

# Quarterly Monitoring Report

## **Qtr 1 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 January to March 2019.

## KEY MONITORING INDICATORS – 1<sup>st</sup> QUARTER 2019

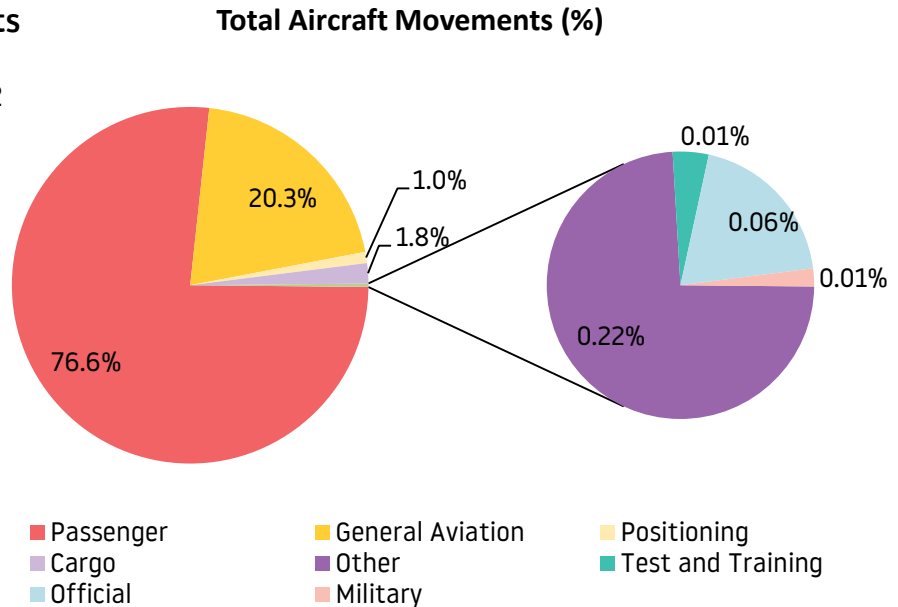
Parameter		1 <sup>st</sup> Quarter 2019	1 <sup>st</sup> Quarter 2018
Total Passenger Number	↑	3,671,400	3,276,560
Total Aircraft Movements	↑	30,422	29,368
Night Movements (23.00 – 06.59)	↑	3,050	2,728
Early Morning Movements (06.00 – 06.59)	↑	1,178	956
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements ( <i>9,650 limit</i> )	↑	8,524	8,311
Night Quota Count ( <i>3,500 limit</i> )	↑	3123.75	2,995.25
Early Morning Shoulder ( <i>7,000 movements</i> )	↑	6,016	5,893
24hr CDA (% achievement)	-	90%	90%
Day CDA (% achievement)	↓	89%	90%
Night CDA (% achievement)	↑	90%	86%
Track Violations	↓	11	12
Departure Noise Infringements (Day)	-	0	0
Departure Noise Infringements (Night)	-	0	0
Noise Monitor Results			
No. Day (Night) > 80 dB(A)	↓	7 (0)	12 (0)
No. Day (Night) > 75 dB(A)	↓	1,225 (124)	1,462 (192)
No. Day (Night) > 70 dB(A)	↑	9,604 (1,017)	9,422 (890)
Night Noise Contour Area (48 dB L <sub>Aeq, 8h</sub> )	↑	28.4 km <sup>2</sup>	23.1 km <sup>2</sup>
Noise Complaints	↑	2,793	1,310
Complainants	↑	121	111
Number of New Complainants	↑	34	24
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns	-	Flamstead	Harpenden
(>5 Complainants)		Harpenden	Kensworth
		Luton	Markyate
		Sandridge	Sandridge
		St Albans	South Luton
		Wheathampstead	St Albans
			Wheathampstead
Westerly/Easterly Runway Split (%)	-	87/13	61/39

# 1 AIR TRAFFIC DATA

## 1.1 Aircraft Movements

There were a total of 30,422 aircraft movements during this quarter (compared with 29,368 for the same period in 2018), increase of 3.6%.

This resulted in an average 338 movements per 24 hours (compared to 326 last year).



A breakdown of these movements is shown below:

	Commercial				Non-Commercial*					Total
	Cargo	Passenger	Positioning		Military	Official	Other <sup>1</sup>	General Aviation <sup>2</sup>	Test & Training	
			Other	STN						
Jan 2019	177	7,708	97	4	0	6	29	1,824	0	9,845
Feb 2019	185	7,330	104	2	0	8	21	2,079	2	9,731
Mar 2019	197	8,255	98	4	2	4	16	2,268	2	10,846
QTR Total	559	23,293	299	10	2	18	66	6,171	4	30,422

## 1.2 Passenger Statistics

A total of 3,671,400 passengers passed through LLA during the period January to March 2019 (compared with 3,276,560 for the same period last year), 3,644,003 on scheduled flights (99.3%) and 27,397 on charter flights (0.7%). This represents an increase in passengers of 12.1% year on year and equates to an average 40,793 passengers per 24 hours (compared to 36,406 during the first quarter last year).

	Domestic	EU	Non-EU	Total
Jan 2019	76,643	705,295	371,793	1,153,731
Feb 2019	82,464	740,179	356,925	1,179,568
Mar 2019	88,679	851,131	398,291	1,338,101
QTR Total	247,786	2,296,605	1,127,009	3,671,400

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

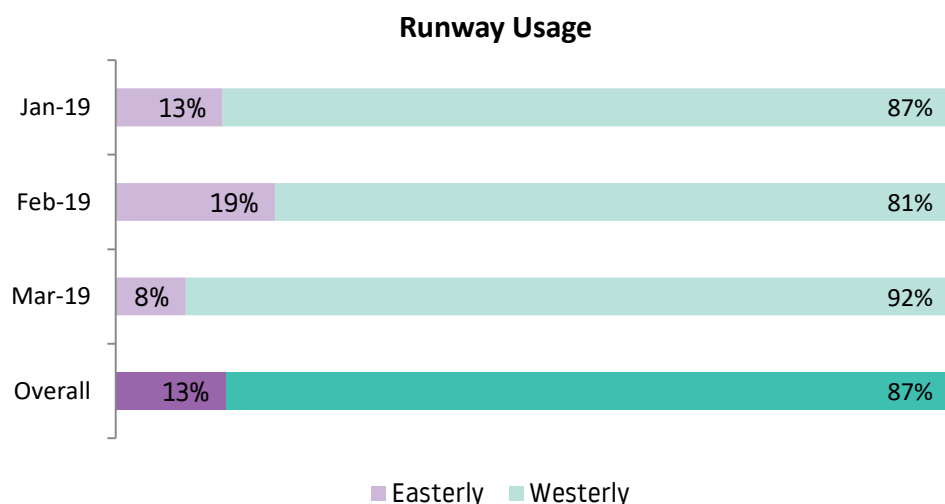
<sup>1</sup> Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base

<sup>2</sup> 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 13% easterly and 87% westerly (compared to 39% / 61% 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 1<sup>st</sup> 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'*

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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.

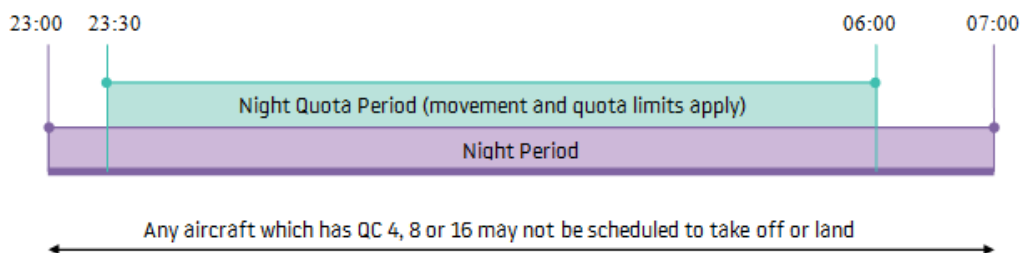
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are then allocated to different aircraft types 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
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 January to March 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 (2330-0600)		Early Morning Shoulder (0600-0700)
	<i>Movements Limited to 9,650 Annually</i>	<i>Quota Count Limited to 3,500 Annually</i>	<i>Movements Limited to 7,000 Annually</i>
April 2018	778	262.25	558
May 2018	976	325.00	638
June 2018	849	318.00	530
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
<b>QTR Total</b>	<b>1,435</b>	<b>557.75</b>	<b>1,178</b>
<i>Total for preceding 12 months</i>	<i>8,524</i>	<i>3123.75</i>	<i>6,016</i>

### 1.5 Day/Night Ratio of Movements - Actual

There were 3,050 night operations during the quarter (compared to 2,728 for the first quarter 2018), an average 34 movements per night (compared to 30 last year). Arriving aircraft accounted for 53% 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. 62% 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 90% day / 10% night (92% / 8% for the same quarter last year).

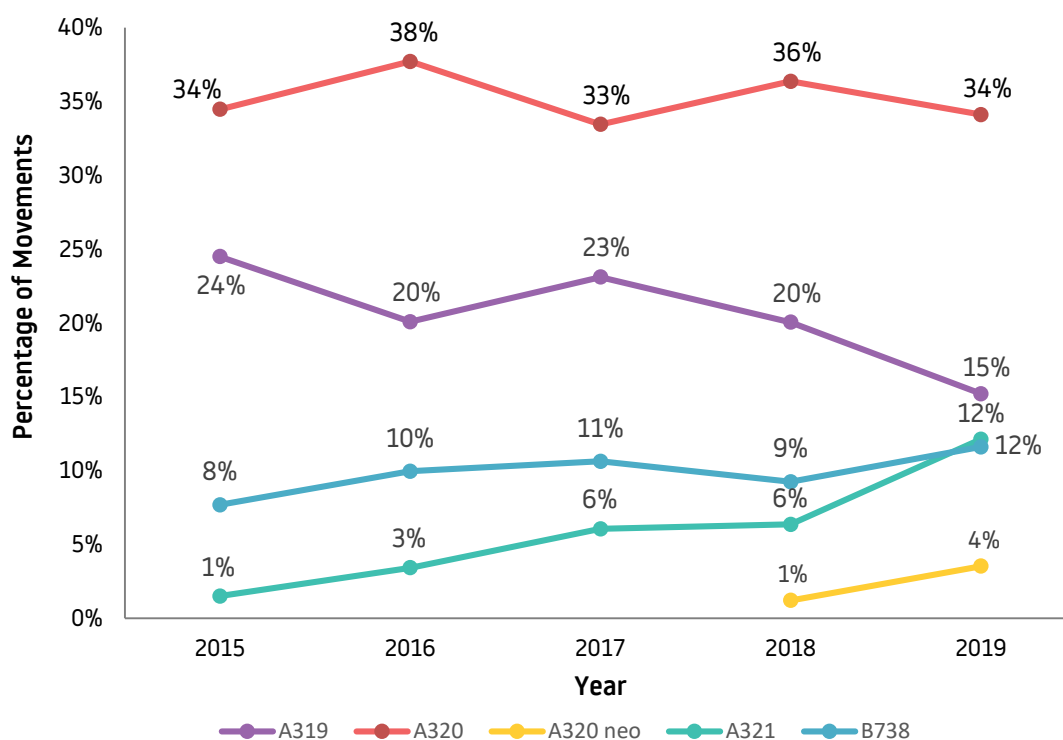
	Day Movements (0700-2300)			Night Movements (2300-0700)				Total	
	Day movements			Night Quota Period (2330-0559)		Early Morning Shoulder (0600-0659)			Total Night Movements (2300 – 0659)
	A	D	Total	A	D	A	D		
April 2018	4,827	5,029	9,856	616	162	110	448	1,515	11,371
May 2018	5,209	5,577	10,786	758	218	150	488	1,821	12,607
June 2018	5,285	5,608	10,893	715	134	65	475	1,562	12,483
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
QTR Total	13,593	13,779	27,372	951	484	296	882	3,050	30,422
Total for preceding 12 months	59,098	61,543	120,641	6,561	1,963	1,176	4,850	16,683	137,324

## 1.6 Day/Night Ratio of Movements – Forecast

	2019/2020 Forecast of Aircraft Movements				
	<i>Day Movements (0700 – 2259hrs)</i>	<i>Night Quota Period (2330-0559) Limited to 9,650</i>	<i>Early Morning Shoulder (0600-0659) Limited to 7,000</i>	<i>Total Night Movements (2300-0659hrs)</i>	<i>Total</i>
April 2019	10,244	792	581	1,560	11,804
May 2019	11,221	995	665	1,875	13,096
June 2019	11,363	865	553	1,609	12,972
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	428	311	855	9,905
February 2020	8,864	419	300	839	9,703
March 2020	10,209	605	399	1163	11,372
<i>Total for following 12 months</i>	125,637	8,657	6,099	16,899	142,536

## 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	
Jan 2019	Daytime	305	14	2,039	177	1,276	64	509	4	23	0	12	4,423
	Night-time	22	1	281	11	123	1	49	1	0	0	0	489
Feb 2019	Daytime	430	8	1,817	312	1,268	105	442	5	22	3	13	4,425
	Night-time	41	2	230	17	95	8	41	0	5	0	0	439
Mar 2019	Daytime	223	14	2,249	132	1,670	43	550	2	27	0	22	4,931
	Night-time	8	3	295	11	138	1	41	0	7	0	1	505
QTR	Total	1,029	42	6,911	660	4,570	222	1,632	12	83	3	48	15,212
	Daily Average	11	<1	76	7	50	2	18	<1	<1	<1	<1	169

### 2.2 Departure – Track Keeping

All propeller-driven aircraft with Maximum Take Off Weight (MTOW) 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 99.53%. 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
Jan 2019	1	£1,000
Feb 2019	8	£10,000
Mar 2019	2	£3,000
<b>QTR</b>	<b>11</b>	<b>£14,000</b>

	Airline or Aircraft Operator	Aircraft Type/Occurrence
Jan 2019	Ryanair	B738/1
Feb 2019	Vueling	A320/1
	Privately owned aircraft	GLF6/3; C550/1; ZLJ4/1; RJ1H/1; FA7X/1
Mar 2019	Ryanair	B738/1
	Privately owned aircraft	GLEX/1

### 3 ARRIVING AIRCRAFT

#### 3.1 Arrivals Route Analysis

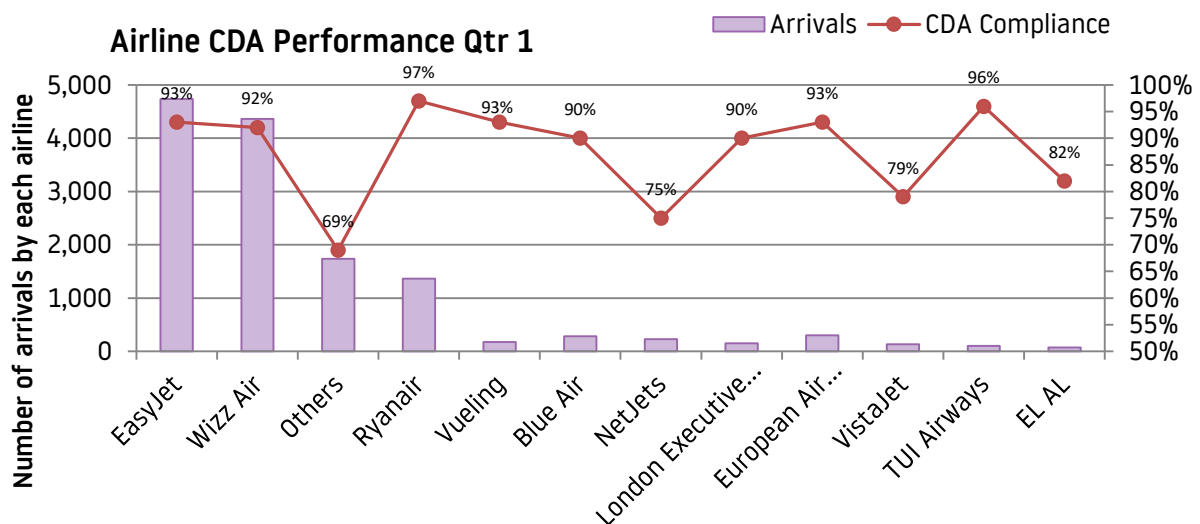
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters between 23:00 hrs and 07:00 hrs.

		Arrivals			Total
		08	26	Heli	
Jan 2019	Daytime	631	3,761	11	4,403
	Night-time	43	486	1	530
Feb 2019	Daytime	830	3,523	16	4,369
	Night-time	106	392	0	498
Mar 2019	Daytime	451	4,347	22	4,821
	Night-time	31	558	0	589
QTR	<b>Total</b>	<b>2,092</b>	<b>13,067</b>	<b>50</b>	<b>15,210</b>
	<i>Daily Average</i>	<i>23</i>	<i>145</i>	<i>&lt;1</i>	<i>169</i>

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.

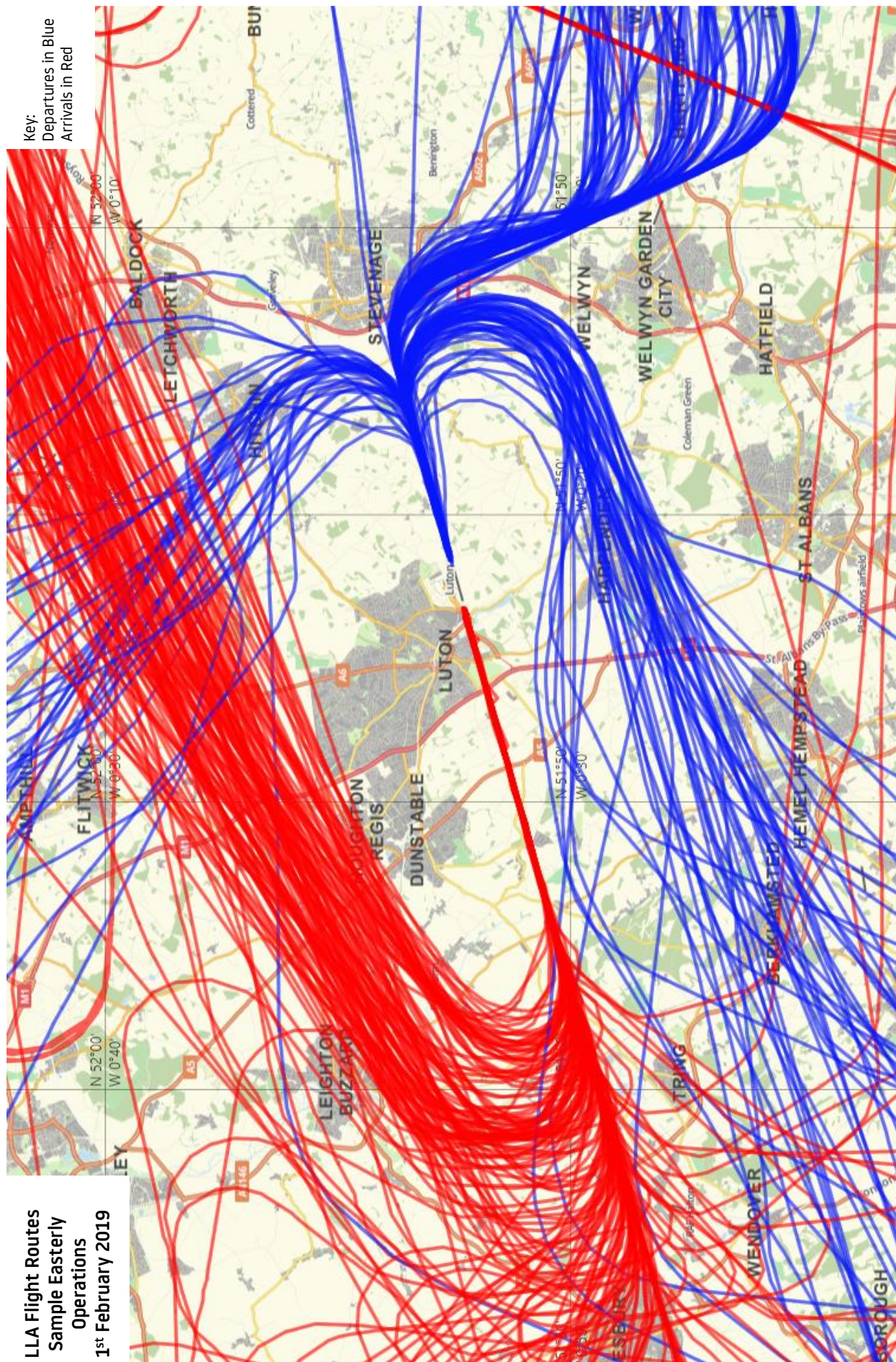
	All Arrivals			08 Easterly Arrivals			26 Westerly Arrivals		
	% CDA			% CDA			% CDA		
	Total	Day	Night	Total	Day	Night	Total	Day	Night
Jan 2019	91%	91%	90%	95%	95%	92%	90%	90%	90%
Feb 2019	90%	90%	89%	93%	94%	87%	89%	89%	89%
Mar 2019	88%	88%	91%	96%	96%	96%	88%	87%	90%
QTR Total	90%	89%	90%	94%	95%	90%	89%	89%	90%

The overall CDA achievement was 90% with several major LLA operators achieving high performance – Ryanair and TUI Airways.

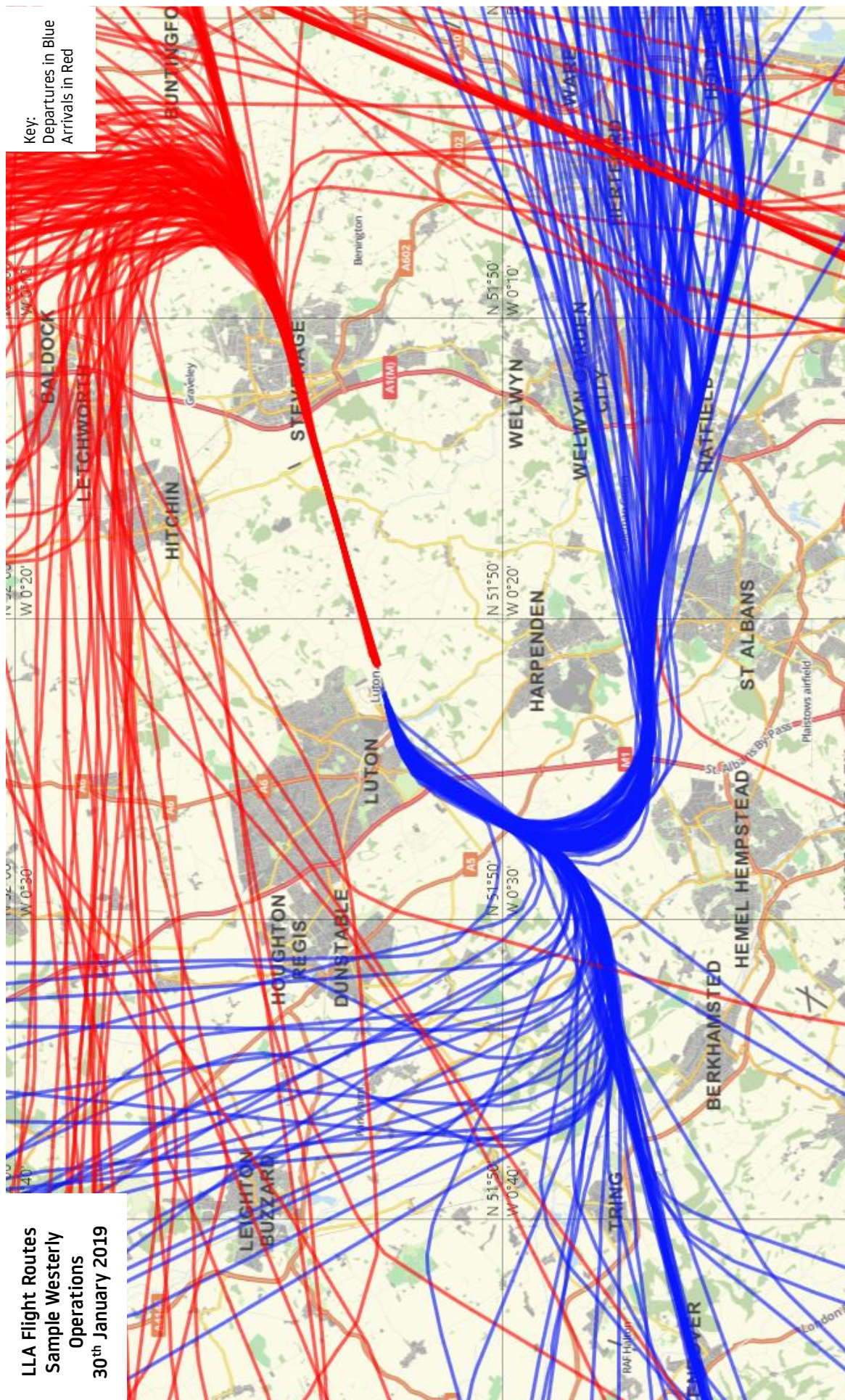


The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) for a typical 24-hour period within the first quarter of 2019.



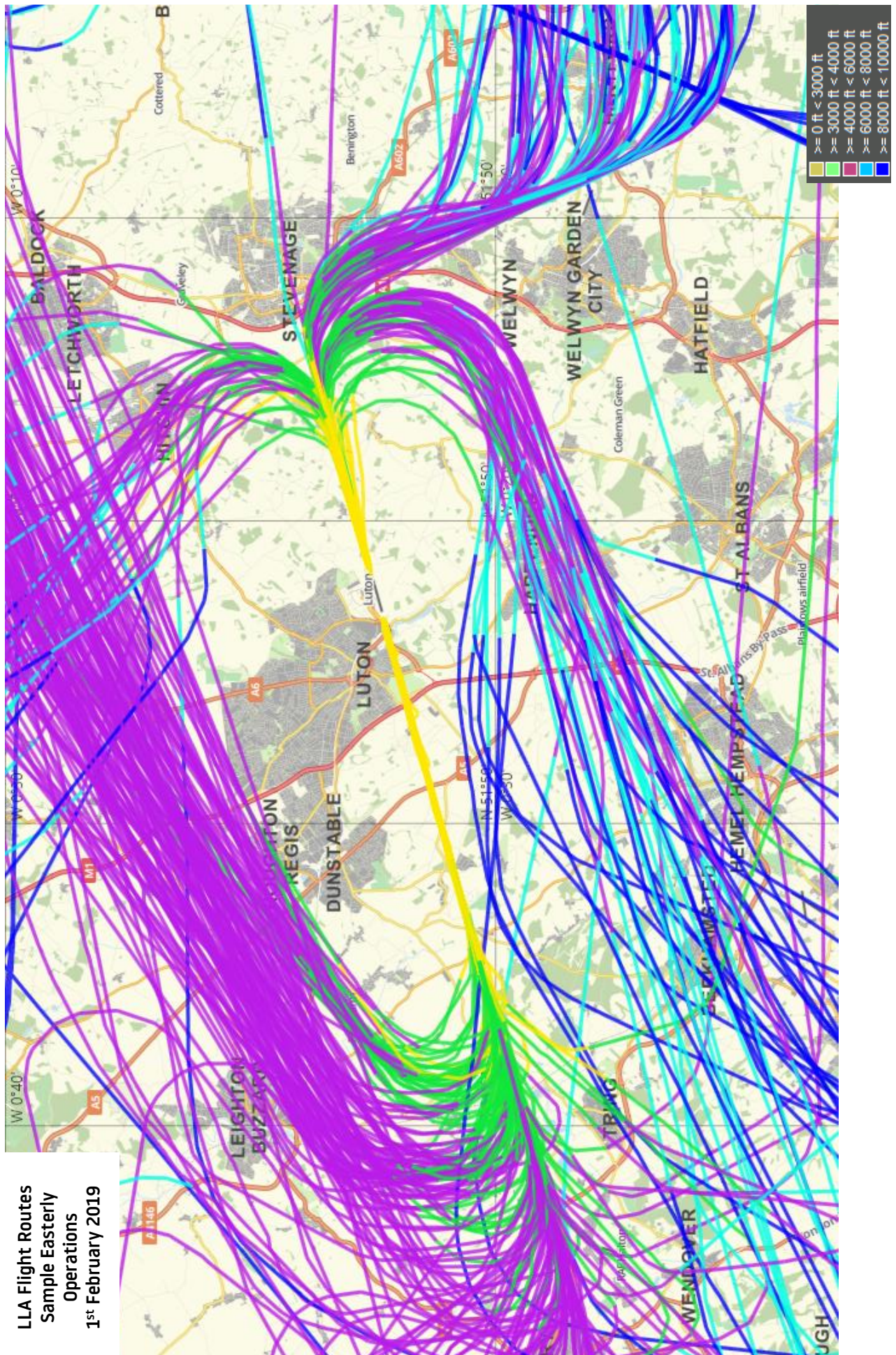




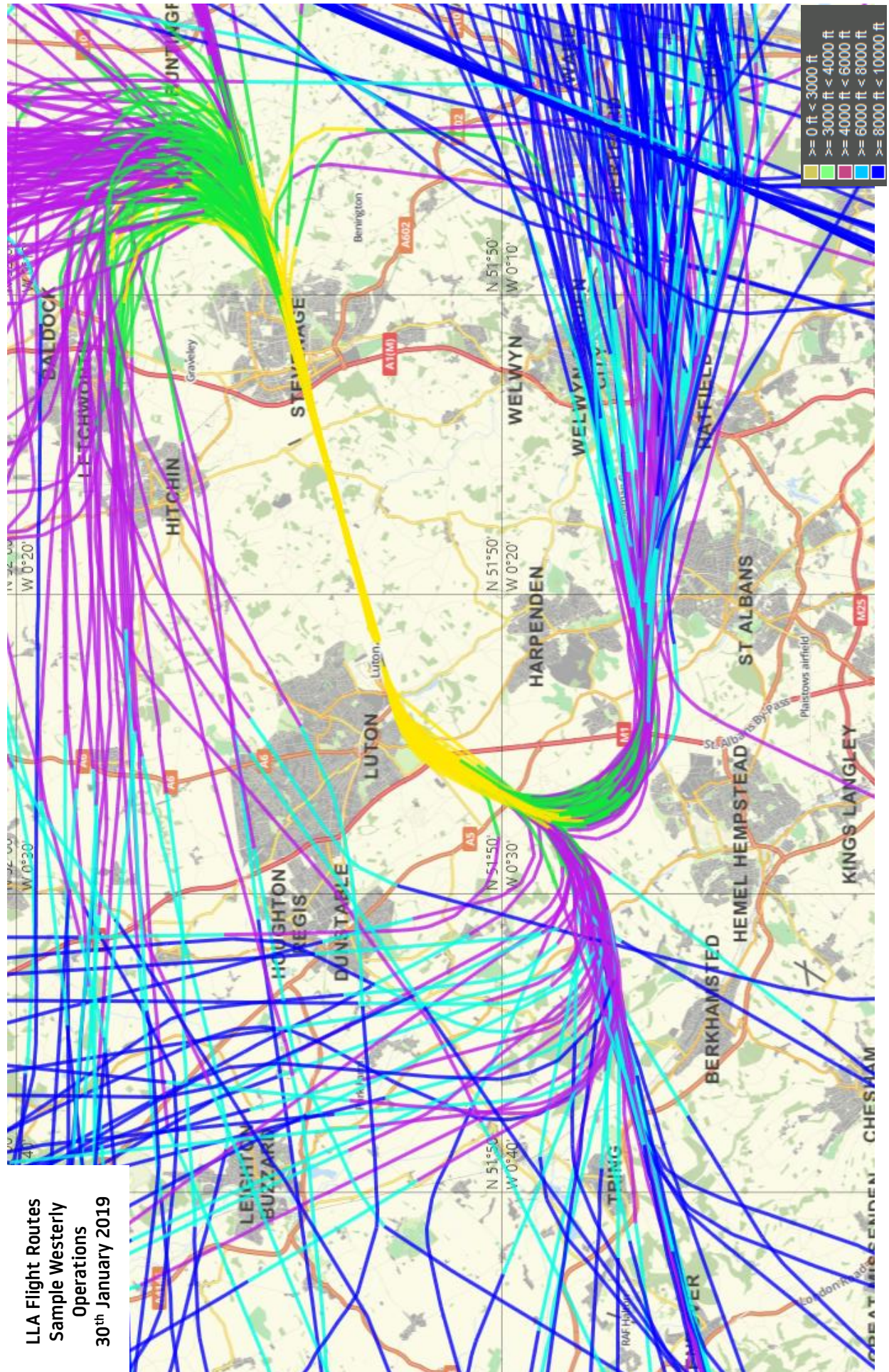




LLA Flight Routes  
Sample Easterly  
Operations  
1st February 2019







## 4 AIRCRAFT NOISE

During the 1<sup>st</sup> Quarter of 2019, the maximum noise levels less than 79 dB(A) was recorded by 99% of correlated departing aircraft slightly increased compared to 98% for the same quarter last year.

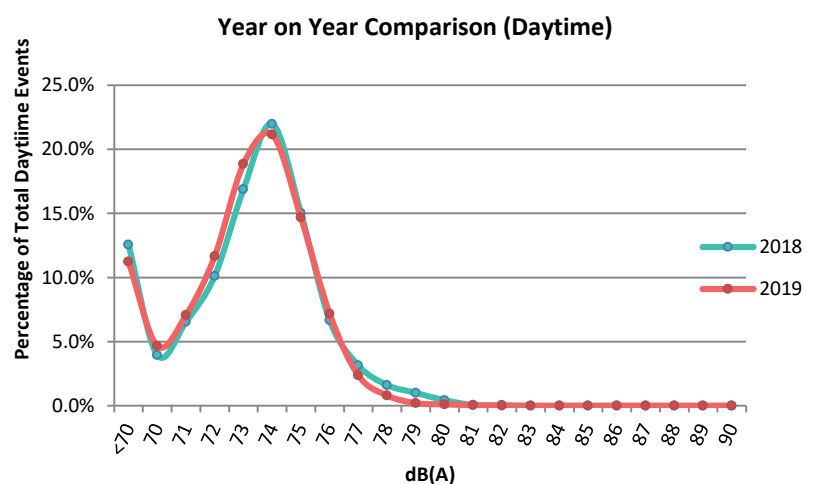
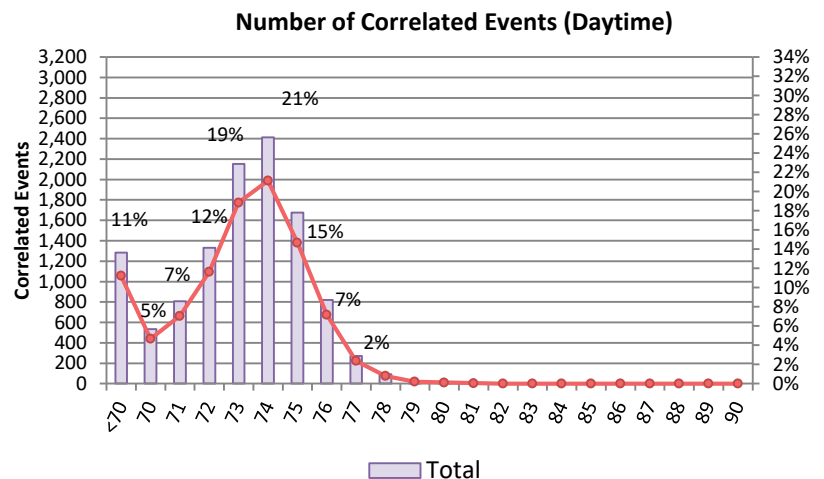
The maximum noise level less than 76 dB(A) was recorded by 96% of correlated departing aircraft slightly increased compared to 87% for the same period last year.

There were no noise violations in this quarter, and no noise violations during the 1<sup>st</sup> quarter 2018.

### 4.1 Daytime Noise Levels – January to March 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 23:00 hrs, is fined accordingly)*

	db (A)	Jan	Feb	Mar	QTR
Number of Correlated Events (Daytime)	<70	350	481	452	1,283
	70	108	217	208	533
	71	197	333	276	806
	72	321	563	447	1,331
	73	678	768	706	2,152
	74	885	733	796	2,414
	75	748	441	487	1,676
	76	411	155	253	819
	77	144	53	73	270
	78	45	23	24	92
	79	11	3	10	24
	80	4	2	7	13
	81	4	1	1	6
	82	1	0	0	1
	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		3,907	3,773	3,740	11,420

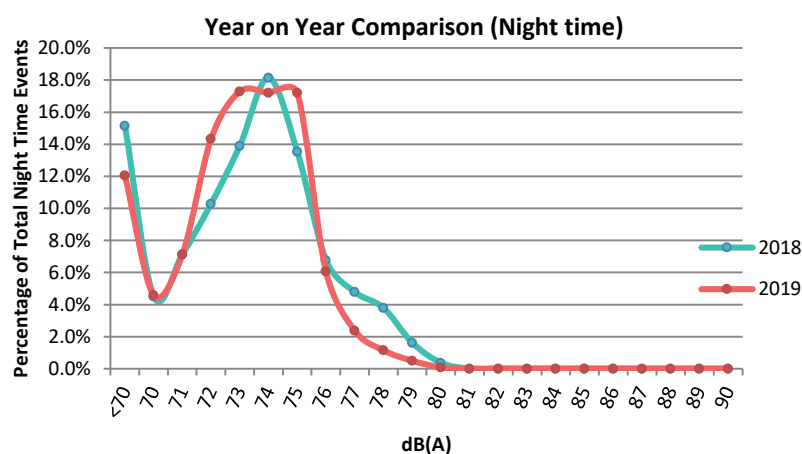
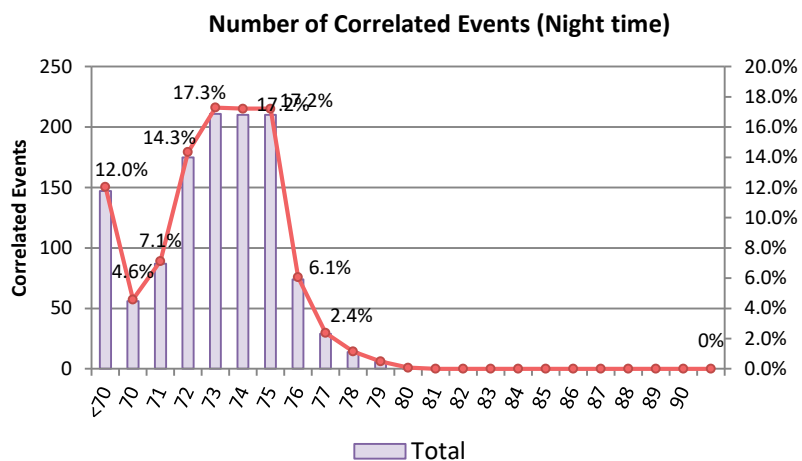




## 4.2 Night Noise Levels – January to March 2019

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 07:00 hrs, is fined accordingly)

	db (A)	Jan	Feb	Mar	QTR
Number of Correlated Events (Night time)	<70	47	47	53	147
	70	12	24	20	56
	71	15	41	31	87
	72	57	67	51	175
	73	75	63	73	211
	74	81	54	75	210
	75	88	49	73	210
	76	41	14	19	74
	77	12	4	13	29
	78	7	4	3	14
	79	3	2	1	6
	80	1	0	0	1
	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		439	369	412	1220



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 be taken into account.



### **4.3 Noise Violations during Quarter (January to March 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 first quarter of 2019, 42 new properties were contacted regarding noise insulation, these were all residential properties. A high percentage of properties accepted the offer and an increasing number of enquiries about the scheme.

## 5 NOISE CONTOURS

### 5.1 Night Noise Contours – January to March 2019

#### 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 2018 Q4 contours. Terrain data is included, and the contours have been produced using the INM software (Version 7.0d). The validation is based on measured results in 2017 at the fixed noise monitors and user-defined profiles for the most common aircraft have been used.

#### 5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A11060-NN19-Q1 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 (October – December 2018), and the equivalent quarter during the previous year (January – March 2018).

Contour Value (dB $L_{Aeq,8h}$ )	Contour Area (km <sup>2</sup> )		
	Jan – Mar 2018	Oct – Dec 2018	Jan – Mar 2019
48	23.1	32.0	28.4
51	12.6	18.1	16.2
54	6.8	9.9	9.1
57	3.7	5.6	5.2
60	1.9	2.9	2.6
63	1.2	1.6	1.5
66	0.7	1.0	0.9
69	0.5	0.6	0.6
72	0.3	0.4	0.4
W/E Split (%)	64/36	68/32	90/10

**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.

<b>INM Aircraft Type</b>	<b>Jan – Mar 2018</b>	<b>Oct - Dec 2018</b>	<b>Jan – Mar 2019</b>
<b>1900D</b>	n/a	26	n/a
<b>737300</b>	24	n/a	n/a
<b>737400</b>	86	51	101
<b>737700</b>	12	n/a	n/a
<b>737800</b>	304	415	317
<b>757RR</b>	141	215	137
<b>A300-622R</b>	135	126	155
<b>A319-131</b>	261	371	161
<b>A320-211 (ceo)</b>	938	1,394	1,050
<b>A320-211 (neo)</b>	65	66	98
<b>A321-232 (ceo)</b>	65	468	474
<b>A330-301</b>	37	46	26
<b>CL600</b>	49	31	22
<b>CL601</b>	38	67	38
<b>CNA441</b>	28	n/a	n/a
<b>CNA510</b>	10	n/a	n/a
<b>CNA525C</b>	27	14	10
<b>CNA55B</b>	n/a	16	n/a
<b>CNA560XL</b>	54	37	31
<b>CNA750</b>	n/a	11	14
<b>DO228</b>	n/a	n/a	27
<b>DO328</b>	n/a	10	n/a
<b>EMB145</b>	38	43	27
<b>F10062</b>	43	56	35
<b>GIV</b>	38	25	18
<b>GV</b>	261	261	231
<b>LEAR35</b>	25	27	14
<b>Other</b>	45	35	62
<b>Total</b>	<b>2,724</b>	<b>3,811</b>	<b>3,048</b>

**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 12% increase in the total number of movements. The aircraft mix has changed slightly, with an increase in the proportion of passenger turbofan operations, which comprised 83% of the total operations in 2019 Q1, compared to 76% in the same quarter in 2018. This is largely due to an increase in movements by the Airbus A321.

The modal split has changed significantly compared to the same quarter in 2018, with 90% of movements in 2019 Q1 using runway 26, compared to 64% in 2018 Q1.

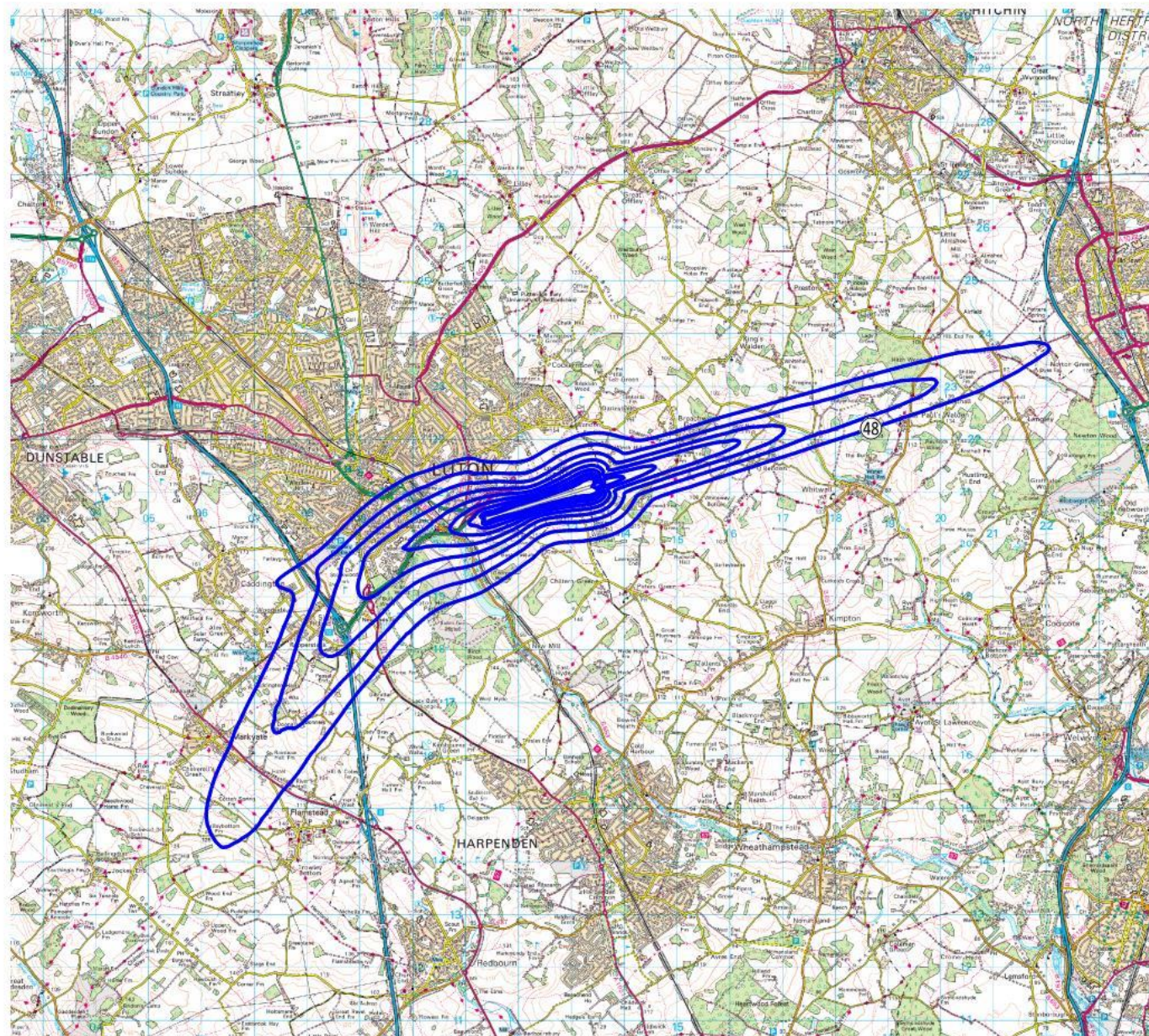
The area within the 48 dB(A) noise contour has increased by 23% compared to the same quarter last year. This increase is due to the increase in total movements and particularly movements by passenger turbofan aircraft.

The contour shape has changed compared to the same quarter last year. The 2019 contour extends further to the south west towards Markyate and Flamstead, but does not extend as far to the west towards Caddington. The eastern end of the contour towards Stevenage is also slightly longer, but narrower than in 2018. This change in shape is due to the significant change in modal split.

The proportion of modernised aircraft types has increased slightly compared to 2018 Q1. Around 9% of operations by the Airbus A320 were by the quieter modernised A320neo variant in 2019 Q1, compared to around 6% in 2018 Q1. The measured results indicate this new aircraft variant is approximately 4 dB quieter on departure at Luton.

The number of movements, and therefore the contour area, has decreased compared to the previous quarter (October – December 2018).





This drawing contains Ordnance Survey data © Crown Copyright and database right 2018.

#### LEGEND:

— Noise Contours,  
48 to 72 dB LAeq,8h in 3 dB steps

#### REVISIONS

**Bickerdike  
Allen  
Partners**  
Architecture  
Acoustics  
Technology

121 Salusbury Road, London, NW6 6RG  
Email: [mail@bickerdikeallen.com](mailto:mail@bickerdikeallen.com) T: 0207 625 4411  
[www.bickerdikeallen.com](http://www.bickerdikeallen.com) F: 0207 625 0250

London Luton Airport  
Regular Contouring

Airborne Aircraft Noise Contours  
Jan-Mar 2019 Average Night time

DRAWN: DCH CHECKED: DR

DATE: April 2019 SCALE: 1:100000@A4

FIGURE No:

**A11060/NN19/Q1**



## 6 COMPLAINTS

### 6.1 Total Complaints relating to LLA aircraft operations

	1 <sup>st</sup> QTR 2019	1 <sup>st</sup> QTR 2018
Total No. of Complaints relating to LLA aircraft operations	2,793	1,310
No. of Complainants	121	111
No. of General Complaints	251	239
No. of Specific Complaints	2,542	1,071
Average No. of Complaints per Complainant	23.1	11.8
No. of Aircraft Movements per Complaint	10.9	22.4

During the last quarter a total of 2,793 complaints relating to LLA aircraft operations (on average 31 complaints per 24 hours) were received by the Flight Operations Department. This is compared to the 1,310 complaints which were received for the same period last year. It should be noted that 88% were received by 10 individuals.

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

Jan 2019	1,163 complaints	(1,062 Specific Complaints, 101 General Complaints)
Feb 2019	476 complaints	(410 Specific Complaints, 66 General Complaints)
Mar 2019	1,154 complaints	(1,070 Specific Complaints, 84 General Complaints)

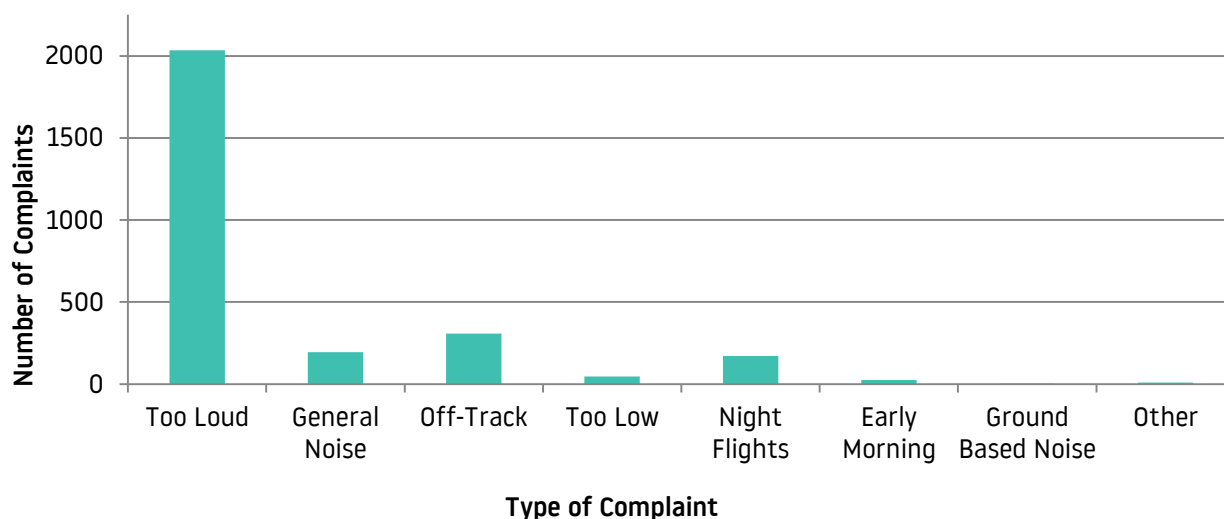
A further 27 complaints not attributable to LLA traffic were received throughout the quarter, compared to 71 complaints for the period January to March last year.



Out of 121 total complainants, there were 66 that contacted the airport only once meaning that 55 complainants generated 2,727 complaints.

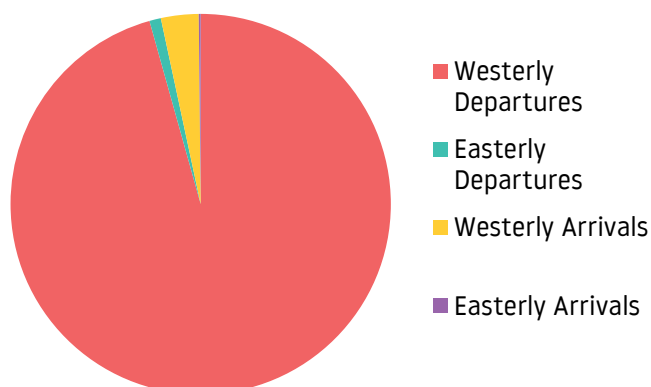
## 6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from January to March 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 January to March 2019.



Within the 2,358 specific aircraft complaints concerning westerly departures, 2,343 complaints involved aircraft on the Match/Detling heading, 10 related to aircraft following Compton flight route, 3 related to aircraft using the Olney route and 2 complaints were recorded about aircraft following an off-airways routing.

With regard to the 24 complaints attributed to easterly departures, 17 related to aircraft following the Compton flight route and 7 aircraft on the Match route. There were no specific complaints relating to the easterly Olney departure route.

In total the Flight Operations Department received 83 specific complaints regarding arrivals. 79 of these complaints were about westerly arrivals and a further 4 concerning easterly arrivals.

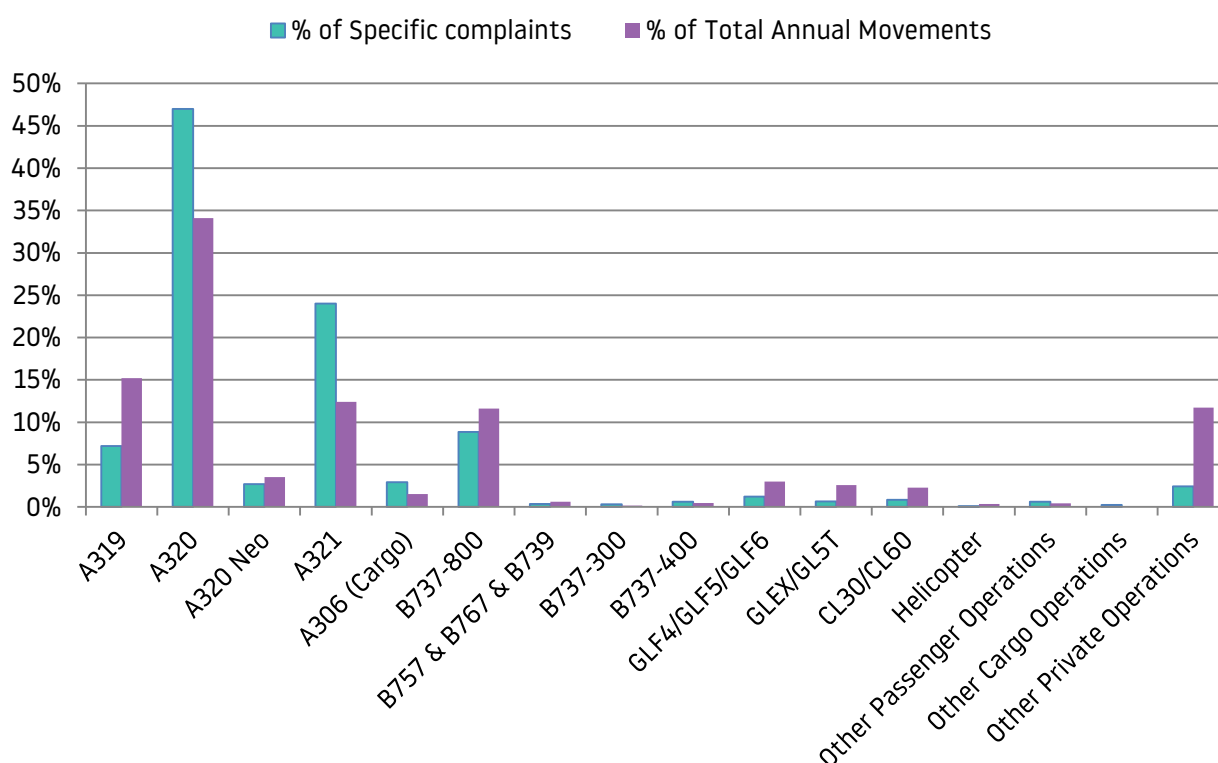
**31**  
**Complainants**  
reported noise  
disturbance at night  
(compared to **33**  
**Complainants** for the same  
Quarter last year)

Departing aircraft accounted for 79% of the 89 specific night complaints and 21% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 8% of night complaints, whilst passenger aircraft accounted for 87% of night complaints and executive aircraft were correlated to 5% of night complaints.

**172 (6%)**  
**Complaints**  
concerning night noise  
disturbance from  
LLA operations

## 6.4 Complaints by aircraft type

The diagram below shows aircraft types generating specific complaints.

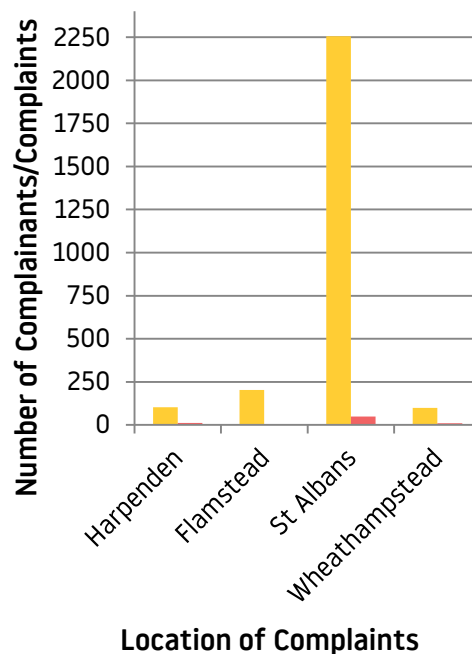
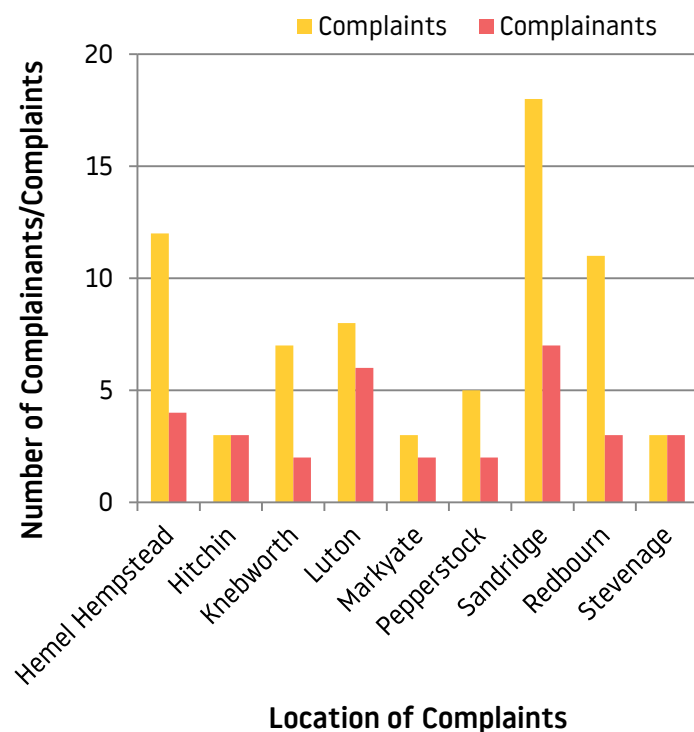




## 6.5 Origin of Complaints

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 January to March 2019.

The communities with one complainant include Aston Clinton, Ayot St Lawrence, Berkhamsted, Blackmore End, Breachwood Green, Dagnall, Essex, Gaddesden Row, Kensworth, Slip End, Sudbury Welwyn Garden City and Woodside.



## 6.6 Complaints Analysis

During Quarter 1 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:

- In February 2019, LLAL announced their preferred option as part of the development consent order for 32mppa. As a result of this there has been an increase in complaints, particularly from the Wigmore area of Luton.
- The wind direction was predominantly westerly and therefore there was no natural respite for communities on westerly departure routes and the largest percentage of complaints 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, Flamstead, St Albans and Wheathampstead. Complaints from these areas accounted for 95% of total complaints.
- Similar to previous quarters, a few people are making many complaints, in Q1 88% 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	7%
Email	23%
Travis	70%

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	46.4%
1	13.4%
2	13.1%
3	3.8%
4	6.2%
5	2.1%
6	1.9%
7	3.7%
8	1.6%
9	3.5%
10	1.5%
11	0.6%
12	0.4%
13	0.2%
14	0.3%
15+	1.5%

## *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.

During Quarter 1, the residents group 'Stop low flights from Luton' attended a meeting at the airport on 11<sup>th</sup> March 2019.

### **7.2 Airport Visits to the Community**

The Flight Operations team arranged two public surgeries during the quarter. The first was in Breachwood Green in January and approx. 30 people attended. Many residents had questions and concerns regarding the Airport operations and the common themes from these meetings were:

- Easterly departures, in particular during the night time period.
- Noise monitoring programme

The second Public Surgery was held at South Luton in March, approx. 10 people attended the event and most concerns were regarding the future growth of the airport and the noise insulation scheme.

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 a number of airspace focus group meetings to discuss upcoming airspace change proposals, these were held on 21<sup>st</sup> February and 27<sup>th</sup> February.

Finally, on the 30<sup>th</sup> January, LLA's Operations Director and Flight Operations Manager met with St Albans and District Air Traffic Working group to discuss the upcoming Post Implementation Review, the Section 73 application to vary condition 10 and the aviation strategy green paper.