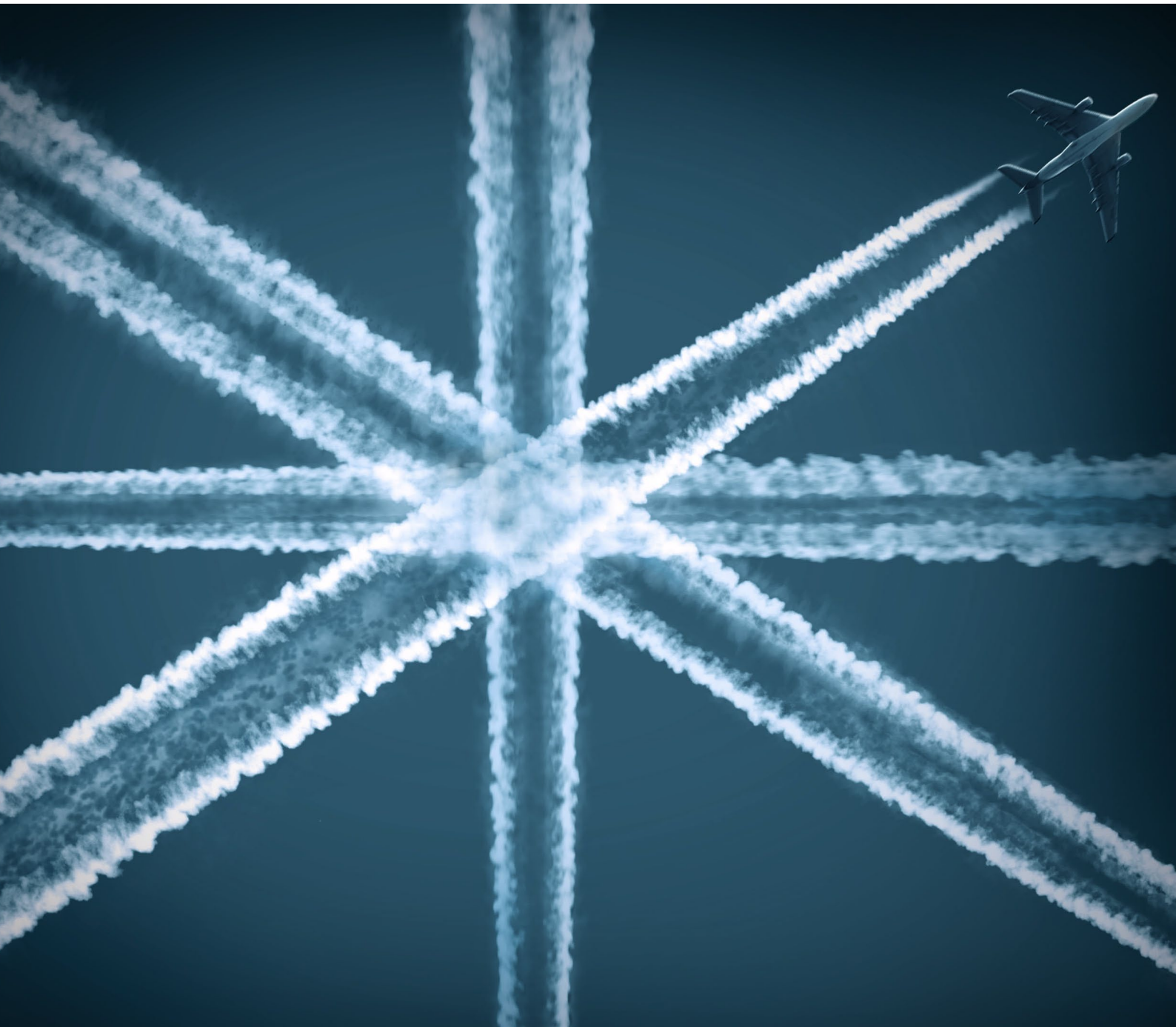


Quiet Flight Performance Report

January – December 2022

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 2021 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 2021 and 2022 to give an accurate comparison of the results. The mid-year report is available on our website.

This report includes 13 new airlines, who were not included in the 2021 report. Six airlines have been removed because they operated fewer than 50 flights each. We are pleased to see that overall performance has improved from an average of 84% in 2021 to 87.2% in 2022. , this is a further 1% improvement for the first half figures of 2022. Notable performance improvements in 2022 include:

- 12 of the 13 new airlines achieving above 90%.
- 7 airlines seeing an improvement of more than half a percent.
- 10 airlines remain within half a percent of their previous score.

The most improved airline this year is FedEx who have improved from 79.8% in 2021 to 86.3% compliance in 2022. This improvement is the result of the introduction of quieter Chapter 14 compliant aircraft at night and significant collaboration with the airport to improve their compliance with noise mitigation procedures, particularly track keeping.

2022 PERFORMANCE SUMMARY

RANK	PERFORMANCE VS. PREVIOUS YEAR	AIRLINE	OVERALL PERFORMANCE JAN-DEC 2022	OVERALL PERFORMANCE JAN-DEC 2021
1	NEW	Aurigny	98.5%	-
2	NEW	DHL Air Austria	96.7%	-
3	NEW	FlyBe	96.3%	-
4	NEW	SmartJet	96.0%	-
5	-	AeroLogic	95.7%	95.3%
6	NEW	Blue Islands	94.6%	-
7	NEW	VistaJet	94.5%	-
8	NEW	EasyJet	94.4%	-
9	↓	West Atlantic Sweden AB	93.9%	95.2%
10	NEW	JCB Aviation Department	93.6%	-
11	NEW	Qatar Airways	93.3%	-
12	NEW	Cygnus Air	93.0%	-
13	-	Loganair	93.0%	93.3%
14	NEW	NetJets Europe	93.0%	-
15	NEW	Air Hamburg Private Jets	91.8%	-
16	↓	RVL Aviation	88.9%	92.2%
17	↑	FedEx	86.3%	79.8%
18	-	Ryanair	85.7%	85.6%
19	↓	TUI Airways	85.7%	91%
20	↑	West Atlantic UK Ltd	85.7%	84.4%
21	↑	Jet2.com	85.4%	84.6%
22	↑	DHL Air Belgium	85.0%	84.3%
23	-	Star Air	84.2%	84.7%
24	-	ASL Airlines Ireland	84.1%	84.5%
25	↑	Bluebird Nordic	83.2%	82.4%
26	↑	Swiftair	83.0%	82.1%
27	-	UPS Airlines	82.8%	82.6%
28	-	ASL Airlines UK Ltd	82.5%	82.6%
29	-	MNG Airlines	82.5%	82.7%
30	↓	Cargo Air	82.4%	83.2%
31	↓	DHL Air UK	81.6%	90%
32	-	Cargojet Airways	77.7%	77.6%
33	↑	Cargologicair	76.3%	69.1%
34	-	ABX Air	75.6%	76.0%
35	↓	Polar Air Cargo	72.4%	73.0%
36	NEW	Silk Way Airlines	68.9%	-

↑	-	↓
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:

AIRCRAFT WEIGHT (CERTIFIED MAXIMUM TAKE-OFF WEIGHT)

NOISE LIMIT (DECIBELS)

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 2022 full report

RANK	PERFORMANCE 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	NEW	Aurigny	98.5%	258	93.8%	97.7%	98.4%	100.0%	98.0%	100.0%	100.0%	100.0%
2	NEW	DHL Air Austria	96.7%	2305	87.1%	97.1%	95.9%	100.0%	93.8%	100.0%	100.0%	100.0%
3	NEW	FlyBe	96.3%	784	85.5%	94.4%	93.6%	100.0%	97.2%	100.0%	100.0%	100.0%
4	NEW	Smart Jet	96.0%	60	86.7%	96.7%	86.7%	100.0%	98.0%	100.0%	100.0%	100.0%
5	-	AeroLogic	95.7%	701	94.0%	98.0%	97.7%	100.0%	76.0%	100.0%	100.0%	100.0%
6	NEW	Blue Islands	94.6%	532	77.7%	83.1%	98.1%	100.0%	98.0%	100.0%	100.0%	100.0%
7	NEW	VistaJet	94.5%	69	60.0%	100.0%	97.1%	100.0%	99.2%	100.0%	100.0%	100.0%
8	NEW	EasyJet	94.4%	114	96.5%	96.5%	91.2%	100.0%	96.1%	100.0%	100.0%	75.0%
9	↓	West Atlantic Sweden AB	93.9%	956	90.5%	81.3%	98.1%	100.0%	94.0%	100.0%	94.4%	92.8%
10	NEW	JCB Aviation Department	93.6%	158	77.2%	97.5%	74.7%	100.0%	99.2%	100.0%	100.0%	100.0%
11	NEW	Qatar Airways	93.3%	114	77.2%	96.5%	96.5%	100.0%	76.0%	100.0%	100.0%	100.0%
12	NEW	Cygnus Air	93.0%	144	58.3%	100.0%	91.7%	100.0%	94.0%	100.0%	100.0%	100.0%
13	-	Loganair	93.0%	570	81.8%	67.4%	96.8%	100.0%	98.0%	100.0%	100.0%	100.0%
14	NEW	NetJets Europe	93.0%	134	59.7%	95.5%	89.6%	100.0%	99.1%	100.0%	100.0%	100.0%
15	NEW	Air Hamburg Private Jets	91.8%	84	61.9%	95.2%	78.6%	100.0%	98.5%	100.0%	100.0%	100.0%
16	↓	RVL Aviation	88.9%	110	64.3%	59.3%	90.7%	100.0%	97.2%	100.0%	100.0%	100.0%
17	↑	FedEx	86.3%	1120	87.0%	87.1%	94.5%	100.0%	79.3%	100.0%	100.0%	42.7%
18	-	Ryanair	85.7%	10542	99.0%	96.5%	97.7%	100.0%	92.2%	100.0%	100.0%	0.6%
19	↓	TUI Airways	85.7%	2879	97.2%	98.7%	95.6%	96.4%	88.6%	100.0%	100.0%	9.4%
20	↑	West Atlantic UK Ltd	85.7%	6558	92.3%	88.5%	97.2%	100.0%	93.4%	100.0%	100.0%	14.0%
21	↑	Jet2.com	85.4%	6623	97.1%	98.4%	96.8%	100.0%	90.9%	100.0%	100.0%	0.0%
22	↑	DHL Air Belgium	85.0%	600	80.4%	94.6%	97.0%	100.0%	85.5%	100.0%	100.0%	22.8%
23	-	Star Air	84.2%	2160	96.7%	90.6%	98.1%	100.0%	84.3%	100.0%	100.0%	3.7%
24	-	ASL Airlines Ireland	84.1%	3664	92.2%	96.7%	97.3%	100.0%	86.8%	100.0%	100.0%	0.1%

RANK	PERFORMANCE 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
25	↑	Bluebird Nordic	83.2%	372	93.5%	84.4%	96.8%	98.5%	92.0%	100.0%	100.0%	0.0%
26	↑	Swiftair	83.0%	532	73.0%	91.7%	93.6%	100.0%	93.2%	100.0%	100.0%	12.9%
27	-	UPS Airlines	82.8%	1130	94.5%	86.4%	93.6%	100.0%	71.6%	87.2%	100.0%	28.7%
28	-	ASL Airlines UK Ltd	82.5%	708	91.0%	73.4%	99.4%	100.0%	96.0%	100.0%	100.0%	0.0%
29	-	MNG Airlines	82.5%	487	86.5%	100.0%	96.3%	100.0%	76.0%	100.0%	100.0%	0.8%
30	↓	Cargo Air	82.4%	1405	78.5%	93.5%	94.9%	100.0%	92.0%	100.0%	100.0%	0.0%
31	↓	DHL Air UK	81.6%	5606	95.3%	92.4%	96.9%	100.0%	79.4%	93.0%	88.9%	6.6%
32	-	Cargojet Airways	77.7%	710	79.4%	79.4%	87.0%	100.0%	76.0%	100.0%	100.0%	0.0%
33	↑	Cargolocaair	76.3%	100	82.0%	88.0%	98.0%	100.0%	52.0%	90.0%	100.0%	0.0%
34	-	ABX Air	75.6%	553	63.0%	79.8%	85.9%	100.0%	76.0%	100.0%	100.0%	0.0%
35	↓	Polar Air Cargo	72.4%	116	44.8%	75.9%	82.8%	100.0%	76.0%	100.0%	100.0%	0.0%
36	NEW	Silk Way Airlines	68.9%	254	78.7%	85.8%	89.0%	100.0%	54.3%	43.5%	100.0%	0.0%