

Out of 292 total complainants, there were 158 that contacted the airport only once meaning that 134 complainants generated 2,590 complaints.

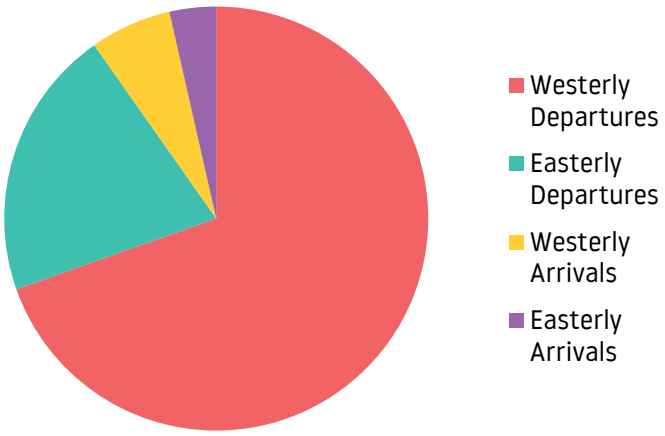
6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from April to June 2019 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 2019.



Within the 1,469 specific aircraft complaints concerning westerly departures, 1,404 complaints involved aircraft on the Match/Detling heading, 41 related to aircraft following Compton flight route, 17 related to aircraft using the Olney route and 7 complaints were recorded about aircraft following an off-airways routing.

With regard to the 436 complaints attributed to easterly departures, 278 related to aircraft following the Compton flight route and 144 aircraft on the Match route. There were 11 specific complaints relating to the easterly Olney departure route and 3 relating to aircraft following an off-airways routing.

In total the Flight Operations Department received 206 specific complaints regarding arrivals. 131 of these complaints were about westerly arrivals and a further 75 concerning easterly arrivals.

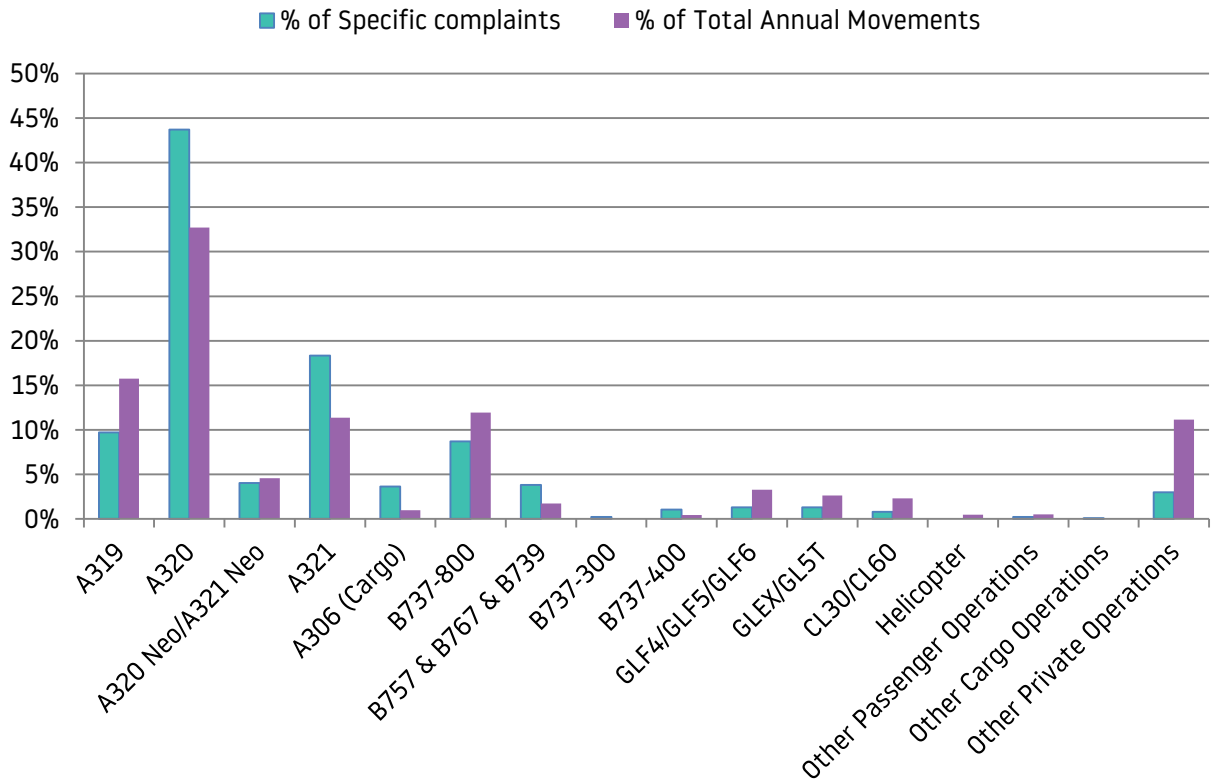
68 Complainants reported noise disturbance at night (compared to **34 Complainants** for the same Quarter last year)

Departing aircraft accounted for 83% of the 292 specific night complaints and 17% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 12% of night complaints, whilst passenger aircraft accounted for 83% of night complaints and executive aircraft were correlated to 5% of night complaints.

361 (13%) Complaints concerning night noise disturbance from LLA operations

6.4 Complaints by aircraft type

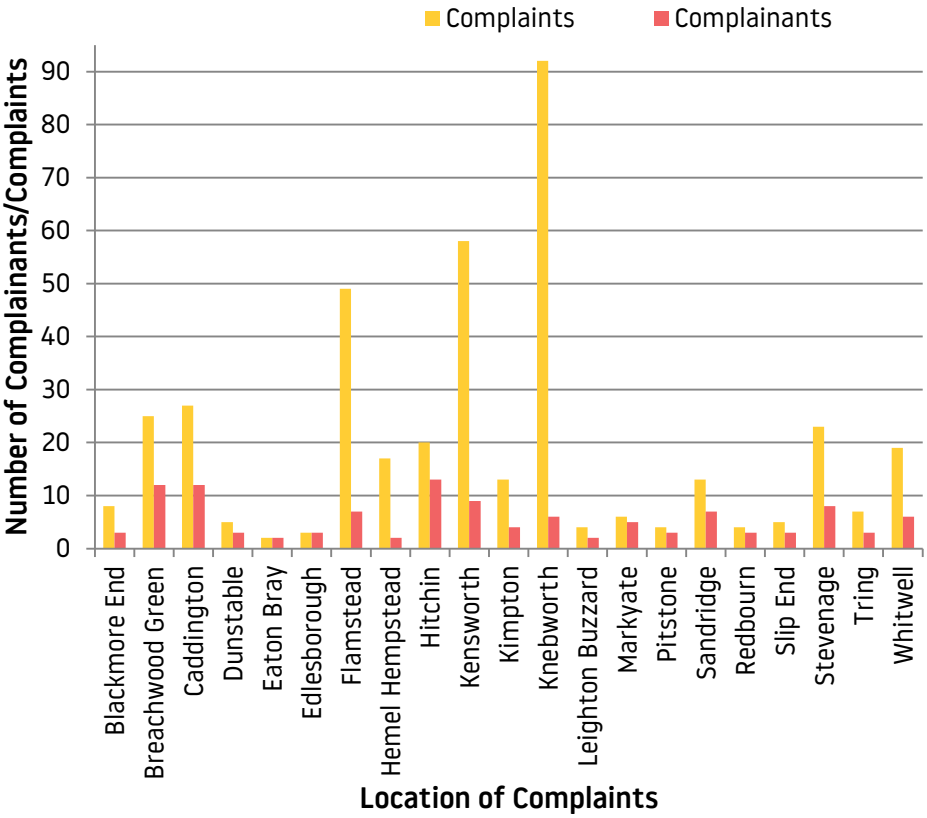
The diagram below shows aircraft types generating specific complaints.

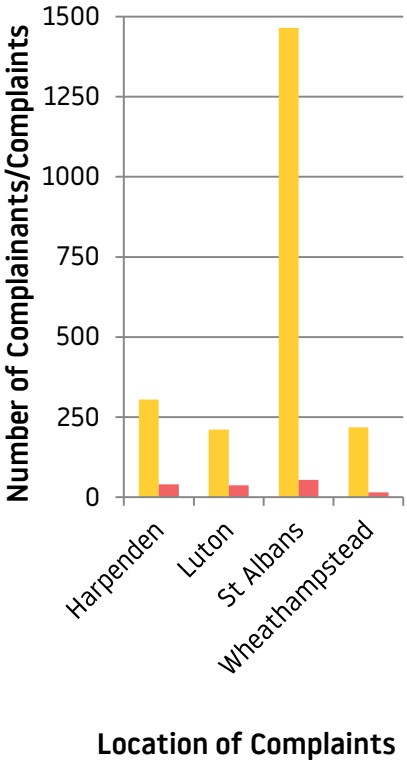


6.5 Origin of Complaints

The chart below identifies the areas around the Airport from which more than one complainant submitted concerns relating to LLA aircraft operations during the period April to June 2019.

The communities with one complainant include Aston Clinton, Aylesbury, Ayot St Lawrence, Baldock, Berkhampstead, Dagnall, Datchworth, Essex, Gaddesden Row, Hertford, Little Gaddesden, Pepperstock, Preston, Princes Risborough, Royston, Sudbury, Welwyn Garden City, Wilstone and Woodside.





6.6 Complaints Analysis

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

- The wind direction was both easterly and westerly and therefore large numbers of complaints were made from residents effected by easterly and westerly routes. Although still the largest percentage of complaints are related to aircraft operating during westerlies.
- The majority of complaints were regarding aircraft on the westerly Match departure route, and this has seen an increase in movements compared to the same quarter last year.
- High numbers of complaints were recorded from specific locations, for example Harpenden, Luton, St Albans and Wheathampstead. Complaints from these areas accounted for 80% of total complaints.
- Similar to previous quarters, a few people are making many complaints, in Q2 67% of complaints were generated by 10 individuals.

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
Phone	4%
Email	25%
Travis	71%

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	48.9%
1	22.2%
2	10.2%
3	2.8%
4	2.8%
5	2.4%
6	1.2%
7	1.2%
8	0.6%
9	0.9%
10	0.4%
11	0.4%
12	0.3%
13	0.3%
14	0.2%
15+	5.3%

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 30th April 2019, LLA met with the Chiltern Conservation Board to discuss upcoming airspace changes. Buckinghamshire County Council and Aylesbury Vale District Council also met with the Flight Operations team on 17th June to discuss noise monitoring and airspace change.

7.2 Airport Visits to the Community

The Flight Operations team arranged a public surgery in Edlesborough during Quarter 2. Only three people attended this meeting, with questions about off-track aircraft and future growth. At LLA we were disappointed with this turnout as there had been a lot of advertising for the event.

More public surgeries are scheduled; details of which can be found on our website, which is updated accordingly.
(https://www.london-luton.co.uk/corporate/community/noise/noise-surgeries)

Furthermore, there were two airspace focus group meetings to discuss upcoming airspace change proposals, these were both held on 5th April 2019.