# Quarterly Monitoring Report Qtr 1 2018



# 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 2018.

# KEY MONITORING INDICATORS – 1st QUARTER 2018

Parameter		1 <sup>st</sup> Quarter 2018	1 <sup>st</sup> Quarter 2017
Total Passenger Number	1	3,276,560	3,246,649
Total Aircraft Movements	1	29,368	29,887
Night Movements (23.00 – 07.00)	<b>1</b>	2,728	2,470
Early Morning Movements (06.00 – 07.00)	Ψ	956	1,025
Aircraft Movement and Quota Count limits			
(per rolling 12-month period)			
Night Quota Movements ( <i>9,650 limit</i> )	1	8,311	7,450
Night Quota Count ( <i>3,500 limit)</i>	↑	2,995.25	2,645.25
Early Morning Shoulder (7,000 movements)	<b>1</b>	5893	5,364
24hr CDA (% achievement)	<b>1</b>	90%	88%
Day CDA (% achievement)	<b>1</b>	90%	89%
Night CDA (% achievement)	<b>1</b>	86%	84%
Track Violations	Ψ	12	10
Departure Noise Infringements (Day)	Ψ	0	3
Departure Noise Infringements (Night)	Ψ	0	2
Noise Monitor Results			
No. Day (Night) > 80 dB(A)	-	12 (0)	21 (2)
No. Day (Night) > 75 dB(A)	-	1,462 (192)	1,608 (196)
No. Day (Night) > 70 dB(A)	-	9,422 (890)	9,479 (777)
Night Noise Contour Area (48 dB L <sub>Aeq, 8h</sub> )	<b>1</b>	23.0km2	21.6 km2
Noise Complaints	Ψ	1,310	1,731
Complainants	Ψ	111	148
Number of New Complainants	Ψ	24	52
Largest Source of Complaints	-	Deps. West	Deps. West
Origin of Concerns	-	Harpenden	Flamstead
(>5 Complainants)		Kensworth	Harpenden
		Markyate	Sandridge
		Sandridge	St Albans
		South Luton	Stevenage
		St Albans	
		Wheathampstead	
Westerly/Easterly Runway Split (%)	-	61/39	70/30

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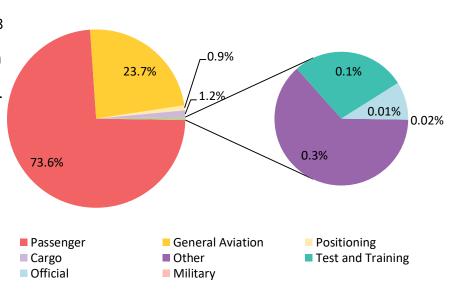
# 1 AIR TRAFFIC DATA

#### 1.1 Aircraft Movements

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

There were a total of 29,368 aircraft movements during this quarter (compared with 29,887 for the same period in 2016), a decrease of 1.7%.

This resulted in an average 326 movements per 24 hours (compared to 332 last year).



A breakdown of these movements is shown below:

			Commer	cial		Non-Commercial*					
	Cargo	Passenger	Positi	ioning	Military	Official	Other1	General Aviation <sup>2</sup>	Test & Training	Total	
				Other STN			AVIALIUII	Trailling			
Jan 20	18	118	7,041	76	4	0	4	34	2,103	8	9,388
Feb 20	18	113	6,703	69	8	0	5	27	2,267	6	9,198
Mar 20	18	128	7,885	105	4	0	5	35	2,592	28	10,782
QTR To	tal	359	21,629	250	16	0	14	96	6,962	42	29,368

#### 1.2 Passenger Statistics

A total of 3,276,560 passengers passed through LLA during the period January to March 2018 (compared with 3,246,649 for the same period last year), 3,245,084 on scheduled flights (99%) and 31,476 on charter flights (1%). This represents an increase in passengers of 1% year on year and equates to an average 36,406 passengers per 24 hours (compared to 36,074 during the first quarter last year).

	Domestic	EU	Non-EU	Total
Jan 2018	80,040	618,098	323,803	1,021,941
Feb 2018	81,851	650,101	310,650	1,042,602
Mar 2018	88,181	769,002	354,834	1,212,017
QTR Total	250,072	2,037,201	989,287	3,276,560

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

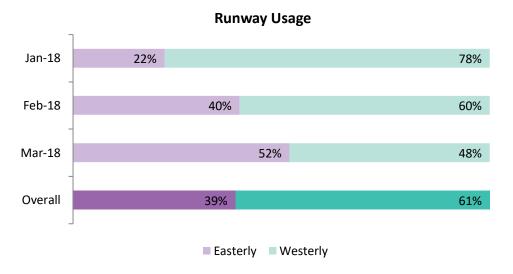
<sup>&</sup>lt;sup>1</sup> Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base

<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 39% easterly and 61% westerly (compared to 30% / 70% 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 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:

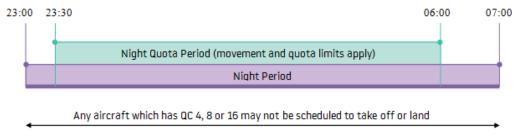
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Certificated noise level (EPNdB)	Quota count	Typical aircraft
Greater than 101.9	QC 16	Some Boeing 747-100/200 Antonov 124/225
99 to 101.9	QC 8	Some Boeing 747-400 McDonnell Douglas DC-8
96 to 98.9	QC 4	Boeing 737-200ADV McDonnell Douglas DC-10
93 to 95.9	QC 2	Boeing 777-200 Airbus A300-600 Airbus A330
90 to 92.9	QC 1	Airbus A320/A321 Some Boeing 737-800 Boeing 757-200 Boeing 787-8
87 to 89.9	QC 0.5	Airbus A319/A320 Boeing 737-400 Boeing 737-800 Boeing 787-8
84 to 86.9	QC 0.25	Airbus A319/A320 Global Express Dassault Falcon 7X/900/2000
Less than 84	QC 0	Airbus A320neo BAe ATP Challenger series (eg CL600) Cessna 525/550

#### The 'Early Morning Shoulder Period'

The 'Early Morning Shoulder Period' is 06:00 to 07:00 hours local. During this period the number of aircraft movements (take-off or landing) is also restricted in a similar way to the Night Quota Period.

#### 1.4.2 Restrictions at London Luton Airport



#### 1.4.3 Aircraft movement and quota count limits (per 12 month period)

Condition 11(f) requires that for the Night Quota Period (2330 - 0600) the following limits shall not be exceeded:

- (i) Total annual movements by aircraft per 12 month period shall be limited to 9,650;
- (ii) The total annual noise guota 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 2017, 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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	Night Quo (2330-	ota Period ·0600)	Early Morning Shoulder (0600-0700)
	Movements Limited to 9,650 Annually	Quota Count Limited to 3,500 Annually	Movements Limited to 7,000 Annually
Apr 2017	638	224.00	563
May 2017	850	286.75	636
Jun 2017	958	310.75	610
Jul 2017	1,063	338.75	622
Aug 2017	989	332.75	637
Sep 2017	898	284.50	637
Oct 2017	832	272.00	593
Nov 2017	204	59.25	336
Dec 2017	481	198.50	303
Jan 2018	413	172.50	294
Feb 2018	404	149.50	284
Mar 2018	581	218.50	378
QTR Total	1,398	540.50	956
Total for preceding 12 months	8,311	2,847.75	5,893

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

There were 2,728 night operations during the quarter (compared to 2,470 for the first quarter 2017), an average 30 movements per night (compared to 27 last year). Arriving aircraft accounted for 42% 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. 26% 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 91% day / 9% night (in line with 92% / 8% for the same quarter last year).

		/ Movem 0700-230			))				
	Da	y movemo	/ movements		Night Quota Period (2330-0600)		Early Morning Shoulder (0600-0700)		Total
	Α	D	Total	A	D	Α	D	(2300 - 0700)	
Apr 2017	4,920	4,757	9,397	468	170	107	456	1.380	11,304
May 2017	5,382	5,455	10,719	646	204	154	482	1,680	12,699
Jun 2017	5,305	5,584	10,781	726	232	120	490	1,785	12,661
Jul 2017	5,426	5,800	11,233	836	227	126	496	1,903	13,138
Aug 2017	5,227	5,478	10,677	768	221	118	519	1,886	12,662
Sep 2017	5,226	5,562	10,866	710	188	127	510	1,760	12,491
Oct 2017	5,153	5,460	10,684	603	229	110	483	1,635	12,057
Nov 2017	4,186	4,305	8,536	121	83	127	209	635	9,012
Dec 2017	4,299	4,648	9,167	296	185	89	214	922	9,607
Jan 2018	4,302	4,269	8,571	260	153	66	228	817	9,388
Feb 2018	4,177	4,219	8,396	266	138	73	211	802	9,198
Mar 2018	4,771	4,902	9,673	384	197	98	280	1,109	10,782
QTR Total	13,250	13,390	26,640	910	488	237	719	2,728	29,368
Total for preceding 12 months	58,374	60,439	118,700	6,084	2,227	1,078	4,578	16,314	134,999

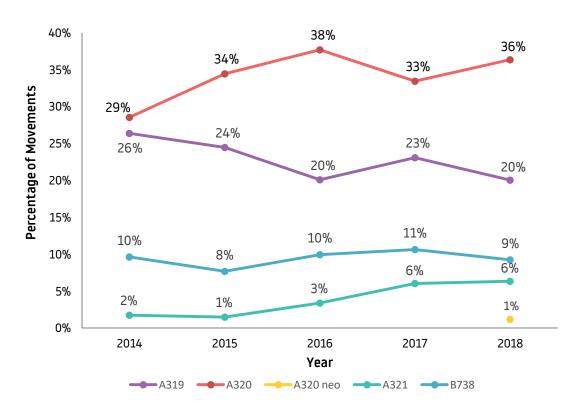
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#### 1.6 Day/Night Ratio of Movements - Forecast

		2017/2018 Fore	cast of Aircraft M	ovements	
	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
April 2018	10,288	667	650	1,527	11,815
May 2018	11,316	877	723	1,813	13,129
June 2018	11,267	1,014	694	1,965	13,232
July 2018	11,735	1,132	719	2,099	13,834
August 2018	11,025	1,051	724	2,075	13,100
September 2018	11,118	972	726	1,951	13,069
October 2018	10,788	830	665	1,732	12,520
November 2018	8,760	387	366	867	9,627
December 2018	9,007	205	333	992	9,999
January 2019	8,956	366	394	912	9,948
February 2019	9,284	405	363	888	10,172
March 2019	10,402	415	451	1,033	11,435
Total for following 12 months	123,946	8,321	6,808	17,854	141,880

## 1.7 Aircraft Movements by Type

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



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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		COMPTON		OLNEY		Other*		Helicopter		Total
		08	26 Conv.	26 RNAV	08	26	80	26	08	26	08	26	
Jan 2018	Daytime	508	9	1,780	316	1,104	120	462	12	33	0	15	4,269
Jail 5019	Night-time	32	0	184	33	99	9	57	0	3	0	0	417
Feb 2018	Daytime	893	5	1,272	580	895	202	310	18	27	1	16	4,219
LED 5019	Night-time	89	0	112	52	69	22	24	1	3	0	1	373
Mar 2018	Daytime	1,324	7	1,209	903	790	314	282	17	30	1	25	4,902
Mai 2016	Night-time	135	0	130	75	95	30	37	1	3	0	0	506
	Total	2,981	21	4,687	1,959	2,962	697	1,172	49	99	2	57	14,686
QTR	Daily Average	33	2	52	22	33	8	13	<1	1	<1	<1	166

#### 2.2 Departure – Track Keeping

All propeller-driven aircraft with Maximum Take Off Mass (MTOM) over 5,700kg and all jet aircraft leaving London Luton Airport are required to follow specific departure routes known as Noise Preferential Routes (NPRs). The obligations of NPRs for conventional SIDs cease when a height of 3,000ft AMSL (between 07:00hrs to 23:00hrs local time) and 4,000ft AMSL (during night time, 23:00hrs to 07:00hrs local time) has been reached. The obligations of the RNAV1 NPR ceases when a height of 4,000ft AMSL has been reached at all times. An NPR is a corridor 3 kilometres wide (2km for the RNAV route), within which aircraft are deemed to be flying on track.

Once aircraft have cleared the designated NPR zone Air Traffic Control (ATC) can instruct the pilots to fly a more direct heading towards their destination. This is known as vectoring.

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

As always, safety 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 99.54%. 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 2018	2	£1,500
Feb 2018	9	£6,750
Mar 2018	3	£2,250
QTR	12	£10,500

	Airline or Aircraft Operator	Aircraft Type/Occurrence
lan 2019	Blue Air	B734/1
Jan 2018	Privately owned aircraft	F2TH/1
	Blue Air	B738/1; B734/1
	Ryan Air	B738/1
Feb 2018	European Air Transport	A306/1
	Privately owned aircraft	CL60/1; C500/1; LJ35/1; GLF4/2
Mar 2018	Privately owned aircraft	C500/1; H25+/1; GL5T/1

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# 3 ARRIVING AIRCRAFT

#### 3.1 Arrivals Route Analysis

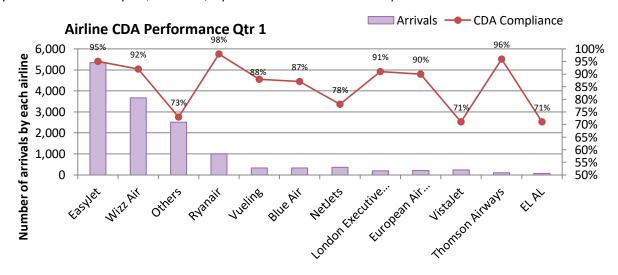
The following table reports the total number of arrivals differentiating between easterly (08), westerly (26) operations and helicopters between 23:00 hrs and 07:00 hrs.

			Arrivals		
		08	26	Heli	Total
Jan 2018	Daytime	935	3,353	14	4,302
Jan 2016	Night-time	55	344	1	400
Feb 2018	Daytime	1,656	2,503	18	4,177
LED 5019	Night-time	168	260	1	429
Mar 2018	Daytime	2,546	2,201	24	4,771
Mai 2010	Night-time	285	317	1	603
ОТВ	Total	5,645	8,978	59	14,682
QTR	Daily Average	63	100	<1	<i>163</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.

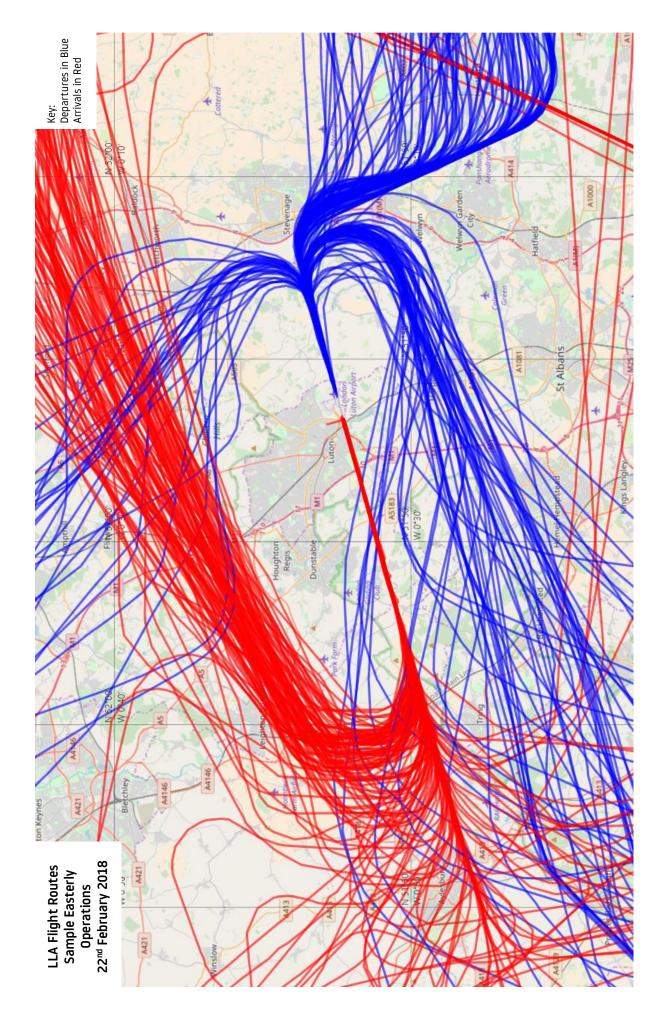
	All Arrivals			08 Ea	08 Easterly Arrivals			26 Westerly Arrivals			
	% CDA				% CDA		% CDA				
	Total Day Night			Total	Day	Night	Total	Day	Night		
Jan 2018	88%	89%	84%	93%	93%	93%	87%	87%	83%		
Feb 2018	90%	90%	85%	92%	93%	87%	88%	89%	84%		
Mar 2018	91%	92%	89%	93%	93%	90%	89%	89%	88%		
QTR Total	90%	90%	86%	93%	93%	89%	88%	88%	85%		

The overall CDA achievement was 90% with several major LLA operators achieving high performance – easyJet, Wizz Air, Ryanair and Thomson Airways.

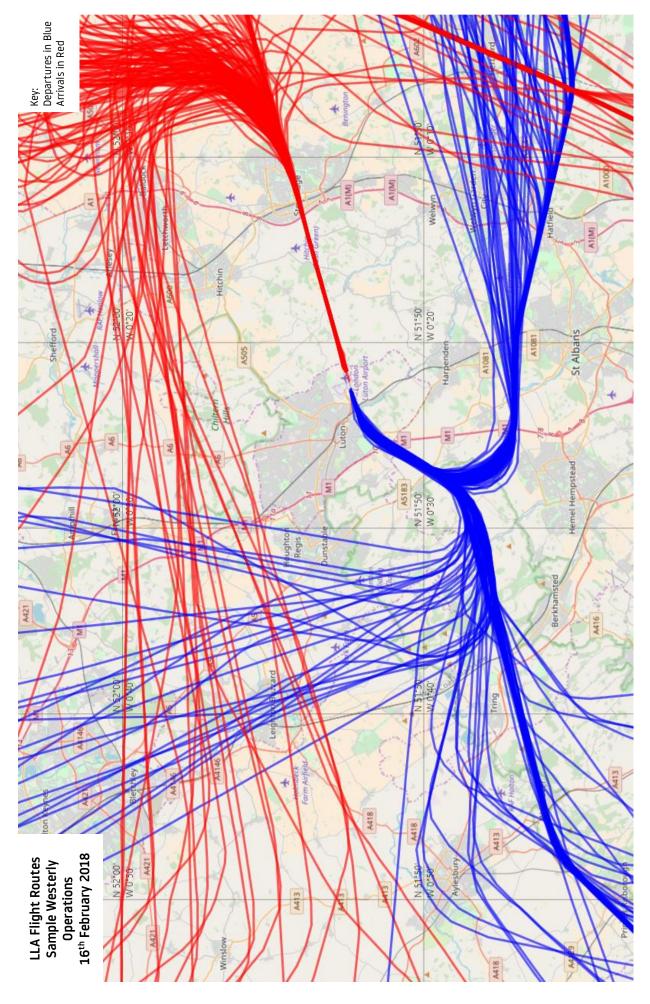


The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) for a typical 24 hour period within the first quarter of 2017.

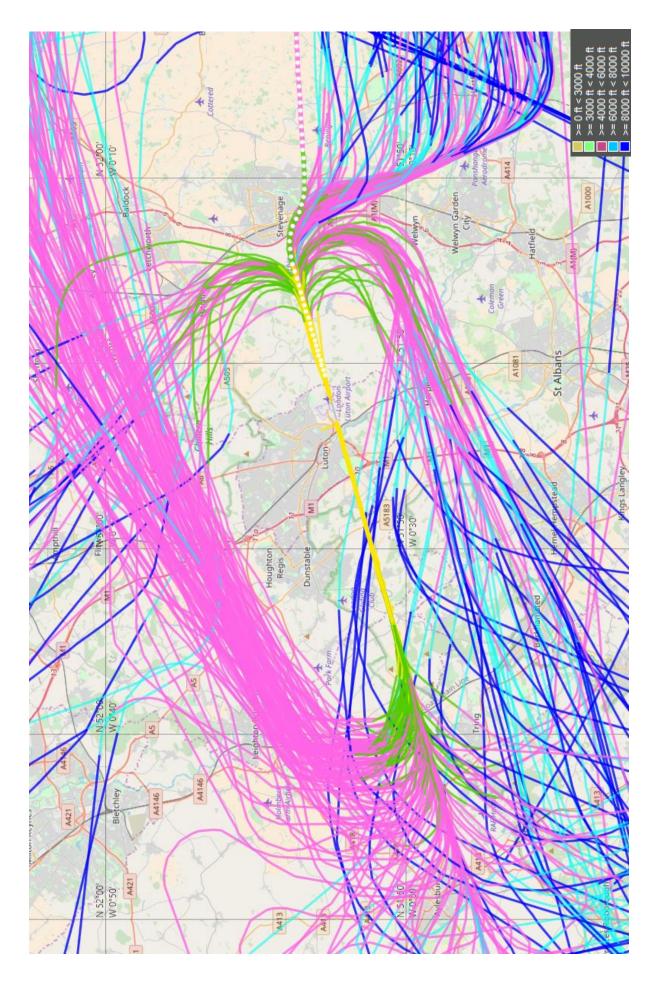
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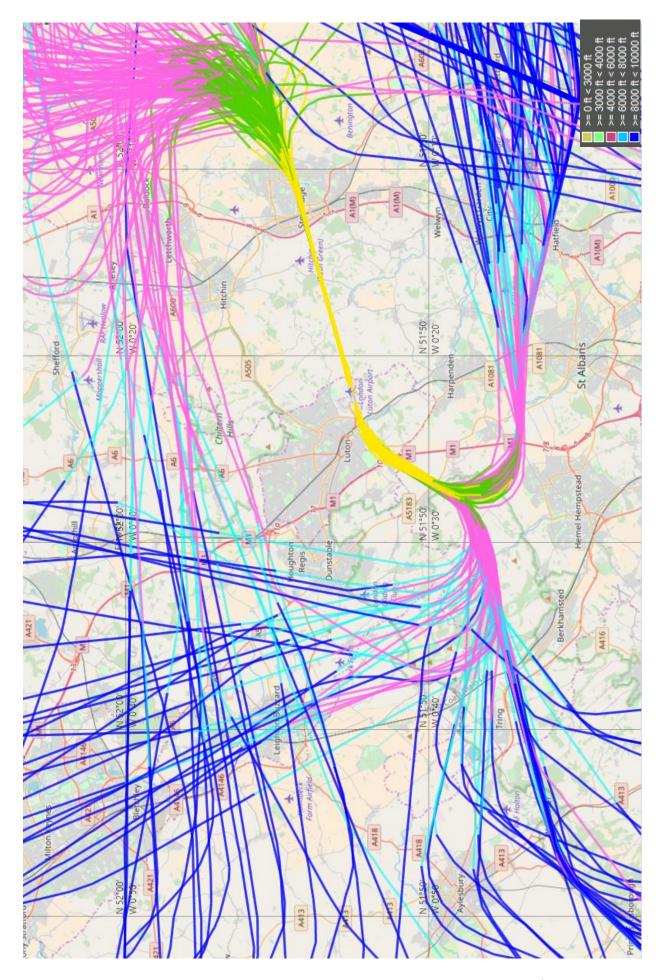
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#### 4 AIRCRAFT NOISE

During the 1<sup>st</sup> quarter of 2018, the maximum noise levels less than 79 dB(A) was recorded by 98% of correlated departing aircraft in line with 98% for the same quarter last year.

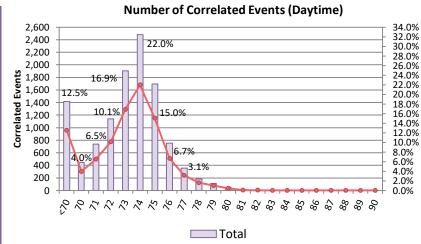
The maximum noise level less than 76 dB(A) was recorded by 87% of correlated departing aircraft slightly increased compared to 85% for the same period last year.

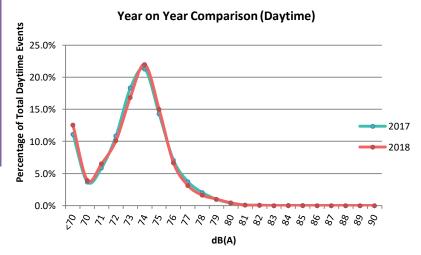
There were no noise violations in this quarter, compared to three daytime noise violations and two night time noise violation during the 1<sup>st</sup> quarter 2017.

#### 4.1 Daytime Noise Levels – January to March 2018

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
	<70	438	408	570	1,416
	70	142	135	169	446
	71	222	252	264	738
	72	326	373	443	1,142
e)	73	572	631	702	1,905
ţ.	74	747	831	902	2,480
Events (Daytime)	75	493	532	671	1,696
<u>ا</u> (2	76	244	209	299	752
l ts	77	111	100	143	354
Ke	78	56	53	73	182
皮	79	40	41	32	113
ate	80	14	19	16	49
<u> </u>	81	2	5	0	7
Number of Correlated	82	0	3	2	5
of	83	0	0	0	0
ē	84	0	0	0	0
ם	85	0	0	0	0
ᇐ	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		3,407	3,592	4,286	11,285



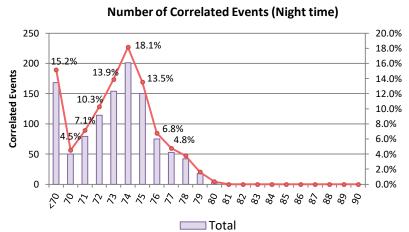


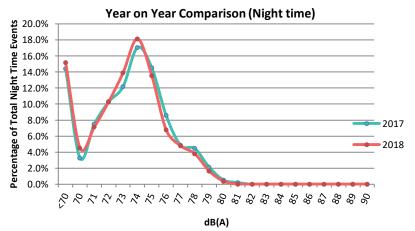
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#### 4.2 Night Noise Levels – January to March 2017

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
	<70	48	50	70	168
	70	15	17	18	50
	71	26	17	36	79
	72	30	41	43	114
Events (Night time)	73	47	45	62	154
Ė	74	65	52	84	201
ghi	75	44	39	67	150
Ξ	76	27	24	24	75
ts	77	14	14	25	53
/en	78	16	11	15	42
	79	3	3	12	18
Correlated	80	0	2	2	4
ela	81	0	0	0	0
orī	82	0	0	0	0
	83	0	0	0	0
r O	84	0	0	0	0
ppe	85	0	0	0	0
Number of	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
Total		335	315	458	1108





N.B It should be noted that the detection thresholds for the noise monitoring terminals are set at the lowest level to record the maximum number of aircraft noise events. However, a number of smaller aircraft types, such as business jets and propeller aircraft, get very close to but do not reach the detection threshold. Ambient background noise is also an important factor as specific incidents such as loud road traffic, emergency vehicle sirens, lawn mowers, drills etc. can register noise levels louder than an aircraft overhead, which results in not all aircraft movements being correlated to noise events. Generally, the louder noise events have more certainty of being correlated with aircraft movements.

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

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#### 4.3 Noise Violations during Qtr1 (January to March 2018)

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 first quarter of 2018 notifications were sent to all eligible properties. Insulation was accepted by 25 properties (18 in Bedfordshire and 7 in Hertfordshire).

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#### 5.1 Night Noise Contours – January to March 2018

#### 5.1.1 Contour Production

Aircraft movement data for use in the contour production has been supplied by LLA. The contour production methodology is the same as that used for the 2016 Qtr3 contours. It includes terrain data, and was produced using INM software Version 7.0d. The validation is based on measured results in 2015 at the fixed noise monitors, and user-defined profiles for the most common aircraft have been used, as for the 2015 contours.

#### 5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A11060-NN18-Q1 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 (October – December 2017) and the equivalent quarter during the previous year (January – March 2017).

Contour Value	Contour Area (km²)			
(dB L <sub>Aeq,8h</sub> )	Jan – Mar 2017	Oct - Dec 2017	Jan – Mar 2018	
48	21.0	25.6	23.0	
51	11.5	14.2	12.6	
54	6.3	7.5	6.7	
57	3.4	4.1	3.7	
60	1.8	2.1	1.9	
63	1.1	1.3	1.2	
66	0.7	0.8	0.7	
69	0.5	0.5	0.5	
72	0.3	0.3	0.3	
W/E Split (%)	70/30	95/5	64/36	

**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 LLA are summarised in Table 2 below, and compared with the movements from the previous quarter and the equivalent quarter in the previous year. Only aircraft types with at least 10 movements have been presented. For aircraft types with less than 10 movements in a period or types that were not explicitly presented in previous periods, 'n/a' is shown.

INM Aircraft Type	Jan – Mar 2017	Oct - Dec 2017	Jan - Mar 2018
B733	36	23	24
B734	10	14	86
B738	298	469	304
B752	85	162	141
A306	150	93	135
A319	283	392	261
A320 (ceo)	743	1104	938
A320 (Neo)	n/a	41	65
A321	86	42	65
A333	18	30	37
CL600	40	67	49
CL601	32	44	38
C441	11	34	28
C500	n/a	11	n/a
C510	n/a	13	10
C525	31	40	27
C56X	60	50	54
C680	n/a	10	n/a
D328	115	16	n/a
E145	33	42	38
F100	57	71	43
GLF4	38	45	38
GLF5	246	298	261
LJ35	29	20	25
Other	61	53	45
Total	2,462	3,184	2,724

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

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<sup>\*</sup> Some aircraft were incorrectly grouped in Table 2 of the Qtr3 report, and therefore some numbers above do not match the previous report. This error was presentational and did not affect the noise contour work.

#### 5.1.4 Noise Contour Comparison

Compared with the same quarter in 2017, there has been an increase of 11% in the total number of movements. The proportion of arrivals in the first quarter has remained similar, going from 53% in 2017 to 52% in 2018.

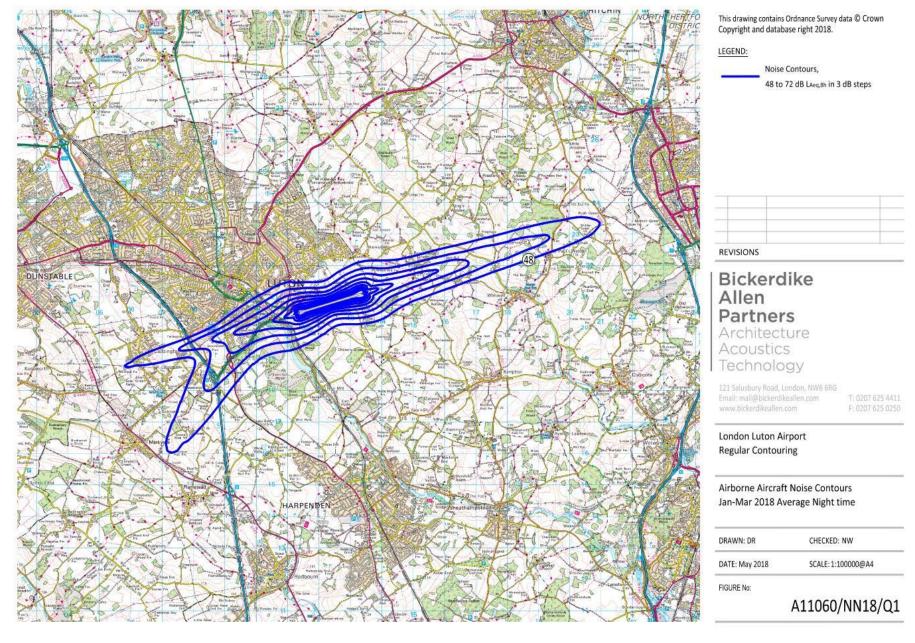
The aircraft mix has changed slightly, with a small increase in the proportion of turbofan operations, which comprised 76% of the total operations in 2018 Q1, compared to 73% the same quarter in 2017. In particular operations by the Airbus A320, both current and modernised, and the Boeing 737-400 have increased, while operations by the Dornier 328 have ceased. Other aircraft have remained at similar proportions as the same quarter in 2017.

The modal split has changed compared to the same quarter in 2017, with 64% of movements in 2018 Q1 using runway 26, compared to 70% in 2017 Q1.

The area within the 48 dB(A) noise contour has increased by 10% compared to the same quarter last year. This increase is due to the increase in overall movements.

The number of movements, and therefore the contour area, has decreased compared to the previous quarter (October – December 2017).

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# 6 COMPLAINTS

## 6.1 Total Complaints relating to LLA aircraft operations

	1 <sup>st</sup> QTR 2018	1 <sup>st</sup> QTR 2017
Total No. of Complaints relating to LLA aircraft operations	1,310	1,849
No. of Complainants	111	148
No. of General Complaints	239	240
No. of Specific Complaints	1,071	1,609
Average No. of Complaints per Complainant	11.8	12.5
No. of Aircraft Movements per Complaint	22.4	17

During the last quarter a total of 1,310 complaints relating to LLA aircraft operations (on average just over 14 complaints per 24 hours) were received by the Flight Operations Department. This is compared to the 1,849 complaints which were received for the same period last year. It should be noted that 76% were received by 10 individuals.

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

Jan 2018	534 complaints	(482 Specific Complaints, 52 General Complaints)
Feb 2018	387 complaints	(299 Specific Complaints, 88 General Complaints)
Mar 2018	389 complaints	(290 Specific Complaints, 99 General Complaints)

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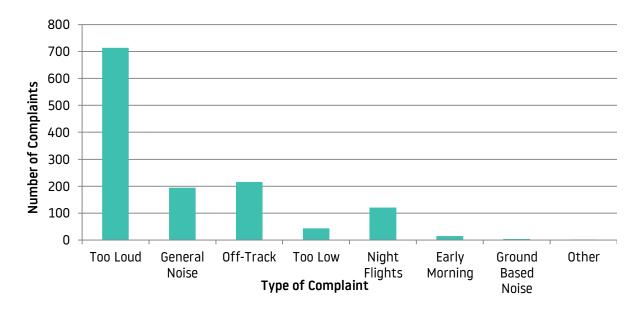
A further 60 complaints not attributable to LLA traffic were received throughout the quarter, compared to 71 complaints for the period January to March last year.



Out of 111 total complainants, there were 62 that contacted the airport only once meaning that 49 complainants generated 1,248 complaints.

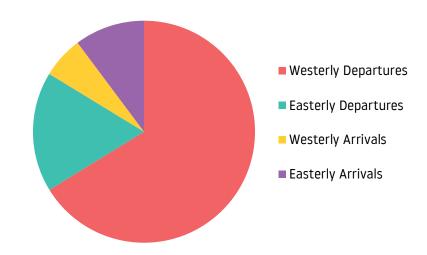
#### 6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from January to March 2018 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 2018.



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Within the 655 specific aircraft complaints concerning westerly departures, 647 complaints involved aircraft on the Match/Detling heading, 3 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 173 complaints attributed to easterly departures, 166 related to aircraft following the Compton flight route, 3 aircraft on the Match route, 1 aircraft following the Olney route and 3 using an off-airways routing.

In total the Flight Operations Department received 161 specific complaints regarding arrivals. 101 of these complaints were about easterly arrivals and a further 60 concerning westerly arrivals.

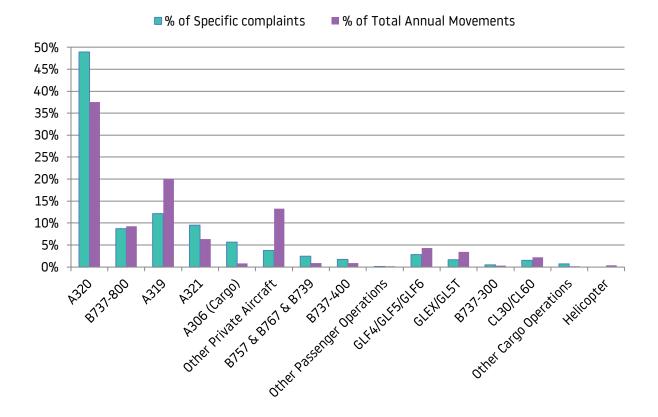
33
Complainants
reported noise
disturbance at night
(compared to 39
Complainants for the same
Quarter last year)

Departing aircraft accounted for 70% of the 98 specific night complaints and 30% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 34% of night complaints, whilst passenger aircraft accounted for 56% of night complaints and executive aircraft were correlated to 10% of night complaints.



#### 6.4 Complaints by aircraft type

The diagram below shows aircraft types generating specific complaints.

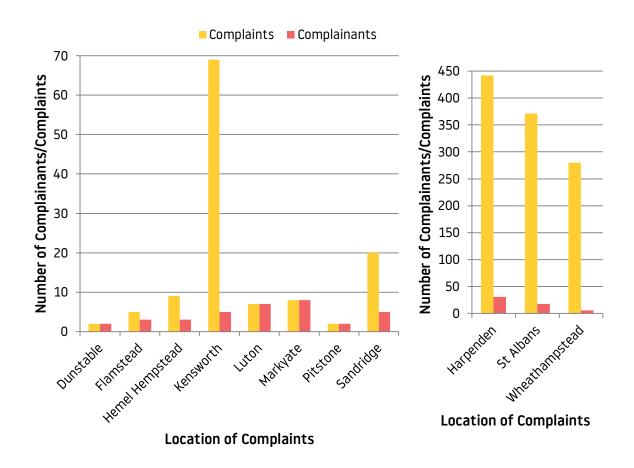


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#### 6.5 Origin of Complaints

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 January to March 2018.

The communities with one complainant include Ayot St Lawrence, Bellingdon, Breachwood Green, Codicote, Datchworth, Dunton, Essex, Hertford, Leighton Buzzard, Pepperstock, Preston, Redbourn, Royston, Stevenage, Studham, Ware, Whitwell and Wilstone.



#### 6.6 Complaints Analysis

During Quarter 1 there has been a decrease in complaints compared to the same quarter last year; this is thought to be due to a number of reasons:

- The number of movements has decreased slightly compared to Quarter 1 in 2017.
- The wind direction allowed natural respite for communities, which is likely to have reduced the number of complaints.
- High numbers of complaints were still recorded from specific locations, for example Harpenden, St Albans and Wheathampstead. Complaints from these areas accounted for 83% of total complaints.
- As winds dictated westerly operations for 61% of the time, the largest percentage of complaints related to aircraft operations during westerlies.

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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	
E-mail	18%	
TraVis	80%	
Telephone	2%	

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	58%
1	19%
2	12%
3	7%
4	1%
5	1%
6	0%
7	0%
8	0%
9	0%
10	0%
11	0%
12+	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 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. Unfortunately, this quarter no members of the community visited LLA.

#### 7.2 Airport Visits to the Community

The Flight Operations team arranged a public surgery in Ivinghoe on the 18<sup>th</sup> January 2018 many residents had questions and concerns regarding the easterly arrivals and the delayed landing gear trial, approx. 30 residents attended. On the 15<sup>th</sup> March 2018 the team held a Public Surgery in Markyate, approx. 45 residents attended with many concerns regarding night noise, residents were most interested in future airspace changes. 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)

On the 26<sup>th</sup> January LLA's Operations Director, Neil Thompson, met with Heidi Allen MP and residents to discuss noise concerns from arriving aircraft nearby the LOREL gate.

Furthermore, on the 16<sup>th</sup> February the westerly Match/Detling Airspace Change Focus Group met to discuss potential designs. The meeting was productive and the committee provided feedback.

Finally, on the 22<sup>nd</sup> March the management team met with residents of Childwickbury and Redbournbury to discuss the noise impacts and future airspace changes.

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