

Quarterly Monitoring Report

QUARTER 2 2023

INTRODUCTION

This report provides statistics on aircraft operations at London Luton Airport (LLA) during the period April to June 2023.

KEY MONITORING INDICATORS – 2nd QUARTER 2023

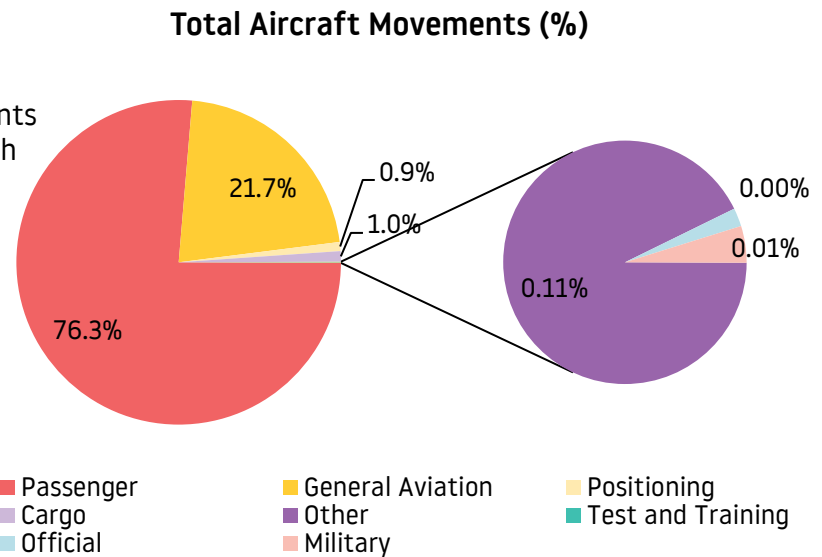
Parameter		2 nd Quarter 2023	2 nd Quarter 2022
Total Passenger Number	↑	4,427,329	3,717,034
Total Aircraft Movements	↑	34,478	33,398
Night Movements (23.00 – 06.59)	↑	4,926	4,792
Early Morning Movements (06.00 – 06.59)	↑	1,651	1,437
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements (<i>9,650 limit</i>)	↑	8,951	6,205
Night Quota Count (<i>3,500 limit</i>)	↑	2,725	2236.75
Early Morning Shoulder (<i>7,000 movements</i>)	↑	5,046	4,206
24hr CDA (% achievement)	↑	94%	93%
Day CDA (% achievement)	↑	95%	93%
Night CDA (% achievement)	↓	92%	93%
Track Violations	↑	11	10
Departure Noise Infringements (Day)	↑	7	0
Departure Noise Infringements (Night)	↑	1	0
Noise Monitor Results*			
No. Day (Night) > 80 dB(A)	↑	6 (0)	0 (0)
No. Day (Night) > 75 dB(A)	↑	2,270 (385)	1,014 (174)
No. Day (Night) > 70 dB(A)	↑	10,813 (1,735)	9,623 (1,498)
Night Noise Contour Area (48 dB L _{Aeq, 8h})	↑	33.0 km ²	30.6 km ²
Noise Complaints	↑	5,329	1,293
Complainants	↓	223	230
Number of New Complainants	↓	71	114
Largest Source of Complaints	-	Arrivals. West	Arrivals. West
Origin of Concerns	-	Cambridge	Harpenden
(>5 Complainants)		Sandy	St Albans
		Harpenden	Stevenage
		St Albans	Luton
		Luton	Flamstead
Westerly/Easterly Runway Split (%)	-	41/59	64/36

1 AIR TRAFFIC DATA

1.1 Aircraft Movements

There were 34,478 aircraft movements during this quarter (compared with 33,398 for the same period in 2022), an increase of 3%.

This resulted in an average 379 movements per 24 hours (compared to 367 last year).



A breakdown of these movements is shown below:

	Commercial				Non-Commercial					Total
	Cargo	Passenger	Positioning		Military	Official	Other ¹	General Aviation ²	Test & Training	
			Other	STN						
Apr 2023	115	8,361	116	1	0	0	15	2,128	0	10,736
May 2023	123	9,076	93	1	2	1	16	2,527	0	11,839
Jun 2023	122	8,862	94	5	0	0	7	2,813	0	11,903
QTR Total	360	26,299	303	7	2	1	38	7,468	0	34,478

1.2 Passenger Statistics

A total of 4,427,329 passengers passed through LLA during the period April to June 2023 (compared with 3,717,034 for the same period last year); 4,380,803 on scheduled flights (99%) and 46,526 on charter flights (1%). This represents 19% increase in passengers and equates to an average 48,652 passengers per 24 hours (compared to 40,847 during the same quarter last year).

	Domestic	EU	Non-EU	Total
Apr 2023	107,213	1,044,200	232,728	1,384,141
May 2023	112,634	1,158,227	244,474	1,515,335
Jun 2023	111,706	1,177,406	238,741	1,527,853
QTR Total	331,553	3,379,833	715,943	4,427,329

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

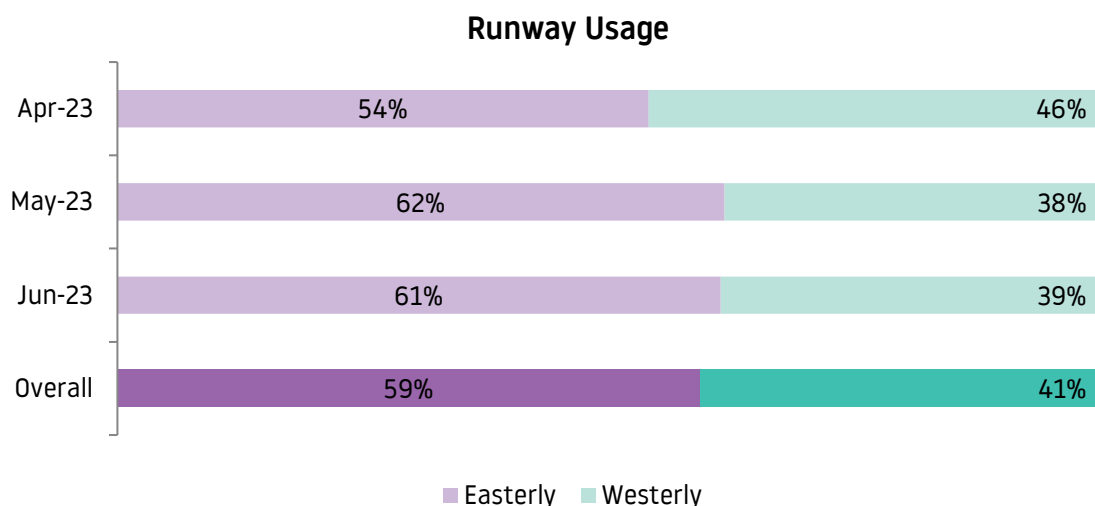
¹ Other relates to flights coming for maintenance and/or departing aircraft that have made an unscheduled return to base

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 59% easterly and 41% westerly (in comparison to a 36%/64% split in the same quarter last year). The monthly breakdown of these statistics is as follows:



1.4 Night Flying Restrictions

On 1st April 2015 London Luton Airport introduced Night Restrictions as part of planning conditions.

These restrictions are put in place to limit and mitigate noise disturbance from aircraft operating at night, to prohibit aircraft of certain types from operating, and to limit 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 the level of noise they produce. 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 this period the number of aircraft movements (take-off or landing) is restricted, as well as an additional limit on the number of noise QC points.

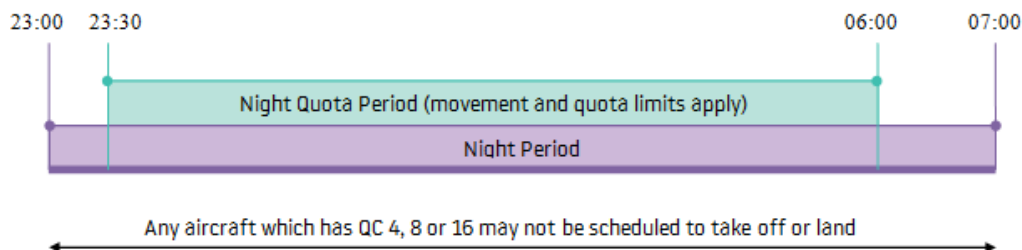
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are allocated to different aircraft types according to the sound level they produce. 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
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 Airbus A321neo Boeing 737-800 Max Dassault Falcon 7X/900/2000
81 to 83.9	QC 0.125	Airbus A320neo Global Express
Less than 81	QC 0	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 the following limits shall not be exceeded for the Night Quota Period (2330 – 0559 hours local):

- (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 the total number of movements by aircraft in any 12-month period shall be limited to 7,000 for the Early Morning Shoulder Period (0600 – 0659 hours local).

The table overleaf provides the aircraft movement and quota count for the last rolling 12-month period. These can be compared with the limits set within the planning conditions.

	Night Quota Period (2330-0559)		Early Morning Shoulder (0600-0659)
	<i>Movements Limited to 9,650 Annually</i>	<i>Quota Count Limited to 3,500 Annually</i>	<i>Movements Limited to 7,000 Annually</i>
July 2022	1,101	366.000	415
August 2022	989	327.125	442
September 2022	981	319.500	419
October 2022	1,059	319.375	503
November 2022	447	140.250	303
December 2022	670	207.750	308
January 2023	533	156.125	317
February 2023	508	148.625	333
March 2023	525	144.750	355
April 2023	718	197.750	534
May 2023	768	209.000	578
June 2023	652	188.375	539
QTR Total	2,138	595.125	1,651
<i>Total for preceding 12 months</i>	<i>8,951</i>	<i>2,725</i>	<i>5,046</i>

1.4.4 Dispensations

In March 2023, LLA started to dispense movements in line with the Section 106 agreement. LLA submitted a Dispensation Policy to the Local Planning Authority to dispense (remove) movements from the night time movement limit, night time QC limit and early morning movement limit.

The table below shows the number of movements dispensed in April-June 2023. These have not been reported in the table in section 1.4.3.

	Night Dispensations
April 2023	144
May 2023	181
June 2023	270
Total	595

The table below also show the reasons for the dispensation, in line with the S106 list of acceptable reasons for dispensation. In June, there was a NATO exercise in German airspace (known as Air Defender 2023), this resulted in air traffic disruption across Europe which led to delays.

Reason for Dispensation	Number of Dispensations
Weather	122
Passenger Hardship	411
Air Traffic Disruption	49
Diversions	2
Emergencies	4
NATO Air Defender Exercise	7
Total	595

1.5 Day/Night Ratio of Movements - Actual

There were 4,926 night operations during the quarter (compared to 4,792 for the same quarter last year), an average 54 movements per night (compared to 53 last year). Arriving aircraft accounted for 55% of total night movements, relating primarily to the last rotation of Luton based passenger aircraft scheduled to land between 23:00 and midnight local. 66% of total night departures took off between 06:00 – 07:00 hours local. The average ratio of total aircraft operations during the quarter was 86% day / 14% night (in comparison to 86% day / 14% night over the same quarter last year).

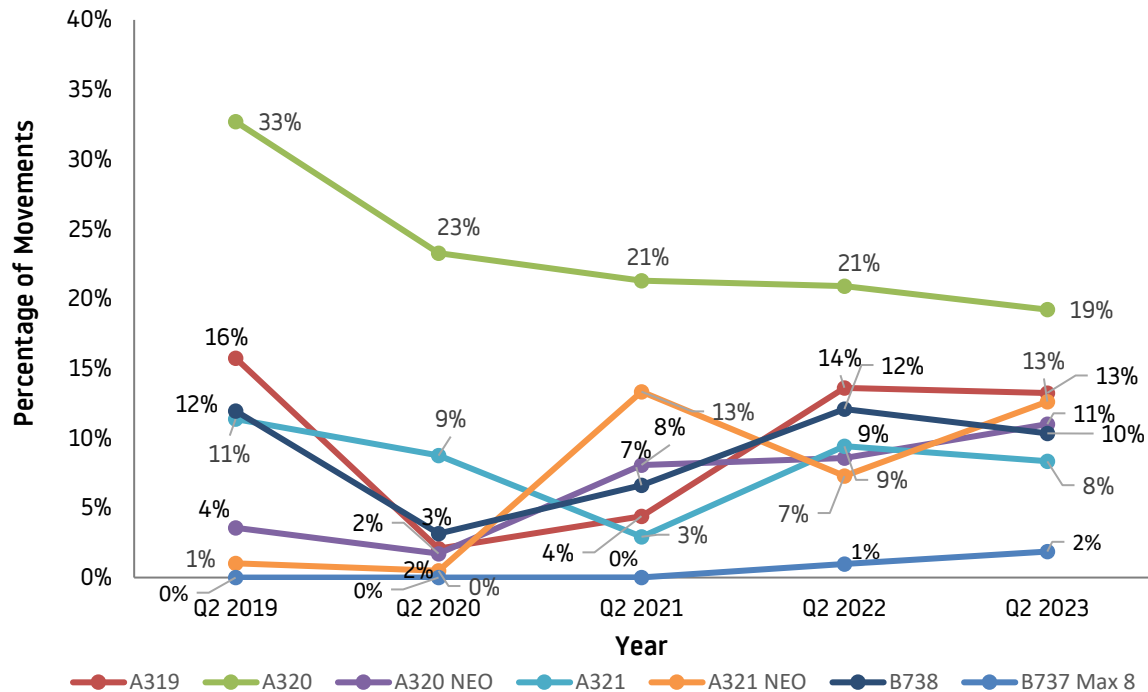
	Day Movements (0700-2259)			Night Movements (2300-0659)				Total	
	Day movements			Night Quota Period (2330-0559)		Early Morning Shoulder (0600-0659)			Total Night Movements (2300 – 0659)
	A	D	Total	A	D	A	D		
Jul 2022	5,031	5,290	10,321	851	250	4	411	1,718	12,039
Aug 2022	4,816	5,077	9,893	796	193	2	440	1,651	11,544
Sept 2022	4,728	5,043	9,771	788	193	14	405	1,636	11,407
Oct 2022	4,739	4,893	9,632	808	251	14	489	1,772	11,404
Nov 2022	3,499	3,561	7,060	336	111	30	273	914	7,974
Dec 2022	3,971	4,105	8,076	483	187	28	280	1,166	9,242
Jan 2023	3,716	3,812	7,528	411	122	27	290	992	8,520
Feb 2023	3,863	3,919	7,782	384	124	28	305	993	8,775
Mar 2023	4,340	4,521	8,861	518	150	15	340	1,191	10,052
Apr 2023	4,522	4,651	9,173	712	150	19	515	1,563	10,736
May 2023	4,962	5,168	10,130	798	151	13	565	1,709	11,839
Jun 2023	5,041	5,208	10,249	782	140	0	539	1,654	11,903
QTR Total	14,525	15,027	29,552	2,292	441	32	1,619	4,926	34,478
Total for preceding 12 months	53,228	55,248	108,476	7,667	2,022	194	4,852	16,959	125,435

1.6 Day/Night Ratio of Movements – Forecast

2023/2024 Forecast of Aircraft Movements					
	Day Movements (0700 – 2259hrs)	Night Quota Period (2330-0559) Limited to 9,650	Early Morning Shoulder (0600-0659) Limited to 7,000	Total Night Movements (2300-0659hrs)	Total
July 2023	11,524	1,078	639	1,972	13,496
August 2023	10,957	1,069	605	1,925	12,882
September 2023	11,185	868	537	1,661	12,846
October 2023	11,293	882	512	1,617	12,910
November 2023	9,123	440	272	831	9,954
December 2023	10,655	580	337	1,087	11,742
January 2024	9,274	496	414	1,054	10,328
February 2024	8,794	482	376	1,001	9,795
March 2024	10,600	471	328	938	11,538
April 2024	11,536	791	553	1,520	13,056
May 2024	12,524	906	617	1,756	14,280
June 2024	12,770	895	592	1,736	14,506
Total for following 12 months	130,235	8,958	5,782	17,098	147,333

1.7 Aircraft Movements by Type

The graph below shows the percentage of aircraft movements for the main aircraft types that operated at LLA. For data comparison, the data covers the last five years. During Q2 2023, there was an increase in the utilisation of the newer generation aircraft type, NEO, compared with the same period last year.



2 DEPARTING AIRCRAFT

2.1 Departure Route Analysis

The following table reports the average and total number of departures for each flight route, differentiating between easterly (07) and westerly (25) operations. The night movements quoted below departed between 23:00 and 06:59 hours local.

		Departures										Total
		MATCH/DETLING			RODNI		OLNEY		Other*		Helic opter	
		07	25 Conv	25 RNAV	07	25	07	25	07	25	HELI	
Apr 2023	Daytime	1,365	5	1,154	749	691	356	297	17	12	5	4,651
	Night-time	216	0	190	111	124	38	35	2	0	0	716
May 2023	Daytime	1,685	4	1,067	1,062	630	399	261	25	15	21	5,169
	Night-time	232	0	188	136	120	39	32	1	2	0	750
Jun 2023	Daytime	1,711	8	1,019	1,080	659	408	269	25	19	11	5,209
	Night-time	260	1	178	142	99	38	20	0	0	0	738
QTR	Total	5,469	18	3,796	3,280	2,323	1,278	914	70	48	37	17,233
	Daily Average	60	<1	42	36	26	14	10	<1	<1	<1	189

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). An NPR is a corridor three kilometres wide (2km for the RNAV route), within which aircraft are deemed to be flying on track. Once an aircraft has 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.

The obligations of NPRs for conventional departure routes (SIDs) cease when a height of 3,000ft AMSL (between 07:00hrs to 23:00hrs local time) and 4,000ft AMSL (during night-time, 23:00 to 06:59 hours 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.

We are working hard to reduce the noise and environmental impact on neighbouring areas. In April 2015 London Luton Airport implemented a Track Violation Penalty Scheme resulting in fines for aircraft that leave the corridor before reaching the required altitude. Using the current Aircraft Noise and Track Monitoring System the airport's Flight Operations Department evaluates and investigates radar tracks with required input from Air Traffic Control (ATC) and airlines. When 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. When there is valid justification for a deviation from the track, the operator in question 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 three-month period. The on-track performance for the quarter was 99.6%. This calculation includes deviations for weather and traffic avoidance, as well as deviations classed as violations. The breakdown of these violations is shown in the table below.

	Number of Violations	Total Penalties Collected
April 2023	5	£9,000
May 2023	2	£3,000
June 2023	4	£5,000
QTR	11	£17,000

	Airline or Aircraft Operator	Aircraft Type/Occurrence
April 2023	Airline and privately owned aircraft	A320/4 and GLEX/1
May 2023	Airline	B738/2
June 2023	Airline and privately owned aircraft	A20N/1; CRJ2/1 and GLEX/2

3 ARRIVING AIRCRAFT

3.1 Arrivals Route Analysis

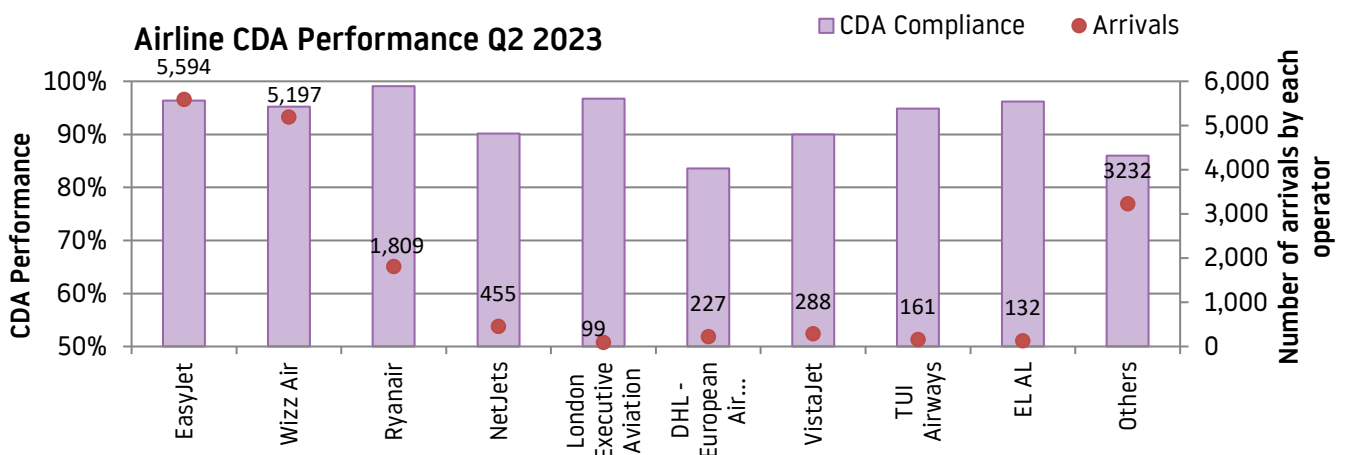
The following table reports the total number of arrivals differentiating between easterly (07), westerly (25) operations and helicopters.

		Arrivals			Total
		07	25	Heli	
April 2023	Daytime	2,422	2,097	4	4,523
	Night-time	486	361	0	847
May 2023	Daytime	3,128	1,819	5	4,952
	Night-time	586	372	1	959
June 2023	Daytime	3,075	1,961	6	5,048
	Night-time	532	390	0	916
QTR	Total	10,229	7,000	16	17,245
	<i>Daily Average</i>	<i>112</i>	<i>77</i>	<i><1</i>	<i>189</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 5,000ft.

	All Arrivals			07 Easterly Arrivals			25 Westerly Arrivals		
	% CDA			% CDA			% CDA		
	Total	Day	Night	Total	Day	Night	Total	Day	Night
April 2023	93%	94%	91%	95%	96%	89%	92%	92%	93%
May 2023	94%	95%	90%	95%	96%	88%	92%	92%	93%
June 2023	95%	95%	94%	97%	97%	93%	93%	93%	95%
QTR Total	94%	95%	92%	95%	96%	90%	92%	92%	94%

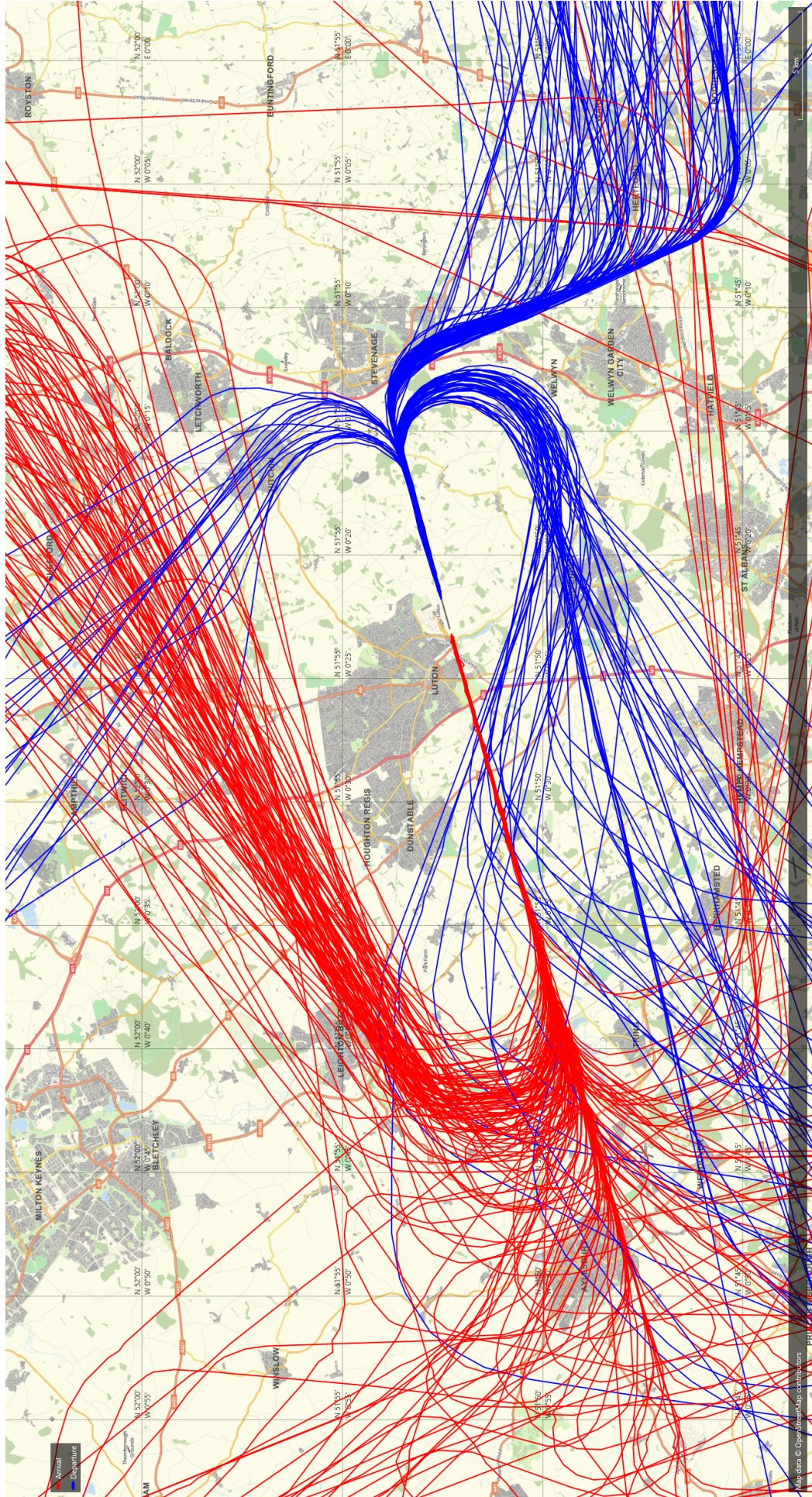
The overall CDA achievement was 94% with several major LLA operators achieving high performance.



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) over a typical 24-hour period within the second quarter of 2023.

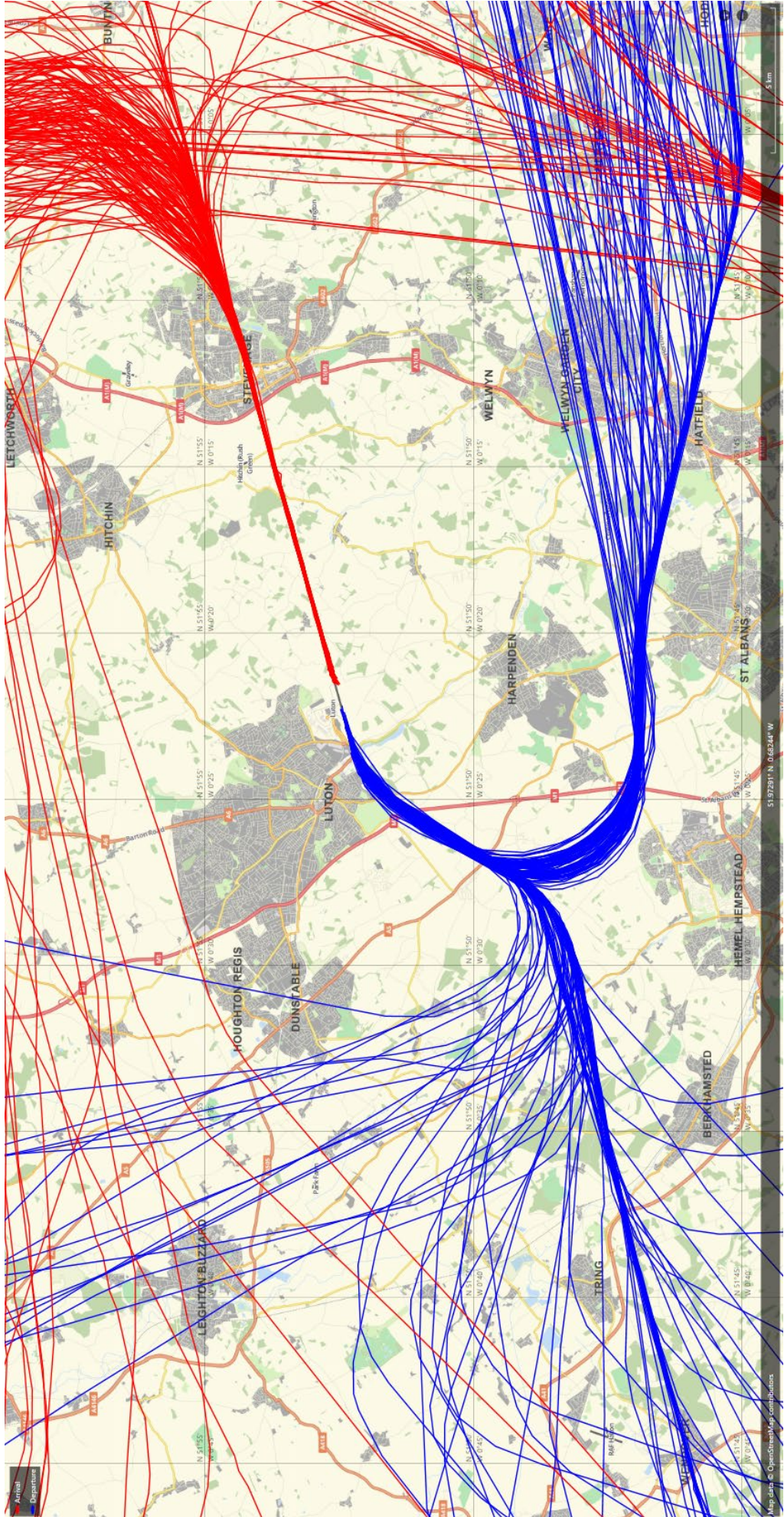
LLA Flight Routes Sample Easterly Operations

Key:
Departures in Blue
Arrivals in Red

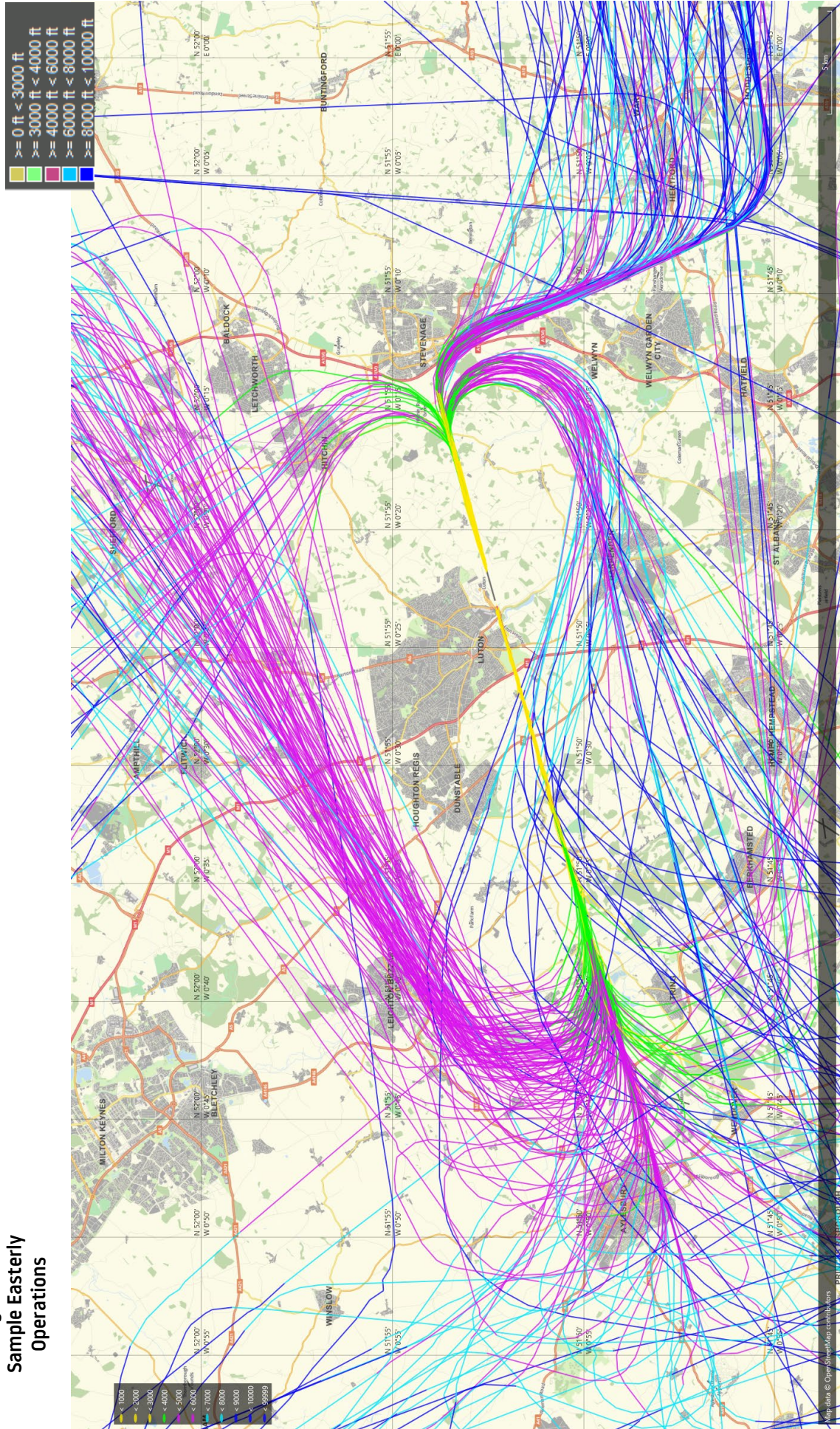


LLA Flight Routes Sample Westerly Operations

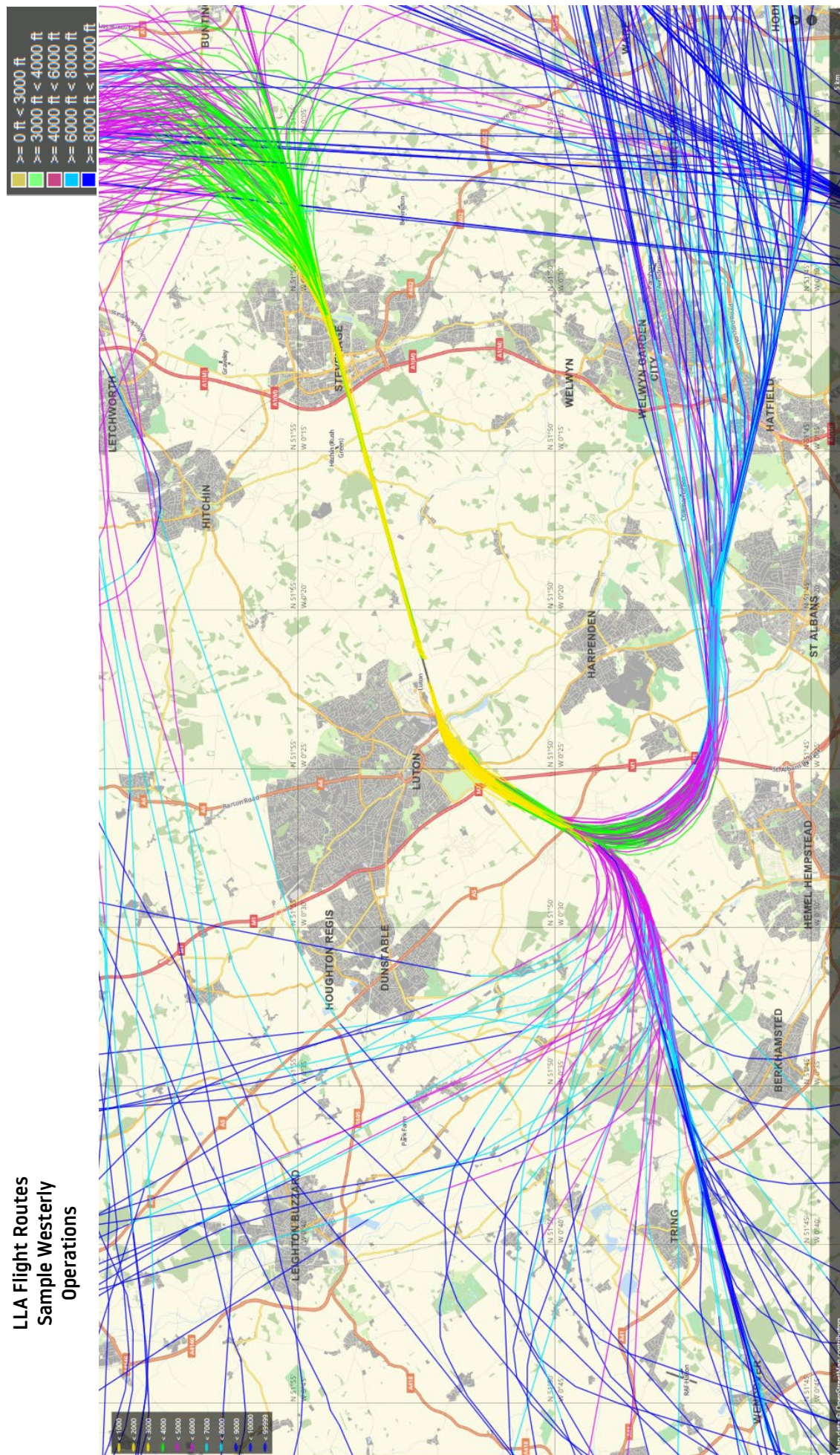
Key:
Departures in Blue
Arrivals in Red



LLA Flight Routes Sample Easterly Operations



LLA Flight Routes Sample Westerly Operations



4 AIRCRAFT NOISE

During the 2nd Quarter of 2023, the maximum noise levels less than 79 dB(A) was recorded by 99.8% of correlated departing aircraft.

The maximum noise level of less than 76 dB(A) was recorded by 92.7% of correlated departing aircraft.

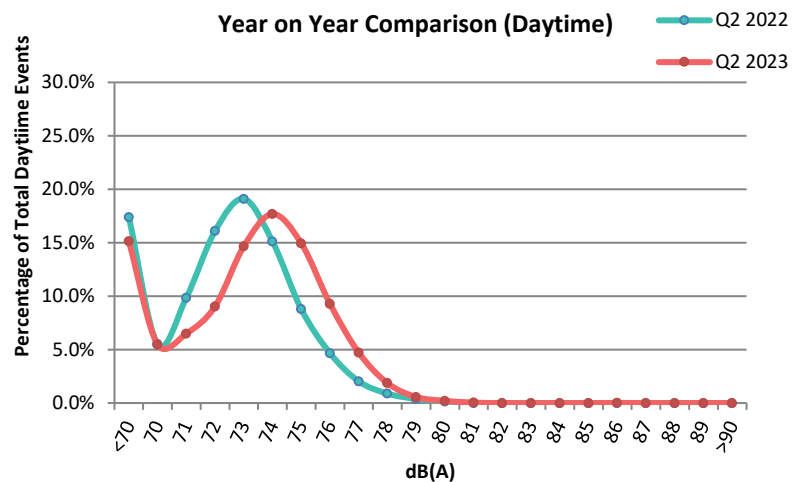
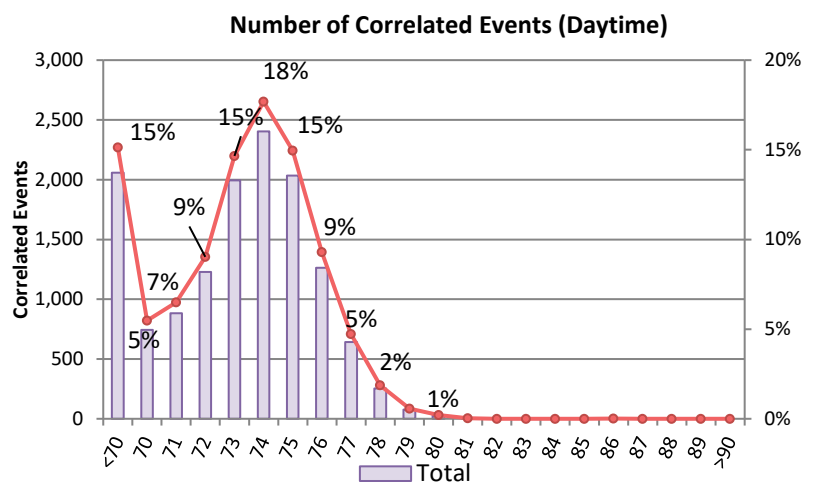
There were eight noise violations in Q2 2023. Details of these violations are outlined in Section 4.4.

4.1 Daytime Noise Levels – April to June 2023

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 80dB(A), between 07:00 and 22:59 hours local, is fined accordingly)*

	db (A) #	Apr	May	Jun	QTR
Number of Correlated Events (Daytime)	<70	489	728	842	2,059
	70	193	261	290	744
	71	262	276	346	884
	72	304	398	526	1,228
	73	512	642	839	1,993
	74	737	819	849	2,405
	75	754	737	542	2,033
	76	495	485	283	1,263
	77	278	230	116	642
	78	131	90	33	254
	79	38	30	9	77
	80	15	10	3	28
	81	3	2	0	5
	82	0	0	0	0
	83	0	0	0	0
	84	0	0	0	0
	85	0	0	0	0
	86	1	0	0	1
	87	0	0	0	0
	88	0	0	0	0
	89	0	0	0	0
	>90	0	0	0	0
Total		4,212	4,708	4,678	13,598

Rounded Result

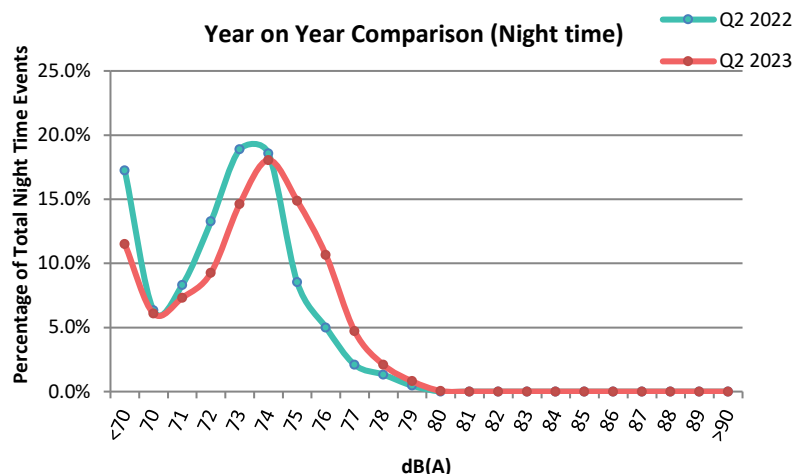
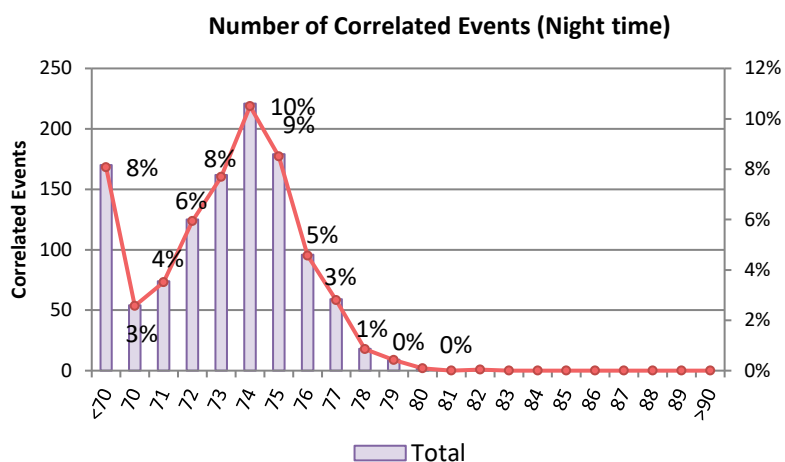


4.2 Night Noise Levels – April to June 2023

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 79dB(A), between 23:00 hrs and 06:59 hours local, is fined accordingly)*

	db (A) #	Apr	May	Jun	QTR
Number of Correlated Events (Night time)	<70	63	93	86	242
	70	30	45	53	128
	71	42	50	62	154
	72	49	54	92	195
	73	79	86	143	308
	74	110	125	145	380
	75	121	107	85	313
	76	89	95	40	224
	77	54	32	13	99
	78	25	12	7	44
	79	6	11	0	17
	80	1	0	0	1
	81	0	0	0	0
	82	0	0	0	0
	83	0	0	0	0
	84	0	0	0	0
	85	0	0	0	0
	86	0	0	0	0
	87	0	0	0	0
	88	0	0	0	0
	89	0	0	0	0
	>90	0	0	0	0
Total		669	710	726	2,105

Rounded Result



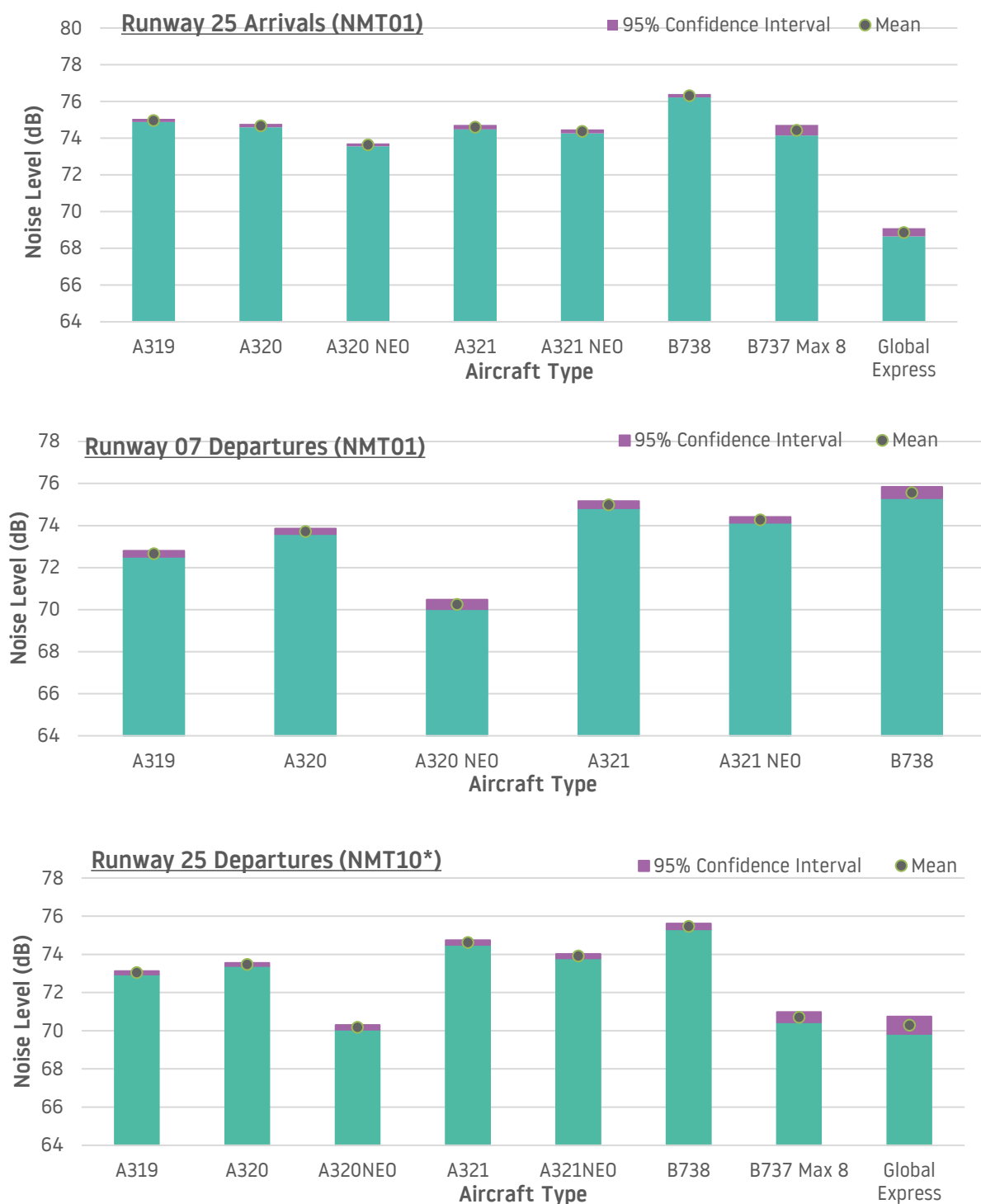
N.B It should be noted that the detection thresholds for the noise monitoring terminals are set at the lowest level to record the maximum number of aircraft noise events. A number of smaller aircraft types, such as business jets and propeller aircraft, get very close to but do not reach the detection threshold.

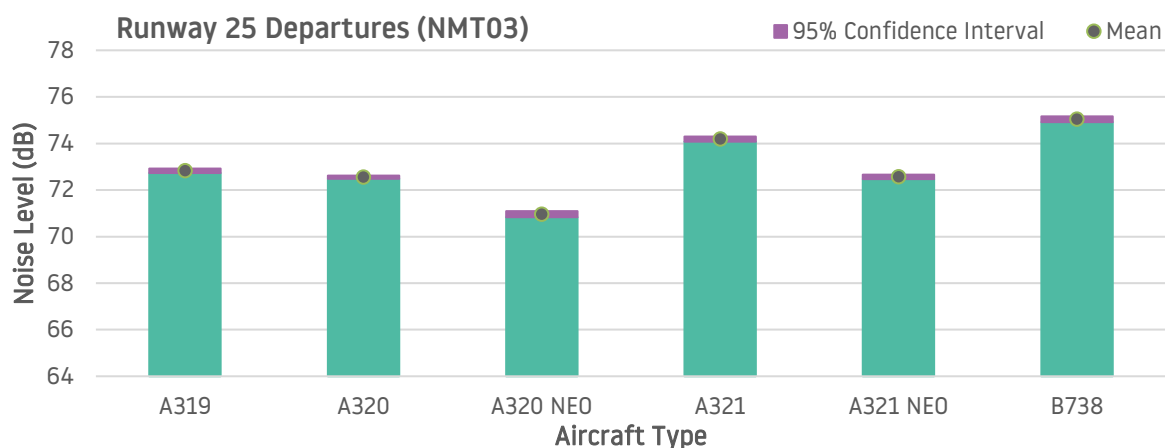
Ambient background noise is also an important factor as specific incidents such as loud road traffic, emergency vehicle sirens, lawn mowers, drills etc. can register noise levels louder than an aircraft overhead. This results in not all aircraft movements being correlated to noise events. Generally, the louder noise events have more certainty of being correlated with aircraft movements.

Weather conditions can also affect 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 be considered.

4.3 Average Noise Monitor results by Aircraft Type (Q2 2023)

The following graphs show the average noise and confidence level (95%) for the three fixed noise monitors for the period April to June 2023. These are also split by the main aircraft types operating at LLA.





The table below shows the sample sizes used for the graphs in this section. For comparative purposes, we recommend a sample size of over 100 results are used. Therefore, only aircraft types with a sample size of over 100 have been shown.

	A306	A319	A320	A320 NEO	A321	A321 NEO	B738	B737 Max 8	Global Express
NMT01 (Arr)	56	872	1,336	777	589	883	713	114	202
NMT01 (Dep)	28	394	711	231	285	370	327	9	84
NMT10* (Dep)	50	869	1,315	783	569	860	725	109	151
NMT03 (Dep)	50	823	1,231	194	569	750	724	59	69

**The fixed noise monitor NMT02 has been replaced with NMT10.*

4.4 Noise Violations during Quarter 2 (April to June 2023)

There were eight noise violations during the period. Each violation was fined £1,000 at daytime and £2,000 for night period.

	Date/Time (Local)	Aircraft Type	Noise Level
Day	09/04/2023 07:48 hrs	B738 (Commercial Jet)	80.8 dB(A)
Day	09/04/2023 10:24 hrs	F900 (Executive Jet)	80.9 dB(A)
Day	14/04/2023 19:10 hrs	AN12 (Executive Jet)	86.1 dB(A)
Night	23/04/2023 23:04 hrs	B739 (Commercial Jet)	80.4 dB(A)
Day	24/04/2023 09:19 hrs	B738 (Commercial Jet)	80.8 dB(A)
Day	01/05/2023 17:31 hrs	B738 (Commercial Jet)	81.1 dB(A)
Day	07/05/2023 07:51 hrs	B738 (Commercial Jet)	80.5 dB(A)
Day	08/05/2023 22:06 hrs	A320 (Commercial Jet)	81.4 dB(A)
Total Penalties Collected			£9,000

4.5 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 and loft insulation can be provided. Rooms eligible for insulation include living rooms, bedrooms, dining rooms and kitchen-diners. In Q2 a total of 277 properties were contacted, 152 properties accepted, and 95 properties were insulated, this including properties that have been contacted previously but only accepted or had work completed in Q2.

5 NOISE CONTOURS

5.1 Night Noise Contours – Q2 2023

5.1.1 Contour Production

Aircraft movement data for use in the contour production has been supplied by LLAOL. The contour production methodology has been updated compared to that used for the 2022 contours. The contours were produced using the INM software (Version 7.0d) with terrain data allowed for, however the methodology has been updated. The validation is now based on measured results from the fixed noise monitors in 2022.

5.1.2 Noise Contour Results

The resulting noise contours are shown on page 22, at values from 48 to 66 dB $L_{Aeq,8h}$. Contours at 69 and 72 dB $L_{Aeq,8h}$ have also been produced but are not individually distinguishable when plotted at the scale of the figure. The area of each noise contour is given in Table 1 below and compared with the values for the previous quarter (January - March 2023), and the equivalent quarter during the previous year (April – June 2022).

Contour Value (dB $L_{Aeq,8h}$)	Contour Area (km ²)		
	Apr – Jun 2022	Jan – Mar 2023	Apr – Jun 2023
48	30.6	23.0	33.0
51	17.3	12.7	18.3
54	9.1	6.9	9.8
57	5.2	4.0	5.5
60	2.8	2.0	3.0
63	1.4	1.1	1.5
66	0.8	0.7	0.9
69	0.5	0.4	0.5
72	0.3	0.3	0.3
W/E Split (%)	61/39	76/24	43/57

Table 1: Area of Night Noise Contours

5.1.3 Aircraft Movements

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

INM Aircraft Type	Apr – Jun 2022	Jan – Mar 2023	Apr – Jun 2023
1900D	16	n/a	10
737800	702	362	549
737800 (MAX)	n/a	n/a	104
757RR	238	288	219
A300-622R	78	91	78
A319-131	593	163	596
A320-211 (ceo)	1,016	516	904
A320-211 (neo)	653	274	874
A321-232 (ceo)	470	296	406
A321-232 (neo)	389	575	807
A330-301	18	n/a	n/a
CL600	19	10	n/a
CL601	56	30	30
CNA208	n/a	23	n/a
CNA525C	22	25	15
CNA55B	15	n/a	n/a
CNA560XL	23	25	21
CNA680	15	n/a	10
CNA750	13	14	10
EMB145	31	33	28
F10062	44	53	39
GIV	20	18	n/a
GV	272	276	161
LEAR35	19	40	n/a
Other	67	55	63
Total	4,789	3,167	4,924

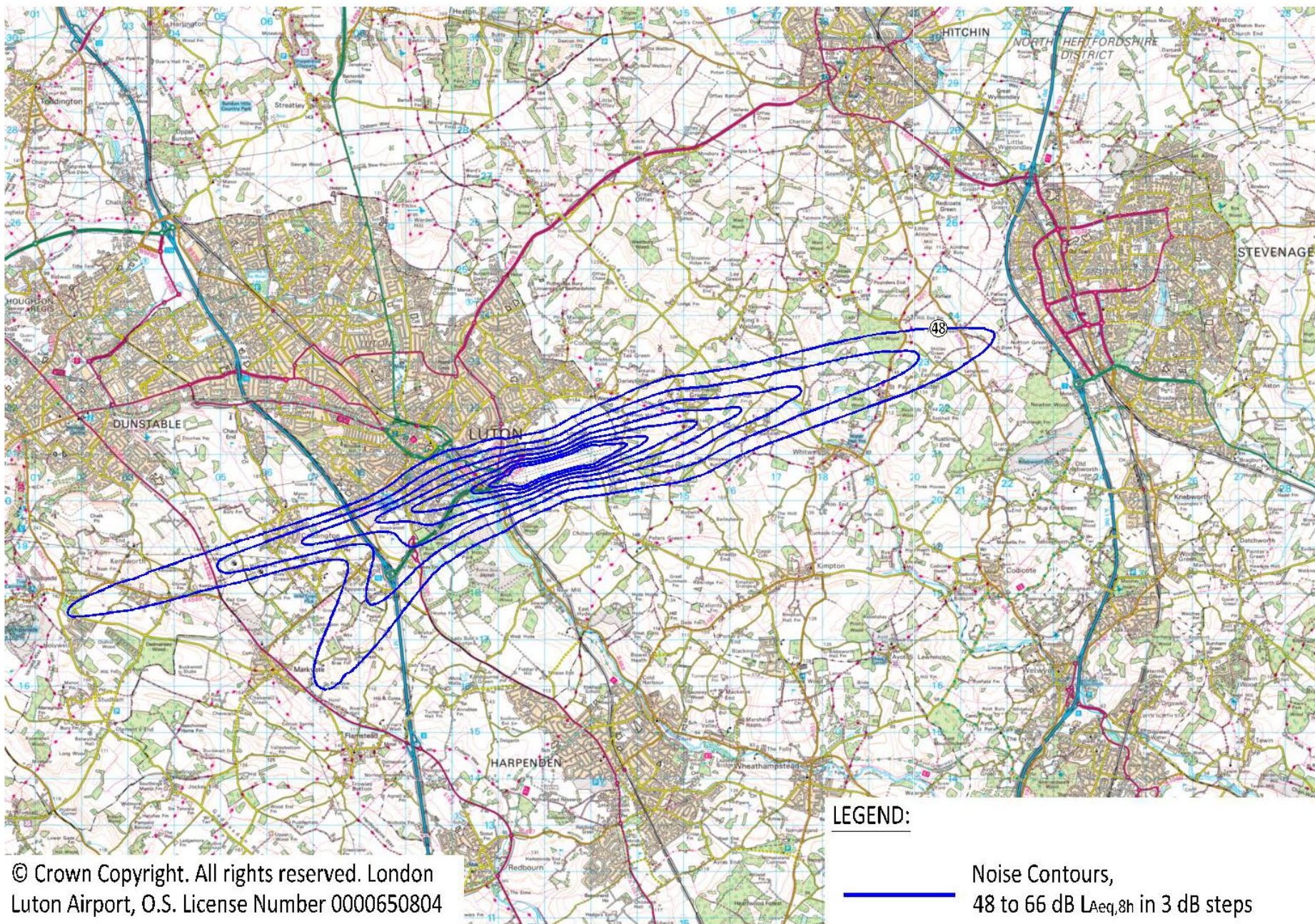
Table 2: Night-time Aircraft Movement Numbers by Aircraft Type

5.1.4 Noise Contour Comparison

There has been a 3% increase in the total number of movements compared with the same quarter in 2022. The overall fleet mix shows some changes with less business jets and the proportion of flights by quieter modernised aircraft types increasing from 22% in 2022 Q2 to 36% in 2023 Q2.

The area of the 48 dB(A) noise contour has increased by 8% compared to the same quarter last year, as a result of the increase in movements and changes to the aircraft mix. The shape of the contours has also changed due to the relatively high proportion of easterly operations.

The number of movements, and therefore the area of the noise contours, has increased compared to the previous quarter (January - March 2023).



6 COMPLAINTS

6.1 Total Complaints relating to LLA aircraft operations

	2 nd QTR 2023	2 nd QTR 2022
Total No. of Complaints relating to LLA aircraft operations	5,329	1,293
No. of Complainants	223	230
No. of General Complaints	408	289
No. of Specific Complaints	4,921	1,004
Average No. of Complaints per Complainant	23.8	5.6
No. of Aircraft Movements per Complaint	6.4	25.8

A total of 5,329 complaints relating to LLA aircraft operations were received by the Flight Operations Department during the second quarter of 2023. This is compared to 1,293 complaints received for the same period in 2022. It should be noted that during the second quarter of 2023, 59% of complaints were received from 10 individuals.

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

April 2023 2,380 complaints (2,260 Specific Complaints, 120 General Complaints)
May 2023 1,807 complaints (1,710 Specific Complaints, 97 General Complaints)
June 2023 1,142 complaints (951 Specific Complaints, 191 General Complaints)

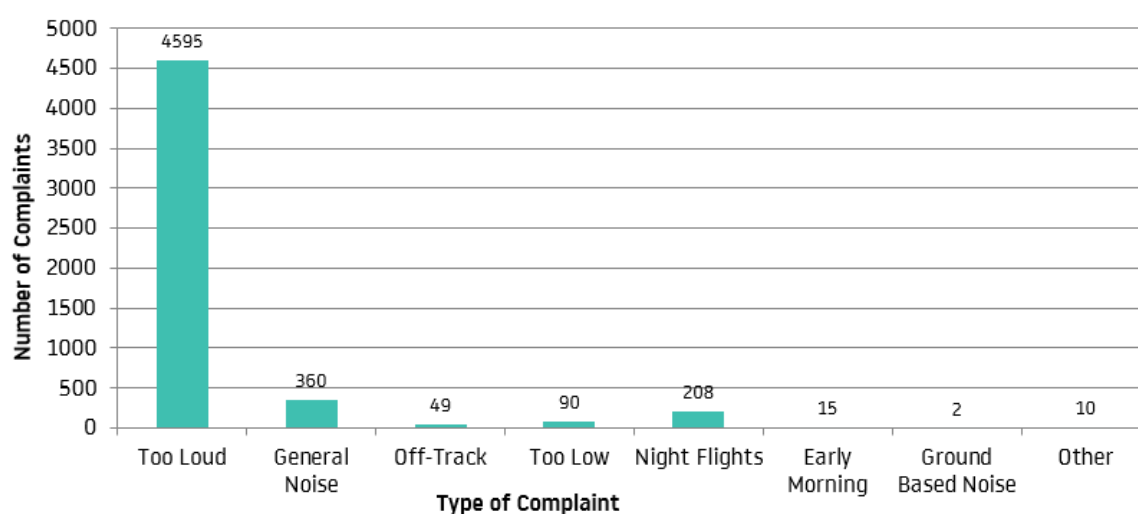
A further 18 complaints not attributable to LLA traffic were received throughout the quarter, compared to 55 complaints for the period January to March 2022.



Out of 223 total complainants, 15 contacted the airport only once meaning, 208 complainants generated 5,314 complaints.

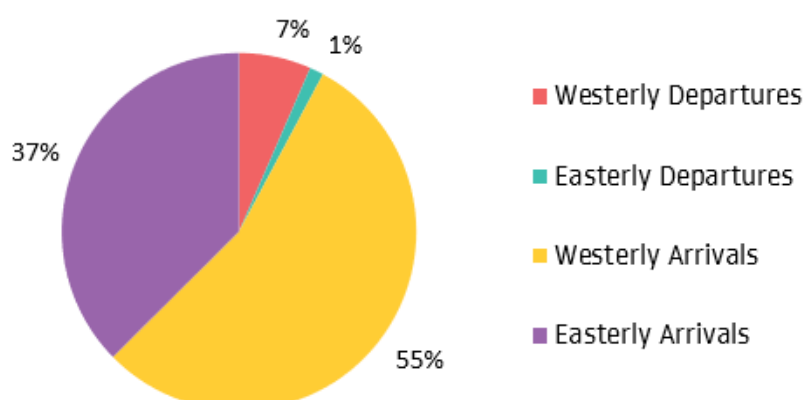
6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from April to June 2023 are listed below.



6.3 Nature of Disturbance

The chart represents the areas of concern reported from specific complaints were regarding aircraft activity during the period April to June 2023.



Within the 269 specific aircraft complaints concerning westerly departures, 259 complaints involved aircraft on the Match/Detling heading, 10 related to aircraft using the Olney route and no complaints were recorded about aircraft following Compton/Rodni or off-airways routing.

Of the 52 complaints attributed to easterly departures, there were 43 aircraft on the Match route and no complaints related to aircraft following the Compton/Rodni route. There were 9 specific complaints relating to the easterly Olney departure. No complaints were recorded about aircraft following an off-airways routing.

In total the Flight Operations Department received 3,765 specific complaints regarding arrivals. 2,237 of these complaints were about westerly arrivals and a further 1,528 concerning easterly arrivals. These complaints were mostly regarding the new arrival's airspace change implemented in February 2022.

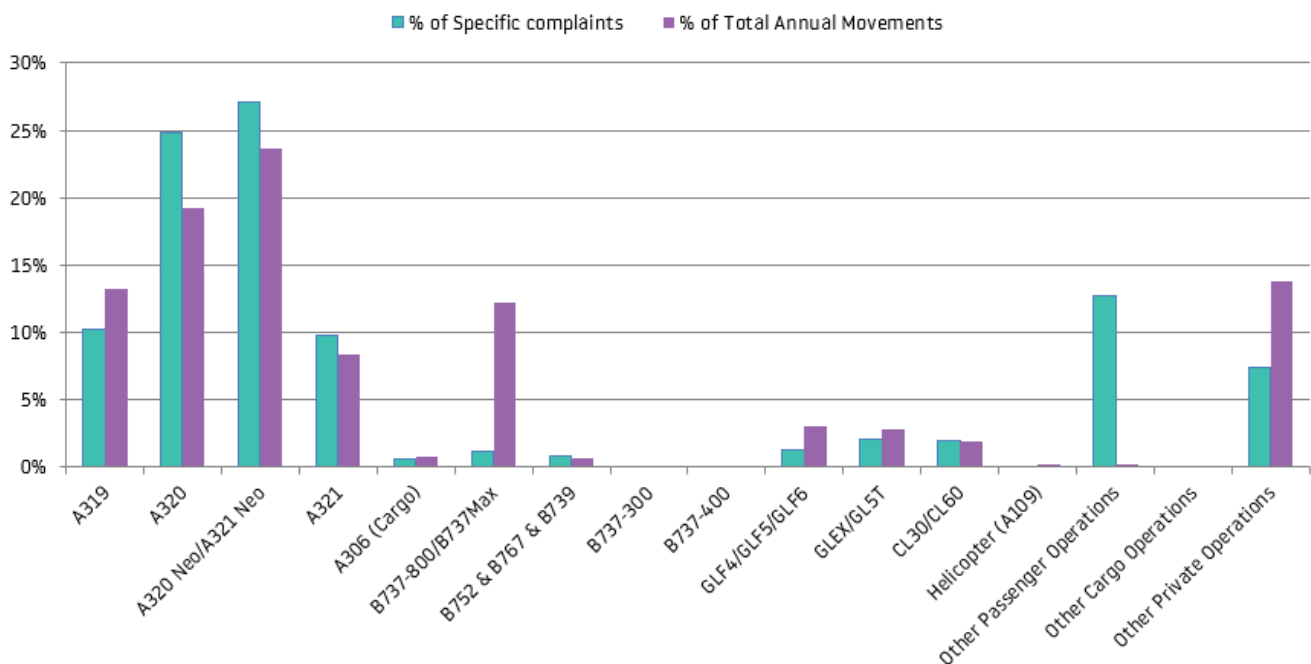
11
Complainants
reported noise
disturbance at night
(compared to 75
Complainants for the same
Quarter last year)

Departing aircraft accounted for 2% of the specific night complaints and 98% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 2% of the night complaints, whilst passenger aircraft accounted for 92% of night complaints. Furthermore, 6% of night complaints correlated to executive aircraft.

188 (4%)
Complaints
concerning night noise
disturbance from
LLA operations

6.4 Complaints by aircraft type

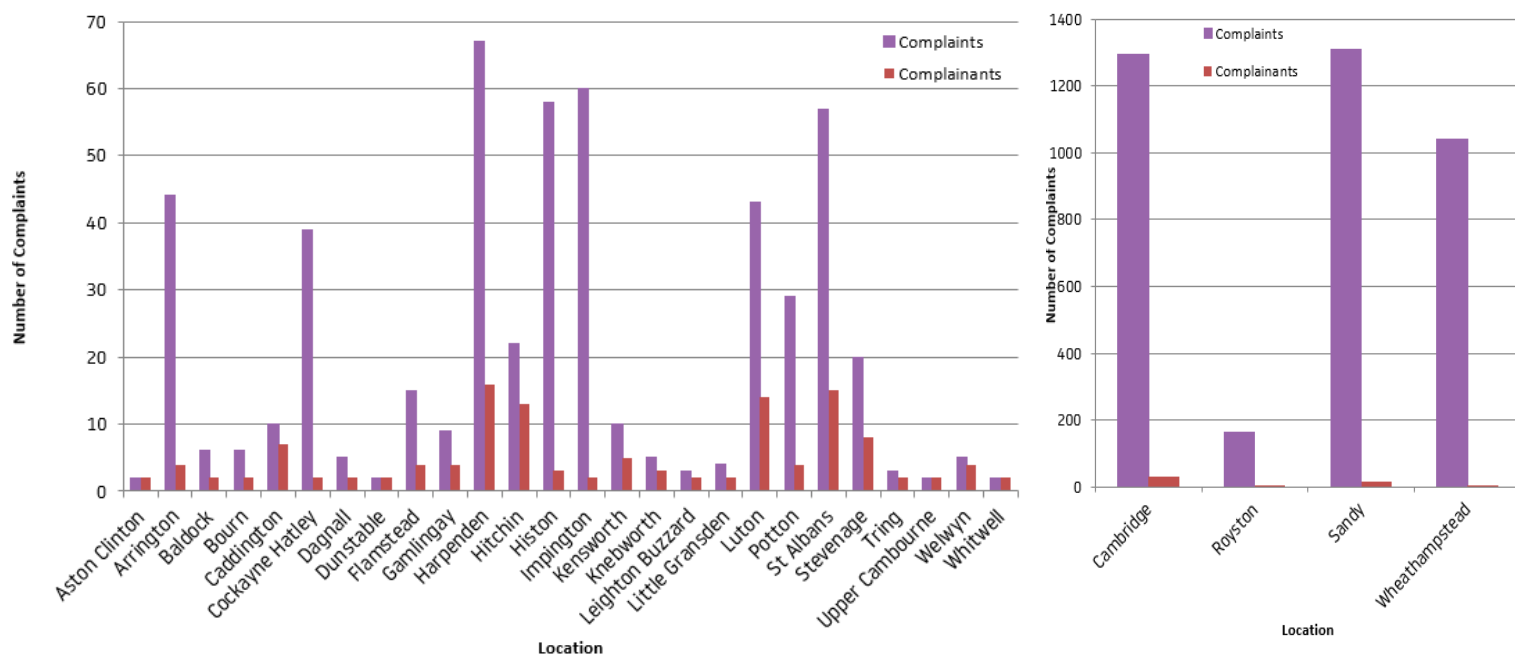
The diagram below shows aircraft types generating specific complaints.



6.5 Origin of Complaints

The chart below identifies the areas around the Airport from which more than one complainant submitted concerns relating to LLA aircraft operations during the period April to June 2023.

The communities with one complainant include: Abbotsley, Aylesbury, Ayot St Lawrence, Berkhamsted, Bracknell, Bramfield, Caxton, Chevington, Clifton, Colmworth, Croydon, Dry Drayton, Dunton, Girton, Harlow, Henlow, Hilton, Hoddesdon, Isleworth, Kimpton, Little Eversden, Lower Dean, Orwell, Papworth Everard, Perry, Pitstone, Puckeridge, Slapton, Slip End, Walton on Thames, Waresley.



6.6 Complaints Analysis

During Quarter 2 there has been an increase in complaints compared to the same quarter last year with a decrease in complainants compared to the same quarter last year. This is thought to be due to a number of reasons:

- The number of complaints has increased which is still related to the implementation of the arrivals airspace change which has been the focus of a number of local campaign groups and local media interest along with the Post implementation review is coming to an end in September.
- Similar to Q1 2023, some individuals are making multiple complaints. In Q1 79% of complaints were received from 10 individuals.
- During Quarter 2 there was an increase in easterly operations which tends to generate more complaints due to it only being in use 30% of the time.

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	0.3%
Email	40.7%
Travis	59.0%

Any concerns relating to aircraft operations associated with London Luton Airport can also be reported to the Flight Operations Department by the following ways:

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 97% of concerns within eight days and 98% 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	65.1%
1	14.2%
2	11.2%
3	6.4%
4	2.2%
5	0.3%
6	0.1%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	0.0%
15	0.0%
16	0.0%
16+	0.0%

7 COMMUNITY RELATIONS

7.1 Community Visits to Airport

Invitations are often extended to local residents 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 quarter 2 of 2023 three visits were offered to community members but none of those were accepted.

7.2 Airport Visits to the Community

The Flight Operations Team held one Public Surgery during quarter 2 which was on 1st June in Stevenage.

There were 10 appointments booked and the main themes were; could the arrival routes be changed, what LLA operating times were and noise levels within the Stevenage and surrounding communities.

Public surgeries provide residents who are impacted airport operations to speak with members of the Flight Operations team on an appointment basis.

The Flight Operations team will continue to hold Public Surgeries during 2023. Details of which can be found on our website, which is updated accordingly. (<https://www.london-luton.co.uk/corporate/community/noise/noise-surgeries>)

During quarter 2 the Flight Operations team also visited one resident in North Bedfordshire area which is newly overflow as part of the new arrivals route implemented in February 2022. The resident wanted to discuss the new arrival routes and understand more about LLA operations.