Quarterly Monitoring Report
Qtr 3 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 July to September 2019.

KEY MONITORING INDICATORS – 3rd QUARTER 2019

Parameter		3rd Quarter 2019	3rd Quarter 2018
Total Passenger Number	↑	5,363,014	4,948,838
Total Aircraft Movements	↑	39,608	37,811
Night Movements (23.00 – 06.59)	↑	5,310	4,896
Early Morning Movements (06.00 – 06.59)	↓	1,720	1,736
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements (*9,650 limit*)	↑	8,794	8,141
Night Quota Count (*3,500 limit*)	↑	3175.5	2,977.75
Early Morning Shoulder (*7,000 movements*)	↑	6,194	5,602
24hr CDA (% achievement)	-	93%	93%
Day CDA (% achievement)	-	93%	93%
Night CDA (% achievement)	↓	94%	95%
Track Violations	↑	18	3
Departure Noise Infringements (Day)	-	0	0
Departure Noise Infringements (Night)	-	0	0
Noise Monitor Results			
No. Day (Night) > 80 dB(A)	↑	19 (0)	17 (0)
No. Day (Night) > 75 dB(A)	↑	2,056 (370)	1,546 (337)
No. Day (Night) > 70 dB(A)	↑	13,521 (2,014)	11,939 (1,692)
Night Noise Contour Area (48 dB $L_{Aeq, 8h}$)	↑	43.9 km^2	39.9 km^2
Noise Complaints	↑	4,593	3,175
Complainants	↓	381	415
Number of New Complainants	↓	138	180
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns (>5 Complainants)	-	Breachwood Green Eaton Bray Kensworth Knebworth Luton Markyate Sandridge Stevenage Welwyn Garden City Wheathampstead Whitwell Harpenden Flamstead St Albans Hitchin	Caddington Flamstead Hemel Hempstead Hitchin Kensworth Knebworth Luton Markyate Sandridge Redbourn Stevenage Tring Welwyn Garden City
Westerly/Easterly Runway Split (%)	-	76/24	78/22

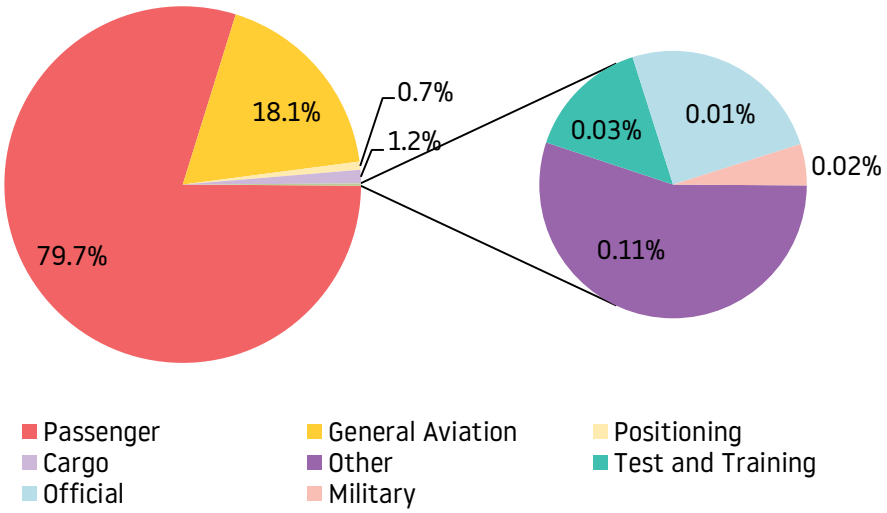
1 AIR TRAFFIC DATA

1.1 Aircraft Movements

There were a total of 39,608 aircraft movements during this quarter (compared with 37,811 for the same period in 2018), increase of 4.8%.

This resulted in an average 431 movements per 24 hours (compared to 411 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*						
Jul 2019	172	10,562	96	1	4	13	15	2,662	2	**13,527**
Aug 2019	148	10,706	83	11	0	0	14	2,057	4	**13,023**
Sep 2019	165	10,303	97	5	0	7	15	2,460	6	**13,058**
QTR Total	**485**	**31,571**	**276**	**17**	**4**	**20**	**44**	**7,179**	**12**	**39,608**

1.2 Passenger Statistics

A total of 5,363,014 passengers passed through LLA during the period July to September 2019 (compared with 4,948,838 for the same period last year), 5,250,262 on scheduled flights (97.9%) and 112,752 on charter flights (2.1%). This represents an increase in passengers of 8.4% year on year and equates to an average 58,294 passengers per 24 hours (compared to 53,792 during the third quarter last year).

	Domestic	EU	Non-EU	Total
Jul 2019	108,448	1,166,716	508,546	**1,783,710**
Aug 2019	110,236	1,219,988	540,125	**1,870,349**
Sep 2019	110,263	1,105,485	493,207	**1,708,955**
QTR Total	**328,947**	**3,492,189**	**1,541,878**	**5,363,014**

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

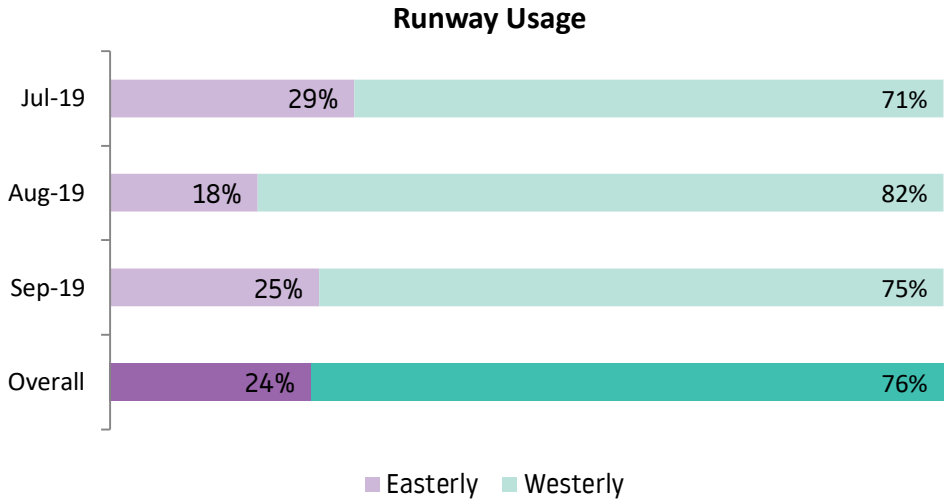
[1] *Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base*

[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 24% easterly and 76% westerly (compared to 22% / 78% 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.

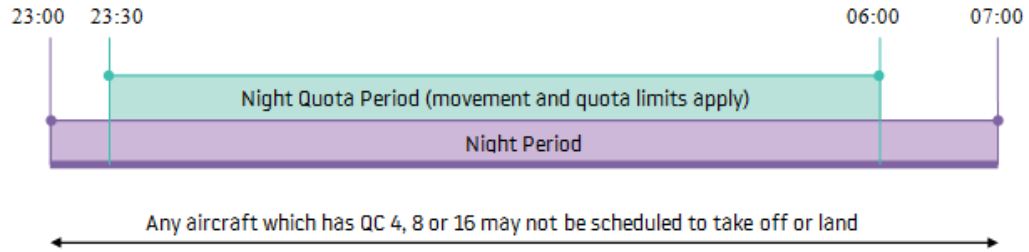
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are then allocated to different aircraft types 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 July to September 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*
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
July 2019	1,033	398.75	629
August 2019	1,003	367.25	575
September 2019	834	305.75	516
QTR Total	**2,870**	**1,071.75**	**1,720**
Total for preceding 12 months	*8,794*	*3,175.5*	*6,194*

1.5 Day/Night Ratio of Movements - Actual

There were 5,310 night operations during the quarter (compared to 4,896 for the 3rd quarter 2018), an average 58 movements per night (compared to 53 last year). Arriving aircraft accounted for 57% 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. 70% 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 88% day / 12% night (in line with 87% / 13% for the same quarter last year).

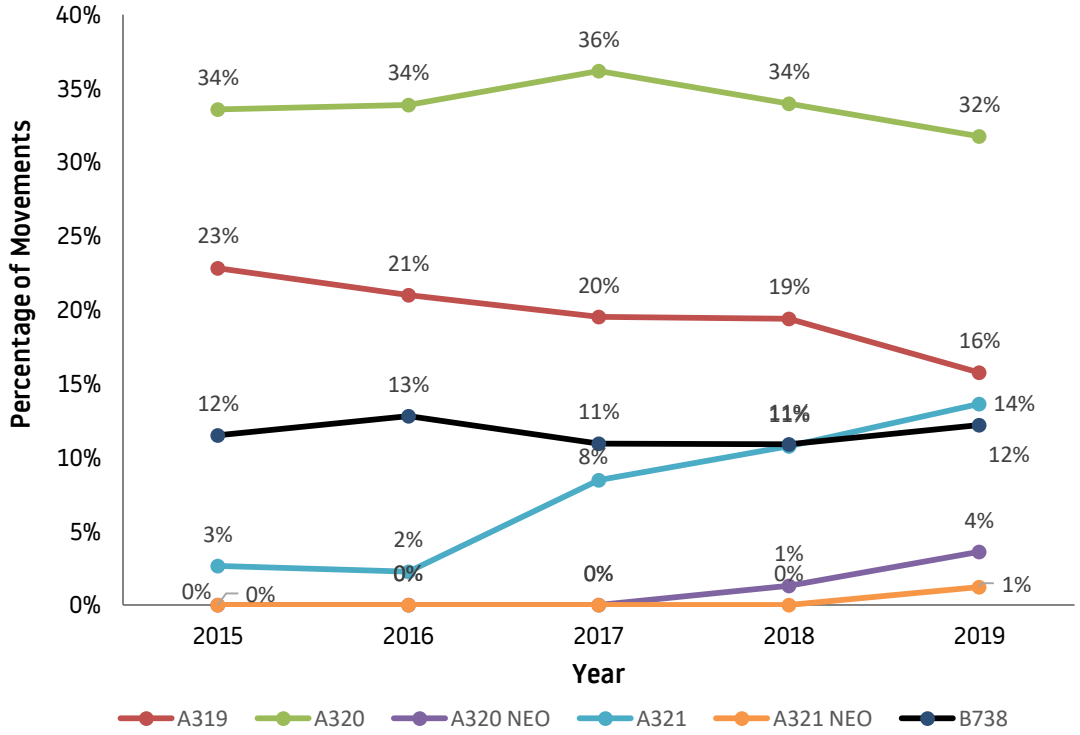
	Day Movements (0700-2259)			Night Movements (2300-0659)					Total
	Day movements			*Night Quota Period (2330-0559)*		*Early Morning Shoulder (0600-0659)*		*Total Night Movements (2300 – 0659)*	
	A	D	Total	A	D	A	D		
Oct 2018	5,204	5,442	10,646	677	194	124	518	1,716	**12,362**
Nov 2018	4,256	4,345	8,601	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**
Jul 2019	5,655	5,967	11,622	823	210	103	526	1,905	**13,527**
Aug 2019	5,454	5,757	11,211	834	169	36	539	1,812	**13,023**
Sep 2019	5,654	5,811	11,465	702	132	2	514	1,593	**13,058**
QTR Total	**16,763**	**17,535**	**34,298**	**2,359**	**511**	**141**	**1,579**	**5,310**	**39,608**
Total for preceding 12 months	*60,602*	*62,858*	*123,460*	*6,807*	*1,987*	*1,083*	*5,111*	*17,329*	*140,789*

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*
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	1,163	11,372
April 2020	10,401	815	590	1,595	11,996
May 2020	11,386	1023	675	1,917	13,303
June 2020	11,529	892	561	1,647	13,176
July 2020	12,067	1,019	529	1,736	13,803
August 2020	11,392	958	617	1,809	13,201
September 2020	11,315	779	632	1,619	12,934
Total for following 12 months	126,634	8,816	6,152	17,130	*143,764*

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	
Jul 2019	Daytime	896	12	2,141	664	1,584	166	440	12	18	2	32	**5,967**
	Night-time	100	1	319	73	232	15	55	0	0	0	0	**795**
Aug 2019	Daytime	521	24	2,485	361	1,701	95	513	4	29	0	24	**5,757**
	Night-time	84	0	305	58	234	6	75	0	0	0	0	**762**
Sep 2019	Daytime	765	14	2,283	540	1,496	159	497	7	24	1	25	**5,811**
	Night-time	70	1	283	47	228	11	65	0	0	0	0	**705**
QTR	**Total**	**2,436**	**52**	**7,816**	**1,743**	**5,475**	**452**	**1,645**	**23**	**71**	**3**	**81**	**19,797**
	Daily Average	*26*	*<1*	*85*	*19*	*60*	*5*	*18*	*<1*	*<1*	*<1*	*<1*	*215*

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 98.4%. 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
Jul 2019	5	£6,000
Aug 2019	10	£10,000
Sep 2019	3	£3,000
QTR	**18**	**£19,000**

	Airline or Aircraft Operator	Aircraft Type/Occurrence
Jul 2019	EasyJet	A319/1
	Privately owned aircraft	CL60/2; C68A/1; GLF6/1
Aug 2019	Wizz Air	A320/1
	NetJets	GLEX/1
	Aero-Dienst	LJ60/1
	Privately owned aircraft	GLEX/2; C560/1; FA10/1; LJ45/1; CN35/1; GLF4/1
Sep 2019	Blue Air	B734/1
	Privately owned aircraft	C550/1; GLF5/1

3 ARRIVING AIRCRAFT

3.1 Arrivals Route Analysis

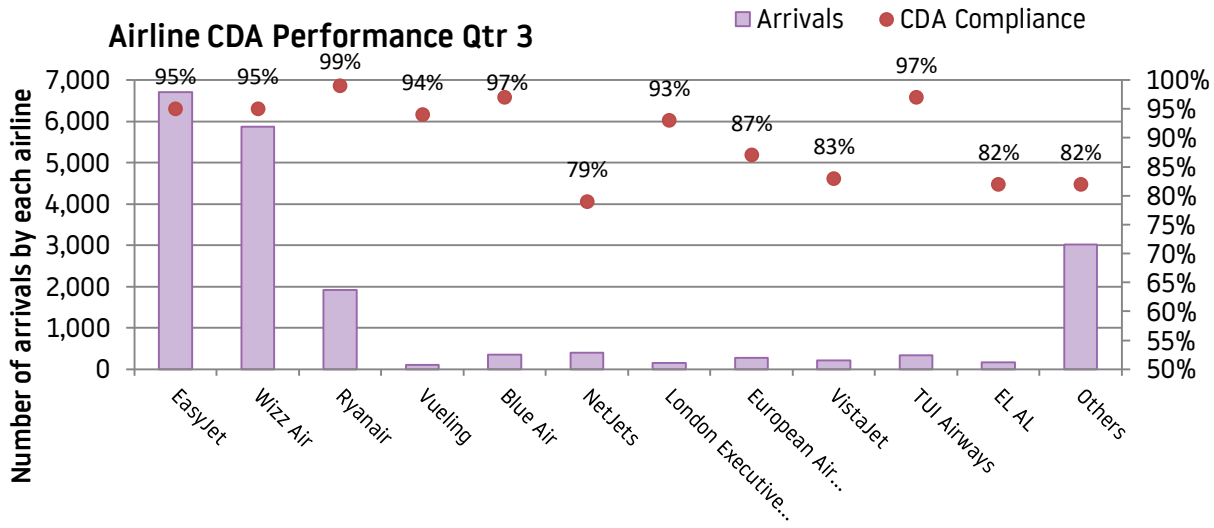
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters between 23:00 hrs and 06:59 hrs.

		Arrivals			Total
		08	26	Heli	
Jul 2019	Daytime	1,696	3,924	35	**5,655**
	Night-time	318	792	0	**1,110**
Aug 2019	Daytime	942	4,489	23	**5,454**
	Night-time	223	826	1	**1,050**
Sep 2019	Daytime	1,435	4,193	26	**5,654**
	Night-time	229	659	0	**888**
QTR	**Total**	**4,843**	**14,883**	**85**	**19,811**
	Daily Average	*53*	*162*	*<1*	*215*

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.

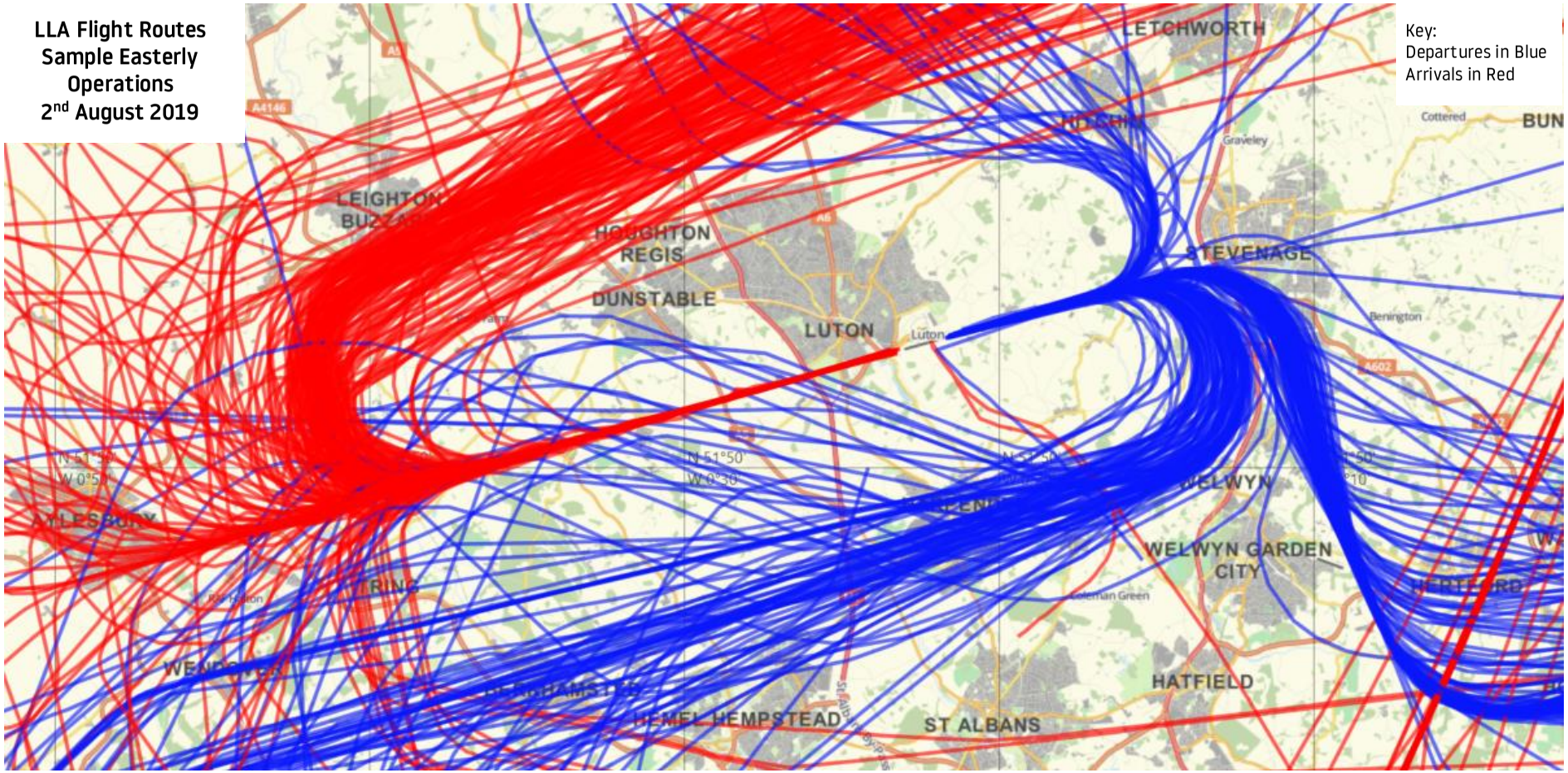
	All Arrivals			08 Easterly Arrivals			26 Westerly Arrivals		
	% CDA			*% CDA*			*% CDA*		
	Total	*Day*	*Night*	*Total*	*Day*	*Night*	*Total*	*Day*	*Night*
Jul 2019	**93%**	93%	94%	**95%**	96%	91%	**93%**	92%	95%
Aug 2019	**93%**	93%	95%	**96%**	97%	93%	**93%**	92%	95%
Sep 2019	**92%**	92%	93%	**96%**	96%	94%	**91%**	91%	93%
QTR Total	**93%**	93%	94%	**95%**	96%	92%	**92%**	92%	95%

The overall CDA achievement was 93% with several major LLA operators achieving high performance – Ryanair.

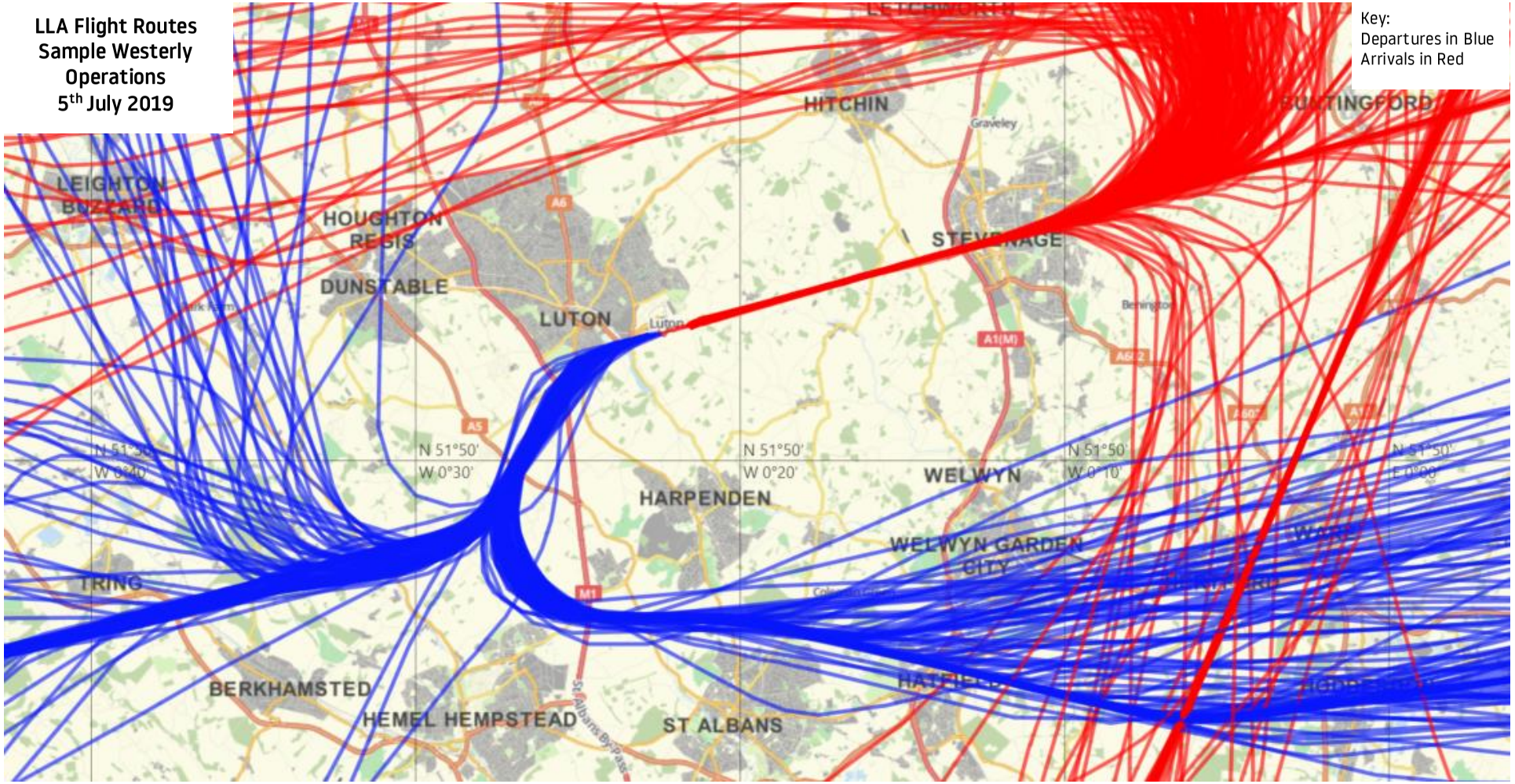


The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) for a typical 24-hour period within the third quarter of 2019.

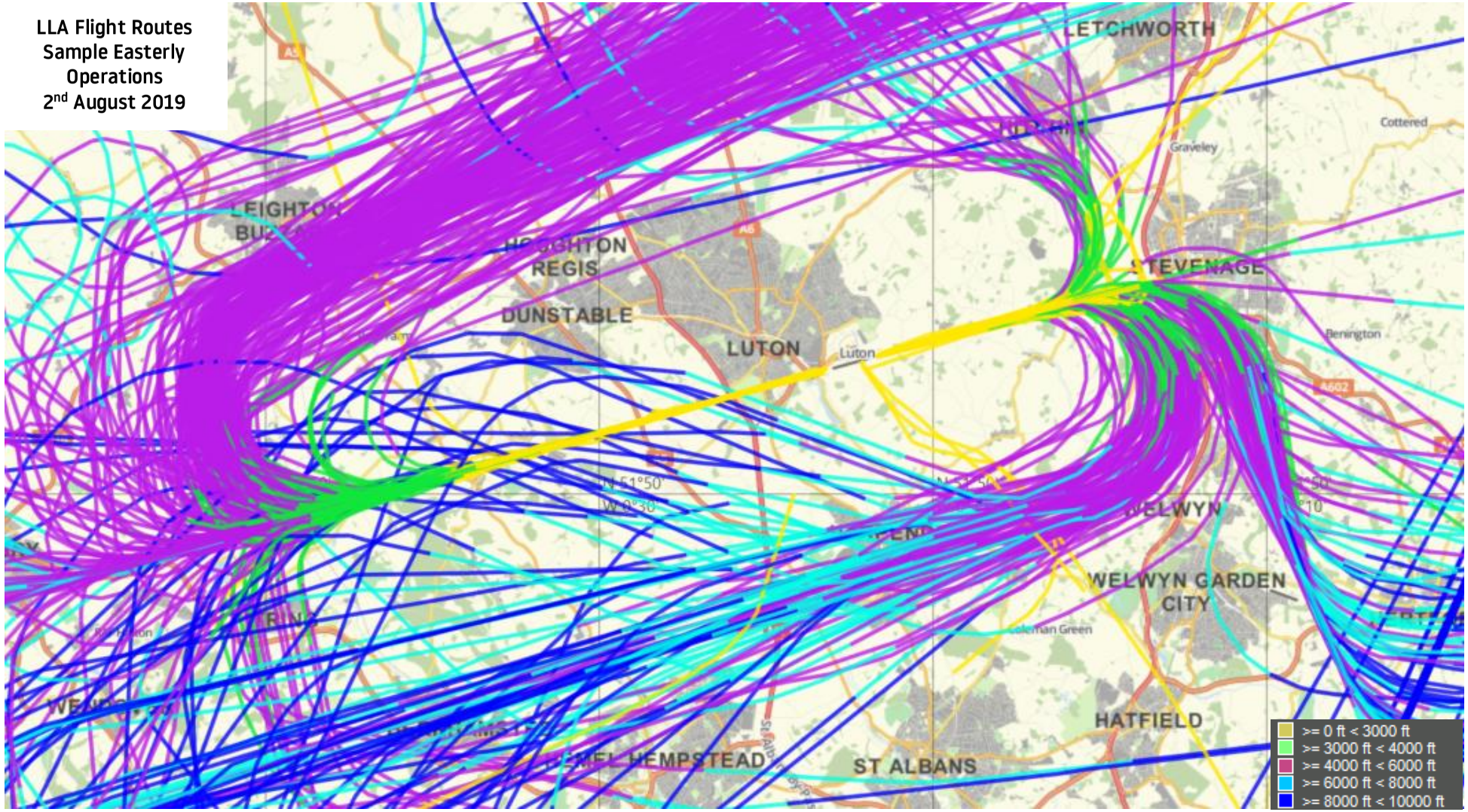
LLA Flight Routes
Sample Easterly Operations
2nd August 2019



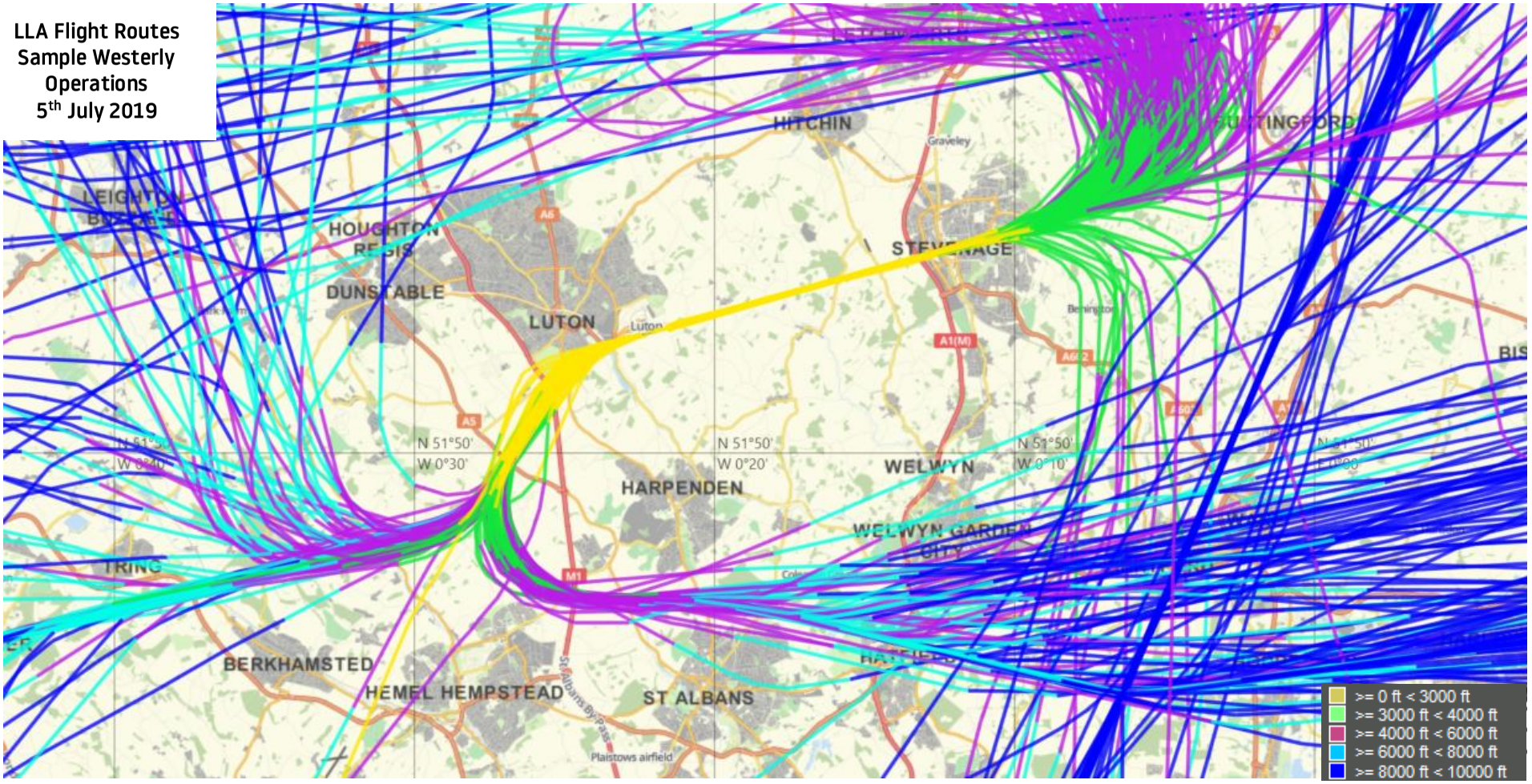
LLA Flight Routes
Sample Westerly
Operations
5th July 2019



LLA Flight Routes Sample Easterly Operations 2nd August 2019



LLA Flight Routes
Sample Westerly
Operations
5th July 2019



4 AIRCRAFT NOISE

During the 3rd Quarter of 2019, the maximum noise levels less than 79 dB(A) was recorded by 99.7% of correlated departing aircraft.

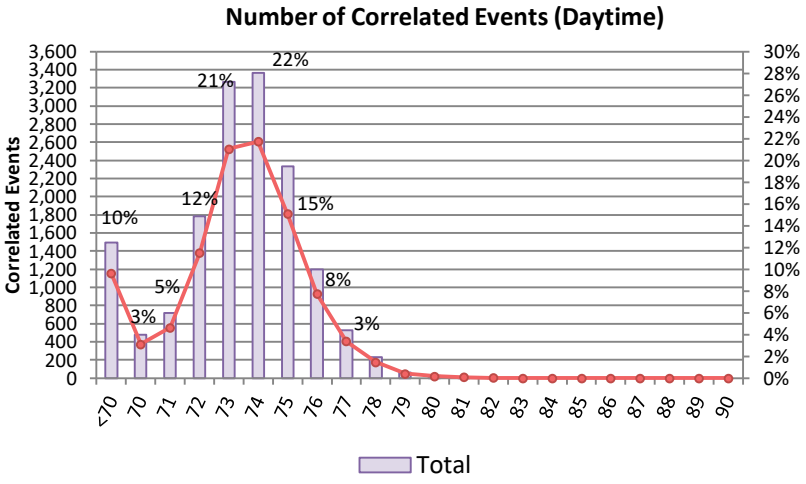
The maximum noise level less than 76 dB(A) was recorded by 94.2% of correlated departing aircraft.

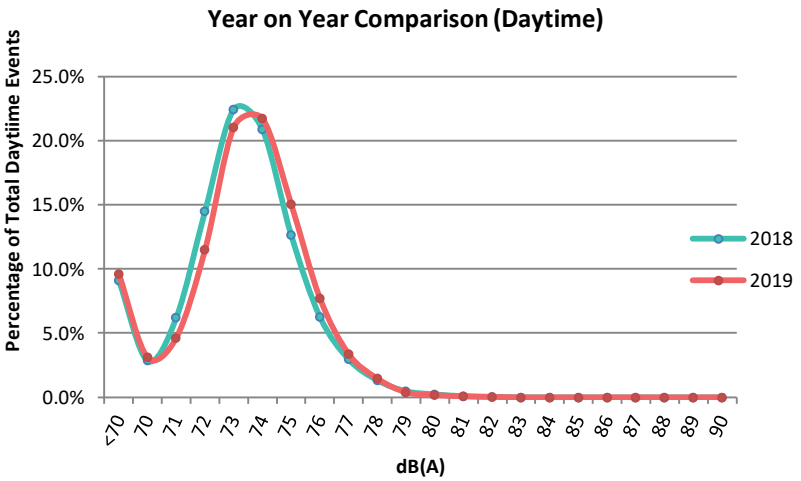
There was no noise violation in this quarter, and no noise violation during the same quarter last year.

4.1 Daytime Noise Levels – July to September 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*)

Number of Correlated Events (Daytime)	db (A)	Jul	Aug	Sep	QTR
	<70	570	423	498	1,491
	70	165	149	167	**481**
	71	244	239	236	**719**
	72	613	621	548	**1,782**
	73	1,130	1,171	962	**3,263**
	74	1,013	1,196	1,158	**3,367**
	75	764	727	843	**2,334**
	76	432	351	415	**1,198**
	77	184	168	172	**524**
	78	69	85	73	**227**
	79	21	21	19	**61**
	80	8	12	7	**27**
	81	5	3	5	**13**
	82	4	0	2	**6**
	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		**5,222**	**5,166**	**5,105**	**15,493**

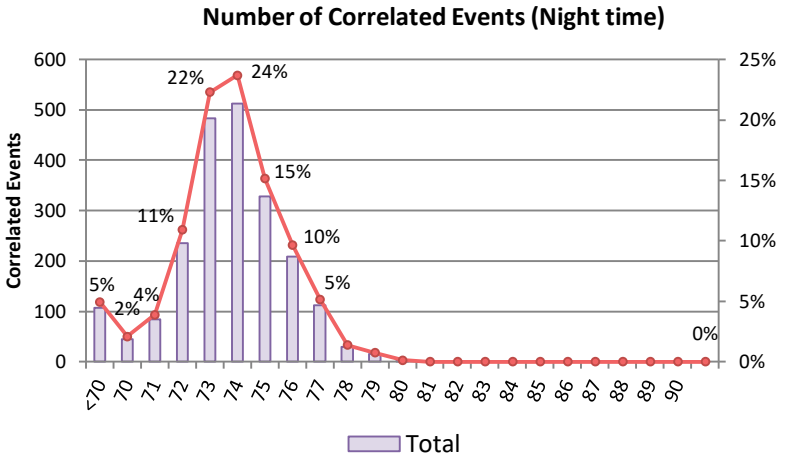


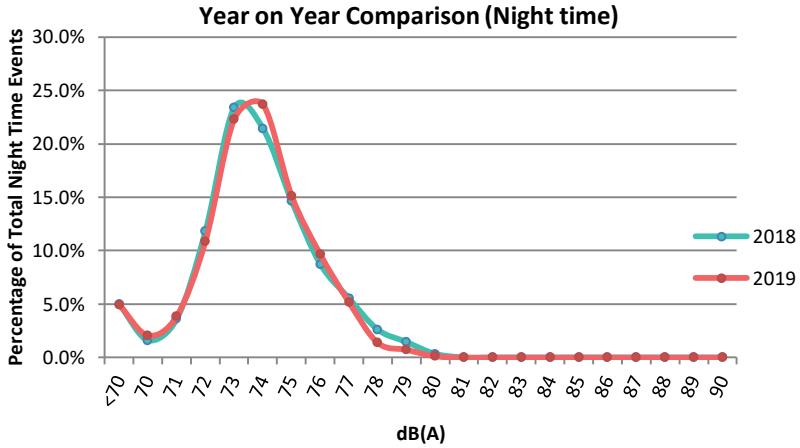


4.2 Night Noise Levels – July to September 2019

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)	Jul	Aug	Sep	QTR
Number of Correlated Events (Night time)	<70	36	35	36	**107**
	70	21	15	9	**45**
	71	32	17	35	**84**
	72	71	92	73	**236**
	73	158	184	141	**483**
	74	173	180	160	**513**
	75	112	102	114	**328**
	76	72	68	69	**209**
	77	52	26	34	**112**
	78	9	13	8	**30**
	79	6	8	2	**16**
	80	0	2	1	**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		**742**	**742**	**682**	**2,166**





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, results from noise monitors will be invalid and therefore will not been taken into account.

4.3 Noise Violations during Quarter (July to September 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 third quarter of 2019, 5 properties had noise insulation fitted, these were all located in Bedfordshire. This brought the total number of houses in 2019 fitted with Noise insulation to 35 and the full annual budget has been spent.

5 NOISE CONTOURS

5.1 Night Noise Contours – July to September 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 2019 Q2 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 2018 at the fixed noise monitors. 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-Q3 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 (April – June 2019), and the equivalent quarter during the previous year (July – September 2018).

Contour Value (dB $L_{Aeq,8h}$)	**Contour Area (km^2)**		
	Jul – Sep 2018	Apr – Jun 2019	Jul – Sep 2019
48	39.9	41.3	43.9
51	23.1	23.2	26.0
54	12.7	12.9	14.5
57	6.9	6.9	8.0
60	3.7	3.7	4.4
63	1.9	1.9	2.2
66	1.1	1.2	1.3
69	0.7	0.7	0.8
72	0.5	0.5	0.5
W/E Split (%)	76/24	48/52	77/23

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	Jul – Sep 2018	Apr – Jun 2019	Jul – Sep 2019
1900D	n/a	19	10
737300	47	n/a	n/a
737400	59	112	106
737800	717	631	748
757RR	274	197	228
A300-622R	134	157	156
A319-131	1,061	764	865
A320-211 (ceo)	1,984	2,051	2,127
A320-211 (neo)	127	295	306
A321-232 (ceo)	426	488	701
A330-301	14	n/a	n/a
BEC58P	n/a	11	n/a
CL600	n/a	16	n/a
CL601	n/a	44	n/a
CNA441	12	n/a	n/a
CNA525C	n/a	12	n/a
CNA560XL	n/a	18	n/a
EMB145	n/a	23	n/a
F10062	n/a	55	n/a
GIV	n/a	16	n/a
GV	14	166	11
LEAR35	n/a	12	n/a
Other	29	70	51
Total	**4,898**	**5,157**	**5,309**

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

5.1.4 Noise Contour Comparison

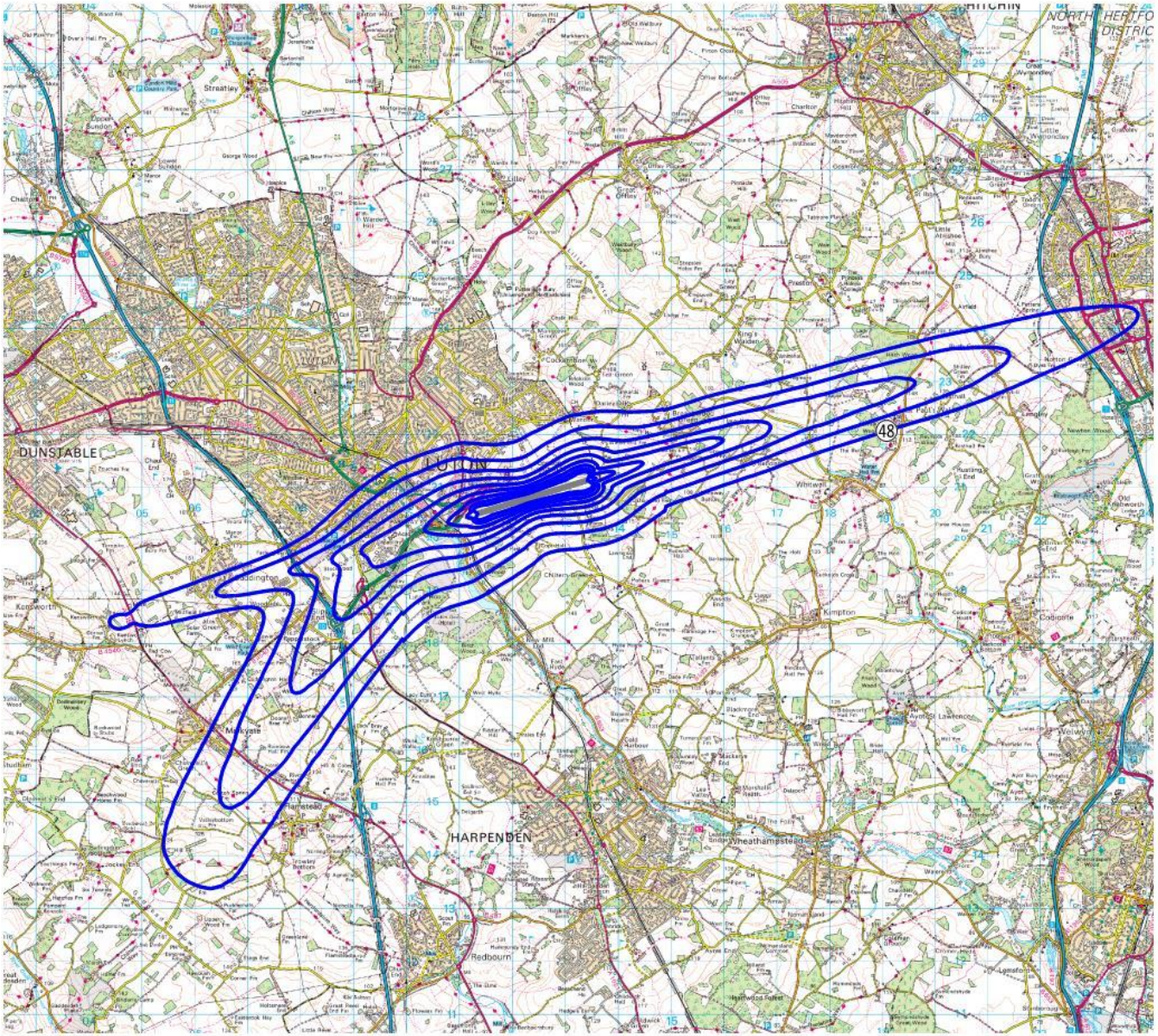
Compared with the same quarter in 2018, there has been an 8% increase in the total number of movements. The aircraft mix has remained broadly similar. Passenger turbofan operations comprised 99% of the total operations in 2019 Q3, the same as in 2018 Q3. Movements by the Airbus A319 have reduced, while movements by the A320ceo, A320neo and particularly the A321 have increased.

The modal split is similar to that in the same quarter in 2018, with 77% of movements in 2019 Q3 using runway 26, compared to 76% in 2018 Q3.

The area within the 48 dB(A) noise contour has increased by 10% compared to the same quarter last year. This increase is largely due to the increase in total movements and in particular the increase in flights by the Airbus A321. The contour shape is very similar to the 2018 Q3 contours.

The proportion of modernised aircraft types has however increased compared to 2018 Q3. Around 13% of operations by the Airbus A320 were by the quieter modernised A320neo variant in 2019 Q3, compared to around 6% in 2018 Q3.

The number of movements, and therefore the contour area, has increased compared to the previous quarter (April - June 2019).



LEGEND:

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

REVISIONS

Bickerdike
Allen
Partners
Architecture
Acoustics
Technology

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Email: mail@bickerdikeallen.com T: 0207 625 4411
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London Luton Airport
Regular Contouring

Airborne Aircraft Noise Contours
Jul-Sep 2019 Average Night time

DRAWN: DCH CHECKED: NW

DATE: October 2019 SCALE: 1:100000@A4

FIGURE No:

A11060/NN19/Q3

6 COMPLAINTS

6.1 Total Complaints relating to LLA aircraft operations

	3rd QTR 2019	3rd QTR 2018
Total No. of Complaints relating to LLA aircraft operations	4593	3175
No. of Complainants	381	415
No. of General Complaints	510	799
No. of Specific Complaints	4083	2376
Average No. of Complaints per Complainant	12.1	7.6
No. of Aircraft Movements per Complaint	9	12

During the last quarter a total of 4593 complaints relating to LLA aircraft operations (on average 50 complaints per 24 hours) were received by the Flight Operations Department. This is compared to the 3175 complaints which were received for the same period last year. It should be noted that 56% were received from 10 individuals.

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

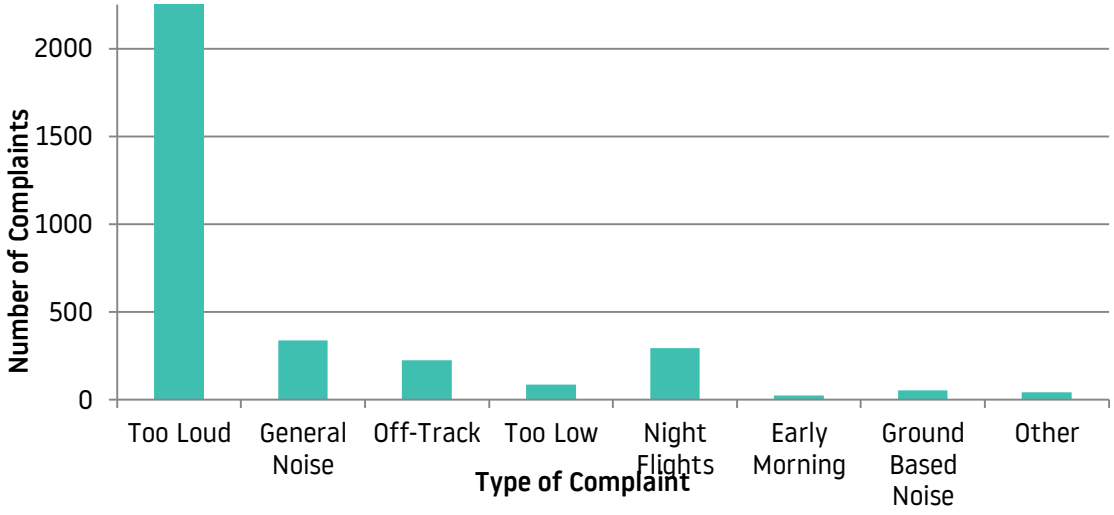
Jul 2019 1704 complaints (1494 Specific Complaints, 210 General Complaints)
Aug 2019 1495 complaints (1312 Specific Complaints, 183 General Complaints)
Sept 2019 1394 complaints (1277 Specific Complaints, 117 General Complaints)

A further 12 complaints not attributable to LLA traffic were received throughout the quarter, compared to 309 complaints for the period July to September last year.

Out of 381 total complainants, there were 213 that contacted the airport only once meaning that 168 complainants generated 4380 complaints.

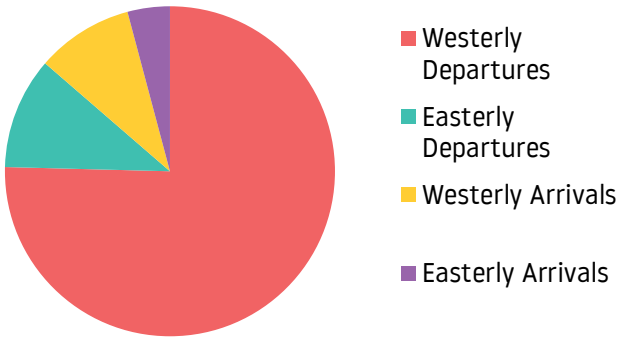
6.2 Type of Complaint

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 July to September 2019.



Within the 2674 specific aircraft complaints concerning westerly departures, 2548 complaints involved aircraft on the Match/Detling heading, 86 related to aircraft following Compton flight route, 36 related to aircraft using the Olney route and 4 complaints were recorded about aircraft following an off-airways routing.

With regard to the 388 complaints attributed to easterly departures, 270 related to aircraft following the Compton flight route and 101 aircraft on the Match route. There were 14 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 484 specific complaints regarding arrivals. 337 of these complaints were about westerly arrivals and a further 147 concerning easterly arrivals.

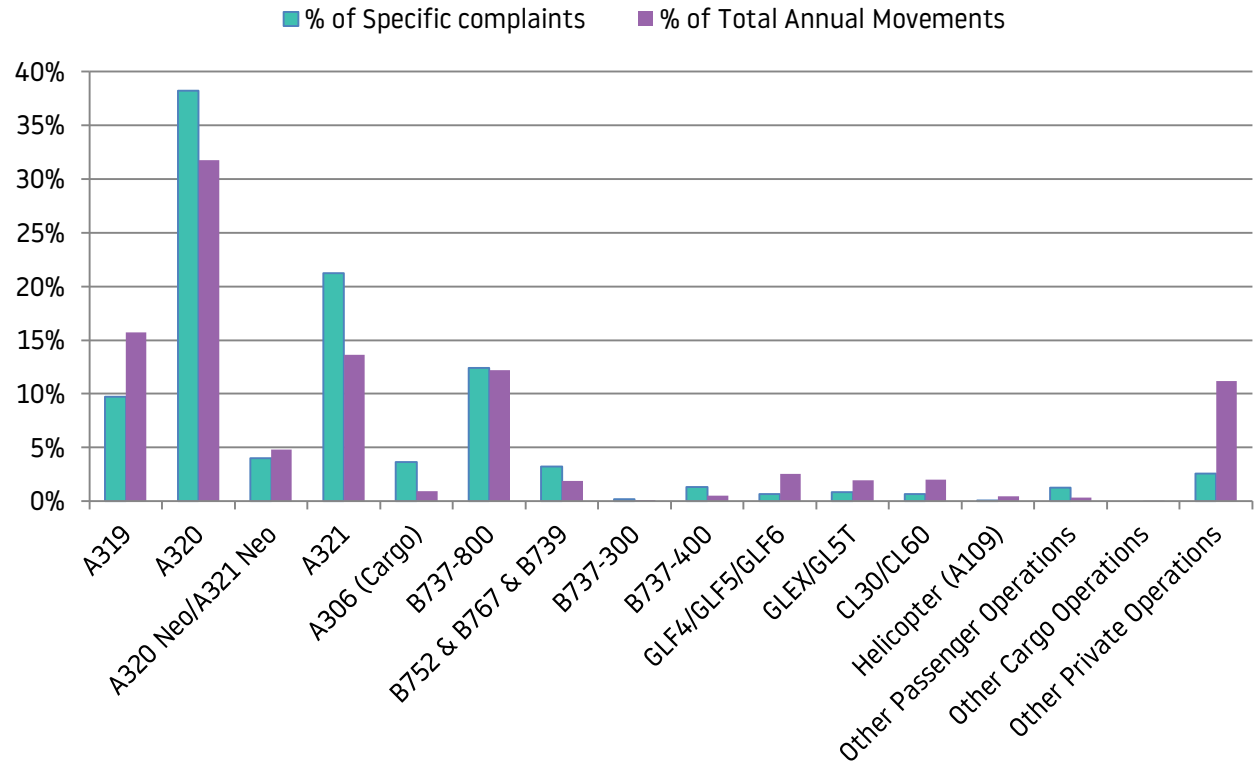
72
Complainants
reported noise disturbance at night (compared to **24 Complainants** for the same Quarter last year)

Departing aircraft accounted for 51% of the 293 specific night complaints and 49% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 24% of night complaints, whilst passenger aircraft accounted for 75% of night complaints and executive aircraft were correlated to 1% of night complaints.

293 (6%)
Complaints
concerning night noise disturbance from LLA operations

6.4 Complaints by aircraft type

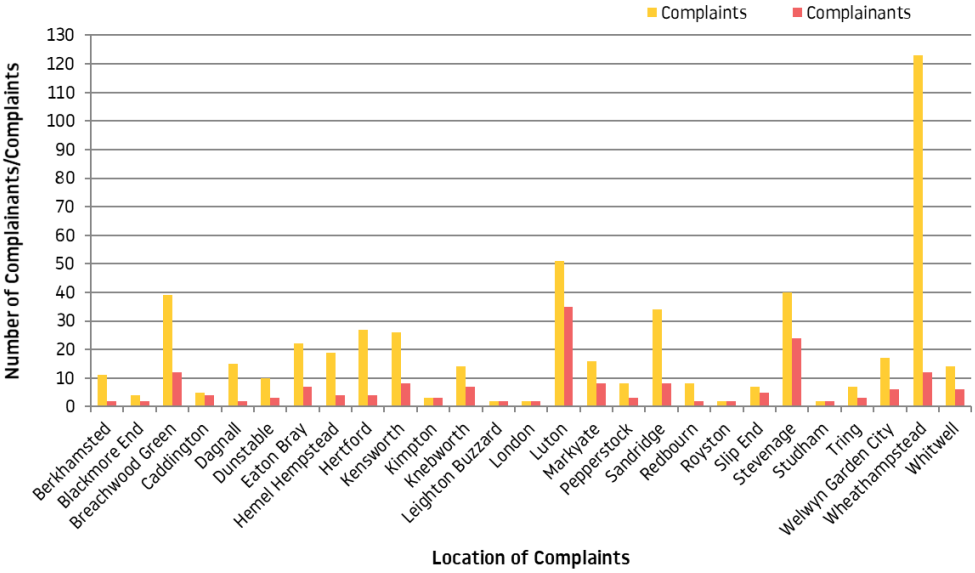
The diagram below shows aircraft types generating specific complaints.

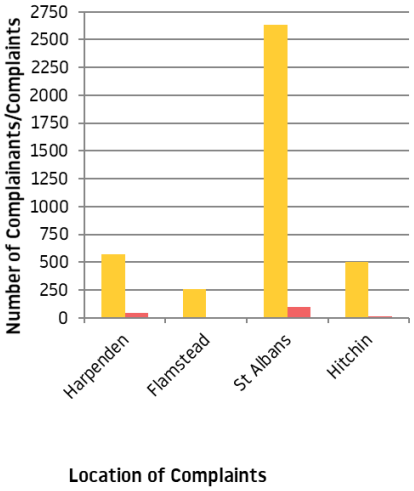


6.5 Origin of Complaints

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 July to September 2019.

The communities with one complainant include Baldock, Bracknell, Chesham, Codicote, Datchworth, Edlesborough, Linslade, Little Gaddesden, Preston, Sandhurst, Shefford and Wilstone.





6.6 Complaints Analysis

During Quarter 3 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 wind direction was predominantly westerly (76%) and therefore large numbers of complaints were made from residents effected by westerly routes.
- 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 Hitchin. Complaints from these areas accounted for 86% of total complaints.
- Similar to previous quarters, a few people are making many complaints, in Q3 56% 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	39%
Travis	54%

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	57.6%
1	14.0%
2	9.4%
3	5.5%
4	2.3%
5	1.5%
6	1.9%
7	1.9%
8	1.2%
9	1.1%
10	0.7%
11	0.5%
12	0.3%
13	0.5%
14	0.5%
15	0.3%
16	0.1%
16+	0.7%

7 COMMUNITY RELATIONS

7.1 Community Visits to Airport

Invitations are often extended to local residents and LLACC members to visit or meet with 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 Q3 John Westbury from Bedfordshire Association of Town and Parish Councils visited the Flight Operations team on 13th August to discuss noise monitoring and airspace change progression.

7.2 Airport Visits to the Community

The Flight Operations team arranged Public Surgeries in Stevenage and Harpenden during Quarter 3 and these were both very busy meetings. Stevenage residents were concerned with the amount of noise from arriving aircraft into LLA and Harpenden residents were concerned about both easterly and westerly departures. Both communities were concerned about the future growth of the airport along with the increase of passenger numbers.

A presentation was also provided at the St Albans parish council conference on the 19th July by the Airspace and Noise Performance Manager.

Also in Q3 a member of LADACAN visited the airport on 6th August to learn more about the airport processes and how complaints are dealt with, processed and monitored.

Two separate visits took place with residents in North St Albans and Sandridge to discuss the noise measures the airport currently have in place, along with future plans to help reduce noise for the communities we overfly.

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)