



GLASGOW
AIRPORT

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Annual Noise Monitoring Report 2022

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Air Traffic Statistics

2022 supported 6.5 million passengers at Glasgow Airport. There was a total of 70,792 air traffic movements¹(ATM's) in 2022 including both departing and arriving aircraft from both commercial, private and chartered flights. 2022 saw a significant increase on 2021 passenger and traffic numbers as the aviation industry returned to an element of normality from the COVID-19 pandemic. However, this still only represents 77% of the ATM's in comparison to the volume of traffic seen in 2019.

Glasgow Airport supports over 20 airlines flying to over 100 destinations worldwide. More information can be found at www.glasgowairport.com/destinations with information on new routes and an interactive destination map. Figure 1 below shows the percentage split between each airline / aviation operator in 2022.

Figure 1

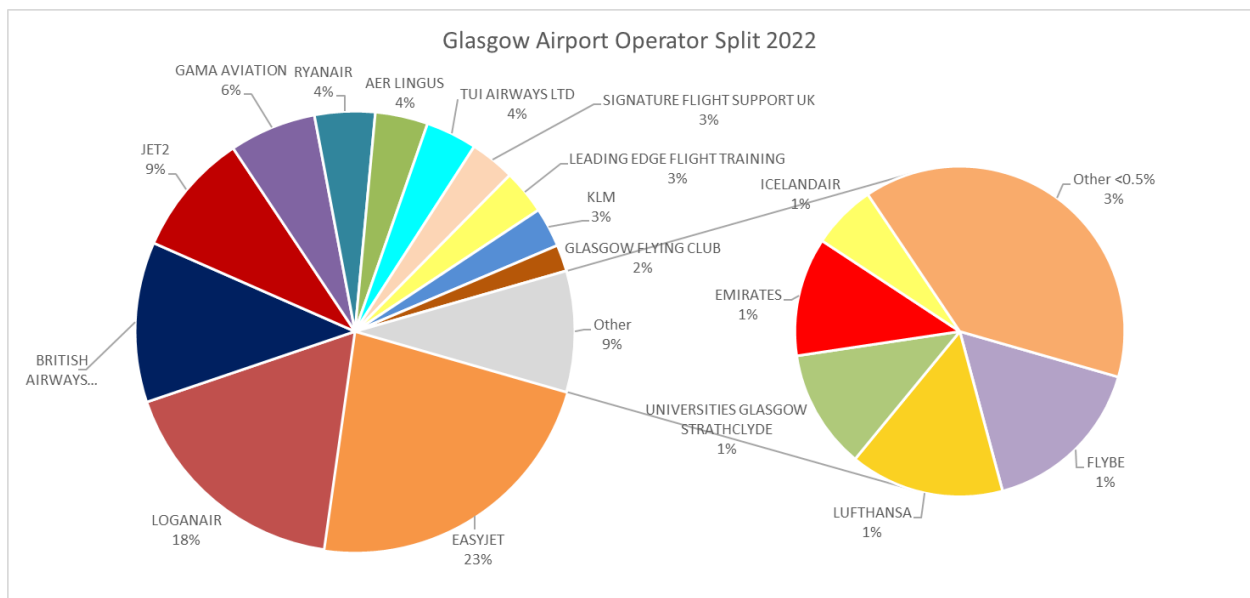


Figure 2 summarises the number of movements per specific aircraft type in 2022. In addition to passenger flights, Glasgow Airport facilitates, cargo, general aviation, air ambulance, military and training flights. Glasgow Airport are also pleased to now support the Airbus A320Neo which is powered by Pratt & Whitney GTF™ engines that contribute to the A220's 25% lower fuel burn per seat²when compared to previous-generation aircraft, as well as half the noise footprint and decreased emissions. The Airbus A320 is gradually being phased out and replaced with the more sustainable model. In 2022, the A320 Neo made up 4.85% of all aircraft movements.

¹ An air traffic movement is defined as either an arriving or departing aircraft

² <https://www.airbus.com/en/products-services/commercial-aircraft/passenger-aircraft/a220-family>

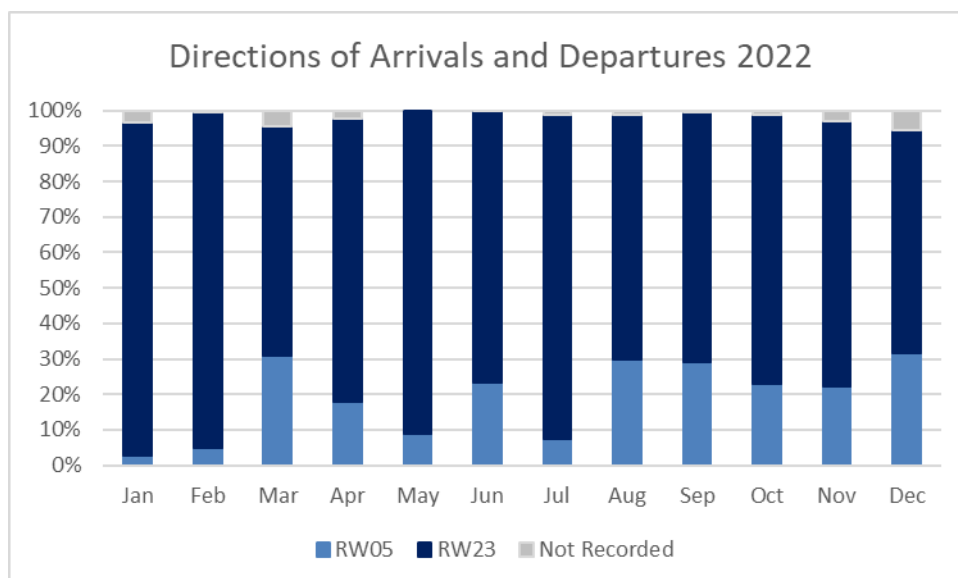
On average, the busiest period for departing aircraft in 2022 was between the hours of 1400-1500 with a total of 2944 aircraft departing during this timeslot. The average peak time for aircraft arriving was between 1400-1500 with a total of 1592 aircraft landing during this timeslot. The average busiest timeslot for total aircraft movements fell between 1600-1700 with a total of 2982 movements during this period. Figure 4 also highlights that flight arrivals and departures between the hours of 23:00–07:00 make up 7.5% of all aircraft movements totalling 2831 movements.

Figure 4



In 2022 78% of flights have utilised Runway 23; arriving from the east over the Bearsden and Clydebank areas and Departing towards the west over the Linwood, Johnstone and Howwood areas. 20% of flights have utilised Runway 05; arriving from the west and departing towards the east. A small number of flights did not have the runway data recorded, accounting for 1.69% of total flights. This split can vary within the months and is wholly dependent on the prevailing wind direction. Figure 5 shows the monthly split of runway use over the course of 2022.

Figure 5



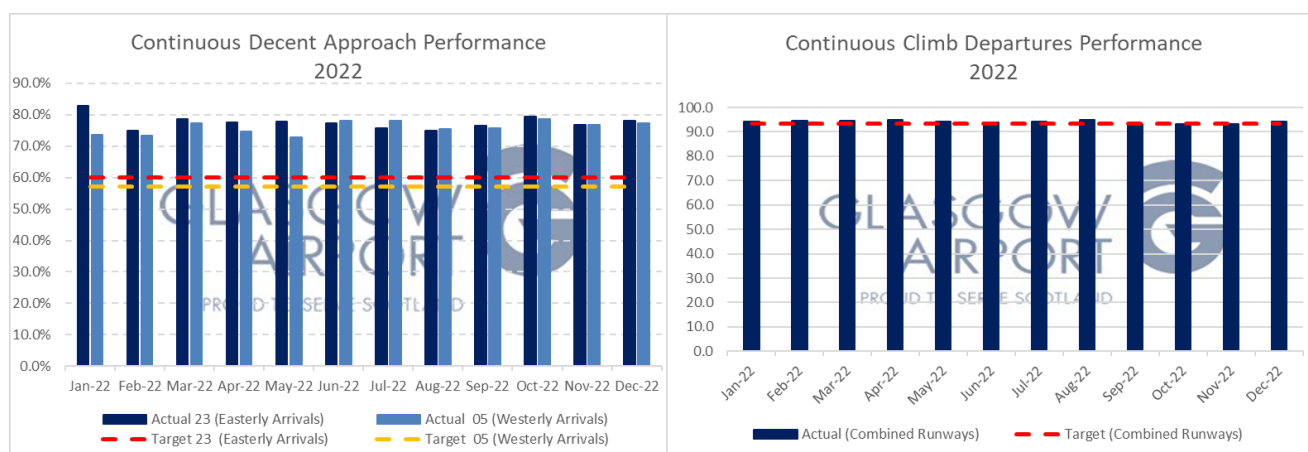
Operational Noise Abatement Measures

Continuous Decent and Continuous Climb

As part of our continuing effort to mitigate noise disturbance to residents our aircraft are measured against a noise mitigation procedure called Continuous Decent Approach (CDA) for our arriving aircraft and Continuous Climb Departures (CCD) for our departing aircraft. Both of these methods have been recognised to reduce the noise levels experienced during take-off and landing. This process is monitored by NATS and Glasgow Airport have set targets for the airlines to achieve.

The overall CDA compliance on aircraft arriving on Runway23 was 77.5% against a target of 60%. This is an 8.7% improvement on the CDA performance in 2021. The overall CDA compliance on aircraft arriving on Runway 05 was 76% against a target of 57%. This was a 7.3% improvement on 2021 performance. The overall CCD compliance for both runways combined was 94.1 against a Target of 93%. This is an increase in performance of 0.8% in comparison to 2021.

Figure 6



Aircraft Engine Testing

Aircraft will routinely test their engines to ensure they are operating correctly. The times and locations of these engine runs are restricted to ensure noise disturbance as a result, is minimised. Engine test runs are not permitted between the hours of 23:00 and 07:00, except in exceptional circumstances. Engine runs carried out within these times must only occur for a maximum of 5 minutes and must be on low power/idle mode. Below shows the number of engine runs that have taken place during each time period in 2022.

Table 1

Glasgow Airport Engine Test Runs 2022			
Time Period	05:00-07:00	07:00-23:00	23:00-0500
Q1 – Jan-Mar	2	230	0
Q2 – Apr-Jun	7	221	6
Q3 – Jul-Sep	9	212	4
Q4 – Oct-Dec	13	247	2

Correspondence & Complaints

As part of our noise action plan commitment, we have a dedicated noise action telephone line (0800 013 2429) and email inbox (GLnoise@glasgowairport.com). We endeavour that all complaints will be responded to within 3 working days. All complaints are tracked, logged and trends are reviewed.

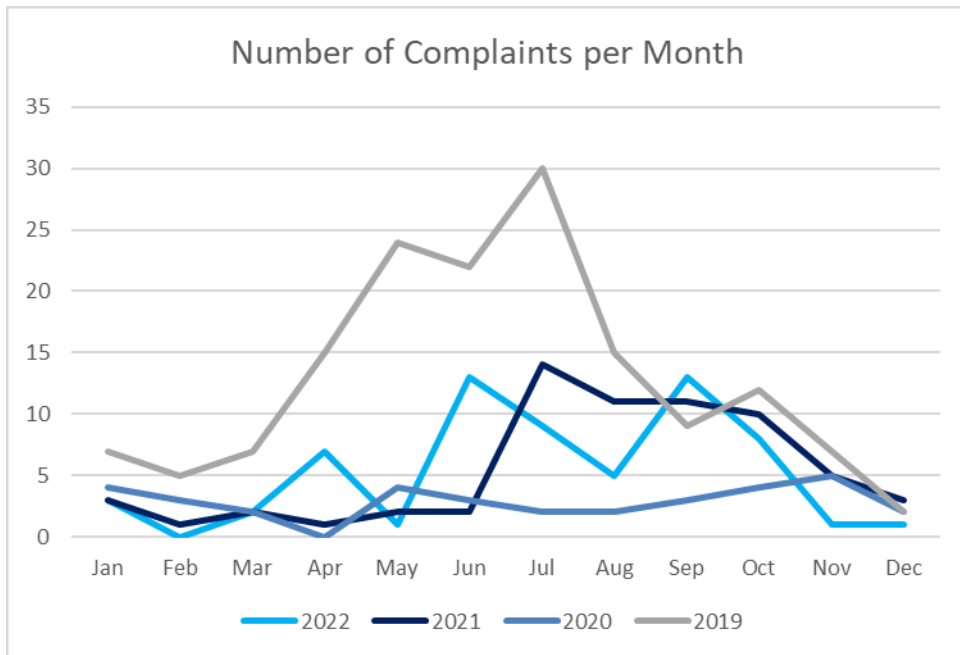
There were 62 recorded complaints in 2022. This is a decrease of 6% compared with 2021. Complaints were split between the 7 categories noted in Figure 7. There were a higher number of complaints/comments relating to flightpath and night flying compared to the other categories. Out of the 62 complaints there were a total of 49 complainants.

Figure 7



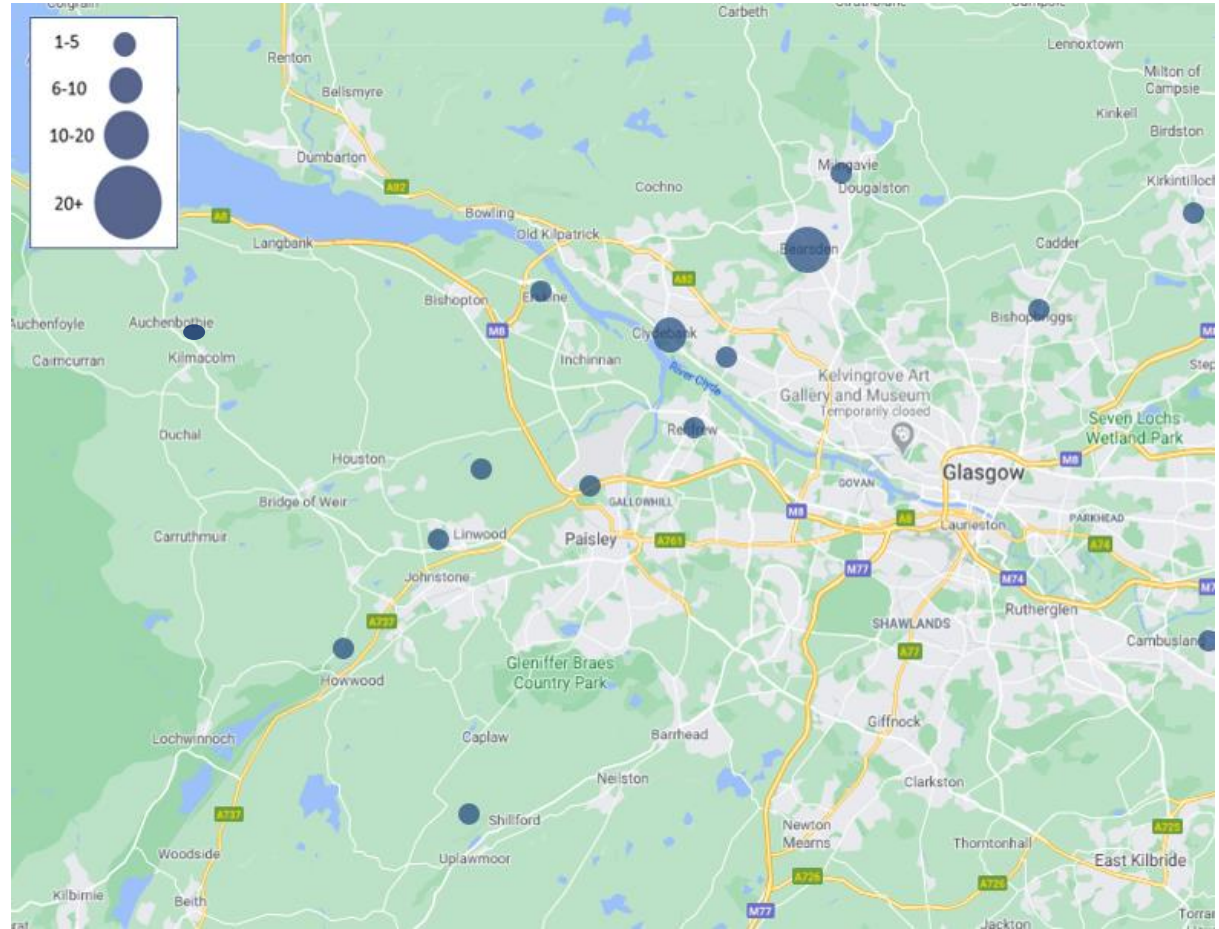
The highest number of complaints were, as expected, voiced during the summer months, where aircraft movements were at their peak however, there is still a stark reduction in the volume of complaints in comparison to 2019 (153).

Figure 8



The geographical location of noise related correspondence and complaints covers a widespread area. 34% of complaints in 2022 came from the Bearsden and Clydebank area at the northeast of the runway. 19% did not provide their location and the remaining 47% of complaints were widely scattered around the flightpath as shown on Figure 9. Please note, this diagram is for illustrative purposes only and does not precise locations.

Figure 9



Noise Monitoring

Glasgow Airport actively monitor the noise levels of both our arriving and departing aircraft with two permanent noise monitoring terminals located towards the end of each runway. Noise levels must not exceed 97 dB LA_{MAX} during the day or 87 dB LA_{MAX} at night. If any breaches are recorded, airlines will be fined accordingly. In 2022 there were no recorded infringements of these noise levels.

Glasgow Airport have recently begun a trial on a new offering for tracking flight movements and aircraft noise. We will continue to trial this until summer 2023 when we aim to launch this new platform. Until the trial is concluded we are unable to provide the previous Webtrak functionality that was previously available. We look forward to sharing this new offering with you and will be actively seeking your feedback.

Community Liaison

[Glasgow Airport Consultative Committee](#)

Glasgow Airport runs a Consultative Committee on a quarterly basis in which noise is a standing agenda item. The consultative committee provides a regular forum for the management of Glasgow

Airport to discuss matters relating to its operation. More information on this can be found at our website <https://www.glasgowairport.com/glasgow-airport-consultative-committee/>.

Noise Insulation Policy

We are developing an updated Noise Insulation Policy to mitigate noise for communities most affected by aircraft noise in line with current aviation noise policy. The policy will provide financial contribution towards noise insulation for residential properties and noise sensitive buildings within the 92-day summer average 63dBLAeq,16h contour. We had previously hoped to roll the scheme out this year but due to the pandemic, there were no households identified within the 63dB contour in the previous full reporting period (summer 2021). We therefore intend to revisit the scheme early in 2023 when we have access to our summer 2022 noise data.

Noise Action Plan

Table 2

Glasgow Airport 2018-2022 Noise Action Plan	
Action	Progress
We Will develop, publish and implement a policy prioritising airlines operating Chapter 4 and Chapter 14 aircraft when introducing new business to Glasgow	Currently under review
We will work with the airlines through our airline consultation process to review the landing fee differential to incentivise the use of quieter aircraft	Landing fees reviewed on an annual basis.
We will continue to work with our partners in the aerospace sector through sustainable aviation to achieve the visionary noise goals of FlightPath 2050 which seek to achieve a 65% reduction in perceived noise, or 15 dB, from aircraft by 2050 compared to 2000.	AGS Airports remain a member of Sustainable Aviation and are aligned with the Flightpath 2050 goals
We will engage directly with local planning authorities to ensure awareness of aircraft operations is considered in the development of sensitive land uses. We will continue to contribute to local development plans and monitor planning applications within the vicinity of Glasgow Airport	Excellent links with local planning authorities continuing.
We will develop and implement a Noise Insulation Policy to mitigate noise for residents exposed to aircraft noise within the 63dB _{L_{Aeq}} , 16h in line with UK Airspace Policy. We will continue to offer our existing home relocation schemes.	Delayed due no eligible houses in 2021 contour. Launching early 2023
We will actively contribute to improving aircraft noise information in local planning policy and seek to influence policy where appropriate. We will encourage the use of good acoustic design to avoid and minimise adverse impacts arising from the development of new noise sensitive buildings and encourage the adoption of the principles advocated by the Professional Practice Guidance: Planning & Noise - New Residential Development	Ongoing through existing links with local planning authorities
We will promote adherence to the Arrivals Code of Practice (ACoP) and in particular the achievement of Continuous Decent Approaches (CDA) where possible	Promoted through the Flight Operations Committee
We are currently undertaking an airspace change proposal (ACP) and we will review and report on aircraft performance and adherence to departure routes in the first 12 months of its implementation	ACP in progress and implementation due 2025
We will fine aircraft in breach of our departure noise limits (94dB(A) during the day and 87dB(A) during the night) and direct the money raised through these fines to the FlightPath Fund.	Policy in place and operational.
We will continue to encourage aircraft operators to plan maintenance schedules to avoid the need for ground running of engines at night. We will continue to enforce our policy that runs should not last longer than 20 minutes. We will investigate any complaints received from ground running activity and revisit our policies if appropriate. We will report on the frequency and times of engine running to the local community through the website	Engine Runs are logged and monitored and discussed at Flight Operations Committee Investigated where noise complaints are made. Reported on website

<p>Our Noise Action Plan is consistent with the ICAO Balanced Approach and EU regulation 598, which requires operating restrictions to be considered only after other measures of the Balanced Approach have been exhausted and only where it is cost effective to do so. We will continually review the effectiveness of our mitigation measures in the context of the balanced approach to ensure that mitigation is considered in a consistent way with a view to addressing noise impacts in the most cost effective way.</p>	<p>In place and continuously monitored.</p>
<p>We will discuss noise issues and report on our progress against the Noise Action Plan under a standing agenda item of the Consultative Committee</p>	<p>In addition to the ACC, we are reviewing options for supplementing the ACC with another means of more informal engagement with the airport to help build mutual understanding, share updates on noise initiatives and seek feedback and discuss aviation noise</p>
<p>We will discuss noise issues and report on our progress against the Noise Action Plan under a standing agenda item of the Consultative Committee</p>	<p>Ongoing standing agenda item</p>
<p>We will continue to operate a noise action line and a dedicated email inbox. We will log all complaints, seek to respond to 100% of complaints and enquiries within 3 working days and publish our performance at the airport consultative committee and in the FlightPath newsletter.</p>	<p>Noise Action Line and email inbox is live and regularly monitored.</p>
<p>We will continue to operate the Noise and Track Keeping System to enable monitoring and investigation of noise issues</p>	<p>New improved system being trialled</p>