# Quarterly Monitoring Report Qtr 4 2019



# INTRODUCTION

The purpose of this report is to advise the community of statistics concerning aircraft operations at London Luton Airport (LLA) during the period October to December 2019.

# KEY MONITORING INDICATORS – 4<sup>th</sup> QUARTER 2019

Parameter		4 <sup>th</sup> Quarter 2019	4 <sup>th</sup> Quarter 2018
Total Passenger Number	1	4,120,670	3,910,219
Total Aircraft Movements	<b>1</b>	33,322	32,630
Night Movements (23.00 – 06.59)		3,657	3,811
Early Morning Movements (06.00 – 06.59)	Ψ	1,208	1,434
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements ( <i>9,650 limit</i> )	<b>1</b>	8,844	8,487
Night Quota Count (3,500 limit)	<b>1</b>	3159.00	3,105.75
Early Morning Shoulder (7,000 movements)	<b>1</b>	5,968	5,794
24hr CDA (% achievement)	Ψ	89%	91%
Day CDA (% achievement)	Ψ	90%	91%
Night CDA (% achievement)	Ψ	85%	90%
Track Violations	<b>1</b>	11	8
Departure Noise Infringements (Day)	-	0	0
Departure Noise Infringements (Night)	-	0	0
Noise Monitor Results			
No. Day (Night) > 80 dB(A)	<b>1</b>	40 (0)	29 (0)
No. Day (Night) > 75 dB(A)	¥	2,056 (233)	2,109 (225)
No. Day (Night) > 70 dB(A)	Ψ	10,983 (1,299)	11,468 (1,294)
Night Noise Contour Area (48 dB L <sub>Aeq, 8h</sub> )	<b>↑</b>	32.7 km <sup>2</sup>	32.0 km <sup>2</sup>
Noise Complaints	<b>1</b>	2,601	1,455
Complainants	<b>1</b>	197	147
Number of New Complainants	<b>1</b>	59	39
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns	-	St Albans	Flamstead
(>5 Complainants)		Harpenden	Harpenden
		Wheathampstead	Knebworth
		Flamstead	St Albans
		Hitchin	Wheathampstead
Westerly/Easterly Runway Split (%)	-	73/27	67/33

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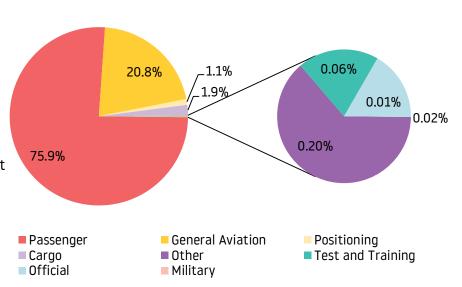
# 1 AIR TRAFFIC DATA

#### 1.1 Aircraft Movements

There was a total of 33,322 aircraft movements during this quarter (compared with 32,630 for the same period in 2018), increase of 2.1%.

This resulted in an average 362 movements per 24 hours (compared to 355 last year).

#### **Total Aircraft Movements (%)**



A breakdown of these movements is shown below:

	Commercial									
Cč	Cargo	Passenger	Positi	ioning	Military	Official	Other1	General Aviation <sup>2</sup>	Test & Training	Total
			Other STN		AVIALIUII	Training				
Oct 2019	190	9,948	118	10	0	10	21	2,516	11	12,824
Nov 2019	248	6,872	115	4	0	2	24	2,140	6	9,411
Dec 2019	192	8,486	99	6	0	6	23	2,271	4	11,087
QTR Total	630	25,306	332	20	0	18	68	6,927	21	33,322

#### 1.2 Passenger Statistics

A total of 4,120,670 passengers passed through LLA during the period October to December 2019 (compared with 3,910,219 for the same period last year), 4,083,976 on scheduled flights (99.1%) and 36,694 on charter flights (0.9%). This represents an increase in passengers of 5.4% year on year and equates to an average 44,790 passengers per 24 hours (compared to 42,502 during the third quarter last year).

	Domestic	EU	Non-EU	Total
Oct 2019	105,220	1,059,860	479,570	1,644,650
Nov 2019	83,425	703,801	343,640	1,130,866
Dec 2019	97,737	829,944	417,473	1,345,154
QTR Total	286,382	2,593,605	1,240,683	4,120,670

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<sup>\*</sup> Non-Commercial relates to aircraft not operating for hire or reward.

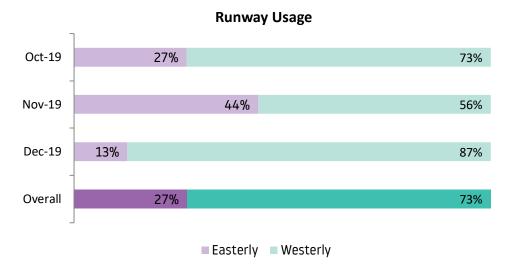
<sup>&</sup>lt;sup>1</sup> Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base

<sup>&</sup>lt;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 27% easterly and 73% westerly (compared to 33% / 67% 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'

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:

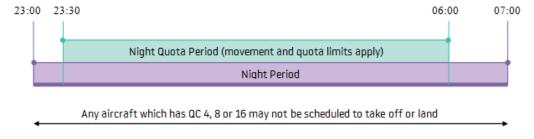
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Certificated noise level (EPNdB)	Quota count	Typical aircraft
96 to 98.9	QC 4	Boeing 737-200ADV McDonnell Douglas DC-10
93 to 95.9	QC 2	Boeing 777-200 Airbus A300-600 Airbus A330
90 to 92.9	QC 1	Airbus A320/A321 Some Boeing 737-800 Boeing 757-200 Boeing 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 O	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 October to December 2019, and shows total movements and noise quota per 12 month period and compares those against the limits set within the planning conditions.

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	_	ota Period -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
January 2019	480	194.25	402
February 2019	447	180.25	358
March 2019	508	183.25	418
April 2019	<b>April 2019</b> 816		606
May 2019	937	301.25	671
June 2019	873	320.75	585
July 2019	1,033	398.75	629
August 2019	1,003	361.75	575
September 2019	834	301.50	516
October 2019	896	292.25	516
November 2019	449	167.25	335
December 2019	568	191.50	357
QTR Total	1,913	651.00	1,208
Total for preceding 12 months	8,844	3159.00	5,968

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

There were 3,657 night operations during the quarter (compared to 3,811 for the 4<sup>th</sup> quarter 2018), an average 40 movements per night (compared to 41 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. 64% 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 88% / 12% for the same quarter last year).

		Day Movements (0700-2259)		Night Movements (2300-0659)											
	Da	y moveme	ents				orning 1600-0659)	Total Night Movements	Total						
	Α	D	Total	Α	D	Α	D	(2300 - 0659)							
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						
Oct 2019	5,513	5,678	11,191	711	185	12	504	1,633	12,824						
Nov 2019	4,244	4,245	8,489	291	158	50	285	922	9,411						
Dec 2019	4,939	5,046	9,985	393	175	48	309	1,102	11,087						
QTR Total	14,696	14,969	29,665	1,395	518	110	1,098	3,657	33,322						
Total for preceding 12 months	61,123	63,183	124,306	6,848	1,996	843	5,125	17,175	141,481						

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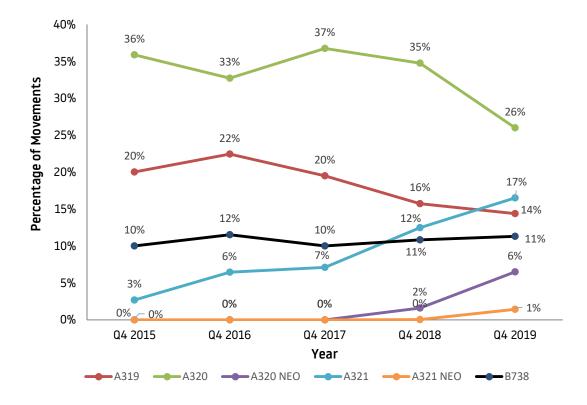
# 1.6 Day/Night Ratio of Movements - Forecast

		2020 Forecas	t of Aircraft Move	ements	
	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
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
October 2020	11,404	912	693	1,820	13,224
November 2020	9,205	476	438	1,077	10,282
December 2020	10,275	556	430	1,153	11,428
Total for following 12 months*	127,096	8,882	6,177	17,229	144,325

<sup>\*</sup>Rounded number

# 1.7 Aircraft Movements by Type

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



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#### 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										
			MATCH/ DETLING		СОМ	OMPTON OLNEY		Other*		Helicopter		Total	
		08	26 Conv	26 RNAV	08	26	08	26	08	26	08	26	
Oct 2019	Daytime	845	17	2,166	515	1,389	207	496	9	18	1	15	5,678
000 2019	Night-time	72	3	289	64	212	19	70	1	1	0	1	732
Nov 2019	Daytime	1,010	2	1,291	531	749	280	331	12	18	0	21	4,245
NOV 2019	Night-time	117	0	154	49	58	32	46	4	4	0	0	464
Dec 2019	Daytime	362	12	2,376	235	1,328	84	594	5	28	0	22	5,046
Dec 2019	Night-time	49	0	271	13	105	6	55	0	7	0	1	507
	Total	2,455	34	6,547	1,407	3,841	628	1,592	31	76	1	60	16,672
QTR	Daily Average	27	<1	71	15	42	7	17	<1	<1	<1	<1	181

#### 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

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<sup>\*</sup> 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 97.1%. 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
Oct 2019	3	£3,000
Nov 2019	4	£4,000
Dec 2019	4	£5,000
QTR	11	£12,000

	Airline or Aircraft Operator	Aircraft Type/Occurrence
Oct 2019	Privately owned aircraft	B737/1; C680/1; GLEX/1
Nov 2019	Privately owned aircraft	B737/1; C56X/1; GLEX/2
Doc 2010	MNG Airlines	A306/1
Dec 2019	Privately owned aircraft	BE40/1; C680/1; GLF6/1

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# 3 ARRIVING AIRCRAFT

#### 3.1 Arrivals Route Analysis

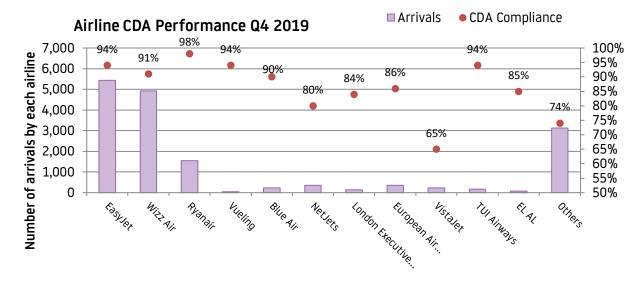
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters between 23:00 hrs and 06:59 hrs.

		ļ ,	Arrivals		
		08	26	Heli	Total
Oct 2019	Daytime	1,553	3,944	16	5,513
000 2019	Night-time	170	730	1	901
Nov 2019	Daytime	1,877	2,348	19	4,244
NOV 2019	Night-time	232	224	2	458
Doc 2010	Daytime	614	4,303	22	4,939
Dec 2019	Night-time	42	552	1	595
OTD	Total	4,488	12,101	61	16,650
QTR	Daily Average	49	<i>132</i>	<1	181

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.

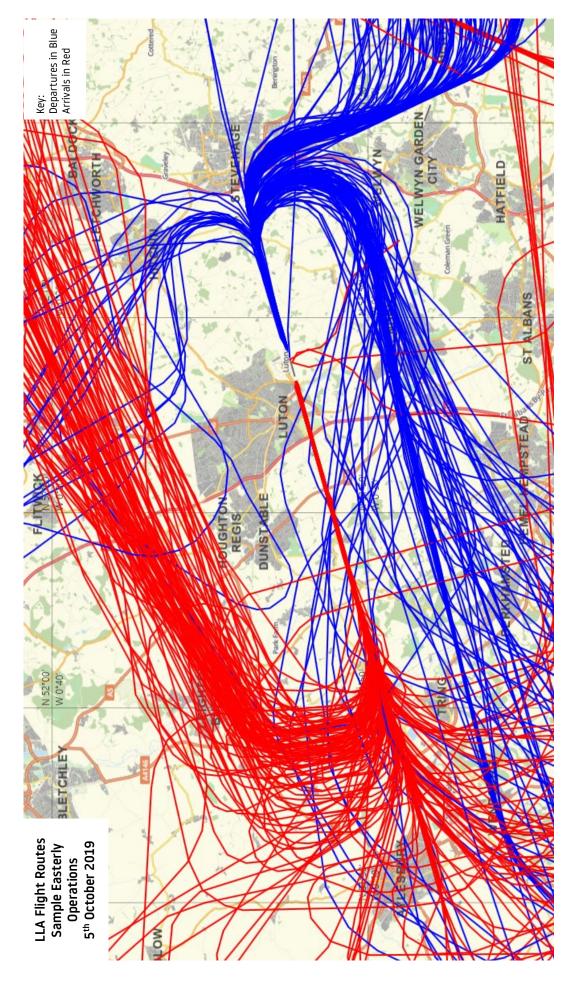
	All Arrivals			08 Ea	isterly Ar	rivals	26 Westerly Arrivals			
	% CDA			% CDA % CDA					% CDA	
	Total	Day	Night	Total	Total Day Night			Day	Night	
Oct 2019	90%	91%	87%	93%	93%	91%	89%	90%	86%	
Nov 2019	89%	90%	84%	90%	91%	82%	88%	88%	86%	
Dec 2019	88%	88%	85%	90%	91%	86%	88%	88%	85%	
QTR Total	89%	90%	85%	91%	92%	86%	88%	89%	85%	

The overall CDA achievement was 89% with several major LLA operators achieving high performance – Ryanair, EasyJet, TUI and Vueling.

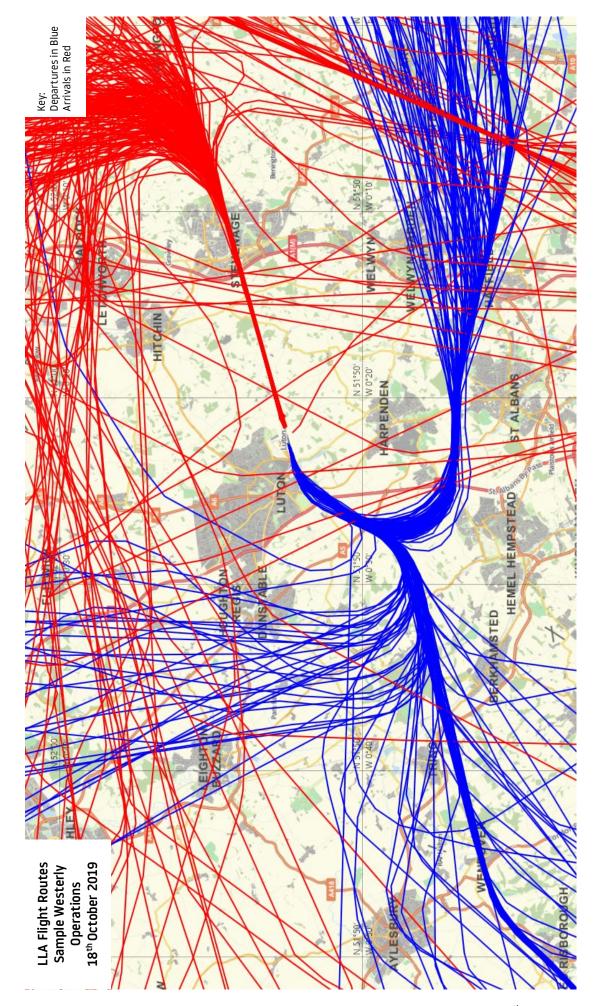


The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) for a typical 24-hour period within the fourth quarter of 2019.

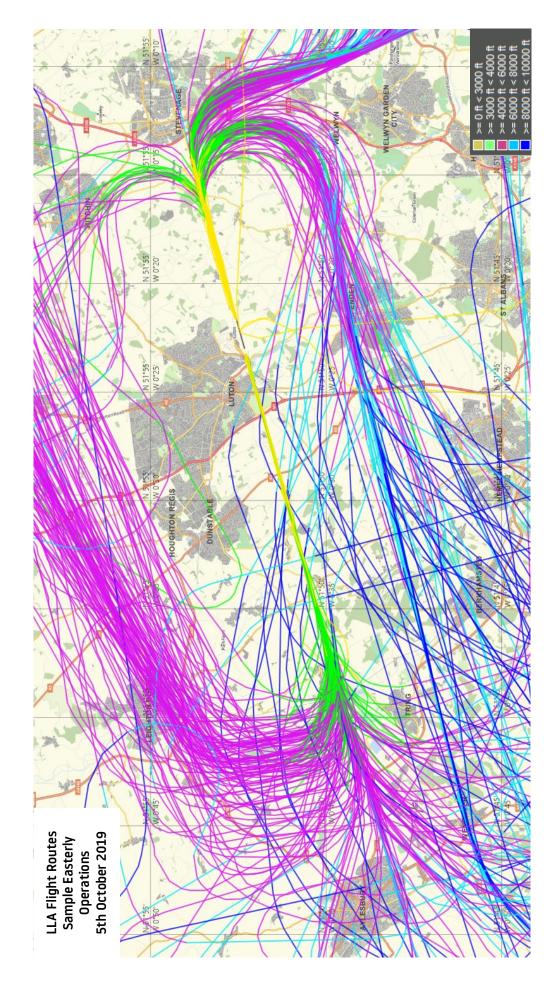
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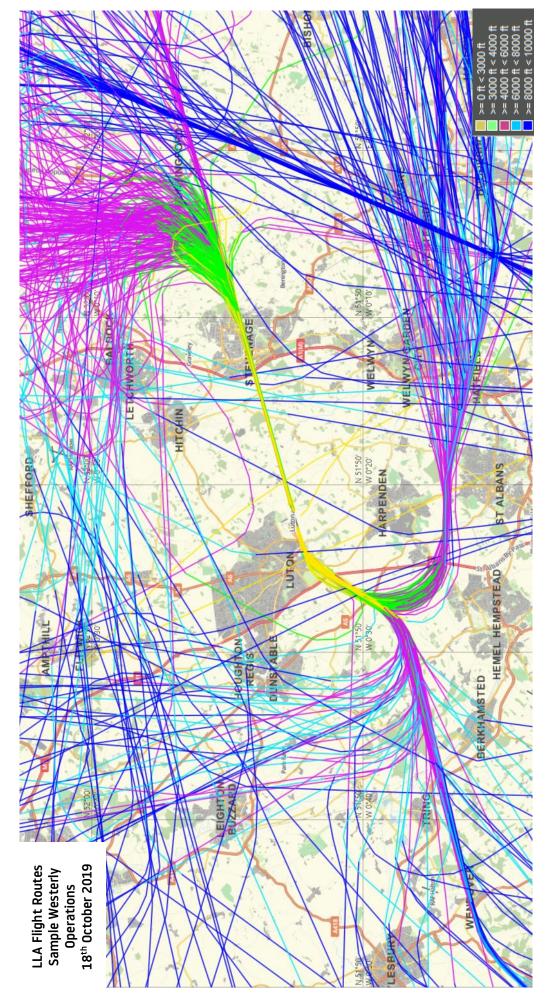
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# 4 AIRCRAFT NOISE

During the 4<sup>th</sup> Quarter of 2019, the maximum noise levels less than 79 dB(A) was recorded by 99.4% of correlated departing aircraft.

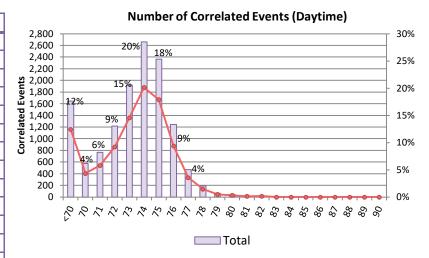
The maximum noise level less than 76 dB(A) was recorded by 93.8% of correlated departing aircraft.

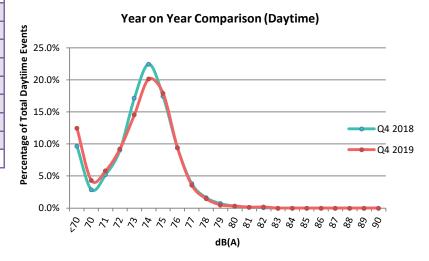
There was no noise violation in this quarter, and no noise violation during the same quarter last year.

#### 4.1 Daytime Noise Levels – October to December 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)	Oct	Nov	Dec	QTR
	<70	574	530	542	1,646
	70	187	200	186	573
	71	231	244	291	766
	72	392	379	448	1,219
e)	73	723	539	657	1,919
ţi	74	1,085	714	859	2,658
ay	75	956	693	716	2,365
9	76	455	370	418	1,243
nts	77	199	130	143	472
Ve	78	102	39	51	192
Number of Correlated Events (Daytime)	79	40	14	12	66
ate	80	30	7	6	43
<u>le</u>	81	15	3	1	19
Sol	82	18	1	2	21
of	83	0	0	0	0
er	84	0	0	0	0
ם	85	0	0	0	0
Z	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		5,007	3,863	4,332	13,202



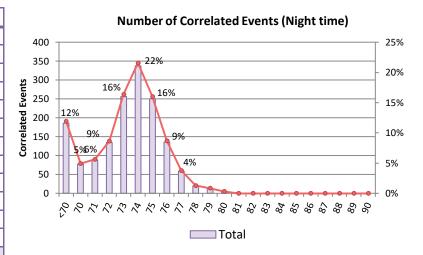


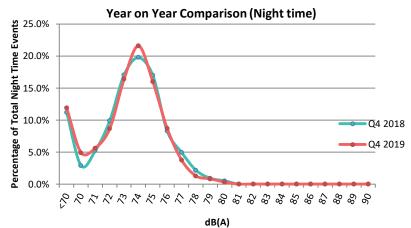
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#### 4.2 Night Noise Levels – October to December 2019

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)	Oct	Nov	Dec	QTR
	<70	47	77	62	186
	70	34	24	19	77
	71	40	21	27	88
	72	49	35	51	135
E E	73	117	52	87	256
ţ	74	168	84	85	337
gh	75	104	76	70	250
Ξ	76	59	30	47	136
Events (Night time)	77	32	18	9	59
l e	78	12	7	1	20
Щ	79	11	1	1	13
tec	80	3	0	2	5
Number of Correlated	81	0	0	0	0
01.0	82	0	0	0	0
Ū	83	0	0	0	0
0	84	0	0	0	0
ge	85	0	0	0	0
ב	86	0	0	0	0
Z	87	0	0	0	0
	88	0	0	0	0
	89	0	0	0	0
	90	0	0	0	0
Т	otal	676	425	461	1,562





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.

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#### 4.3 Noise Violations during Quarter (October to December 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, kitchendiners and bedrooms.

During the fourth quarter of 2019, 118 letters were sent to new properties selected for 2020 and these were all located in Bedfordshire. 26 of these properties responded before the end of the quarter.

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# 5 NOISE CONTOURS

# 5.1 Night Noise Contours – October to December 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 Q3 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-Q4 and presented at values from 48 to 72 dB LAeq,8h. The area of each noise contour is given in Table 1 below and compared with the values for the previous quarter (July – September 2019), and the equivalent quarter during the previous year (October – December 2018).

Contour Value	Contour Area (km²)			
(dB L <sub>Aeq,8h</sub> )	Oct - Dec 2018	July – Sep 2019	Oct - Dec 2019	
48	32.0	43.9	32.7	
51	18.1	26.0	18.7	
54	9.9	14.5	10.5	
57	5.6	8.0	6.1	
60	2.9	4.4	3.1	
63	1.6	2.2	1.7	
66	1.0	1.3	1.0	
69	0.6	0.8	0.7	
72	0.4	0.5	0.4	
W/E Split (%)	68/32	77/23	76/24	

**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.

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#### 5.1.3 Aircraft Movements

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

INM Aircraft Type	Oct - Dec 2018	Jul – Sep 2019	Oct - Dec 2019
1900D	26	10	18
737400	51	106	38
737800	415	748	396
757RR	215	228	225
A300-622R	126	156	166
A319-131	371	865	339
A320-211 (ceo)	1,394	2,127	912
A320-211 (neo)	66	306	262
A321-232 (ceo)	468	701	698
A330-301	46	n/a	n/a
BEC58P	n/a	n/a	20
CL600	31	n/a	32
CL601	67	n/a	55
CNA525C	14	n/a	12
CNA55B	16	n/a	n/a
CNA560U	n/a	n/a	11
CNA560XL	37	n/a	30
CNA750	11	n/a	n/a
DO328	10	n/a	n/a
EMB145	43	n/a	30
F10062	56	n/a	61
GIV	25	n/a	28
GV	261	11	238
LEAR35	27	n/a	15
Other	35	51	64
Total	3,811	5,309	3,650

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

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#### 5.1.4 Noise Contour Comparison

Compared with the same quarter in 2018, there has been a 4% decrease in the total number of movements. The aircraft mix has remained broadly similar. Passenger turbofan operations comprised 84% of the total operations in 2019 Q4, compared to 83% in 2018 Q4. Movements by the Airbus A320ceo have reduced, while movements by the Airbus A320neo and Airbus A321ceo have increased.

The proportion of modernised aircraft types has increased compared to 2018 Q4. Around 22% of operations by the Airbus A320 were by the quieter modernised A320neo variant in 2019 Q4, compared to around 4% in 2018 Q4.

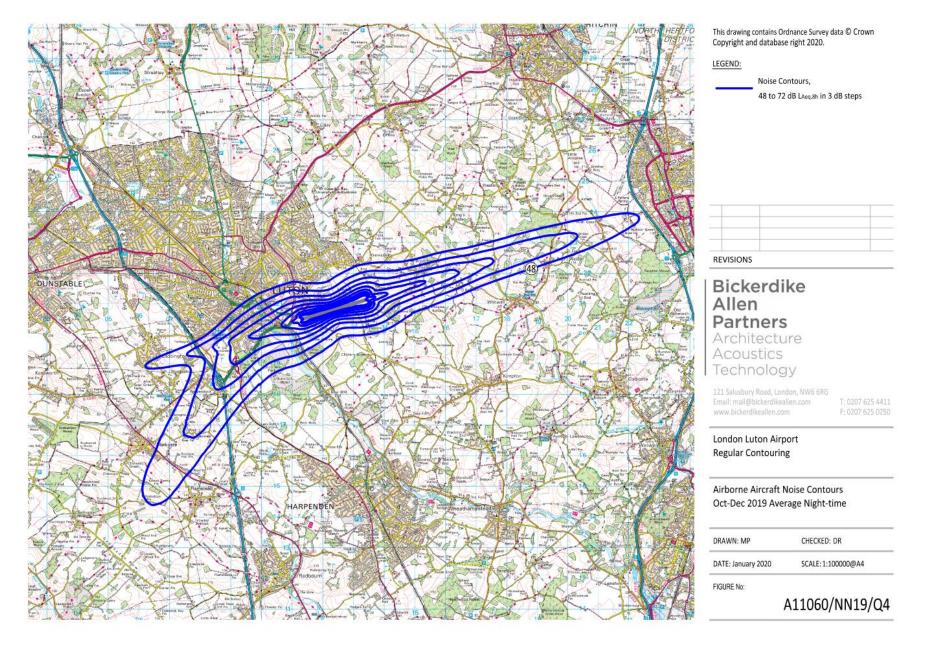
The modal split is slightly different to that in the same quarter in 2018, with 76% of movements in 2019 Q4 using runway 26, compared to 68% in 2018 Q4.

The area within the 48 dB(A) noise contour has increased by 2% compared to the same quarter last year. This increase is largely due to the increase in movements by the Airbus A321ceo, which is one of the loudest aircraft types that use the airport.

The contour shape has changed compared to the same quarter last year. The 2019 Q4 contour extends further to the south west towards Markyate and Flamstead, but does not extend as for to the west towards Caddington. The eastern end of the contour towards Stevenage is similar. This change in shape is due to the change in modal split.

The number of movements, and therefore the contour area, has decreased compared to the previous quarter (July - September 2019).

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# 6 COMPLAINTS

# 6.1 Total Complaints relating to LLA aircraft operations

	4 <sup>th</sup> QTR 2019	4 <sup>th</sup> QTR 2018
Total No. of Complaints relating to LLA aircraft operations	2,601	1,455
No. of Complainants	197	147
No. of General Complaints	210	344
No. of Specific Complaints	2,391	1,111
Average No. of Complaints per Complainant	12.1	9.9
No. of Aircraft Movements per Complaint	12.8	22.4

During the last quarter a total of 2,601 complaints relating to LLA aircraft operations (on average 28 complaints per 24 hours) were received by the Flight Operations Department. This is compared to the 1,455 complaints which were received for the same period last year. It should be noted that 42% were received from 10 individuals.

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

October 2019	1,052 complaints (967 Specific Complaints, 85 General Complaints)
November 2019	649 complaints (585 Specific Complaints, 64 General Complaints)
December 2019	900 complaints (839 Specific Complaints, 61 General Complaints)

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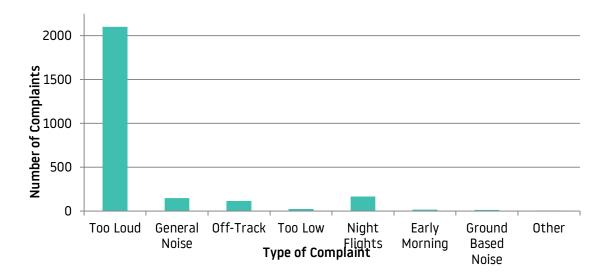
A further 107 complaints not attributable to LLA traffic were received throughout the quarter, compared to 13 complaints for the period October to December last year.



Out of 197 total complainants, there were 97 that contacted the airport only once meaning that 100 complainants generated 2504 complaints.

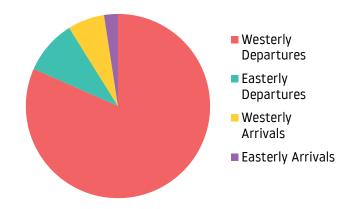
#### 6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from October to December 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 October to December 2019.



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Within the 1912 specific aircraft complaints concerning westerly departures, 1858 complaints involved aircraft on the Match/Detling heading, 35 related to aircraft following Compton flight route, 16 related to aircraft using the Olney route and no complaints were recorded about aircraft following an off-airways routing.

With regard to the 214 complaints attributed to easterly departures, 186 related to aircraft following the Compton flight route and 17 aircraft on the Match route. There were 10 specific complaints relating to the easterly Olney departure route and no complaints relating to aircraft following an off-airways routing.

In total the Flight Operations Department received 199 specific complaints regarding arrivals. 148 of these complaints were about westerly arrivals and a further 51 concerning easterly arrivals.

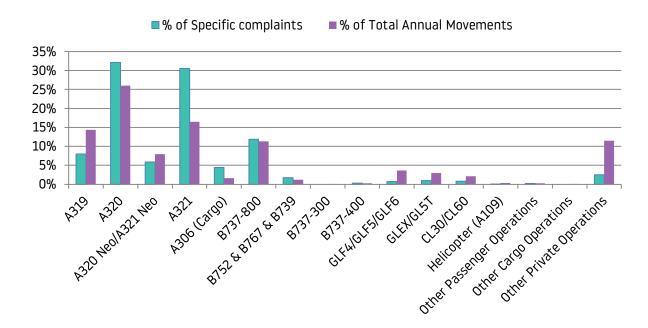


Departing aircraft accounted for 44% of the 147 specific night complaints and 56% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 17% of night complaints, whilst passenger aircraft accounted for 72% of night complaints and executive aircraft were correlated to 11% of night complaints.



#### 6.4 Complaints by aircraft type

The diagram below shows aircraft types generating specific complaints.

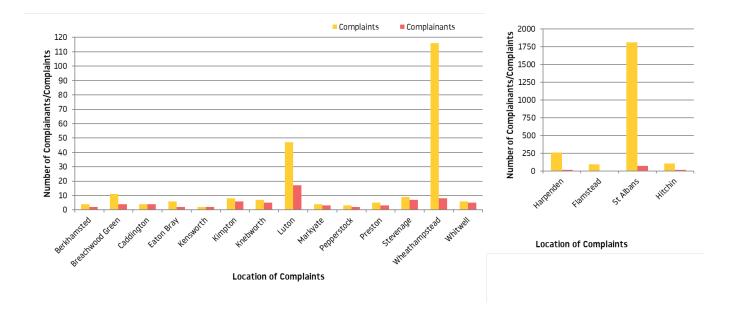


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#### 6.5 Origin of Complaints

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 October to December 2019.

The communities with one complainant include Ayot St Lawrence, Baldock, Blackmore End, Bracknell, Buntingford, Chesham, Codicote, Dagnall, Essex, Hemel Hempstead, Henlow, Hertford, Leighton Buzzard, London, Redbourn, Shefford, Slip End, Stewkley, Tadworth, Tring, Welwyn Garden City and Wilstone,



#### 6.6 Complaints Analysis

During Quarter 4 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 (73%) 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 St Albans, Harpenden, Wheathampstead and Flamstead. Complaints from these areas accounted for 87% of total complaints.
- Similar to previous quarters, a few people are making many complaints, in Q4 42% of complaints were generated by 10 individuals.

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#### 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	70%
Travis	26%

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

Percival House Percival Way

Luton

Bedfordshire LU2 9NU

**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%
1	15.8%
2	12%
3	8.3%
4	7.3%
5	2.2%
6	1.4%
7	0.7%
8	0.9%
9	1%
10	1.3%
11	0.4%
12	0.2%
13	0.5%
14	0.0%
15	0.0%
16	0.0%
16+	0.0%

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### 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 Q4 on 08/11/2019, Liz Thurlby and Joe Graziano from Kings Walden parish Council visited the airport in order to further discuss the levels of noise in Breachwood Green.

#### 7.2 Airport Visits to the Community

The Flight Operations team arranged and attended Public Surgeries in Leighton Buzzard during Quarter 4 and this was a very low turnout with only 2 residents attending. Of the 2 residents that did attend they were concerned about future growth of the airport and wanted more information on LLAL expansion plans.

A member of the flight operations team attended the Bedfordshire association of parish and town council annual general meeting on 17/10/2019.

Also, in Q4 a member of LADACAN attended the DFT with a member of the flight operations team in London.

Two separate visits took place with residents in North East St Albans and Preston in Hertfordshire 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 for 2020; details of which can be found on our website, which is updated accordingly.

(https://www.london-luton.co.uk/corporate/community/noise/noise-surgeries)

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