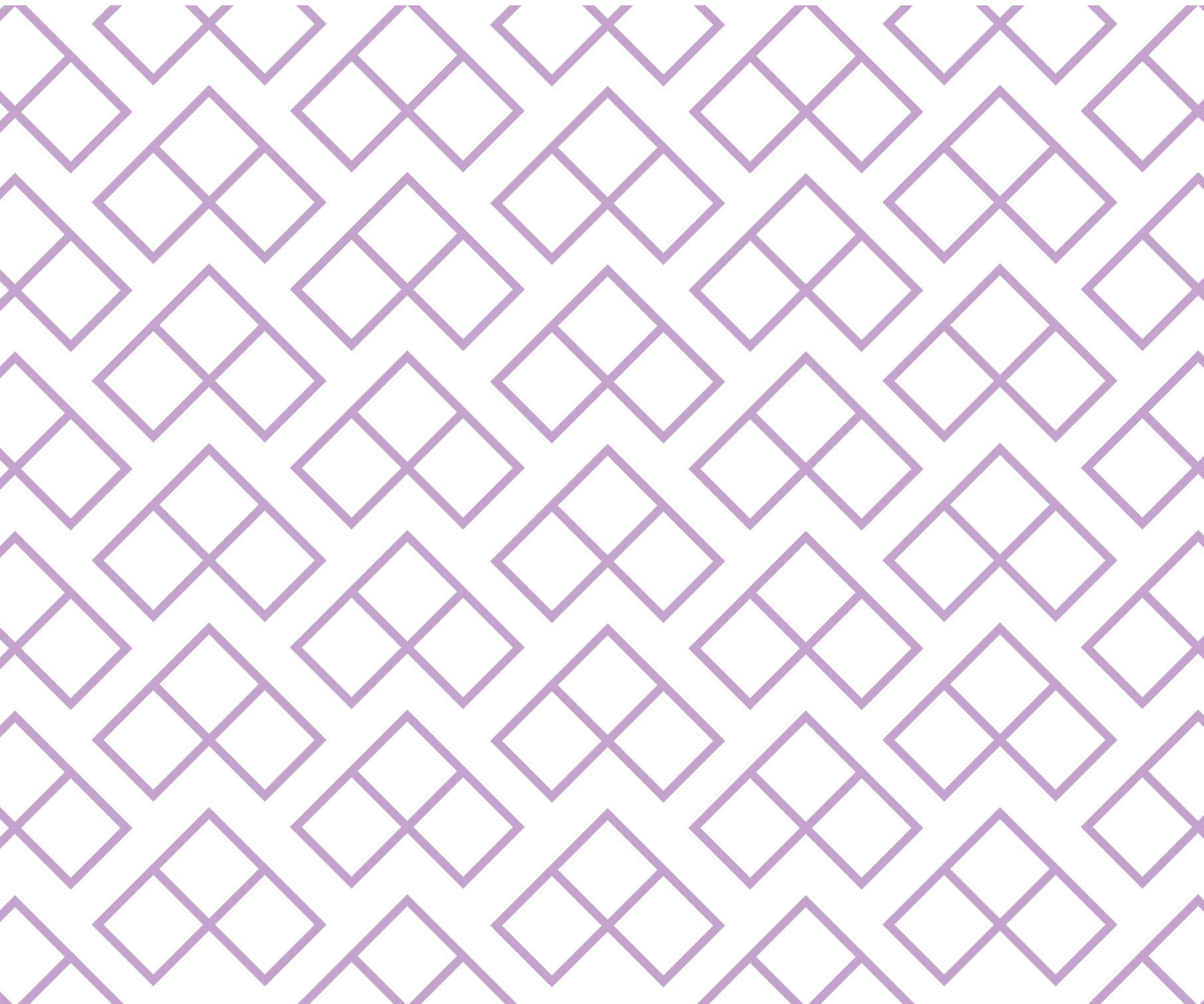


# Quarterly Monitoring Report

QUARTER 4 2022



# INTRODUCTION

The report provides statistics on aircraft operations at London Luton Airport (LLA) during the period October to December 2022.

## KEY MONITORING INDICATORS – 4<sup>TH</sup> QUARTER 2022

Parameter		4 <sup>th</sup> Quarter 2022	4 <sup>th</sup> Quarter 2021
Total Passenger Number	↑	3,286,090	1,884,692
Total Aircraft Movements	↑	28,620	23,844
Night Movements (23.00 – 06.59)	↑	3,852	2,740
Early Morning Movements (06.00 – 06.59)	↑	1,114	695
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements ( <i>9,650 limit</i> )	↑	9,157	3,479
Night Quota Count ( <i>3,500 limit</i> )	↑	2848.25	1,276.50
Early Morning Shoulder ( <i>7,000 movements</i> )	↑	4,669	2,423
24hr CDA (% achievement)	↑	91%	89%
Day CDA (% achievement)	↑	91%	89%
Night CDA (% achievement)	↑	91%	87%
Track Violations	↓	8	9
Departure Noise Infringements (Day)	↓	0	3
Departure Noise Infringements (Night)	-	0	0
Noise Monitor Results*			
No. Day (Night) > 80 dB(A)	↓	0 (0)	3 (0)
No. Day (Night) > 75 dB(A)	↑	1,256 (184)	684 (100)
No. Day (Night) > 70 dB(A)	↑	8,656 (1,217)	6,151 (880)
Night Noise Contour Area (48 dB L <sub>Aeq, 8h</sub> )	↓	26.2 km <sup>2</sup>	27.0 km <sup>2</sup>
Noise Complaints	↑	2,365	1,108
Complainants	↑	142	57
Number of New Complainants	↑	62	12
Largest Source of Complaints	-	Arrivals. West	Deps. West
Origin of Concerns (>5 Complainants)	-	Cambridge Harpenden Luton Sandy St Albans	St Albans Flamstead Harpenden
Westerly/Easterly Runway Split (%)	-	80/20	83/17

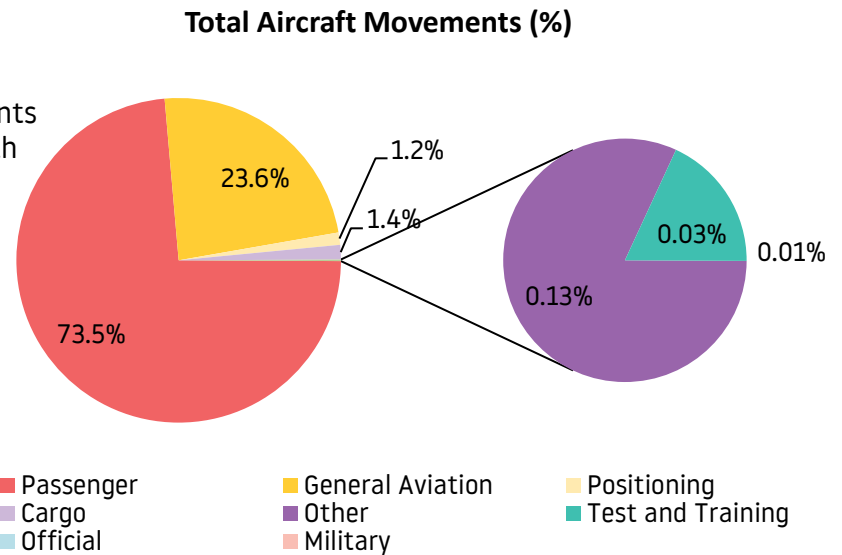
\*A fixed noise monitor (NMT02) was out of service from 23<sup>rd</sup> November 2022. No noise data was captured from this fixed noise monitor point until a replacement noise monitor was installed on 14<sup>th</sup> December 2022.

# 1 AIR TRAFFIC DATA

## 1.1 Aircraft Movements

There were 28,620 aircraft movements during this quarter (compared with 23,844 for the same period in 2021), an increase of 20%.

This resulted in an average 311 movements per 24 hours (compared to 259 last year).



A breakdown of these movements is shown below:

	Commercial				Non-Commercial					Total
	Cargo	Passenger	Positioning		Military	Official	Other <sup>1</sup>	General Aviation <sup>2</sup>	Test & Training	
			Other	STN						
Oct 2022	141	8,463	106	9	0	0	9	2,674	2	11,404
Nov 2022	136	5,649	103	11	0	0	8	2,061	6	7,974
Dec 2022	137	6,935	120	2	0	0	19	2,029	0	9,242
QTR Total	414	21,047	329	22	0	0	36	6,764	8	28,620

## 1.2 Passenger Statistics

A total of 3,286,090 passengers passed through LLA during the period October to December 2022 (compared with 1,884,692 for the same period last year); 3,261,119 on scheduled flights (99%) and 24,971 on charter flights (1%). This represents 74% increase in passengers and equates to an average 35,718 passengers per 24 hours (compared to 20,486 during the same quarter last year).

	Domestic	EU	Non-EU	Total
Oct 2022	106,588	984,595	220,112	1,311,295
Nov 2022	73,999	634,636	194,098	902,733
Dec 2022	89,082	734,785	248,195	1,072,062
<b>QTR Total</b>	<b>269,669</b>	<b>2,354,016</b>	<b>662,405</b>	<b>3,286,090</b>

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

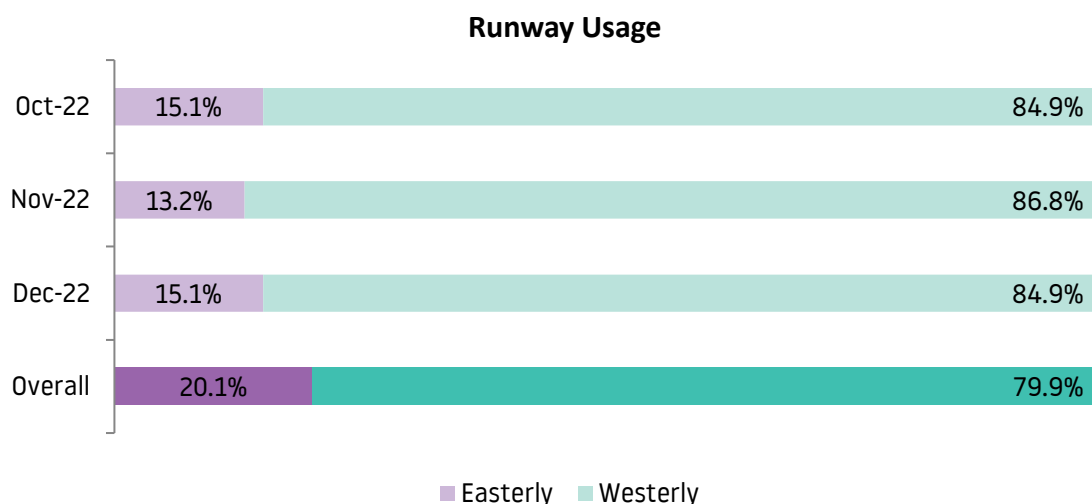
<sup>1</sup> Other relates to flights coming for maintenance and/or departing aircraft that have made an unscheduled return to base

<sup>2</sup> General Aviation incorporates Private Aircraft, Helicopters and Business Jets

### 1.3 Runway Usage

The direction of operation is determined by wind direction. Aircraft operating in a westerly direction take off towards the west and land from the east. Aircraft operating in an easterly direction take off towards the east and land from the west.

The runway usage split during this period was 20% easterly and 80% westerly (in comparison to a 17%/83% split in the same quarter last year). The monthly breakdown of these statistics is as follows:



### 1.4 Night Flying Restrictions

On 1<sup>st</sup> April 2015 London Luton Airport introduced new 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'*

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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.

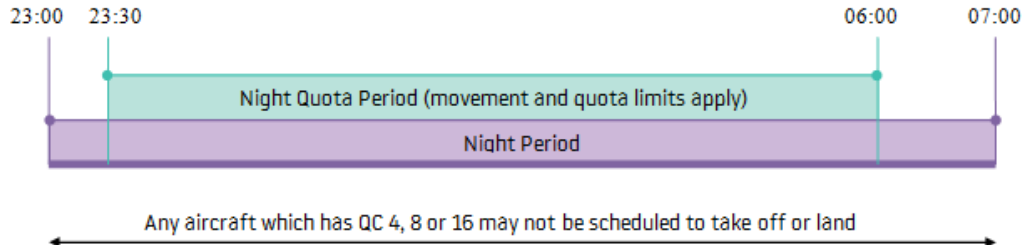
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are allocated to different aircraft types according 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 Dassault Falcon 7X/900/2000
81 to 83.9	QC 0.125	Airbus A320neo Airbus A321neo Boeing 737-800 Max Global Express
Less than 81	QC 0	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 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>
January 2022	325	106.750	238
February 2022	364	112.625	247
March 2022	426	122.750	354
April 2022	788	237.000	504
May 2022	984	264.125	494
June 2022	1,023	325.000	442
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
<b>QTR Total</b>	<b>2,176</b>	<b>667.375</b>	<b>1,114</b>
<i>Total for preceding 12 months</i>	<i>9,157</i>	<i>2848.250</i>	<i>4,669</i>

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

There were 3,852 night operations during the quarter (compared to 2,740 for the same quarter last year), an average 42 movements per night (compared to 30 last year). Arriving aircraft accounted for 54% of total night movements, relating primarily to the last rotation of Luton based passenger aircraft scheduled to land between 23:00 and midnight local. 59% of total night departures took off between 06:00 – 07:00 hours local. The average ratio of total aircraft operations during the quarter was 87% day / 13% night (in comparison to 89% day / 11% 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		
Jan 2022	2,630	2,605	5,235	237	88	15	223	645	5,880
Feb 2022	2,946	2,958	5,904	266	98	13	234	740	6,644
Mar 2022	3,770	3,835	7,605	332	94	23	331	925	8,530
Apr 2022	4,305	4,413	8,718	643	145	25	476	1,445	10,163
May 2022	4,842	5,040	9,882	796	188	22	472	1,680	11,562
Jun 2022	4,898	5,108	10,006	801	222	10	432	1,667	11,673
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
QTR Total	12,209	12,559	24,768	1,627	549	72	1,042	3,852	28,620
Total for preceding 12 months	50,175	51,928	102,103	7,137	2,020	200	4,466	15,959	118,062

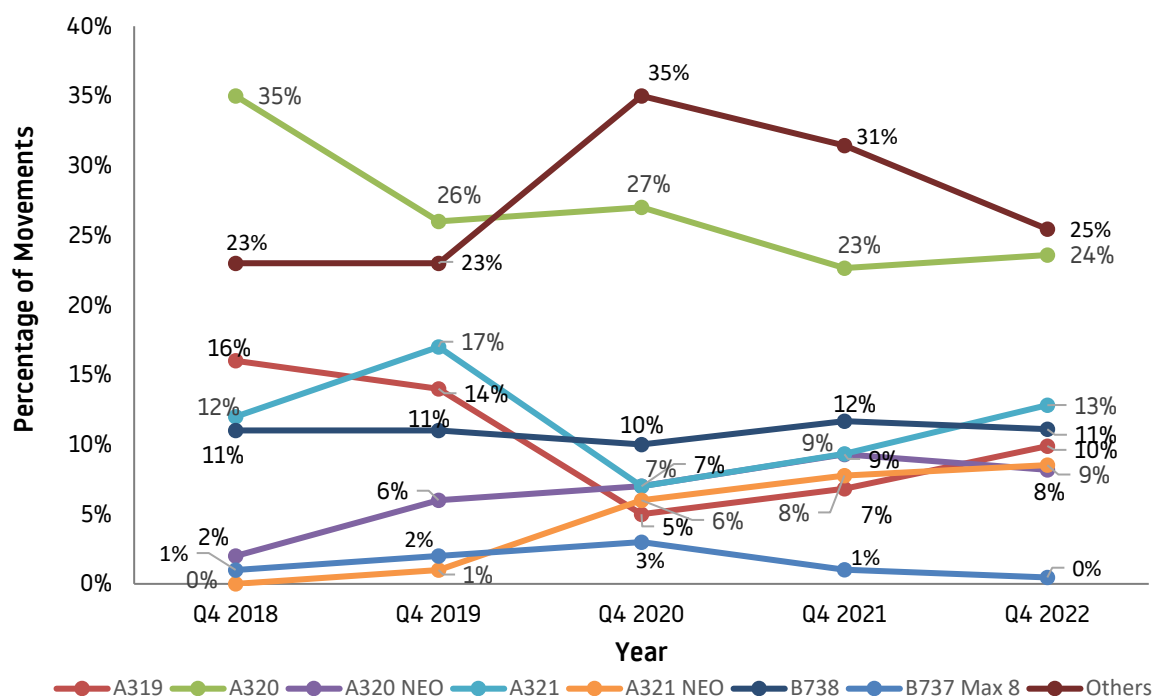


## 1.6 Day/Night Ratio of Movements – Forecast

2022/2023 Forecast of Aircraft Movements					
*Rounded number	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 2023	8,965	493	413	1,049	10,014
February 2023	8,485	478	375	996	9,481
March 2023	10,215	467	327	933	11,148
April 2023	11,121	786	552	1,515	12,636
May 2023	12,071	902	615	1,748	13,819
June 2023	11,651	897	591	1,737	13,388
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
Total for following 12 months*	127,246	8,940	5,775	17,071	144,317

## 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 Q4 2022, 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			COMPTON		OLNEY		Other*		Helic opter	
		07	25 Conv	25 RNAV	07	25	07	25	07	25	HELI	
Oct 2022	Daytime	382	10	2,036	252	1,490	85	589	3	26	23	4,896
	Night-time	79	0	344	58	259	11	45	2	3	1	802
Nov 2022	Daytime	260	4	1635	143	938	80	462	2	25	11	3,560
	Night-time	43	0	240	8	80	8	42	1	5	0	427
Dec 2022	Daytime	703	2	1,486	402	910	193	374	9	12	11	4,102
	Night-time	124	0	244	36	72	17	31	1	6	0	531
QTR	Total	1,591	16	5,987	899	3,749	394	1,543	18	77	46	14,318
	Daily Average	17	<1	65	10	41	4	17	<1	<1	<1	156

### 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 98.8%. 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
October 2022	0	-
November 2022	2	£2,000
December 2022	6	£8,000
<b>QTR</b>	<b>8</b>	<b>£10,000</b>

	Airline or Aircraft Operator	Aircraft Type/Occurrence
October 2022	-	-
November 2022	Privately owned aircraft	F2TH/1; H25+/1
December 2022	Privately owned aircraft	C650/1; CRJ2/1; E135/1; E55P/2; B752/1

### 3 ARRIVING AIRCRAFT

#### 3.1 Arrivals Route Analysis

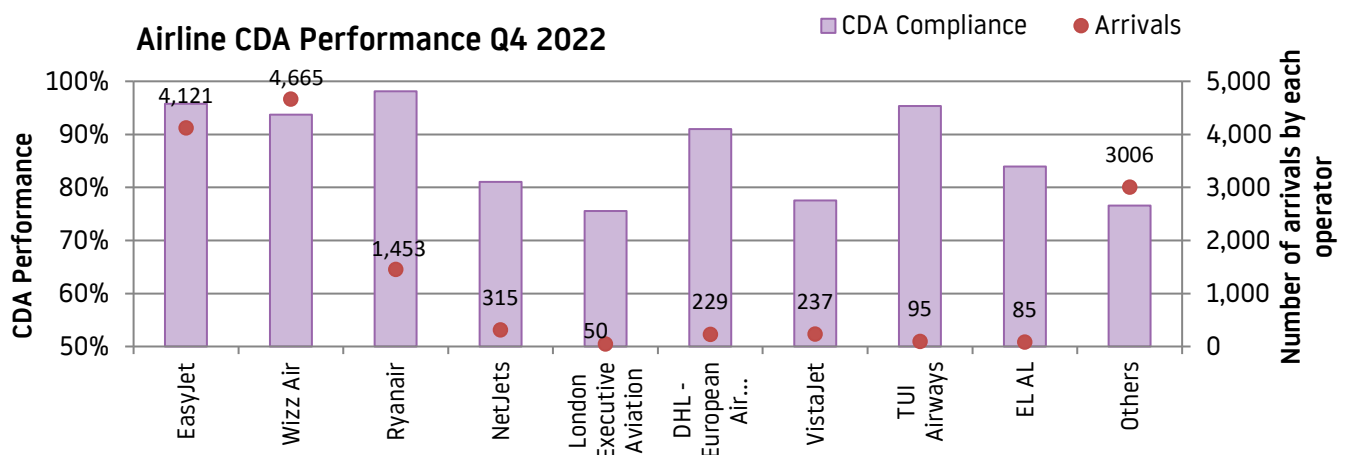
The following table reports the total number of arrivals differentiating between easterly (07), westerly (25) operations and helicopters.

		Arrivals			Total
		07	25	Heli	
October 2022	Daytime	725	4,003	14	4,742
	Night-time	127	842	1	970
November 2022	Daytime	440	3,049	9	3,498
	Night-time	57	430	0	487
December 2022	Daytime	1,301	2,663	6	3,970
	Night-time	208	427	0	635
QTR	<b>Total</b>	<b>2,858</b>	<b>11,414</b>	<b>30</b>	<b>14,302</b>
	<i>Daily Average</i>	<i>31</i>	<i>124</i>	<i>&lt;1</i>	<i>155</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.

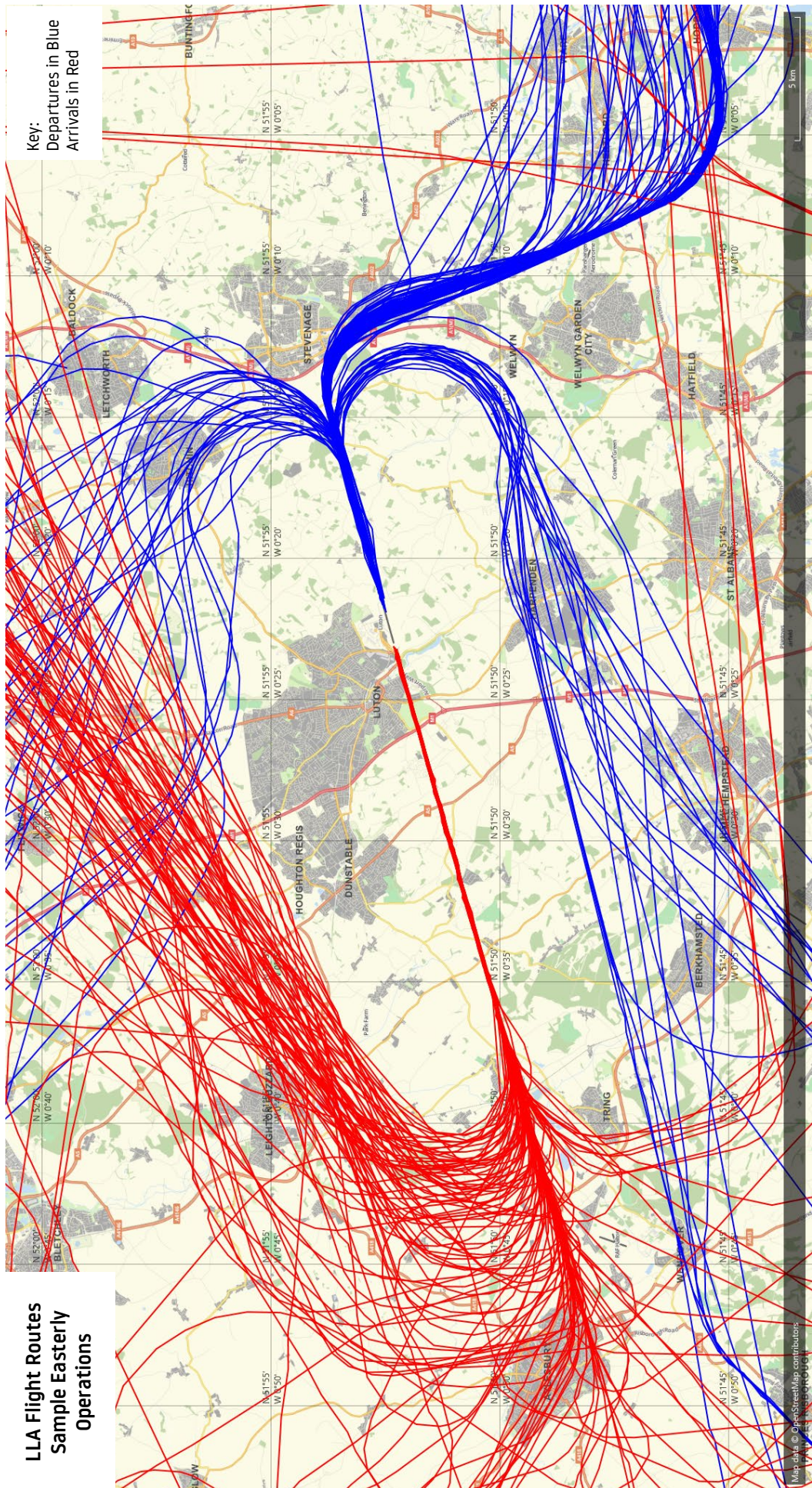
	All Arrivals			07 Easterly Arrivals			25 Westerly Arrivals		
	% CDA			% CDA			% CDA		
	Total	Day	Night	Total	Day	Night	Total	Day	Night
October 2022	93%	92%	94%	95%	95%	97%	92%	92%	94%
November 2022	89%	89%	85%	94%	95%	80%	88%	88%	86%
December 2022	90%	90%	90%	92%	92%	93%	89%	89%	89%
QTR Total	91%	91%	91%	93%	93%	93%	90%	90%	91%

The overall CDA achievement was 91% with several major LLA operators achieving high performance.

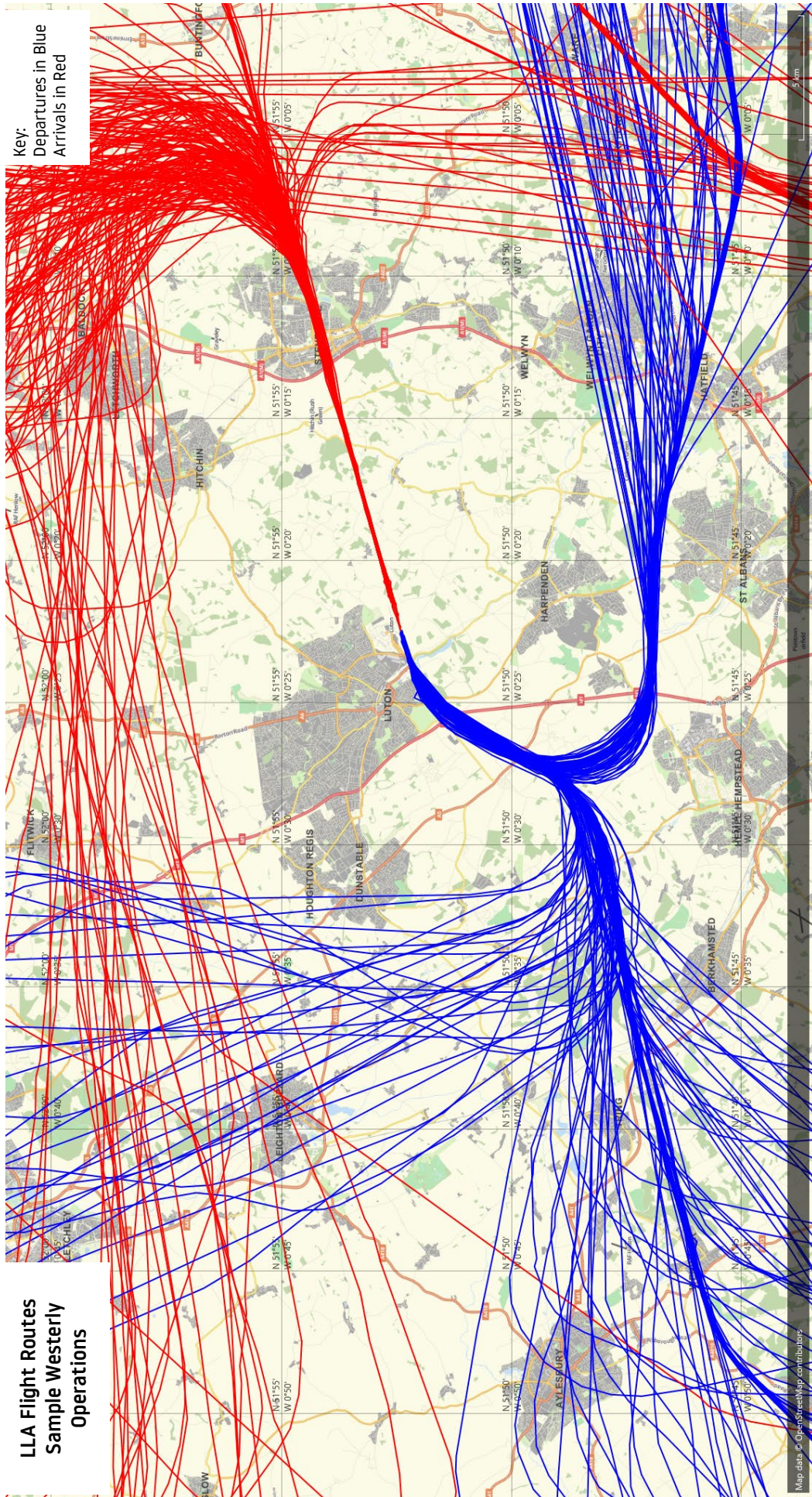


The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) over a typical 24-hour period within the fourth quarter of 2022.

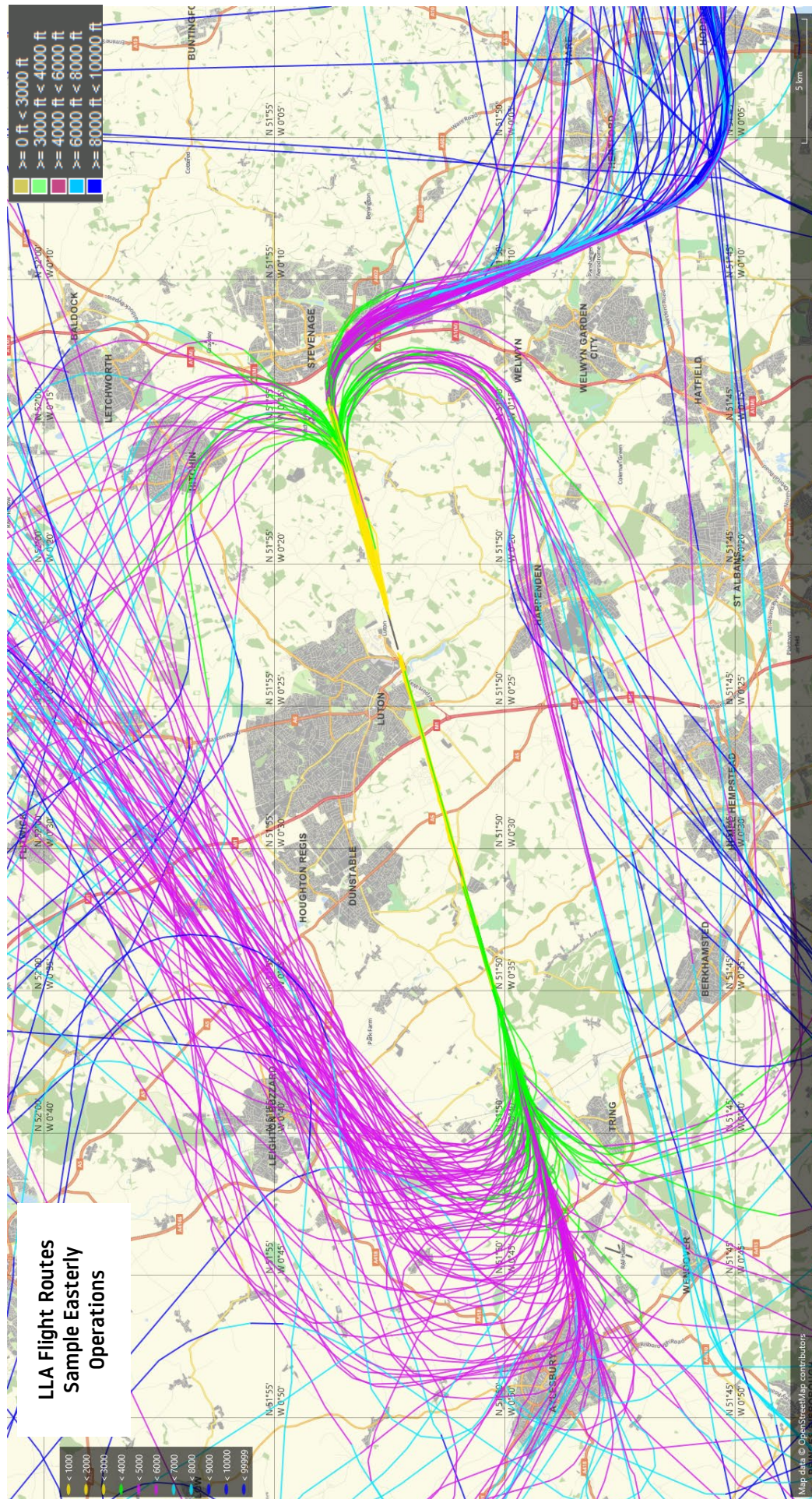




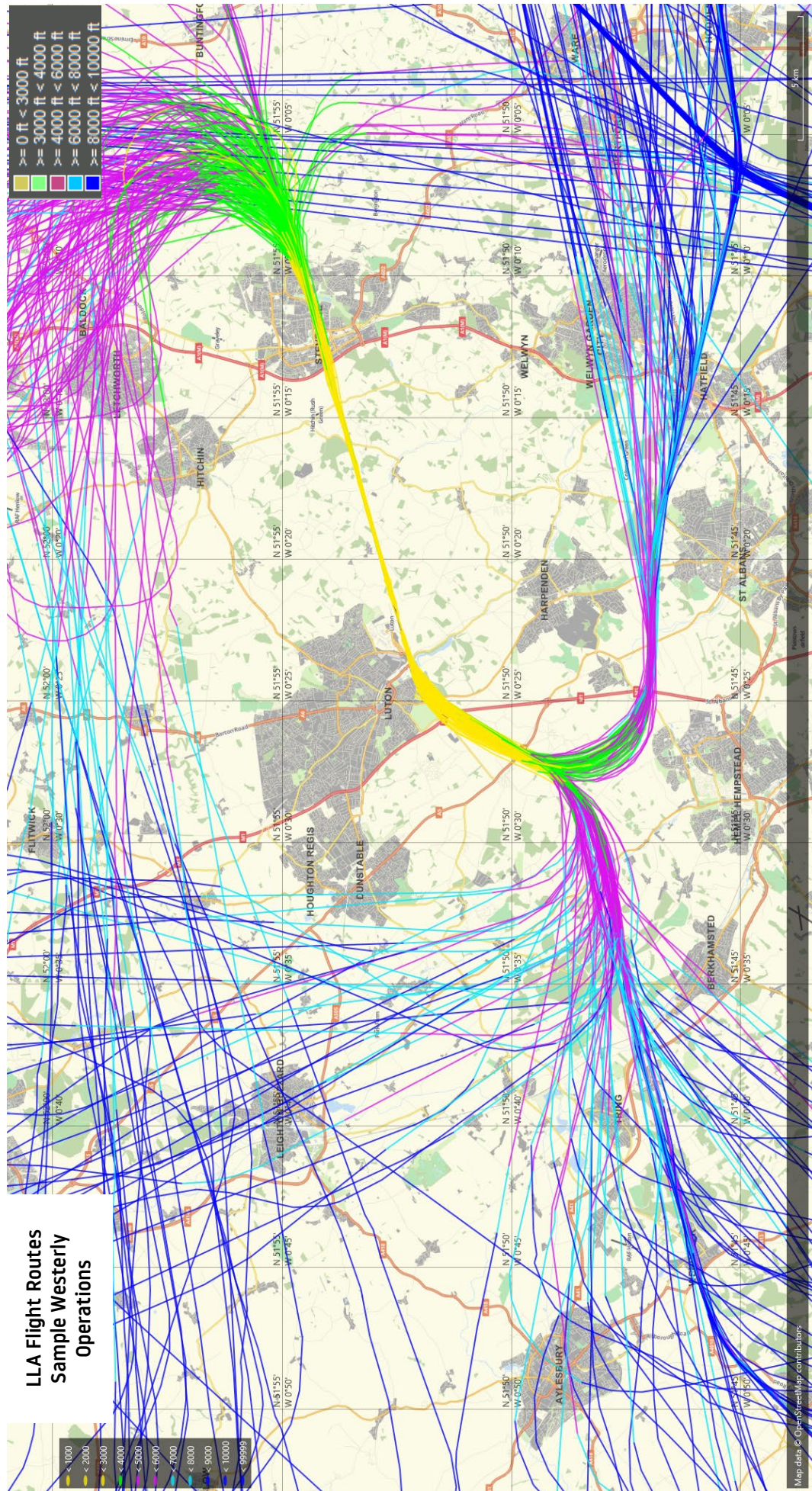














## 4 AIRCRAFT NOISE

During the 4<sup>th</sup> Quarter of 2022, the maximum noise levels less than 79 dB(A) was recorded by 99.8% of correlated departing aircraft.

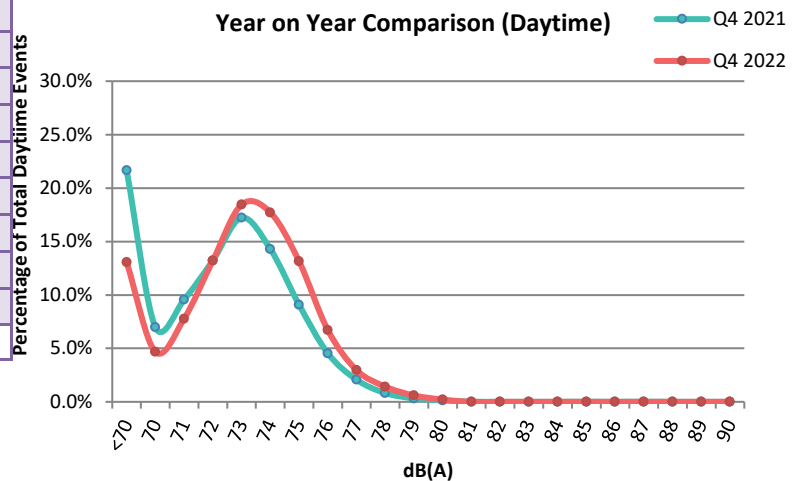
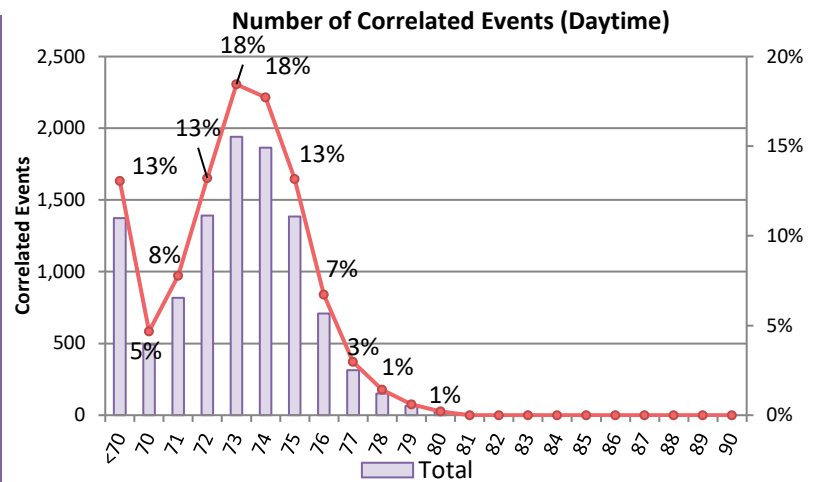
The maximum noise level of less than 76 dB(A) was recorded by 94.8% of correlated departing aircraft.

There was no noise violation in Q4 2022.

### 4.1 Daytime Noise Levels – October to December 2022

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*)

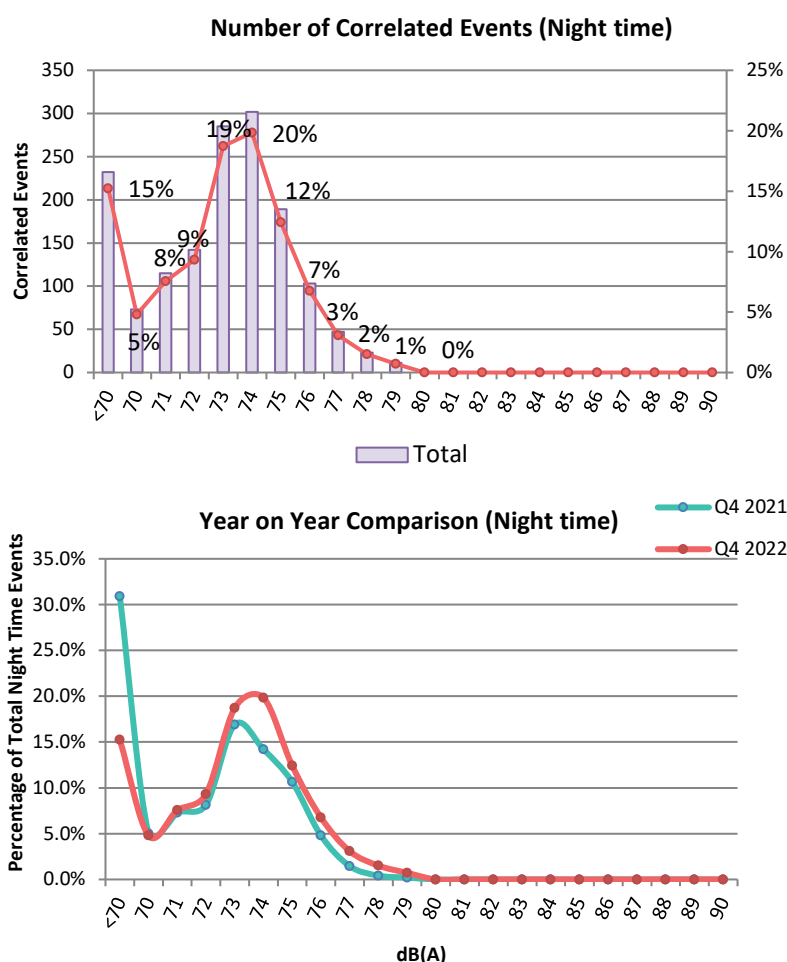
	db (A)	Oct	Nov	Dec	QTR
Number of Correlated Events (Daytime)	<70	557	340	477	1,374
	70	174	130	188	492
	71	301	235	282	818
	72	623	332	436	1,391
	73	861	517	563	1,941
	74	734	484	647	1,865
	75	520	362	503	1,385
	76	265	175	268	708
	77	108	91	114	313
	78	50	41	59	150
	79	26	17	20	63
	80	8	8	6	22
	81	0	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		4,227	2,732	3,563	10,522



## 4.2 Night Noise Levels – October to December 2022

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)	Oct	Nov	Dec	QTR
Number of Correlated Events (Night time)	<70	111	43	78	232
	70	43	13	17	73
	71	57	19	39	115
	72	68	36	38	142
	73	153	62	70	285
	74	146	53	103	302
	75	77	46	66	189
	76	44	29	30	103
	77	17	11	19	47
	78	14	7	2	23
	79	5	2	4	11
	80	0	0	0	0
	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		735	321	466	1,522



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.

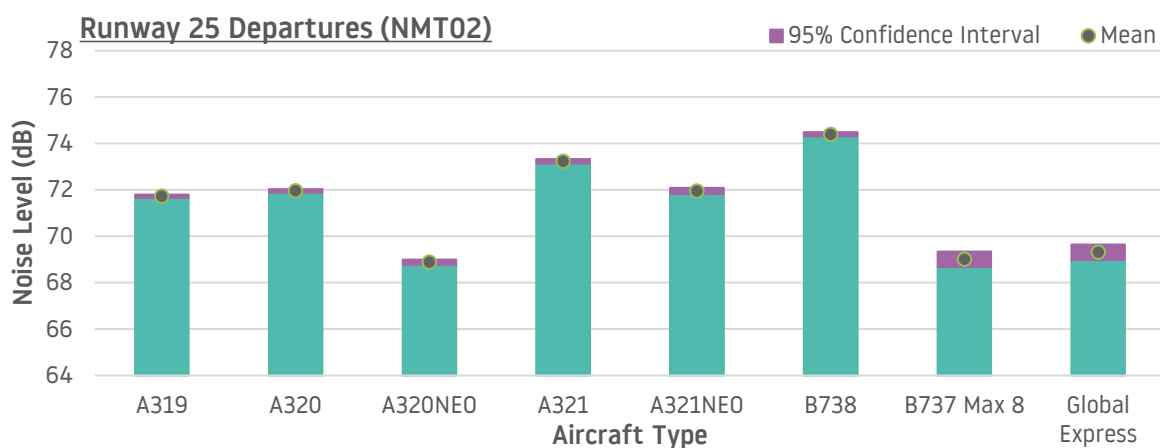
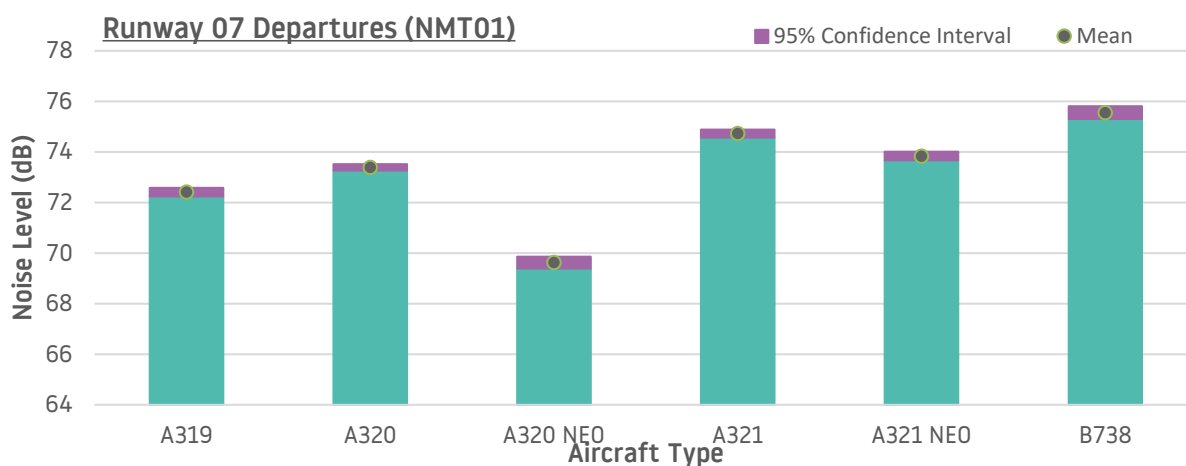
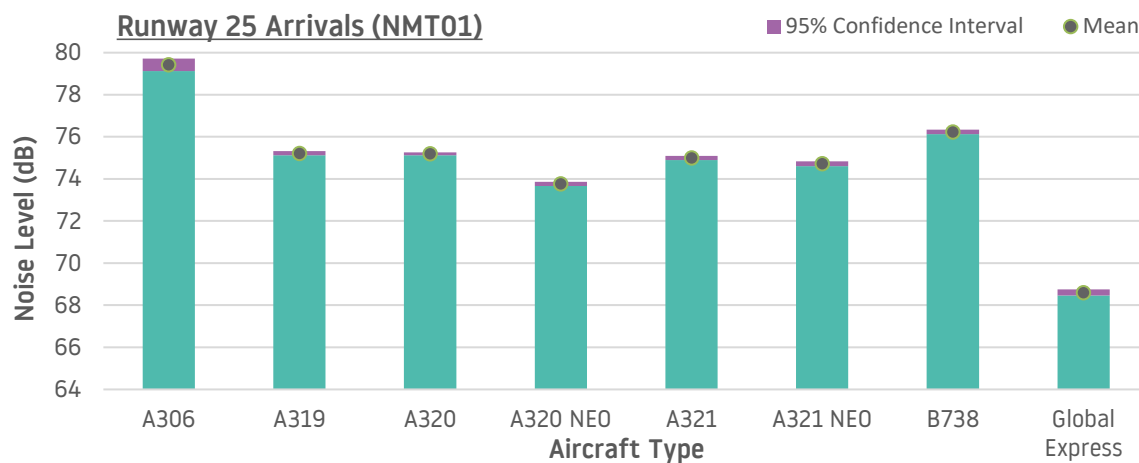
Ambient background noise is also an important factor as specific incidents such as loud road traffic, emergency vehicle sirens, lawn mowers, drills etc. can register noise levels louder than an aircraft overhead. This results in not all aircraft movements being correlated to noise events. Generally,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

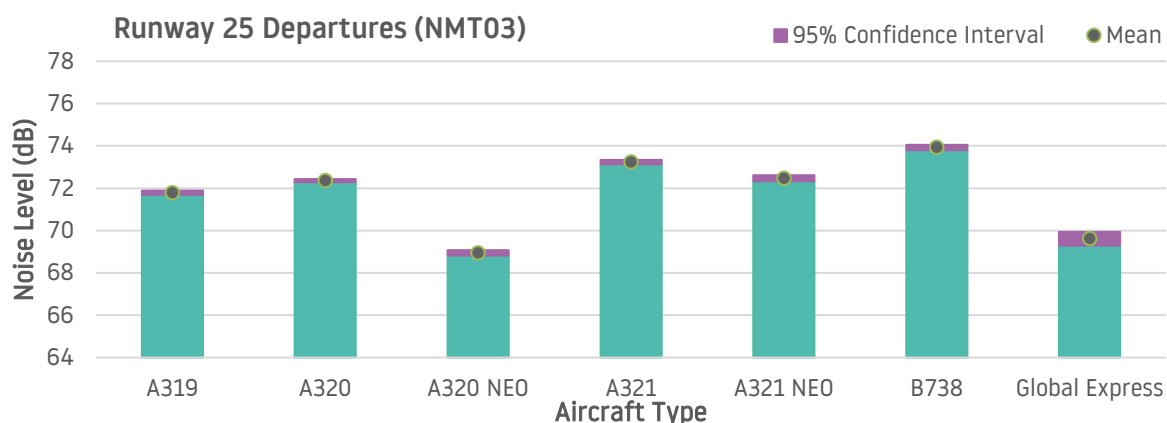
Weather conditions can also affect the number of noise monitoring events recorded in the table; for example, if winds are greater than 10m/s, results from noise monitors will be invalid and therefore will not be considered.

\*A fixed noise monitor (NMT02) was out of service from 23<sup>rd</sup> November 2022. No noise data was captured from this fixed noise monitor point until a replacement noise monitor was installed on 14<sup>th</sup> December 2022.

### 4.3 Average Noise Monitor results by Aircraft Type (Q4 2022)

The following graphs show the average noise and confidence level (95%) for the three fixed noise monitors for the period October to December 2022. 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
<b>NMT01 (Arr)</b>	100	1,082	2,621	918	1,428	933	1,231	50	400
<b>NMT01 (Dep)</b>	24	295	675	224	373	260	327	12	85
<b>NMT02*/10 (Dep)</b>	82	1,311	2,198	869	1,122	782	1,272	102	244
<b>NMT03 (Dep)</b>	81	996	2,310	744	1,224	835	1,054	44	257

*\*A fixed noise monitor (NMT02) was out of service from 23<sup>rd</sup> November 2022. No noise data was captured from this fixed noise monitor until a replacement noise monitor point was installed on 14<sup>th</sup> December 2022.*

#### 4.4 Noise Violations during Quarter 4 (October to December 2022)

There was no noise violation during the period.

#### 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, dining rooms, kitchen-diners and bedrooms. At the beginning of 2022 the scheme now also offers loft insulation.

In Quarter 4, Granville Noise Insulators continued to work on properties that had been transferred over from Newview properties that went into liquidation earlier in the year.

We did not contact any further properties during Q4 as all eligible properties for 2022 has been contacted. Granville Noise Insulators continued to work on the properties that had accepted the scheme. Another meeting has been arranged to discuss further eligible properties with the Noise insulation Sub-Committee and there will be further eligible properties for 2023 as well as re-contacting properties re-eligible after the initial contact 5 years ago.

## 5 NOISE CONTOURS

### 5.1 Night Noise Contours – Q4 2022

#### 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 to produce the 2022 Q2 and Q3 contours, with terrain data allowed for and the contours produced using the INM software (Version 7.0d) with user-defined profiles for the most common aircraft. The validation is based on measured results in 2021 at the fixed noise monitors with departure profiles for key aircraft types based on radar data.

#### 5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A11060-NN22-Q4 at values from 48 to 66 dB LAeq,8h. Contours at 69 and 72 dB LAeq,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 (July – September 2022), and the equivalent quarter during the previous year (October – December 2021).

Contour Value (dB LAeq,8h)	Contour Area (km <sup>2</sup> )		
	Oct – Dec 2021	Jul – Sep 2022	Oct – Dec 2022
48	27.0	32.8	26.2
51	15.3	18.4	14.7
54	8.9	9.7	7.7
57	5.2	5.6	4.5
60	2.5	3.1	2.4
63	1.4	1.5	1.2
66	0.9	0.9	0.7
69	0.6	0.5	0.5
72	0.4	0.3	0.3
W/E Split (%)	84/16	64/36	80/20

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	Oct – Dec 2021	Jul – Sep 2022	Oct – Dec 2022
1900D	26	n/a	n/a
737800	386	821	504
737800 (max)	n/a	18	n/a
757RR	232	238	234
A300-622R	96	79	94
A319-131	128	652	256
A320-211 (ceo)	425	1,149	806
A320-211 (neo)	270	718	380
A321-232 (ceo)	302	733	577
A321-232 (neo)	314	459	361
A330-301	19	n/a	13
BEC58P	n/a	n/a	14
CL600	22	n/a	17
CL601	43	n/a	38
CNA208	n/a	10	16
CNA525C	20	n/a	19
CNA55B	15	n/a	14
CNA560XL	27	n/a	19
CNA680	21	n/a	n/a
CNA750	n/a	n/a	11
EMB145	24	n/a	30
F10062	40	n/a	22
FA7X*	n/a	n/a	41
GIV	30	n/a	13
GLEX*	n/a	n/a	140
GLF6*	n/a	n/a	79
GV	251	54	93
LEAR35	12	n/a	10
Other	36	73	47
Total	2,739	5,004	3,848

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



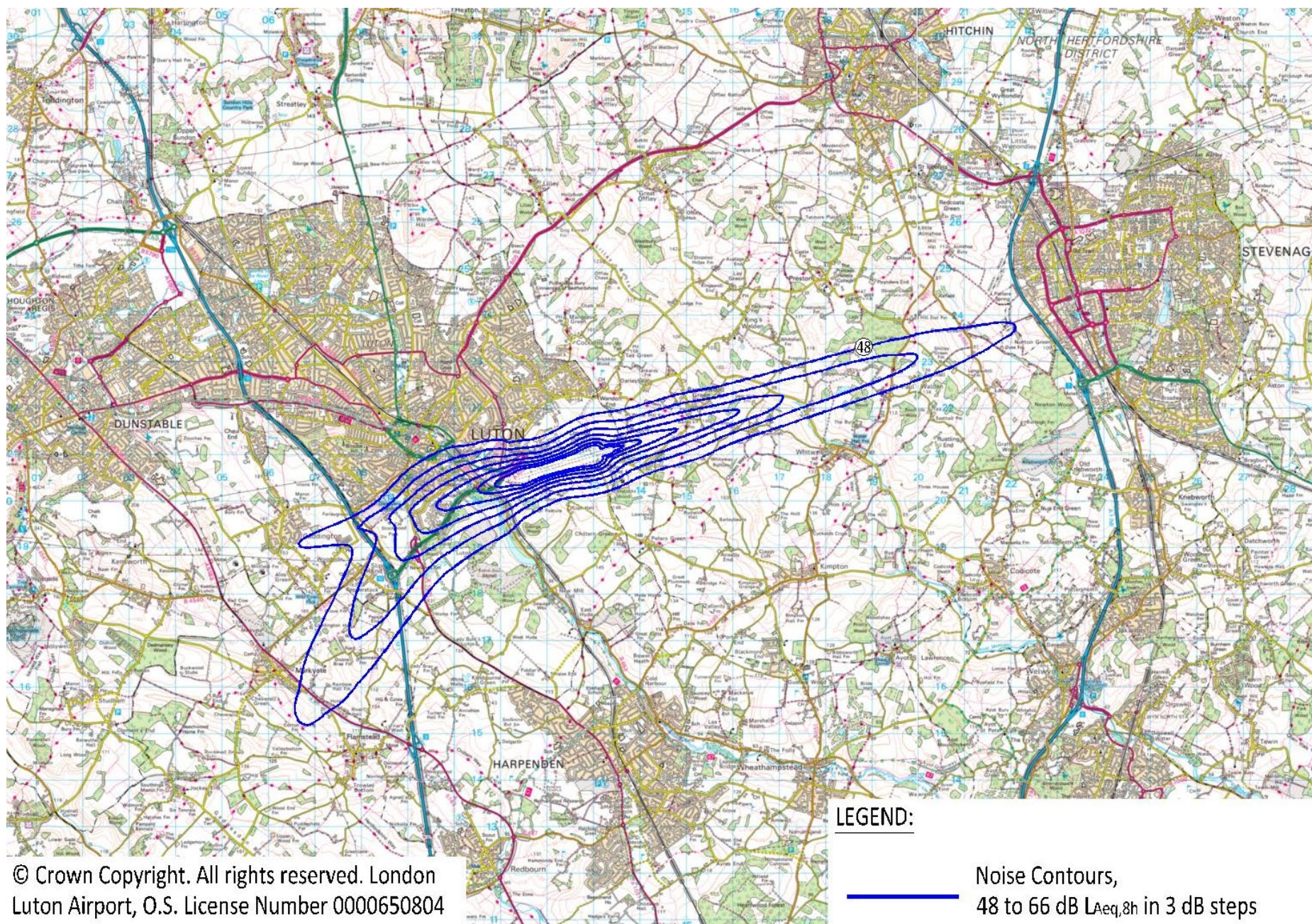
#### **5.1.4 Noise Contour Comparison**

With the continued recovery from the COVID-19 pandemic there has been an increase in the total number of movements compared with the same quarter in 2021.

The area of the 48 dB(A) noise contour has however remained similar to the same quarter last year. This is attributed to the contour validation now being based on measured results in 2021 at the fixed noise monitors with departure profiles for key aircraft types based on radar data.

The number of movements, and therefore the contour areas, have decreased compared to the previous quarter (July – September 2022).







## 6 COMPLAINTS

### 6.1 Total Complaints relating to LLA aircraft operations

	4 <sup>th</sup> QTR 2022	4 <sup>th</sup> QTR 2021
Total No. of Complaints relating to LLA aircraft operations	2,365	1,108
No. of Complainants	142	57
No. of General Complaints	216	113
No. of Specific Complaints	2,149	995
Average No. of Complaints per Complainant	16.7	19.4
No. of Aircraft Movements per Complaint	12.1	10.1

In line with the recovery of aviation and increase in aircraft movements, a total of 2,365 complaints relating to LLA aircraft operations were received by the Flight Operations Department during the last quarter of 2022. This is compared to 1,108 complaints received for the same period in 2021. It should be noted that during the fourth quarter of 2022, 77% of complaints were received from 10 individuals and 35% from one individual.

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

Oct 2022    1,272 complaints (1,189 Specific Complaints, 83 General Complaints)  
Nov 2022    619 complaints (561 Specific Complaints, 58 General Complaints)  
Dec 2022    474 complaints (399 Specific Complaints, 75 General Complaints)

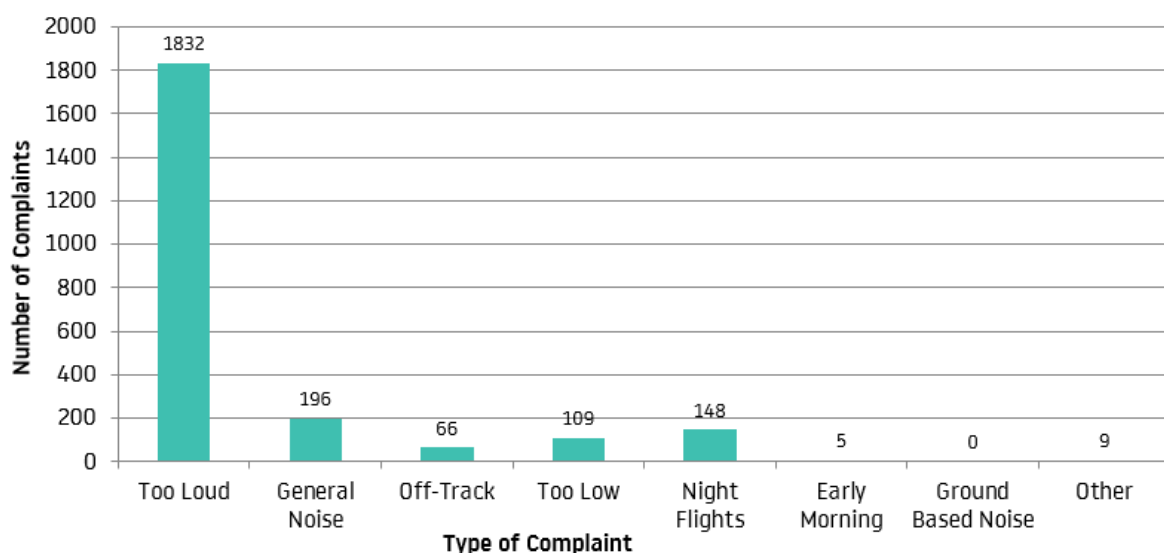
A further 6 complaints not attributable to LLA traffic were received throughout the quarter, compared to 26 complaints for the period October to December 2021.



Out of 142 total complainants, 72 contacted the airport only once meaning, 70 complainants generated 2,293 complaints.

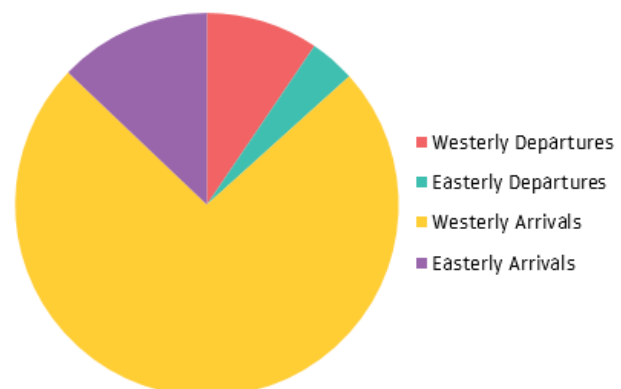
## 6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from October to December 2022 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 October to December 2022.



Within the 195 specific aircraft complaints concerning westerly departures, 182 complaints involved aircraft on the Match/Detling heading, 6 related to aircraft following Compton flight route, 7 related to aircraft using the Olney route and no complaints were recorded about aircraft following an off-airways routing.

Of the 79 complaints attributed to easterly departures, 62 related to aircraft following the Compton flight route and 14 aircraft on the Match route. There were 3 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 1,783 specific complaints regarding arrivals. 1,518 of these complaints were about westerly arrivals and a further 265 concerning easterly arrivals. These complaints were mostly regarding the new arrivals airspace change implemented in February 2022.

**16**  
**Complainants**  
reported noise  
disturbance at night  
(compared to 6  
Complainants for the same  
Quarter last year)

Departing aircraft accounted for 6% of the specific night complaints and 94% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 4% of night complaints, whilst passenger aircraft accounted for 72% of night complaints. Furthermore, 24% of night complaints correlated to executive aircraft.

**167 (7%)**  
**Complaints**  
concerning night noise  
disturbance from  
LLA operations

## 6.4 Complaints by aircraft type

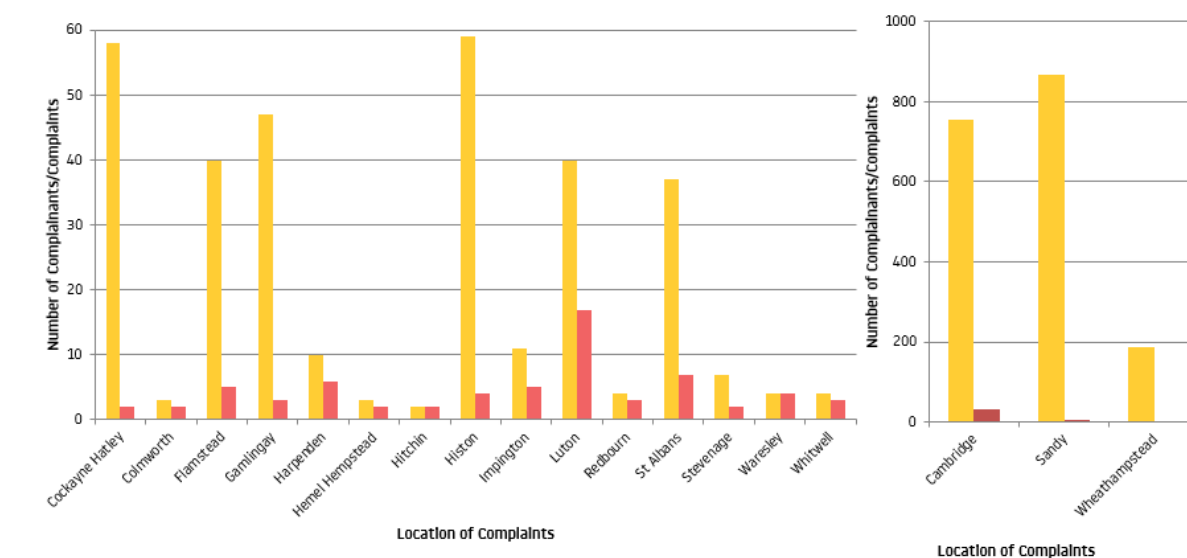
The diagram below shows aircraft types generating specific complaints.



## 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 October to December 2022.

The communities with one complainant include: Abbotsley, Albury, Ayot St Lawrence, Bar Hill, Biggleswade, Breachwood Green, Buntingford, Caddington, Chevington, Codicote, Croydon, Dagnall, Dry Draton, Dunstable, Dunton, Elsworth, Girton, Hertford, Hilton, Hoddesdon, Kimpton, Leighton Buzzard, Letty Green, Little Gransden, Royston, Studham, Upper Cambourne, Welwyn, Wrestlingworth.



## 6.6 Complaints Analysis

During Quarter 4 there has been an increase in complaints compared to the same quarter last year along with an increase in complainants compared to the same quarter last year. This is thought to be due to a number of reasons:

- The number of complainants has increased which is significantly higher than the same period last year and this is thought to be 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.
- Similar to previous quarters in 2022, some individuals are making multiple complaints. In Q4 77% of complaints were received from 10 individuals and 35% from one individual. These particular complainants differ from previous quarters.



## 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	0.2%
Email	16.1%
Travis	83.7%

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

<b>Postal Address</b>	Flight Operations Department London Luton Airport Percival House, Percival Way Luton Bedfordshire LU2 9NU
<b>Direct Telephone</b>	(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 8 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	57.5%
1	9.6%
2	10%
3	7.2%
4	5.2%
5	4.2%
6	3.6%
7	1.0%
8	0.3%
9	0.2%
10	0.2%
11	0.2%
12	0.1%
13	0.0%
14	0.1%
15	0.1%
16	0.0%
16+	0.5%

## **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.

While a number of invitation to visit the airport were offered during Quarter 4 these were declined by residents and as below preferred a visit to their home address.

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

The Flight Operations Team held one Public Surgery during quarter 4 which was in November at Kensworth Village Hall.

Public surgeries provide residents who are impacted airport operations to speak with members of the Flight Operations team on an appointment basis. There was a good uptake on appointments booked by residents and local councillors.

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 4, the Flight Operations team met with three MP's (Anthony Browne MP, Jonathan Djanogly MP and Richard Fuller MP) regarding the impact of the new arrivals airspace change on their constituents.

There was also a number of virtual calls held with councillors from South Cambridgeshire District Council regarding the new arrival airspace change.