Quarterly Monitoring Report
Quarter 1 2022

London
Luton
Airport

INTRODUCTION

The purpose of this report is to advise the community of statistics concerning aircraft operations at London Luton Airport (LLA) during the period January to March 2022.

KEY MONITORING INDICATORS – 1st QUARTER 2022

Parameter		1st Quarter 2022	1st Quarter 2021
Total Passenger Number	↑	1,882,072	309,280
Total Aircraft Movements	↑	21,054	6,047
Night Movements (23.00 – 06.59)	↑	2,310	788
Early Morning Movements (06.00 – 06.59)	↑	839	167
Aircraft Movement and Quota Count limits (per rolling 12-month period)			
Night Quota Movements (*9,650 limit*)	↑	4,027	3,403
Night Quota Count (*3,500 limit)*	↑	1497.75	1,411.50
Early Morning Shoulder (*7,000 movements*)	↑	3,095	1,796
24hr CDA (% achievement)	↑	88%	79%
Day CDA (% achievement)	↑	88%	79%
Night CDA (% achievement)	↑	85%	80%
Track Violations	↑	11	2
Departure Noise Infringements (Day)	↑	1	0
Departure Noise Infringements (Night)	-	0	0
Noise Monitor Results*			
No. Day (Night) > 80 dB(A)	↑	1 (0)	0 (0)
No. Day (Night) > 75 dB(A)	↑	396 (73)	68 (9)
No. Day (Night) > 70 dB(A)	↑	4,443 (546)	744 (98)
Night Noise Contour Area (48 dB $L_{Aeq, 8h}$)	↑	22.8 km^2	9.3 km^2
Noise Complaints	↓	839	1,075
Complainants	↑	91	54
Number of New Complainants	↑	21	13
Largest Source of Complaints	-	Deps. East	Deps. West
Origin of Concerns (>5 Complainants)	-	St Albans Luton Harpenden/ Wheathampstead	Harpenden Luton St Albans
Westerly/Easterly Runway Split (%)	-	67/33	63/37

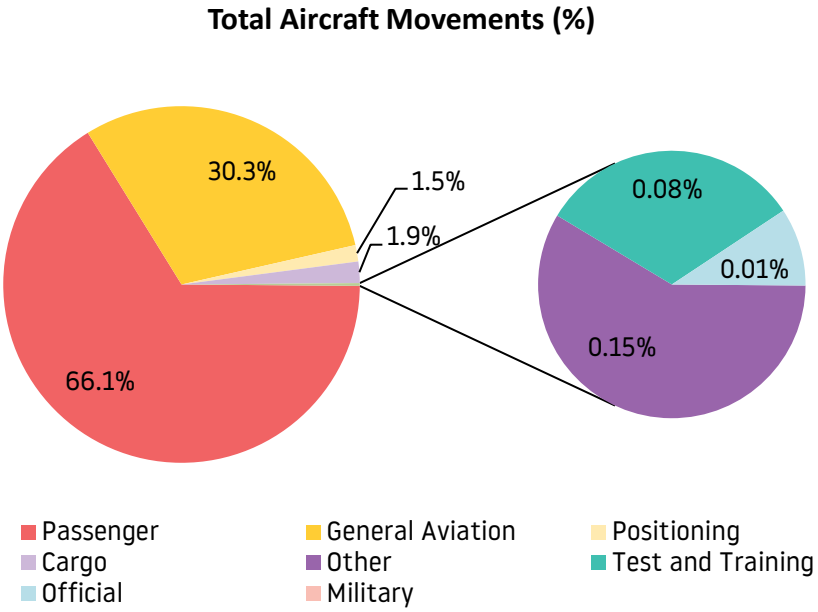
**It should be noted that due to maintenance at noise monitor NMT02 and NMT03, some data was not collected for Quarter 1 2022.*

1 AIR TRAFFIC DATA

1.1 Aircraft Movements

There was a total of 21,054 aircraft movements during this quarter (compared with 6,047 for the same period in 2021), increase of 248%.

This resulted in an average 234 movements per 24 hours (compared to 67 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*						
Jan 2022	154	3,856	94	5	0	0	12	1,751	8	**5,880**
Feb 2022	116	4,190	97	4	0	1	11	2,221	4	**6,644**
Mar 2022	138	5,863	104	9	0	4	8	2,399	5	**8,530**
QTR Total	**408**	**13,909**	**295**	**18**	**0**	**5**	**31**	**6,371**	**17**	**21,054**

1.2 Passenger Statistics

A total of 1,882,072 passengers passed through LLA during the period January to March 2022 (compared with 309,280 for the same period last year), 1,871,920 on scheduled flights (99.5%) and 10,052 on charter flights (0.5%). This represents an increase in passengers of 509% and equates to an average 20,939 passengers per 24 hours (compared to 3,436 during the same quarter last year).

	Domestic	EU	Non-EU	Total
Jan 2022	38,184	305,671	99,701	**443,556**
Feb 2022	64,536	397,923	149,019	**611,478**
Mar 2022	74,506	584,062	168,470	**827,038**
QTR Total	**177,178**	**1,286,693**	**416,669**	**1,882,072**

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

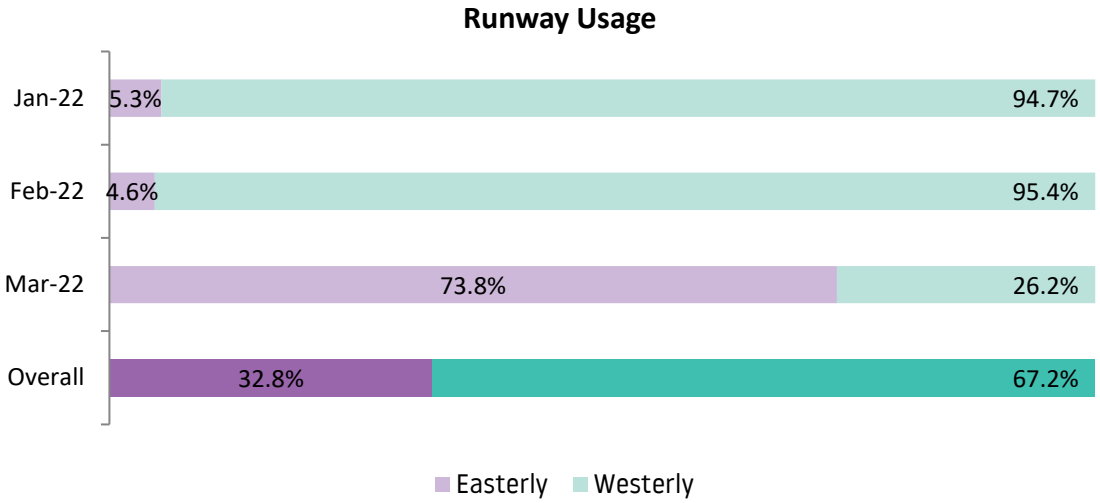
[1] *Other relates to flights coming for maintenance and or departing aircraft that has made an unscheduled return to base*

[2] *General Aviation incorporates Private Aircraft, Helicopters and Business Jets*

1.3 Runway Usage

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

The runway usage split during this period was 33% easterly and 67% westerly (37%/63% split in same quarter last year). The breakdown of these statistics, on a monthly basis, is as follows:



1.4 Night Flying Restrictions

As from 1st April 2015 London Luton Airport introduced new Night Restrictions as part of the planning conditions.

These restrictions have been put in place to limit and mitigate noise disturbance from aircraft operating at night, to prohibit aircraft of certain types from operating, as well as limiting the number of occasions on which aircraft may take off or land.

The night flying restrictions contain a 12 month period aircraft movement limit and a 12 month period quota count limit. The quota count (QC) is a points based system that allocates points to different aircraft types according to how noisy they are. The noisier the aircraft type, the higher the points allocated.

1.4.1 Definitions

The 'Night Quota Period'

The 'Night Quota Period' is from 23:30 to 05:59 hours local, during which period the number of aircraft movements (take-off or landing) is restricted, as well as an additional limit on number of noise QC points.

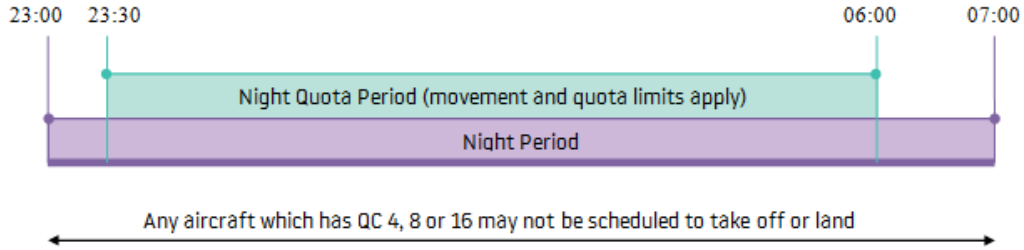
Aircraft are certified by the International Civil Aviation Organisation (ICAO) according to the noise they produce during specific certification tests conducted by the manufacturer. They are classified separately for both take-off and landing. The points are then allocated to different aircraft types according to how noisy they are. The table overleaf details the QC bands identified by the certified noise levels, and gives some typical example aircraft, some of which operate from LLA:

Certificated noise level (EPNdB)	Quota count	Typical aircraft
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 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 for the Night Quota Period (2330 – 0559) the following limits shall not be exceeded:

(i) Total annual movements by aircraft per 12 month period shall be limited to 9,650;
(ii) The total annual noise quota in any 12 month period shall be limited to 3,500.

Condition 11(h) requires that for the Early Morning Shoulder Period (0600 – 0659) the total number of movements by aircraft in any 12 month period shall be limited to 7,000.

The table overleaf provides the aircraft movement and quota count for the 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)
	Movements Limited to 9,650 Annually	*Quota Count Limited to 3,500 Annually*	*Movements Limited to 7,000 Annually*
April 2021	203	90.625	68
May 2021	217	85.875	92
June 2021	197	95.750	169
July 2021	242	107.500	200
August 2021	389	136.500	385
September 2021	358	123.375	362
October 2021	478	142.000	406
November 2021	374	118.625	285
December 2021	454	148.875	289
January 2022	325	123.750	238
February 2022	364	148.625	247
March 2022	426	176.250	354
QTR Total	**1,115**	**448.625**	**839**
Total for preceding 12 months	*4,027*	*1497.750*	*3,095*

1.5 Day/Night Ratio of Movements - Actual

There were 2,310 night operations during the quarter (compared to 788 for the same quarter last year), an average 26 movements per night (compared to 9 last year). Arriving aircraft accounted for 51% of total night movements, relating primarily to the last rotation of Luton based passenger aircraft scheduled to land between 23:00 hours local and midnight. 70% of total night departures took off between 06:00 – 07:00 hours local in the morning. The average ratio of total aircraft operations during the quarter was 89% day / 11% night (87% day / 13% night in 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		
Apr 2021	1,040	1,067	2,107	136	67	8	60	292	**2,399**
May 2021	1,414	1,428	2,842	147	70	14	78	351	**3,193**
Jun 2021	1,981	1,950	3,931	136	61	20	149	422	**4,353**
Jul 2021	2,600	2,511	5,111	147	95	2	198	532	**5,643**
Aug 2021	3,465	3,351	6,816	298	91	1	384	926	**7,742**
Sept 2021	3,767	3,711	7,478	280	78	2	360	862	**8,340**
Oct 2021	3,914	3,854	7,767	340	138	31	375	1,045	**8,813**
Nov 2021	3,092	3,096	6,188	253	121	23	262	791	**6,979**
Dec 2021	3,538	3,610	7,148	344	110	10	279	904	**8,052**
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	**8,350**
QTR Total	**9,346**	**9,398**	**18,744**	**835**	**280**	**51**	**788**	**2,310**	**21,054**
Total for preceding 12 months	*34,157*	*33,976*	*68,132*	*2,916*	*1,111*	*162*	*2,933*	*8,435*	*76,388*

1.6 Day/Night Ratio of Movements – Forecast

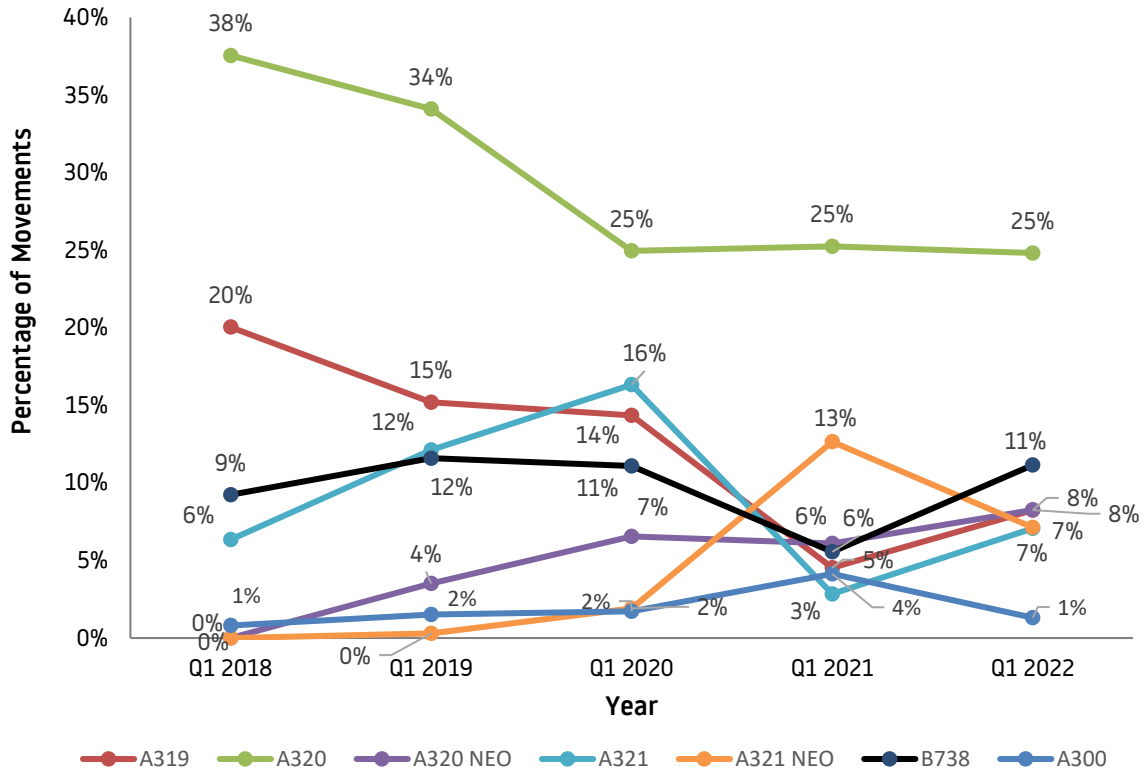
As a result of COVID-19 forecasts are uncertain and forecasts change based on the number of COVID cases in other countries and the UK Foreign and Commonwealth Office's advice.

	2022 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*
April 2022	11,039	779	550	1,505	12,544
May 2022	11,965	894	613	1,737	13,702
June 2022	11,531	896	592	1,739	13,270
July 2022	11,414	1,073	639	1,969	13,383
August 2022	10,870	1,069	606	1,925	12,795
September 2022	11,078	868	538	1,664	12,742
October 2022	11,190	879	512	1,613	12,803
November 2022	8,834	435	269	822	9,656
December 2022	10,284	575	337	1,083	11,367
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
*Total for following 12 months**	*125,870*	*8,906*	*5,771*	*17,035*	*142,905*

**Rounded number*

1.7 Aircraft Movements by Type

The graph below shows the percentage of aircraft movements for our main aircraft types. The data goes back 5 years for data comparison purposes. The percentage of aircraft movements by the newer generation NEO type aircraft has now reached 15% from only 9% two years ago.



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 (07) and westerly (25) operations. Night movements quoted below departed between 23:00 hrs and 06:59 hrs.

		Departures										Total
		MATCH/ DETLING			*COMPTON*		*OLNEY*		*Other**		*Helicopter*	
		07	25 Conv	25 RNAV	07	25	07	25	07	25	HELI	
Jan 2022	Daytime	78	8	1,350	30	765	21	307	4	28	8	**2,599**
	Night-time	12	1	176	4	64	5	64	0	1	0	**327**
Feb 2022	Daytime	61	8	1,308	51	1,053	22	423	1	23	5	**2,955**
	Night-time	6	1	184	4	72	3	81	0	1	0	**352**
Mar 2022	Daytime	1,382	1	476	966	358	408	153	23	9	10	**3,786**
	Night-time	183	0	68	120	24	71	26	1	0	0	**493**
QTR	**Total**	**1,722**	**19**	**3,562**	**1,175**	**2,336**	**530**	**1,054**	**29**	**62**	**23**	**10,512**
	Daily Average	*19*	*<1*	*40*	*13*	*26*	*6*	*12*	*<1*	*<1*	*<1*	*117*

2.2 Departure – Track Keeping

All propeller-driven aircraft with Maximum Take Off Mass (MTOM) over 5,700kg and all jet aircraft leaving London Luton Airport are required to follow specific departure routes known as Noise Preferential Routes (NPRs). The obligations of NPRs for conventional SIDs cease when a height of 3,000ft AMSL (between 07:00hrs to 23:00hrs local time) and 4,000ft AMSL (during night time, 23:00hrs to 06:59hrs local time) has been reached. The obligations of the RNAV1 NPR ceases when a height of 4,000ft AMSL has been reached at all times. An NPR is a corridor 3 kilometres wide (2km for the RNAV route), within which aircraft are deemed to be flying on track. Once aircraft have cleared the designated NPR zone Air Traffic Control (ATC) can instruct the pilots to fly a more direct heading towards their destination. This is known as vectoring.

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

As always, safety prevails and there may be cases which involve vectoring an aircraft sooner than at the NPR height restriction. If there is valid justification that could explain the deviation from the track, then the operator causing it will be exempt from the fine. Valid justifications include:

- Safety or operational reasons
- Weather avoidance
- Emergencies

* *This category relates to Test/Training flights or short positioning flights.*

The table below shows track keeping violations over the previous 3-month period. The on-track performance for the quarter was 97.0%. 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
January 2022	1	£1,000
February 2022	3	£3,000
March 2022	7	£11,000
QTR	**11**	**£15,000**

	Airline or Aircraft Operator	Aircraft Type/Occurrence
January 2022	Privately owned aircraft	C56X/1
February 2022	Privately owned aircraft	E35L/1; E545/1; GLF6/1
March 2022	Privately owned aircraft, easyJet, DHL Air and Wizz Air	A306/1; A20N/1; A21N/1; B752/1; GA6C/1; GALX/1; GLF6/1

3 ARRIVING AIRCRAFT

3.1 Arrivals Route Analysis

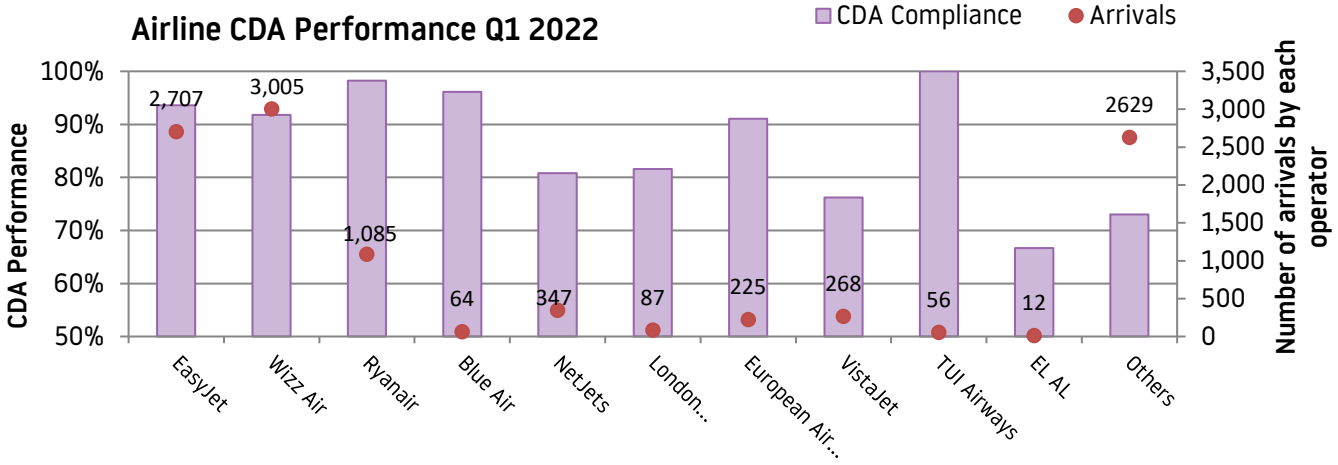
The following table reports the total number of arrivals differentiating between easterly (07), westerly (25) operations and helicopters.

		Arrivals			Total
		07	25	Heli	
January 2022	Daytime	135	2,487	8	**2,630**
	Night-time	18	300	0	**318**
February 2022	Daytime	143	2,798	4	**2,945**
	Night-time	16	372	0	**388**
March 2022	Daytime	2,768	986	8	**3,762**
	Night-time	373	126	0	**499**
QTR	**Total**	**3,453**	**7,069**	**20**	**10,542**
	Daily Average	*38*	*79*	*<1*	*117*

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.

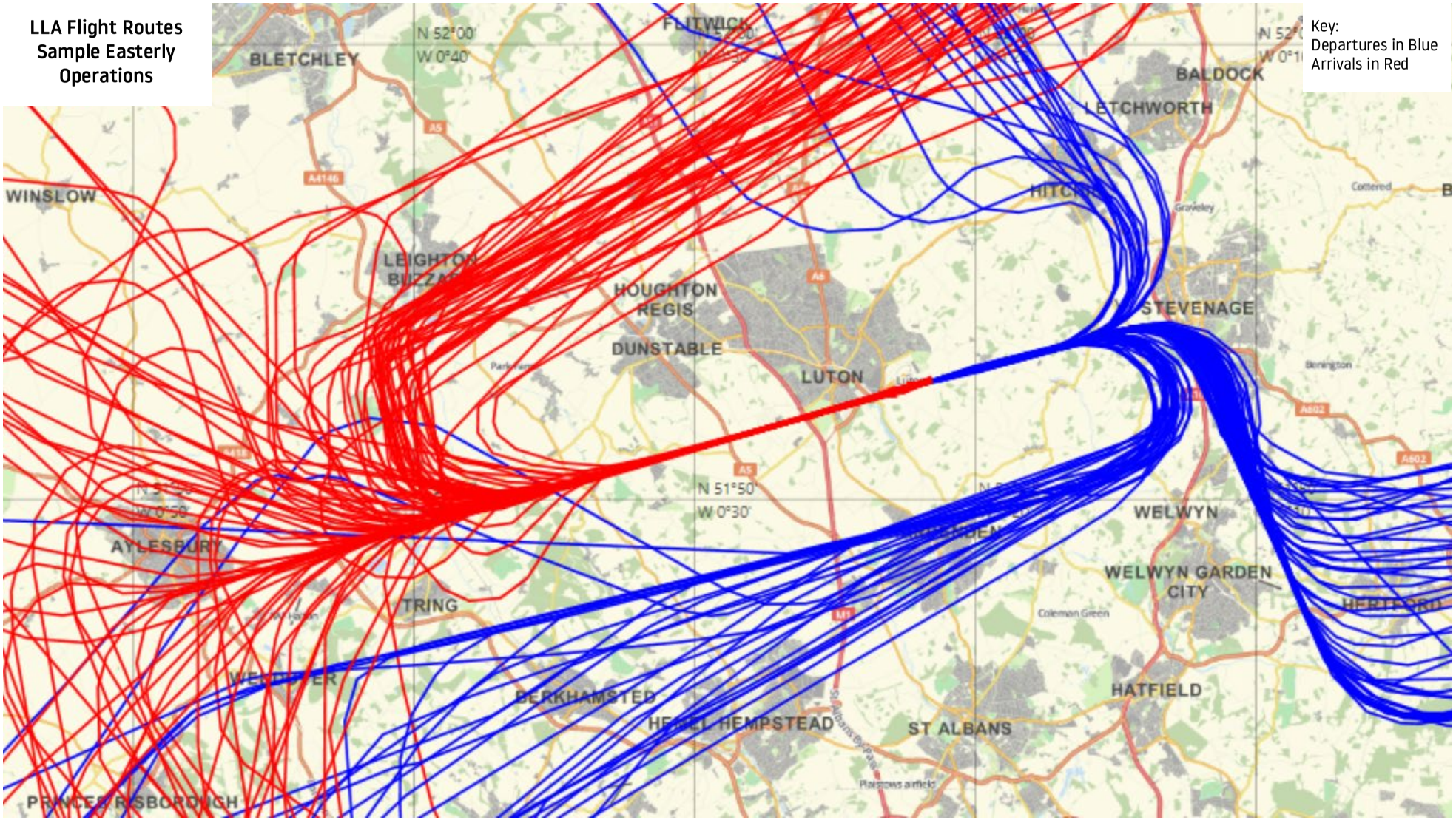
	All Arrivals			07 Easterly Arrivals			25 Westerly Arrivals		
	% CDA			*% CDA*			*% CDA*		
	Total	*Day*	*Night*	*Total*	*Day*	*Night*	*Total*	*Day*	*Night*
January 2022	**86%**	86%	85%	**92%**	93%	80%	**85%**	85%	85%
February 2022	**84%**	84%	87%	**92%**	92%	100%	**84%**	83%	86%
March 2022	**92%**	93%	83%	**93%**	94%	85%	**88%**	89%	78%
QTR Total	**88%**	88%	85%	**93%**	94%	86%	**85%**	85%	84%

The overall CDA achievement was 88% with several major LLA operators achieving high performance.

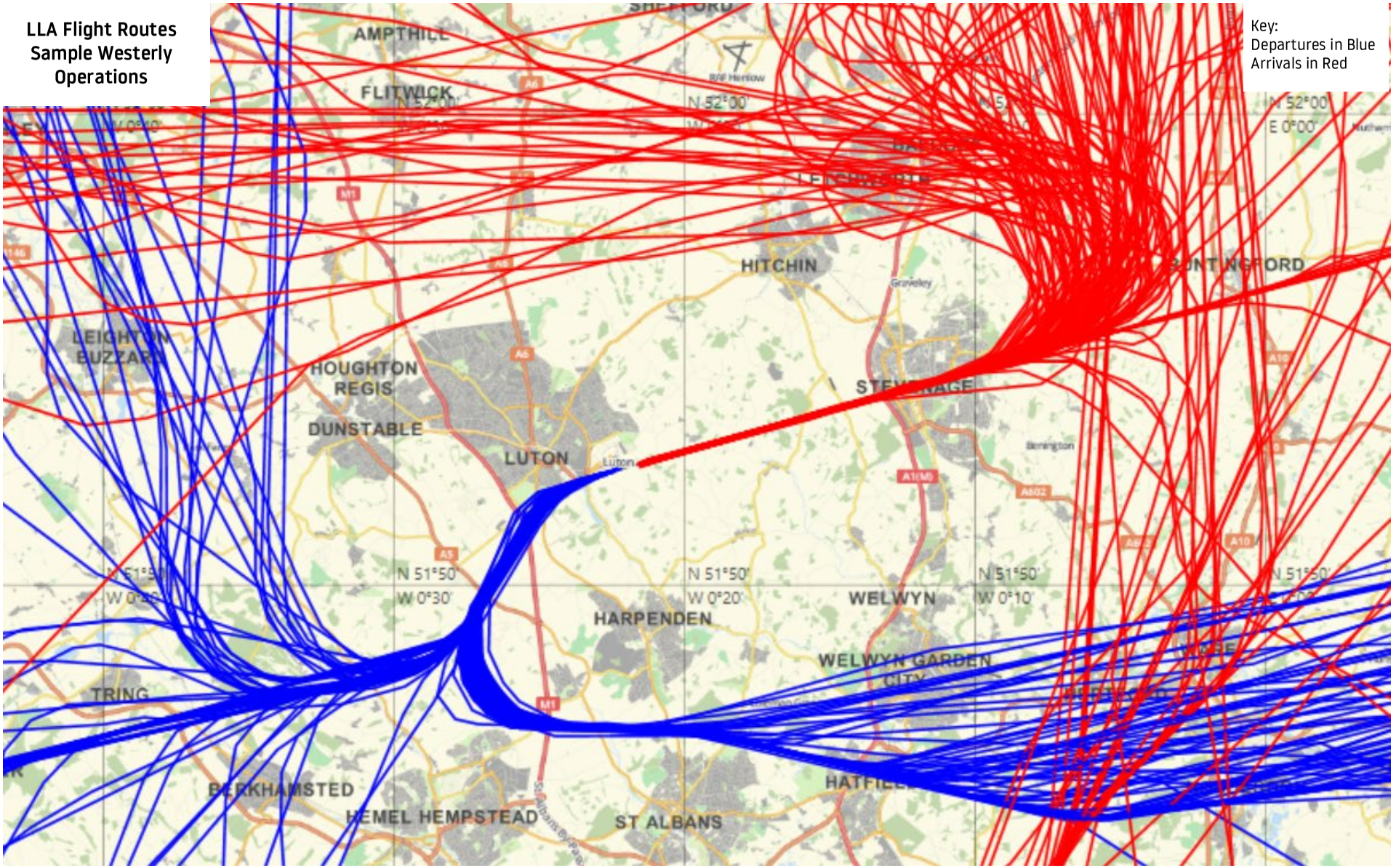


The maps overleaf, produced from the Topsonic Aircraft Noise & Track Monitoring System, identify samples of actual flown aircraft tracks operating from LLA (arrivals and departures during both easterly and westerly operations) for a typical 24-hour period within the first quarter of 2022.

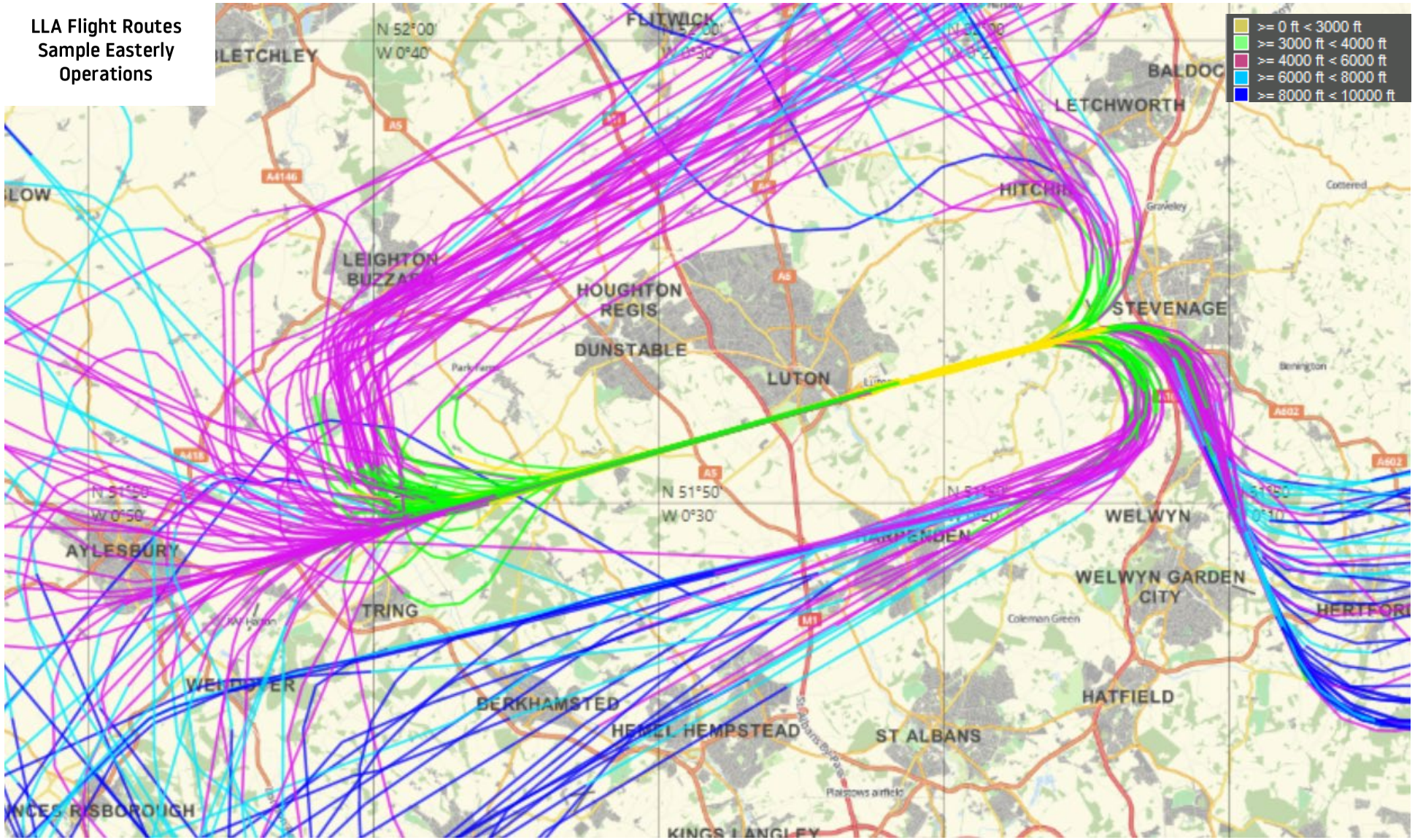
LLA Flight Routes Sample Easterly Operations



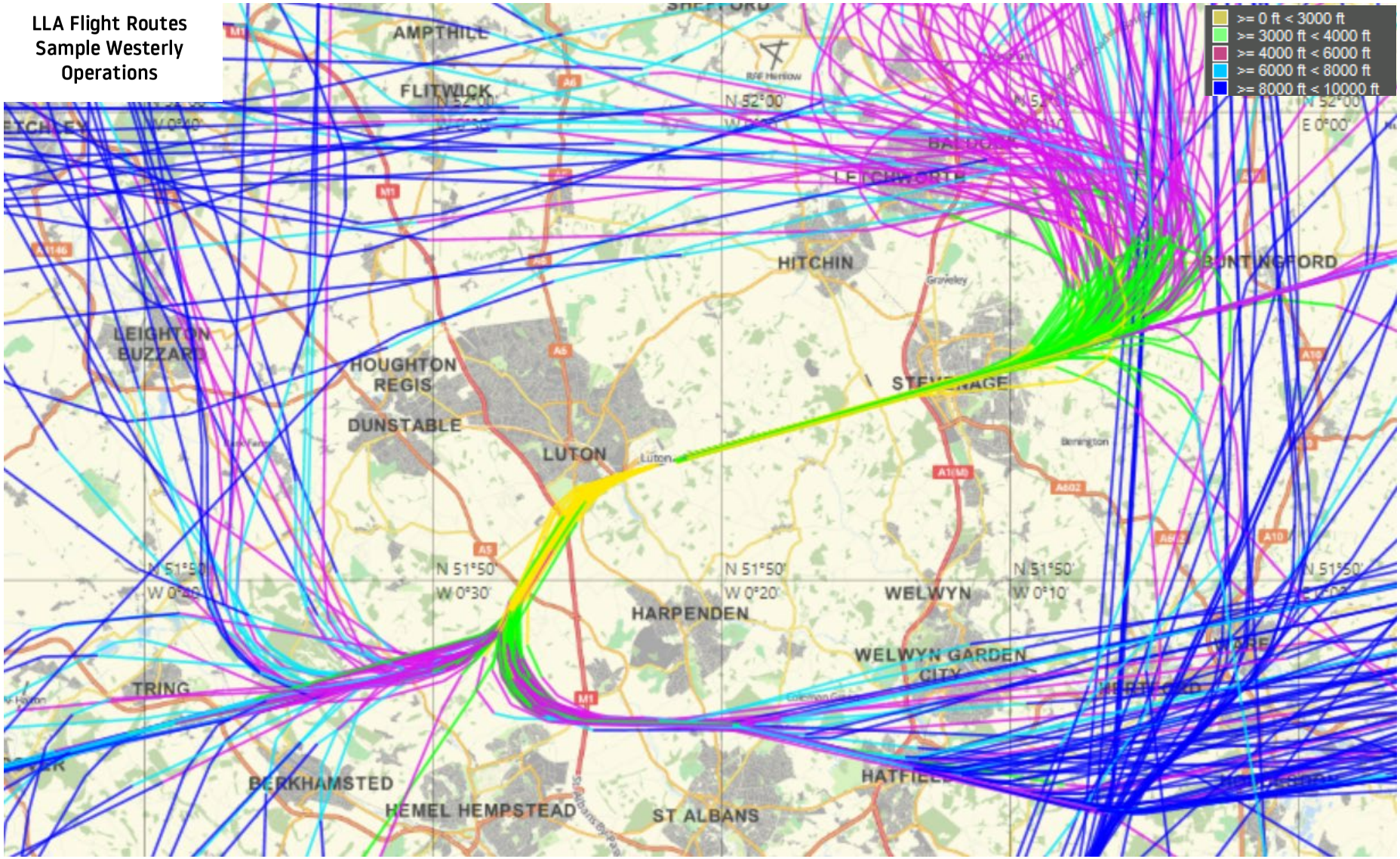
LLA Flight Routes Sample Westerly Operations



LLA Flight Routes Sample Easterly Operations



LLA Flight Routes Sample Westerly Operations



4 AIRCRAFT NOISE

During the 1st Quarter of 2022, the maximum noise levels less than 79 dB(A) was recorded by 99.9% of correlated departing aircraft.

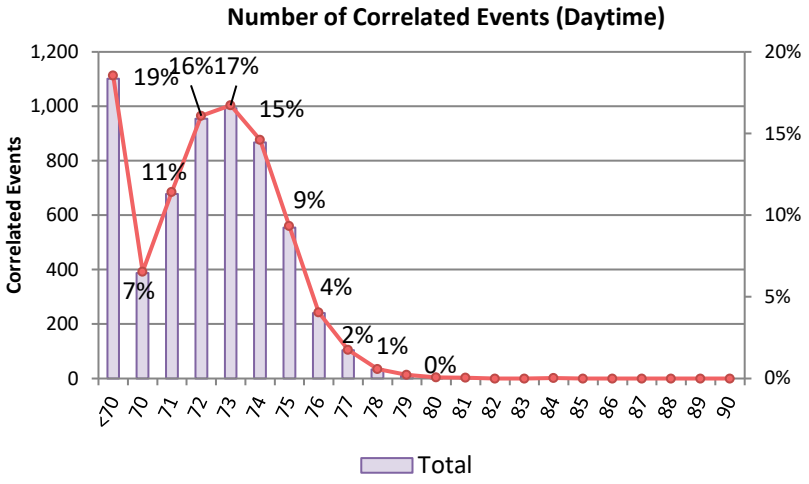
The maximum noise level less than 76 dB(A) was recorded by 97.3% of correlated departing aircraft.

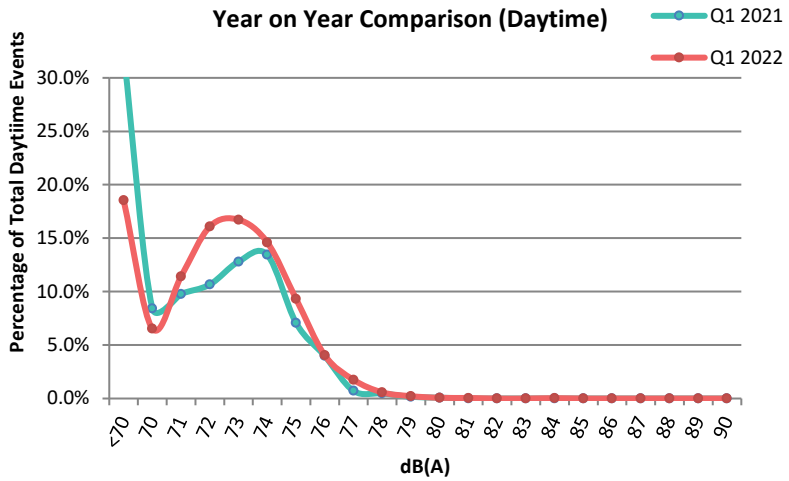
There was one daytime noise violations in Q1 2022.

4.1 Daytime Noise Levels – January to March 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 hrs and 22:59 hrs, is fined accordingly*)

	db (A)	Jan	Feb	Mar	QTR
Number of Correlated Events (Daytime)	<70	310	113	678	**1,101**
	70	113	53	222	**388**
	71	238	149	291	**678**
	72	281	229	445	**955**
	73	253	228	512	**993**
	74	156	205	506	**867**
	75	81	120	353	**554**
	76	29	63	148	**240**
	77	15	18	71	**104**
	78	6	11	17	**34**
	79	2	4	7	**13**
	80	0	1	3	**4**
	81	0	0	0	**0**
	82	0	0	0	**0**
	83	0	0	0	**0**
	84	0	1	0	**1**
	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		**1,484**	**1,195**	**3,253**	**5,932**

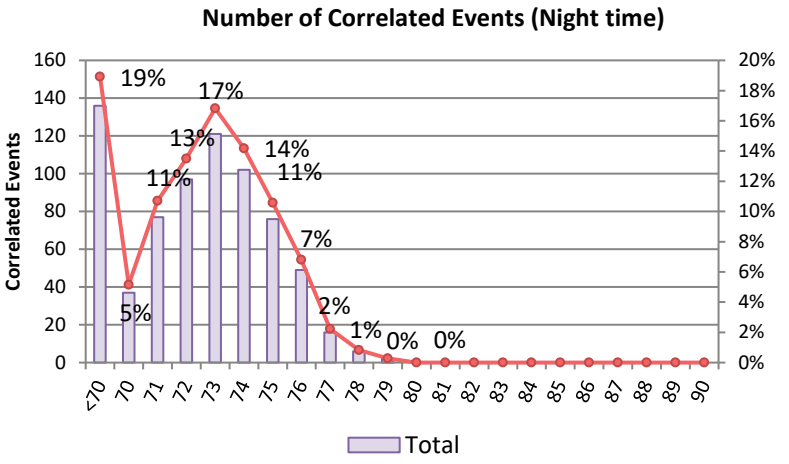


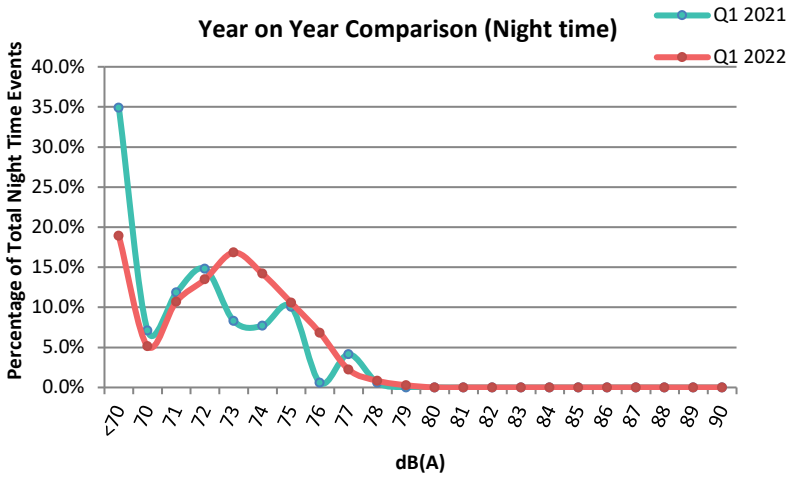


4.2 Night Noise Levels – January to March 2022

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 hrs, is fined accordingly)*

	db (A)	Jan	Feb	Mar	QTR
Number of Correlated Events (Night time)	<70	42	11	83	**136**
	70	13	4	20	**37**
	71	21	19	37	**77**
	72	41	20	36	**97**
	73	32	28	61	**121**
	74	19	30	53	**102**
	75	15	18	43	**76**
	76	7	14	28	**49**
	77	4	1	11	**16**
	78	1	1	4	**6**
	79	1	1	0	**2**
	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		**196**	**147**	**376**	**719**





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.

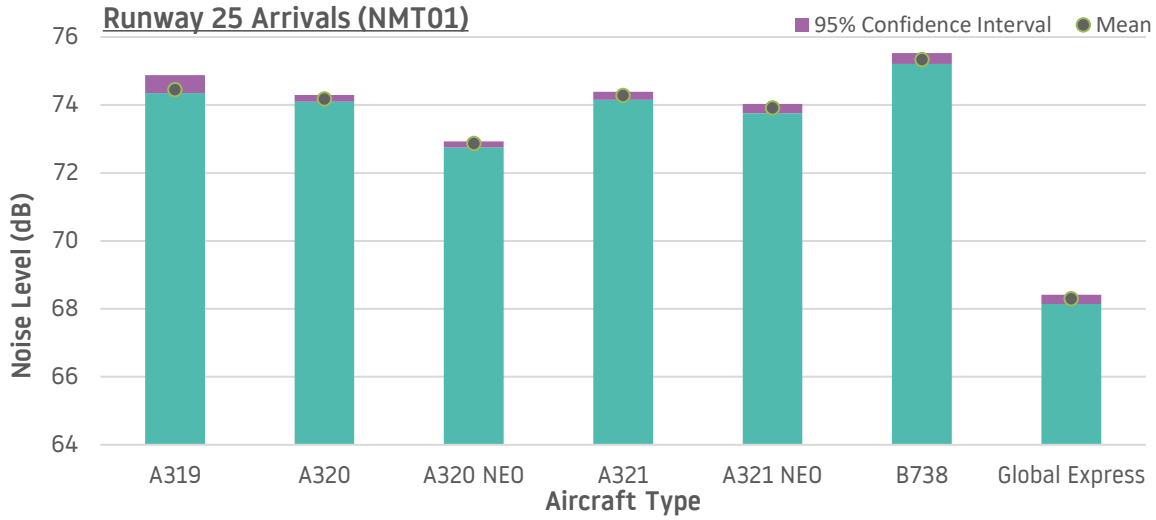
Weather conditions can also affect the number of noise monitoring events recorded in the table; for example, if winds are greater than 10m/s, results from noise monitors will be invalid and therefore will not been taken into account.

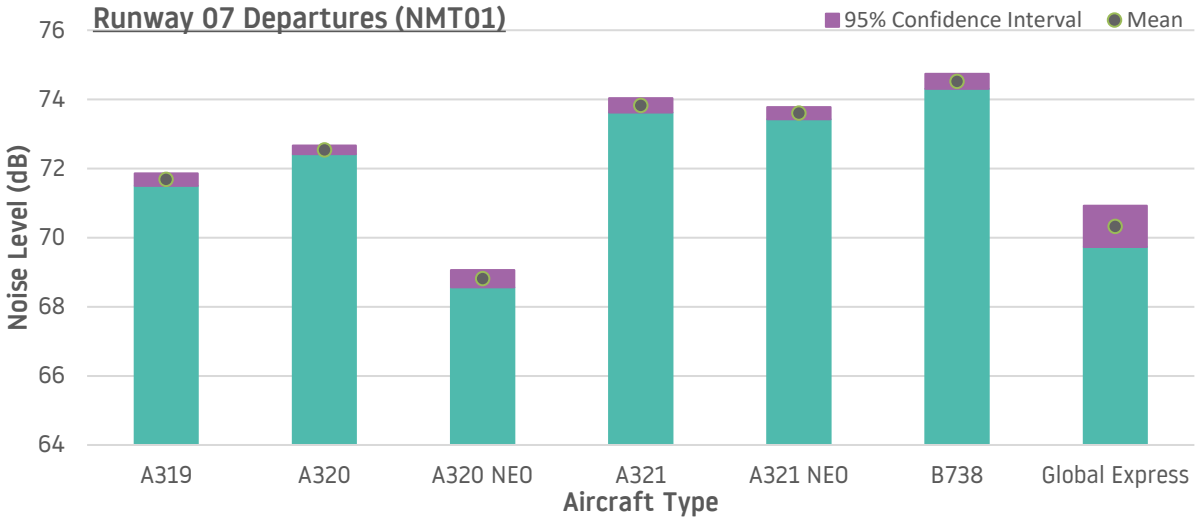
These are rounded number.

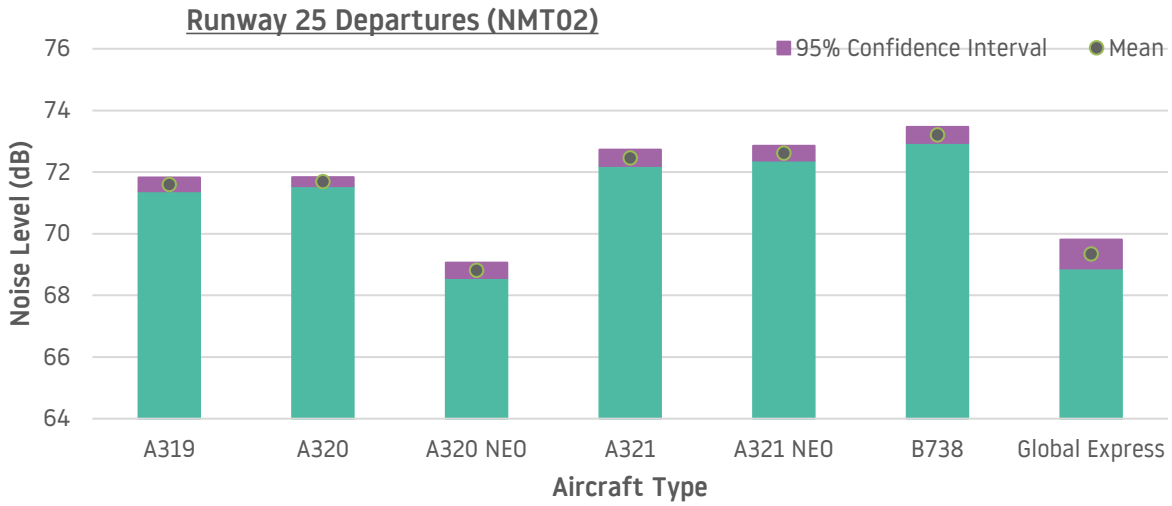
**It should be noted that due to maintenance at noise monitor NMT02 and NMT03, some data was not collected for Quarter 1 2022.*

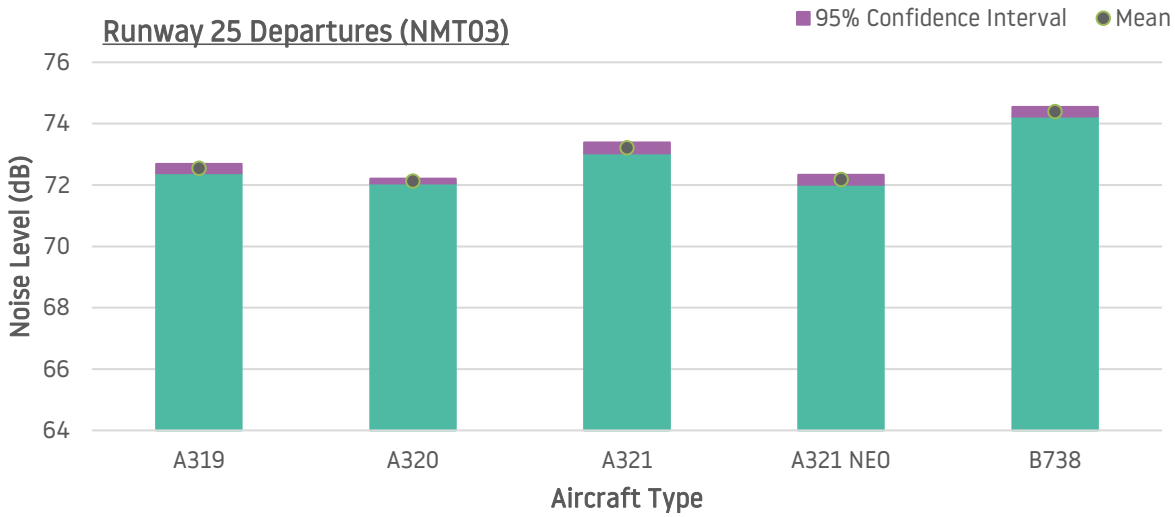
4.3 Average Noise Monitor results by Aircraft Type (January to March 2022)

The following graphs show the average noise and 95% confidence level for the three fixed noise monitors for the period January - March 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. We recommend a sample size of over 100 results to be compared. Therefore, only aircraft types with a sample size of over 100 have been shown.

	A306	A319	A320	A320 NEO	A321	A321 NEO	B738	Global Express
NMT01 (Arr)	85	415	1,460	479	416	400	609	276
NMT01 (Dep)	29	313	747	268	240	239	369	124
NMT02* (Dep)	45	237	785	226	245	255	351	117
NMT03* (Dep)	55	247	864	30	194	197	374	80

**The fixed noise monitors, NMT02 and NMT03 were out of service for maintenance in Q1 2022. No noise data was captured during this period.*

4.4 Noise Violations during Quarter (January to March 2022)

There was one noise violation during the period. The operator was fined £1,000 for this noise violation. The event happened during the day-time period.

	Date/Time (Local)	Aircraft Type	Noise Level
Daytime	16/02/2022 15:04 hrs	MD87 (Executive Jet)	84 dB(A)
Total Penalties Collected			**£1,000**

4.5 Noise Insulation Scheme Update

In Quarter 1, both contractors for the scheme were now on board; Newview Homes and Granville Noise Insulators. A further 126 properties were contacted for Newview Homes, this included 12 properties recontacted who did not accept the scheme in 2017.
287 properties were contacted for Granville Noise Insulators, 3 of these were re-contacted who accepted the scheme during Q1 of 2020 but the works could not be carried out because of COVID-19 impacts. The NIS scheme will continue to gather pace during 2022 and further eligible properties will be contacted.

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.

5 NOISE CONTOURS

5.1 Night Noise Contours – January to March 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 for the 2021 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 2020 at the fixed noise monitors.

5.1.2 Noise Contour Results

The resulting noise contours are shown in the attached Figure A11060-NN22-Q1 at values from 48 to 63 dB LAeq,8h. Contours at 66, 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 (October - December 2021), and the equivalent quarter during the previous year (January – March 2021).

Contour Value (dB $L_{Aeq,8h}$)	Contour Area (km^2)		
	Jan – Mar 2021	Oct – Dec 2021	Jan – Mar 2022
48	9.3	27.0	22.8
51	5.3	15.3	12.8
54	2.7	8.9	7.4
57	1.5	5.2	4.0
60	0.9	2.5	2.0
63	0.6	1.4	1.2
66	0.4	0.9	0.8
69	0.2	0.6	0.5
72	0.1	0.4	0.3
W/E Split (%)	68/32	84/16	68/32

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	Jan – Mar 2021	Oct – Dec 2021	Jan – Mar 2022
1900D	15	26	17
737400	105	n/a	n/a
737800	17	386	355
757RR	126	232	228
A300-622R	108	96	101
A319-131	12	128	92
A320-211 (ceo)	114	425	380
A320-211 (neo)	20	270	218
A321-232 (ceo)	34	302	189
A321-232 (neo)	26	314	244
A330-301	n/a	19	n/a
CL600	12	22	15
CL601	11	43	45
CNA525C	10	20	22
CNA55B	n/a	15	n/a
CNA560XL	10	27	28
CNA680	n/a	21	15
EMB145	18	24	32
F10062	23	40	46
GIV	n/a	30	15
GV	76	251	212
LEAR35	n/a	12	n/a
Other	51	36	56
Total	**788**	**2,739**	**2,310**

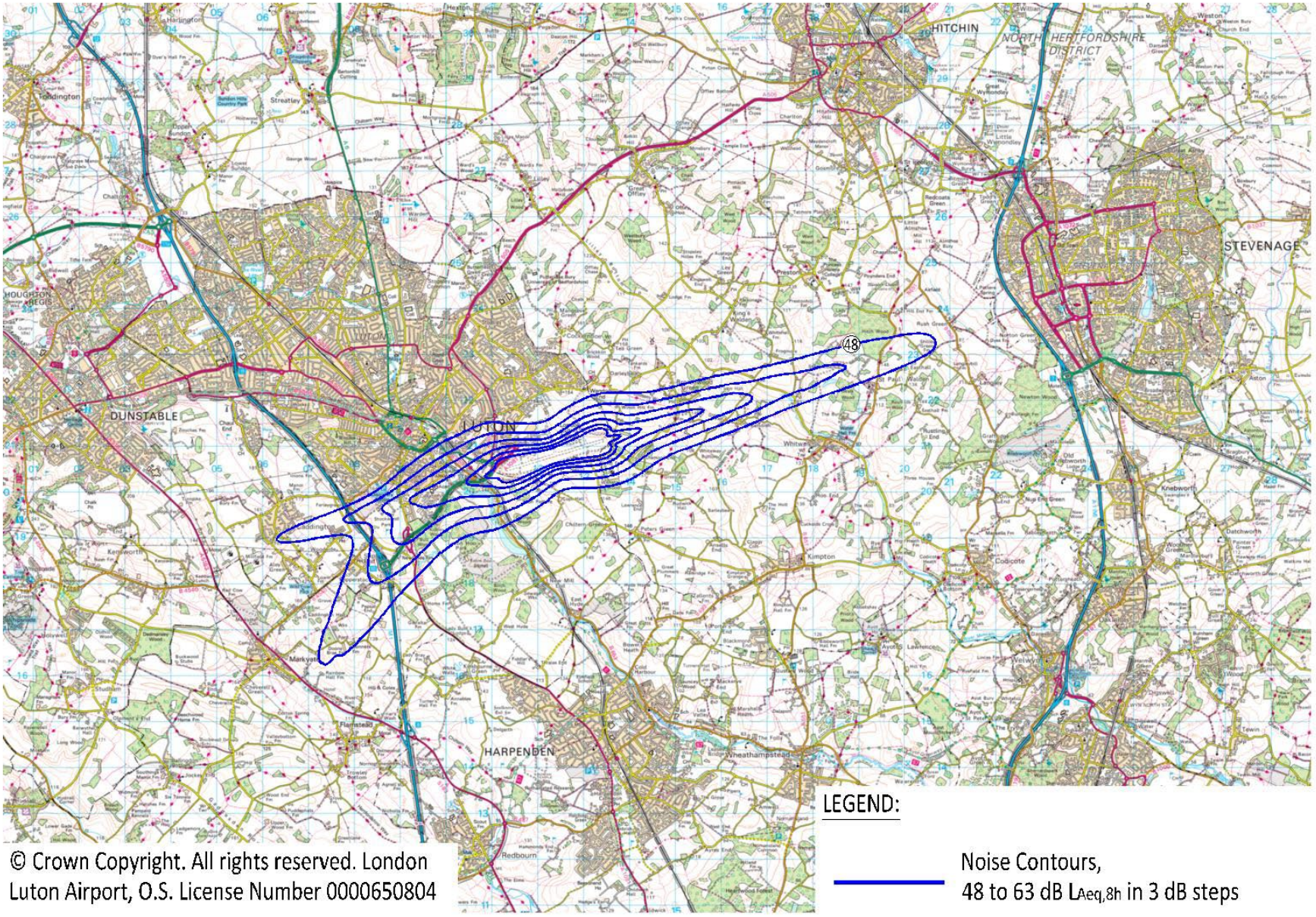
Table 2: Night-time Aircraft Movement Numbers by Aircraft Type

5.1.4 Noise Contour Comparison

With the ongoing recovery from the COVID-19 pandemic, and the easing of travel restrictions, there has been a 193% increase in the total number of movements compared with the same quarter in 2021.

The area of the 48 dB(A) noise contour has increased by 145% compared to the same quarter last year, as a result of the increase in movements, although remains below the pre-pandemic level.

The number of movements, and therefore the area of the noise contours, has decreased compared to the previous quarter (October - December 2021).



LEGEND:

Noise Contours,
48 to 63 dB $L_{Aeq,8h}$ in 3 dB steps

6 COMPLAINTS

6.1 Total Complaints relating to LLA aircraft operations

	1st QTR 2022	1st QTR 2021
Total No. of Complaints relating to LLA aircraft operations	839	1,075
No. of Complainants	91	54
No. of General Complaints	98	31
No. of Specific Complaints	741	1,044
Average No. of Complaints per Complainant	9.2	19.9
No. of Aircraft Movements per Complaint	25.1	5.6

In line with the recovery of aviation and increase in aircraft movements, a total of 839 complaints relating to LLA aircraft operations were received by the Flight Operations Department during the last quarter. This is compared to the 1,075 complaints which were received for the same period last year. It should be noted that during the first quarter of 2022, 86% of complaints were received from 10 individuals and 71% from one individual.

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

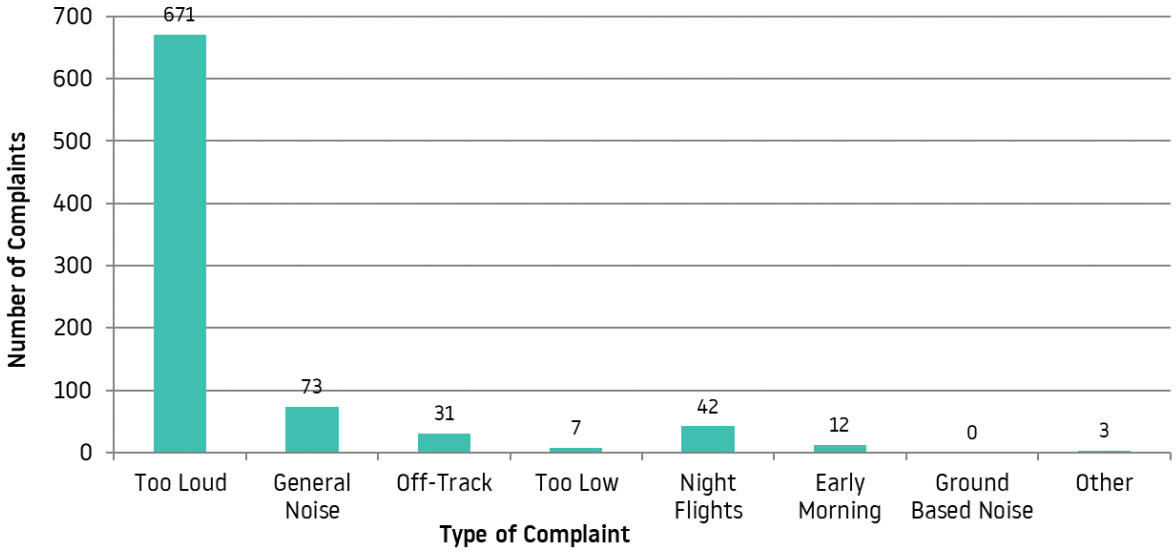
Jan 2022 88 complaints (67 Specific Complaints, 21 General Complaints)
Feb 2022 61 complaints (45 Specific Complaints, 16 General Complaints)
Mar 2022 690 complaints (629 Specific Complaints, 61 General Complaints)

A further 3 complaints not attributable to LLA traffic were received throughout the quarter, compared to 130 complaints for the period January to March last year.

Out of 91 total complainants, there were 57 that contacted the airport only once meaning that 34 complainants generated 805 complaints.

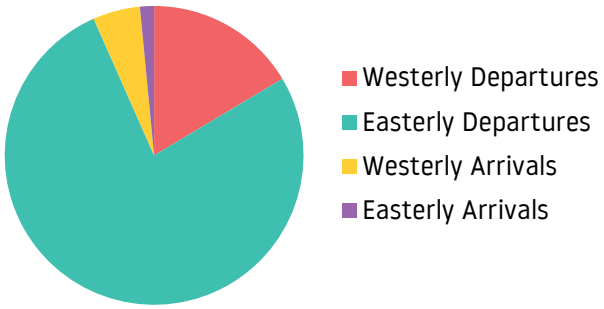
6.2 Type of Complaint

The types of complaint received by the Flight Operations Department from January to March 2022 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 2022.



Within the 119 specific aircraft complaints concerning westerly departures, 106 complaints involved aircraft on the Match/Detling heading, 9 related to aircraft following Compton flight route, 4 related to aircraft using the Olney route and no complaints were recorded about aircraft following an off-airways routing.

With regard to the 557 complaints attributed to easterly departures, 513 related to aircraft following the Compton flight route and 26 aircraft on the Match route. There were 18 specific complaints relating to the easterly Olney departure route and no complaints were recorded about aircraft following an off-airways routing.

In total the Flight Operations Department received 48 specific complaints regarding arrivals. 37 of these complaints were about westerly arrivals and a further 11 concerning easterly arrivals.

13 Complainants reported noise disturbance at night (compared to **22 Complainants** for the same Quarter last year)

Departing aircraft accounted for 84% of the 32 specific night complaints and 16% involved arrivals. Cargo flights, involving A306 and B752 aircraft were reported in 50% of night complaints, whilst passenger aircraft accounted for 41% of night complaints. Furthermore, 9% of night complaints correlated to executive aircraft.

42 (5%) Complaints concerning night noise disturbance from LLA operations

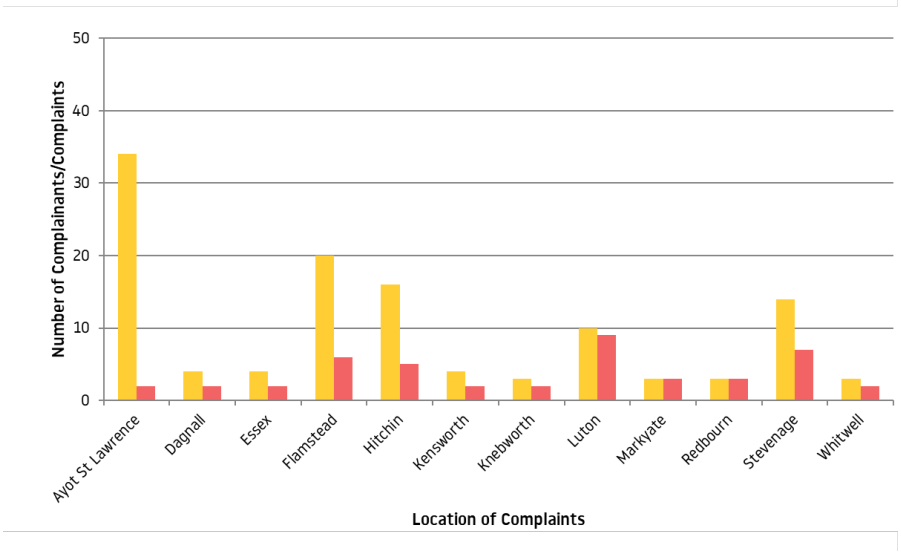
6.4 Complaints by aircraft type

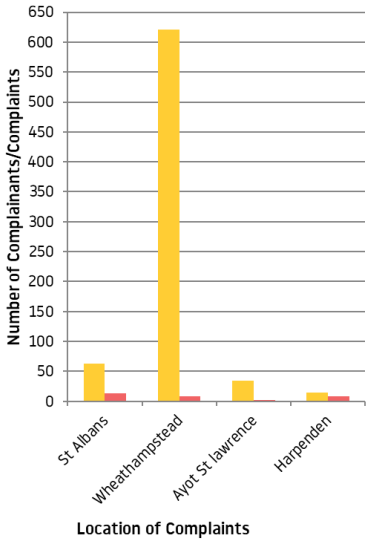
The diagram below shows aircraft types generating specific complaints.

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 January to March 2022.

The communities with one complainant include Baldock, Barton-le-Clay, Berkhamstead, Bishop Stortford, Breachwood Green, Codicote, Datchworth, Edgware, Gaddesden Row, Great Cambourne, Leighton Buzzard, Papworth Everard, St Pauls Warden, Sudbury, Totternhoe, Tring and Wiggington.





6.6 Complaints Analysis

During Quarter 1 there has been a decrease in complaints compared to the same quarter last year however, the number of complainants has increased, 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 recent implementation of the arrival's airspace change.
- Similar to previous quarters in 2021, a few individuals are making many complaints, in Q1 86% of complaints were received from 10 individuals and 71% from one individual.
- The wind direction was predominantly westerly (67%) but unusually 68% of complaints were made from residents effected by easterly routes.

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	2%
Email	84%
Travis	14%

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

Postal Address Flight Operations Department
London Luton Airport
Percival House, Percival Way
Luton
Bedfordshire
LU2 9NU

Direct Telephone (01582) 395382 (24 hours)

6.8 Response Time

The following table shows the time taken to respond to complaints submitted by our local communities. We aim to respond to 92% of concerns within 8 days and 99% 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	26.7%
1	12.3%
2	11.0%
3	11.8%
4	6.0%
5	5.8%
6	8.9%
7	4.9%
8	5.0%
9	5.2%
10	0.4%
11	0.7%
12	0.1%
13	0.2%
14	1.0%
15	0.0%
16	0.1%
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 1 there was one community visit to the airport, this was by HarpendenSky and Harpenden councillors during March 2022. The meeting discussed airspace change and noise monitoring. There were further community visits to the airport offered although these were declined by residents within the community.

7.2 Airport Visits to the Community

On 22nd February 2022 a FASI-S stage 2 engagement day was held with the community. This was split into two sections, the morning session being in person and the afternoon session was held virtually. This was an opportunity for members of the community to ask questions and see what progress had been made with the project since the re-launch after the pandemic.

The Flight Operations team have also arranged Public Surgeries for later in the year; details of which can be found on our website, which is updated accordingly.
(https://www.london-luton.co.uk/corporate/community/noise/noise-surgeries)