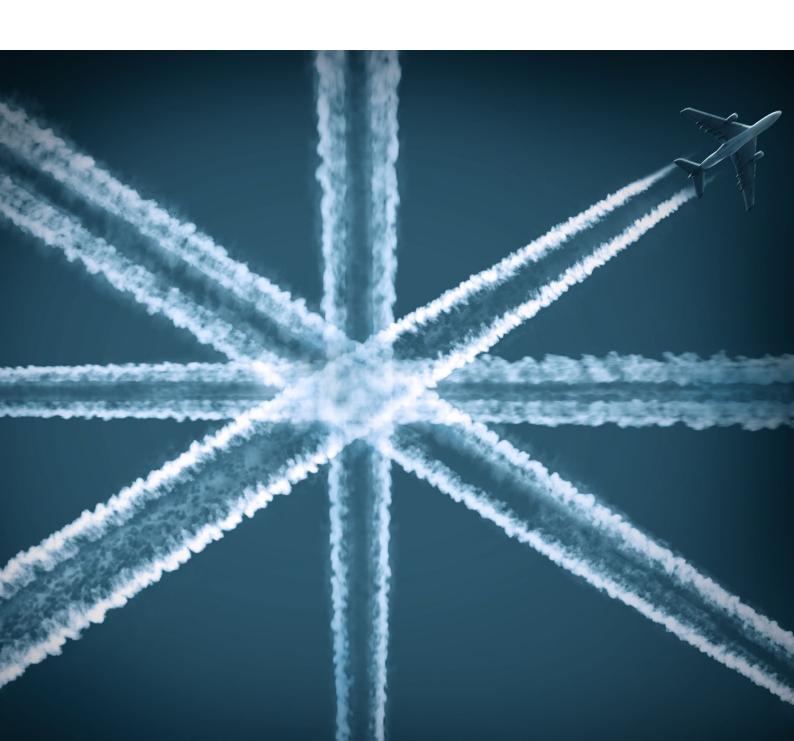


# Quiet Flight Performance Report January – December 2023

Airline noise abatement performance



#### Introduction

East Midlands Airport is committed to minimising the noise impact of our operations. Our approach to noise management is set out in our Noise Action Plan, the latest of which covers 2019-2023 and has been adopted by the Government.

To enable our local communities to understand operations at the airport, we provide a wide range of information. Our website includes Community Information Sheets, performance reports and a link to WebTrak, an online radar replay website which allows communities to see aircraft activity in their area. As well as engaging with local communities, we work closely with airline partners to help them operate more quietly and efficiently when they operate at East Midlands Airport.

This Quiet Flight Performance Report provides a transparent view of how airlines operating at East Midlands Airport perform against a range of noise-related indicators. It considers measures that apply to both the types of aircraft in use and the way in which our airlines operate those aircraft at our airport.

The summary table below shows a ranking of each airline's overall performance, along with an average percentage score against the noise-related indicators. This report also includes a description of each noise-related indicator and a detailed breakdown of all the measurement criteria that contribute to an airline's overall performance.

#### Changes since our 2022 report

Our report includes airlines who operate more than 50 flights from East Midlands Airport during the reporting period. This report compares data for the calendar years 2022 and calendar year 2023 to give an accurate comparison of the results.

This report includes eight new airlines, who were not included in the 2022 report. 6 airlines have been removed because they operated fewer than 50 flights each. We are pleased to see that overall performance has seen an increase from an average of 87.2% in 2022 to 88.8% in of 2023. Notable operational performance in 2023 include:

- 18 airlines achieving or maintaining above 90%.
- 17 airlines seeing an improvement of more than half a percent.
- 8 airlines remain within half a percent of their previous score.
- Two airlines scored 100% track keeping compliance, and two airlines with 100% of operations completing a Continuous Climb Operations for 2023

There is significant variation in aircraft types used between 2022 and 2023, this variation can have significant impacts on the overall ranking, masking where other improvements have been made in operational procedures, such as departure track keeping and Continuous Climb Operations.



## January – December 2023 PERFORMANCE SUMMARY

RANK	PEFORMANCE VS. PREVIOUS YEAR	AIRLINE	OVERALL PERFORMANCE JAN-JUNE 2023	OVERALL PERFORMANCE JAN-DEC 2022		
1	<b>^</b>	Flybe	98.7%	96.3%		
2	NEW	Specsavers Aviation	98.4%	-		
3	Ψ	Aurigny	97.0%	98.5%		
4	<b>^</b>	Smart Jet	96.9%	96.0%		
5	-	DHL Air (Austria)	96.8%	96.7%		
6	<b>^</b>	VistaJet	96.4%	94.5%		
7	-	AeroLogic	95.2%	95.7%		
8	<b>^</b>	NetJets Europe	94.2%	93.0%		
9	<b>^</b>	LoganAir	93.7%	93.0%		
10	Ψ	Blue Island	93.6%	94.6%		
11	NEW	Aegean Airlines	93.5%	-		
12	NEW	Eastern Airways	93.5%	-		
13	<b>^</b>	Air Hamburg Private Jet	93.4%	91.8%		
14	-	JCB Aviation Department	93.4%	93.6%		
15	NEW	Emerald Airlines UK	92.4%	-		
16	NEW	Emerald Airlines	92.2%	-		
17	<b>^</b>	RVL Aviation	92.1%	88.9%		
18	<b>^</b>	FedEx	92.0%	86.3%		
19	<b>^</b>	Ryanair	88.1%	85.7%		
20	<b>^</b>	European Air Transport	86.8%	82.8%		
21	-	West Atlantic UK Ltd	85.9%	85.7%		
22	-	Jet2.com	85.4%	85.4%		
23	<b>^</b>	ASL Airlines Ireland	85.1%	84.1%		
24	NEW	AirExplore	84.5%	-		
25	<u>-</u>	Star Air	84.2%	84.2%		
26	Ψ	TUI UK	84.1%	85.7%		
27	<b>^</b>	UPS Airlines	83.9%	82.8%		
28	<b>^</b>	ASL Airlines UK	83.8%	82.5%		
29	NEW	Sunwing Airlines	83.0%	-		
30	<b>^</b>	DHL Air (UK)	82.6%	81.6%		
31	-	Cargo Air	82.6%	82.4%		
32	-	MNG Airlines	82.2%	82.5%		
33	<b>^</b>	Swiftair	82.2%	83.0%		
34	NEW	ASL Airlines Belgium	80.8%	-		
35	Ψ	West Atlantic Sweden	80.6%	93.9%		
36	<b>^</b>	Cargojet Airways	78.9%	77.7%		
37	<b>^</b>	ABX Air	77.5%	75.6%		

<b>^</b>	-	Ψ
Improved by more than half a percent compared to last year	Stayed within +/- half a percent of last year's performance.	Declined by more than half a percent compared to last year



#### **METHODOLOGY**

#### Scope of the report

This report combines information from a number of sources including:

- aircraft certification data issued by regulators in the country in which aircraft are registered
- noise and operational performance data recorded by our noise management system, which includes radar information from air traffic control and information collected by our community noise monitors.

Although we monitor the performance of all airlines operating at the airport, this report focuses on airlines who operated 50 or more flights during the monitoring period.

#### Assessing performance

We measure performance against a total of eight measures which consider the types of aircraft airlines in use at East Midlands Airport and the way in which they operate those aircraft. The measures include:

- Continuous descent operations
- Departure track keeping
- Continuous climb operations
- Compliance with night-time departure noise limits
- Average QC of operations
- QC2 or lower operations at night
- Minimum Chapter 4 compliance at night
- Chapter 14 operations at night

Each airline's overall performance score is calculated as the mean average of its performance against the eight noise-related performance indicators listed above. Four of these measures specifically consider performance at night (2300 – 0700). This approach ensures that airlines who do not perform as well at night are scored lower when compared to other higher performing night operators and those that only operate during the daytime.

### Operational performance

We have invested significantly in a state-of-the-art noise and track keeping monitoring system which monitors compliance with the noise abatement procedures set out in our Noise Action Plan. This report includes four operational measures which assess airlines'



performance with procedures intended to minimise aircraft noise and the number of people impacted by noise from aircraft operating at East Midlands Airport. Performance against 3 of these indicators is reported over 24hrs to align with our NAP commitment and as specified in the NAP departure noise limit compliance only apply to night-time operations between 2300-0700.

#### Continuous descent operations

Keeping arriving aircraft higher for longer allows for a more gradual descent towards the runway, reducing noise and improving fuel efficiency because engine power can be reduced. Aircraft arriving at East Midlands Airport are expected to perform a continuous descent approach from 6,000 feet until they land at the airport.

#### Departure track keeping

Aircraft departing from East Midlands Airport are expected to follow departure routes which have been designed to minimise noise disturbance for local communities. Aircraft are required to remain within a 2.4 km wide Noise Preferential Routing (NPR) until they reach a minimum height of 5,000 feet, at which point they can receive instruction from air traffic control (ATC) and continue onto a more direct heading to their destination.

#### Continuous climb operations

Continuous climb departures are a measure designed to enable aircraft to keep climbing after take-off until they reach their cruising altitude. The aim is to take the aircraft to a higher altitude, quicker reducing the noise experienced by communities. We monitor continuous climb for departing aircraft until they reach 10,000 feet.

#### Departure noise limit compliance (night-time)

We recognise that local communities can be more sensitive to noise at night-time. As a result, we have set noise limits within which aircraft departing between 23:00 to 07:00 are required to operate. We monitor the level of noise generated by each departing aircraft using noise monitors located directly beneath the noise preferential routes, measured at a distance of 6.5 km from start of the take-off run. The maximum level of noise a departing aircraft is permitted to make depends on the maximum take-off weight of the aircraft – limits for smaller aircraft types are lower as we would expect them to operate more quietly due to their size. Airlines whose flights generate noise levels above the permitted limits are required to pay a financial penalty to the East Midlands Airport Community Fund. The amount of the penalty depends on how far above the noise limit at which the aircraft is recorded. The maximum noise limits are defined as follows:



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300 tonnes or greater	92
Greater than 100 tonnes but less than 300 tonnes	87
100 tonnes or less	81

#### Fleet performance

We work closely with our airlines to encourage them to operate their quietest aircraft at East Midlands Airport. Our Noise Action Plan includes details of the steps we have taken and actions we plan to take to discourage the use of noisier aircraft, particularly at night. This report includes four specific fleet-based performance indicators. These indicators acknowledge airlines who are operating a more modern, quieter fleet of aircraft.

## Average quota count per flight

The Quota Count (QC) system, published by the Government, gives each aircraft a QC value depending on its certified noise level for departure and arrival. There are nine QC categories as shown below, louder aircraft are placed in higher categories and these double with each increase of three decibels.

CERTIFIED NOISE LEVEL (DECIBELS)	QUOTA COUNT
More than 101.9	16
99 to 101.9	8
96 to 98.9	4
93 to 95.9	2
90 to 92.9	1
87 to 89.9	0.5
84 to 86.9	0.25
81 to 83.9	0.125
Less than 81	0

This indicator is calculated by evaluating the average QC of each airline operation based on the noise certificates of aircraft operated at EMA over 24 hours. The total QC of all operations per aircraft, both arriving and departing, is divided by the number of operations to provide an average QC per operation. The methodology we have used determines that if an airline is operating only QC0 aircraft they would receive 100% score, whereas if an operator was to only operate QC16 they would receive 0% score.



## QC2 or lower operations (night-time)

Recognising the impact of noisier aircraft operating at night, we introduced a QC4 surcharge in April 2021 and this has since been increased in April 2022. Any QC4 operation between the hours of 23:00-07:00 will incur a surcharge of up to £2,750, a typical QC4 operation would be a departing 747-400.

This new surcharge is in addition to existing surcharges for QC8 and QC16 aircraft. Proceeds from noise surcharges are paid to the East Midlands Airport Community Fund.

This measure reports the percentage of flights undertaken using aircraft which are categorised as QC2 or below and do not need to pay a QC4, QC8 or QC16 surcharge.

## Chapter 4 and 14 compliance (night-time)

Aircraft manufacturers are required meet noise standards set by the International Civil Aviation Organisation (ICAO) when they introduce new aircraft types. Our Noise Action Plan includes actions to phase out the night-time use of aircraft which do not meet the 'Chapter 4' noise certification standard which has applied to newly certified aircraft types introduced since 2006. Since 2018, newly certified aircraft types have been required to meet the requirements of the most recent noise certification standard called 'Chapter 14'.

This is reported as 2 separate measures, that show the percentage of compliance to Chapter 4 (or above) and Chapter 14 standards for aircraft operated by each airline at night.





## Quiet Flight Performance Report January – December 2023 full report

RANK	PEFORMANCE VS. PREVIOUS YEAR	AIRLINE	OVERALL COMPLIANCE AVERAGE	OPERATIONS TOTAL	CONTINUOUS DECENT OPERATIONS	DEPARTURE TRACK KEEPING	CONTINUOUS CLIMB OPERATIONS	COMPLIANCE WITH DEPARTURE NOISE LIMITS AT NIGHT	AVERAGE QC OF OPERATIONS	QC2 OR LOWER OPERATIONS AT NIGHT	MINIMUM CHAPTER 4 COMPLIANCE AT NIGHT	CHAPTER 14 OPERATIONS AT NIGHT
1	<b>^</b>	Flybe	98.7%	98	95.9%	98.0%	98.0%	100.0%	97.8%	100.0%	100.0%	100.0%
2	NEW	Specsavers Aviation	98.4%	70	88.6%	100.0%	100.0%	100.0%	98.5%	100.0%	100.0%	100.0%
3	Ψ	Aurigny	97.0%	227	90.3%	89.5%	98.2%	100.0%	98.0%	100.0%	100.0%	100.0%
4	<b>^</b>	Smart Jet	96.9%	112	89.3%	98.2%	89.3%	100.0%	98.0%	100.0%	100.0%	100.0%
5	-	DHL Air (Austria)	96.8%	2392	89.0%	93.7%	98.0%	100.0%	94.0%	100.0%	100.0%	100.0%
6	<b>1</b>	VistaJet	96.4%	128	78.1%	98.4%	95.3%	100.0%	99.4%	100.0%	100.0%	100.0%
7	-	AeroLogic	95.2%	488	90.2%	99.2%	95.1%	100.0%	77.5%	100.0%	100.0%	100.0%
8	<b>1</b>	NetJets Europe	94.2%	199	61.0%	99.0%	94.9%	100.0%	98.6%	100.0%	100.0%	100.0%
9	<b>1</b>	LoganAir	93.7%	618	83.5%	70.6%	97.7%	100.0%	98.1%	100.0%	100.0%	100.0%
10	Ψ	Blue Island	93.6%	554	69.8%	83.0%	97.8%	100.0%	98.1%	100.0%	100.0%	100.0%
11	NEW	Aegean Airlines	93.5%	74	81.1%	81.1%	97.3%	100.0%	88.7%	100.0%	100.0%	100.0%
12	NEW	Eastern Airways	93.5%	708	73.0%	95.2%	85.6%	100.0%	97.8%	100.0%	100.0%	96.6%
13	<b>↑</b>	Air Hamburg Private Jet	93.4%	60	63.3%	96.7%	90.0%	100.0%	97.4%	100.0%	100.0%	100.0%
14	-	JCB Aviation Department	93.4%	98	71.4%	95.9%	79.6%	100.0%	100.0%	100.0%	100.0%	100.0%
15	NEW	Emerald Airlines UK	92.4%	411	74.6%	68.4%	98.1%	100.0%	98.2%	100.0%	100.0%	100.0%
16	NEW	Emerald Airlines	92.2%	66	87.9%	51.5%	100.0%	100.0%	98.0%	100.0%	100.0%	100.0%
17	<b>^</b>	RVL Aviation	92.1%	67	50.0%	90.3%	96.8%	100.0%	100.0%	100.0%	100.0%	100.0%
18	<b>^</b>	FedEx	92.0%	827	84.0%	100.0%	94.9%	100.0%	84.7%	100.0%	100.0%	72.5%
19	<b>^</b>	Ryanair	88.1%	12630	98.4%	95.8%	97.8%	100.0%	93.7%	100.0%	100.0%	18.8%
20	1	European Air Transport	86.8%	312	82.8%	99.4%	97.4%	100.0%	89.1%	100.0%	100.0%	26.1%
21	-	West Atlantic UK Ltd	85.9%	5676	90.3%	88.8%	98.3%	100.0%	94.0%	100.0%	100.0%	15.6%
22	-	Jet2.com	85.4%	5660	97.5%	97.9%	96.4%	99.6%	91.3%	100.0%	100.0%	0.3%



23	<b>↑</b>	ASL Airlines Ireland	85.1%	1977	90.5%	94.5%	98.6%	100.0%	91.7%	100.0%	100.0%	5.5%
24	NEW	AirExplore	84.5%	1933	90.2%	98.1%	96.0%	100.0%	92.0%	100.0%	100.0%	0.0%
25	-	Star Air	84.2%	1992	97.0%	90.0%	98.6%	100.0%	85.1%	100.0%	100.0%	3.2%
26	Ψ	TUI UK	84.1%	3558	96.3%	92.7%	96.7%	95.8%	89.7%	100.0%	100.0%	2.0%
27	<b>^</b>	UPS Airlines	83.9%	1689	98.1%	85.0%	96.8%	100.0%	81.1%	100.0%	100.0%	10.5%
28	<b>1</b>	ASL Airlines UK	83.8%	1205	90.5%	84.1%	99.2%	100.0%	93.2%	100.0%	100.0%	3.6%
29	NEW	Sunwing Airlines	83.0%	481	81.3%	97.5%	93.3%	100.0%	92.0%	100.0%	100.0%	0.0%
30	<b>1</b>	DHL Air (UK)	82.6%	7876	95.0%	91.8%	97.4%	100.0%	80.5%	97.6%	94.7%	4.2%
31	-	Cargo Air	82.6%	898	79.1%	93.3%	96.2%	100.0%	92.4%	100.0%	100.0%	0.0%
32	-	MNG Airlines	82.2%	500	79.2%	99.6%	96.4%	100.0%	80.0%	100.0%	100.0%	2.2%
33	<b>1</b>	Swiftair	82.2%	696	81.7%	86.2%	97.1%	100.0%	90.0%	100.0%	100.0%	2.2%
34	NEW	ASL Airlines Belgium	80.8%	146	75.3%	84.9%	94.5%	100.0%	91.9%	100.0%	100.0%	0.0%
35	Ψ	West Atlantic Sweden	80.6%	113	80.7%	75.0%	98.2%	100.0%	90.7%	100.0%	100.0%	0.0%
36	<b>1</b>	Cargojet Airways	78.9%	168	67.9%	95.2%	89.3%	100.0%	78.8%	100.0%	100.0%	0.0%
37	<b>^</b>	ABX Air	77.5%	317	70.9%	81.1%	91.8%	100.0%	76.1%	100.0%	100.0%	0.0%