

Departures Performance

Track Keeping

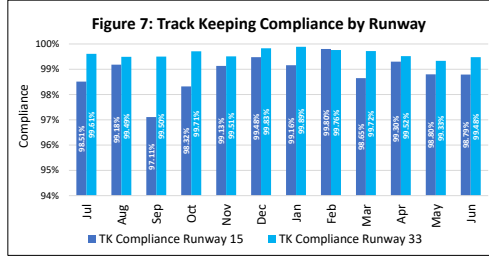
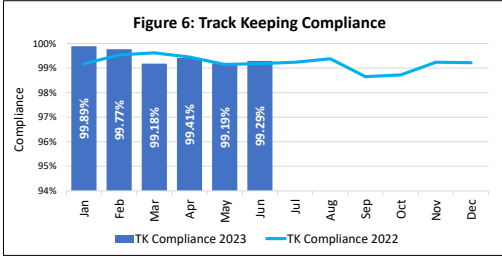


Figure 10 shows a map of the five noise preferential routes (NPRs) for departures in use at Birmingham Airport. The table below lists the altitudes up to which aircraft are required to stay within the noise preferential route, in order to be classed as 'on-track'. Once above the minimum vectoring altitude, air traffic control may provide pilots with vectors to facilitate a more direct path towards their destination.

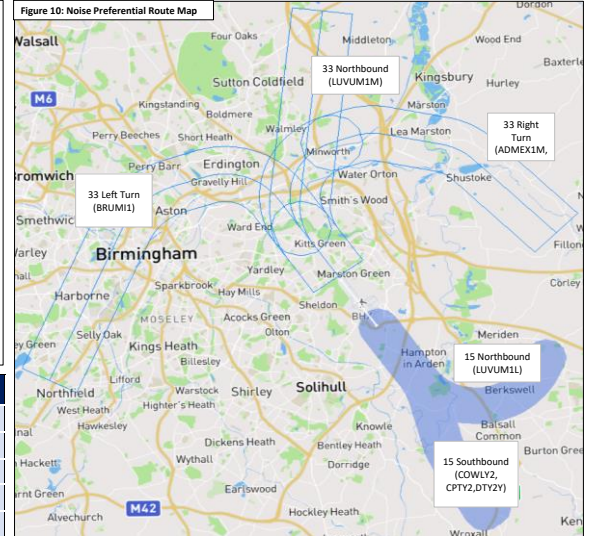
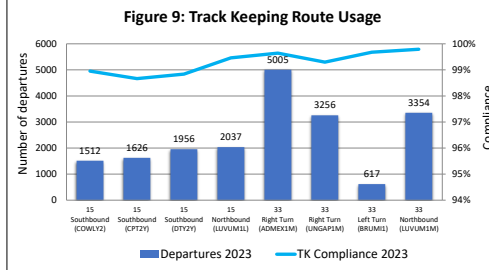
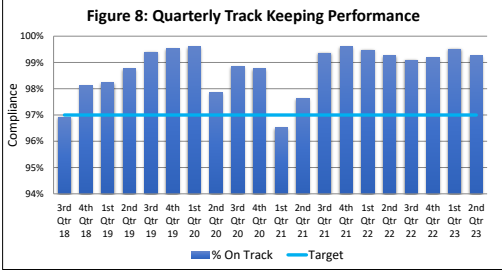
Figure 6 shows the overall departure track keeping compliance for 2022 to the end of Q4. Track keeping compliance in 2022 remained in excess of 98% in each month, above the current 97% target.

Figure 7 shows track keeping compliance by runway for 2022, with a marginal difference between R33 and R15, with track keeping compliance higher for operations departing from Runway 33. This is due to there being more total departures off R33 in 2022.

Figure 8 shows quarterly track keeping performance vs target (97%). Track keeping has exceeded 96% since 2018 and fell slightly below target in 2021.

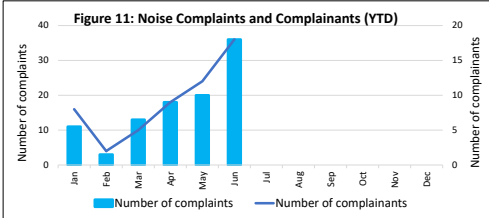
Figure 9 shows 2023 YTD route usage and the associated track-keeping compliance. Track keeping was above 97% for all routes. The routes most utilised were R33 RightTurn (ADMEX1M/ LUNGAP1M), R33 Northbound (LUVUM1L) and R15 Southbound (COWLY2, CPTY2, DTY2Y, WCOZY) consecutively.

Route	Minimum Vectoring Altitude
15 Southbound (COWLY2, CPT2Y, DTY2Y)	4000 ft
15 Northbound (LUVUM1L)	3000 ft
33 Right Turn (ADMEX1M/ LUNGAP1M)	3000 ft
33 Left Turn (BRUM1)	3000 ft
33 Northbound (LUVUM1M)	3000 ft



Aircraft Activity Complaints

Complaints - 2023



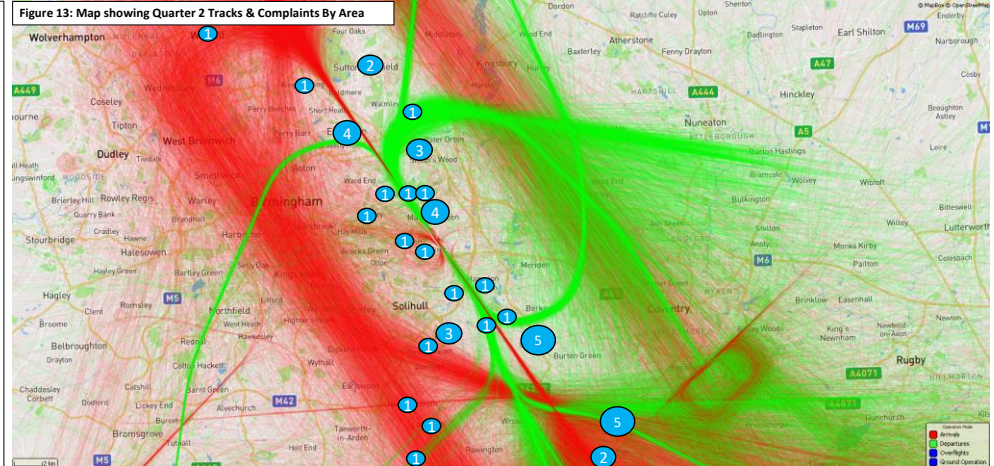
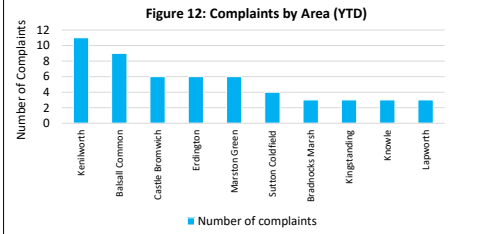
In Quarter 2 2023, 74 aircraft complaints were received from 39 individual correspondents (complainants), who collectively contacted the airport on 47 separate occasions. When compared to Quarter 2 2022 there has been a 38.3% decrease in the number of aircraft complaints received and a 31.5% decrease in the number of complainants.

Figure 11 (left) illustrates the number of noise complaints received in each month of 2023. June saw the highest number of complaints (36) and the highest number of complainants (18).

Figure 12 (below left) provides a breakdown of complaints by area of origin for 2023 Year to Date, for the top ten areas of complaint. Kenilworth was the area from which we received the most complaints in 2023 YTD with 11 complaints.

Figure 13 (right) is a map showing the distribution of individual complainants, as well as the tracks of all movements in Q2 2023.

It should also be noted that during Q2 2023, six persistent complainants are excluded from the statistics in the figures shown, as per the Birmingham Airport Complaints Policy and as reported to the Airport Consultative Committee. These six complainants registered a further 90 complaints regarding aircraft in Q2 2023.



Complaints - Trend Analysis

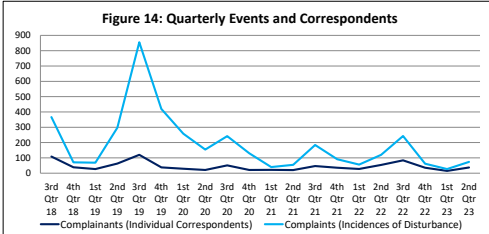
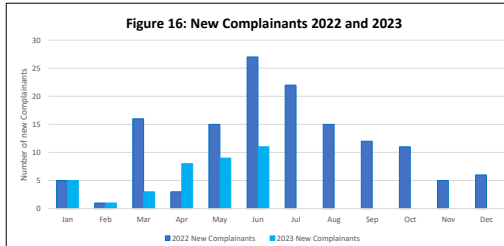
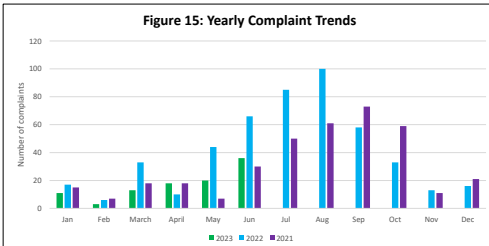


Figure 14 (left) shows quarterly complaints and complainant numbers and trends over a five year period, showing a peak in complaints and complainants at Q3 2019.

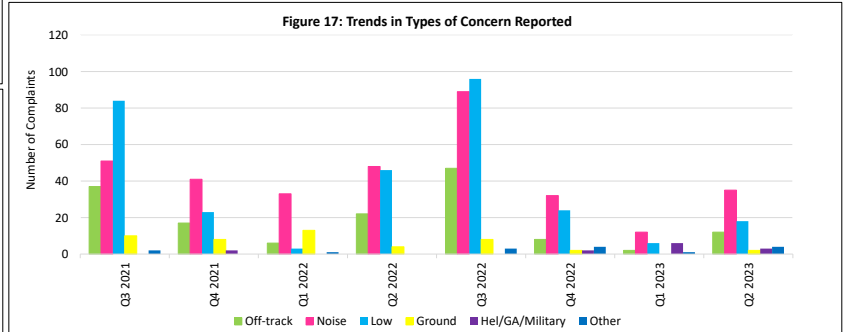
Figure 15 (below left) shows a comparison between the number of complaints per month for 2023, 2022 and 2021. May and June in Q2 2023 show a decrease in complaints compared to 2022 but an increase compared to 2021. April 2023 shows an increase in complaints compared to the same month in 2022.

Figure 16 (below) shows the number of new complainants for 2022 and 2023, with the largest number of new complainants seen in June 2022 (27). New complainants for April increased in 2023 compared with 2022, whereas both May and June show decreases between the same years.

Figure 17 (below right) shows noise complaints broken down by concern category (Noise, Off-Track, Low Flying Aircraft, Ground Noise, Helicopter/General Aviation/ Military, Other) by quarter. In Q2 2023 the category with the most complaints was Noise (aircraft noise) with 35 complaints, the category with the fewest complaints was Ground Noise with 2. The table (right) shows noise complaints by concern category reported, this year vs last year rolling.



Concern Type	3 rd Qtr 2022	3 rd Qtr 2021	4 th Qtr 2022	4 th Qtr 2021	1 st Qtr 2023	1 st Qtr 2022	2 nd Qtr 2023	2 nd Qtr 2022	Last 12 months	Previous 12 Months
Off Track	47	37	8	17	2	6	12	22	69	82
Noise	89	51	32	41	12	33	35	48	168	173
Low	96	84	24	23	6	3	18	46	144	156
Ground Noise	8	10	2	8	0	13	2	4	12	35
Hel/GA/Military	0	0	2	2	6	0	3	0	11	2
Other	3	2	4	0	1	1	4	0	12	3
TOTAL	243	184	72	91	27	56	74	120	416	451



Airlines & Air Traffic

Airline Noise Performance

Rank by ATM	Airline Name	Total Movements	CDA Performance	Rank (CDA)	Track Keeping Performance	Rank (TK)
1	Jet2.com	4051	97.19%	2	99.41%	8
2	Ryanair	4033	98.60%	1	99.5%	7
3	TUI	2852	94.70%	5	99.7%	2
4	EasyJet	1464	93.99%	8	99.59%	4
5	Lufthansa	887	94.59%	6	99.10%	11
6	KLM Royal Dutch Airlines	758	94.40%	7	99.47%	6
7	Loganair	747	89.30%	15	99.7%	2
8	Air France	686	85.96%	19	100.00%	1
9	Emerald Airlines (UK)	589	88.23%	16	100.00%	1
10	EasyJet Europe	522	91.95%	9	99.62%	3
11	Emerald Airlines	431	88.02%	17	99.53%	5
12	Eurowings	380	91.05%	12	99.47%	6
13	Emirates	364	90.70%	13	98.9%	12
14	Turkish Airlines	362	95.00%	4	100.0%	1
15	Aer Lingus	313	86.93%	18	98.75%	13
16	Wizz Air	278	90.60%	14	99.3%	9
17	Vueling	250	91.30%	11	97.6%	14
18	Brussels Airlines	241	81.82%	20	99.17%	10
19	Zimex Aviation Austria	239	91.80%	10	100.00%	1
20	SunExpress	218	95.40%	3	99.1%	11

The table to the left shows airline noise performance. Airlines are ranked by the number of movements for Q2 2023. The ranking within each metric is also presented.

The methodology used to calculate the two metrics that form the airline noise performance table are described below. In order to drive continuous improvement and to help showcase airline performance in relation to noise, this table has been developed and is presented to airlines on a quarterly basis through the Operation Pathfinder programme. In collaboration with airlines, we have identified operational metrics which are being monitored and reported against. These metrics will develop over time in collaboration with the airlines.

Continuous Descent Approaches (CDA) and Track Keeping (TK) are operational metrics. Airlines with more than ten movements per week during Q2 2023 are included in the ranking. Airlines with CDA or Track Keeping performance in green have met our CDA (96%) and Track Keeping (97%) targets. Airlines with CDA or Track Keeping performance in the red or amber range will be considered as a priority for engagement and we will work with them to improve their operational performance.

Continuous Descent Approaches (CDA) Performance is the first operational metric in the airline noise performance table and relates to the vertical profiles flown during arrival. CDA performance is equal to the proportion of arrivals that meet the criteria for CDA, i.e., no level segment longer than 2.5 nautical miles below the altitude of 7,000ft. Continuous descent approaches reduce the noise impact because they require significantly less engine thrust, which leads to reduced emissions of air pollutants and noise, with the aircraft staying higher for longer. Airport-wide CDA performance is also presented separately in this report.

RAG definition: **Green** ≥ 96% **96%** ≤ **Amber** < 85% **Red** < 85%

Track Keeping (TK) Performance Track keeping performance is the second operational metric in the airline noise performance table and applies to the lateral departure track. All departures are required to stay within the Noise Preferential Routes (NPRs) designed to take departing aircraft over the least populated areas. Track keeping performance is equal to the proportion of departures that stay within the NPRs until they reach the required altitude of 3,000ft or 4,000ft depending on the route. Airport-wide Track Keeping performance is also presented separately in this report.

RAG definition: **Green** ≥ 97% **97%** ≤ **Amber** < 95% **Red** < 90%

Runway Statistics

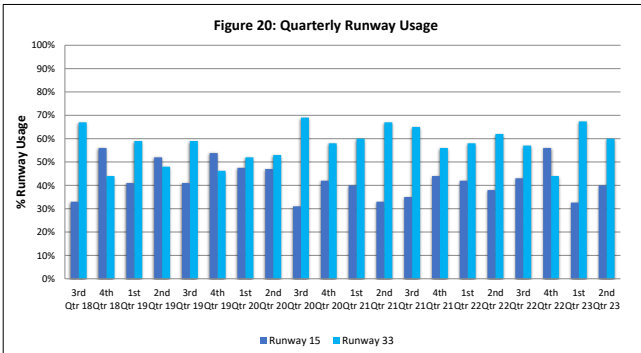
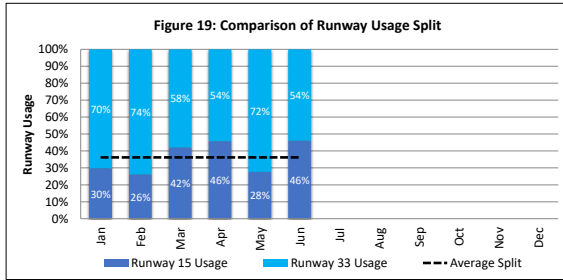
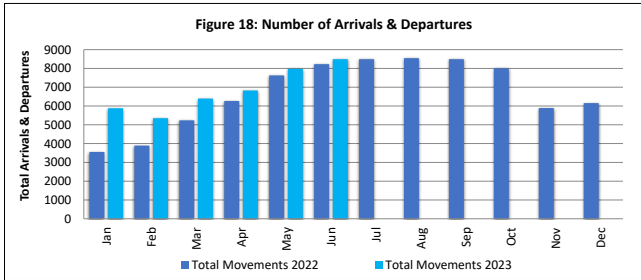


Figure 18 (top left) shows the total number of air transport movements (ATMs) (both arrivals and departures) for 2022 and 2023. There has been an increase in movements for all months in Q2 of 2023 vs 2022.

Figure 19 (top middle) shows runway usage for 2023. Over Q2 of 2023 the average runway split is 40% R15 and 60% R33. The number of Air Traffic Movements (ATMs) by runway for the 2nd Qtr 2023 was 9,236 ATMs on runway 15 and 14,056 ATMs on runway 33.

Figure 20 (bottom left) shows quarterly runway usage over a 5-year period.

Figure 21 (right) Birmingham Airport has one runway which operates in two directions, known as Runway 15 and Runway 33; the direction of operation is primarily dependent upon meteorological conditions.

Where winds are below five knots, we operate our 'Preferential Runway' Policy, this is when Air Traffic Control will generally direct arrivals onto Runway 33 to minimise the risk of wake vortex strikes. Wake vortices are rotating columns of air generated by arriving aircraft as they pass through the air. Infrequently and in certain still, calm conditions they can cause damage to roofs. Although vortex strikes are rare, the Preferential Runway Policy minimises the risk to the large number of properties located to the north of the airport underneath the R15 centreline by directing arrivals onto R33, where there are very few properties at risk. Taken together, wind direction and the Preferential Runway policy explain why Runway 33 is utilised more than Runway 15.

