

**Aberdeen International
Airport**

Annual Noise Report 2023



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Air Traffic Statistics

2023 Summary

Through 2023 Aberdeen International Airport Limited (AIAL) facilitated 2.3 million passengers across over 74,000 aircraft movements (ATMs). This includes passengers both arriving and departing from commercial, private, and chartered flights. Passenger numbers increased by 14% compared to 2022. ATMs stayed level in 2023, compared to 2022. Of the 2.3 million passengers in 2023, nearly 2 million were facilitated through the main fixed wing terminal, and the remaining 348,000 transited through one of four helicopter terminals on site. The helicopter passenger numbers are level with 2022, with the increased passenger numbers seen through fixed-wing operations.

AIAL currently supports around 10 airlines and flies to many destinations across the UK and internationally. More information can be found at [Our Destinations | Aberdeen Airport](#). Figure 1 shows the percentage split of ATMs between each operator in 2023. Loganair has the highest number of ATMs with 28% of all movements. AIAL is home to one of Europe's busiest commercial heliports, supporting the North Sea offshore industry. This is reflected with the four helicopter operators at AIAL all being in the top five operators for ATMs. Helicopters made up 43% of all movements at AIAL, with the other 57% of movements from fixed wing operations – a growth of 4% since 2022.

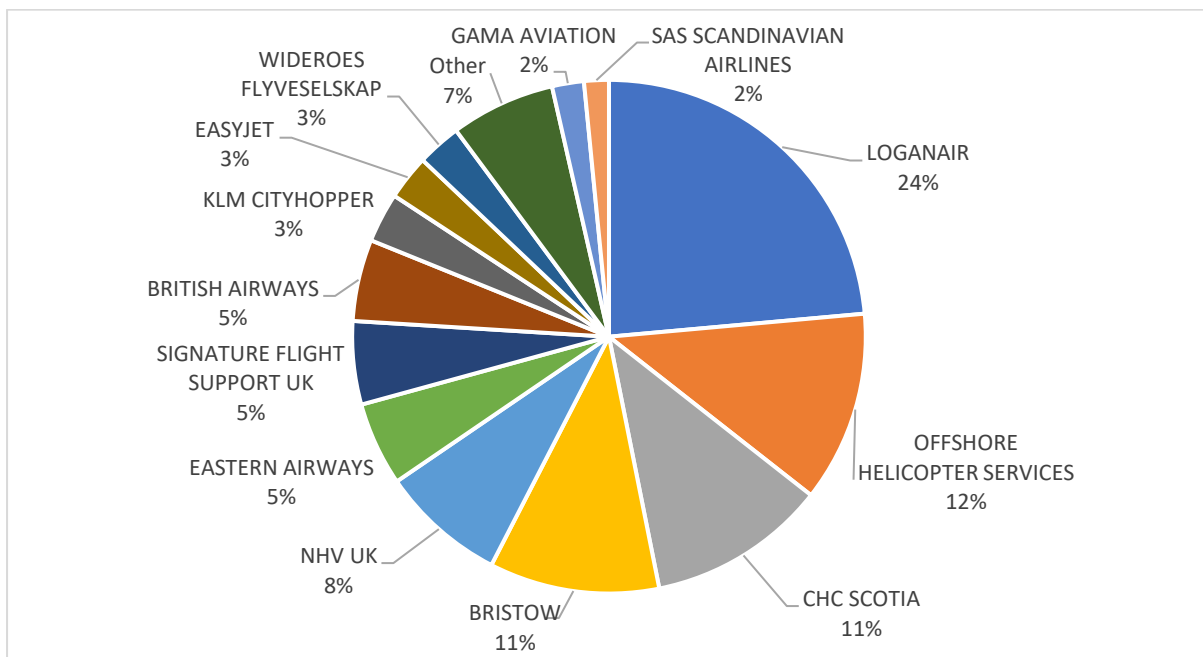


Figure 1 – Percentage split of Air Traffic Movements (ATMs) by operators ('Other' includes any operator with < 1000 movements).

Aircraft Movements

AIAL supports passenger flights, commercial helicopters, cargo, general aviation, air ambulance, military, and training flights. Figure 2 shows the number of movements per fixed wing aircraft type in 2023. The EMB-145 accounted for 16% of all fixed wing movements. This is followed by the ATR 72, Jetstream 41, and Saab 340, highlighting the importance of regional flights at AIAL.

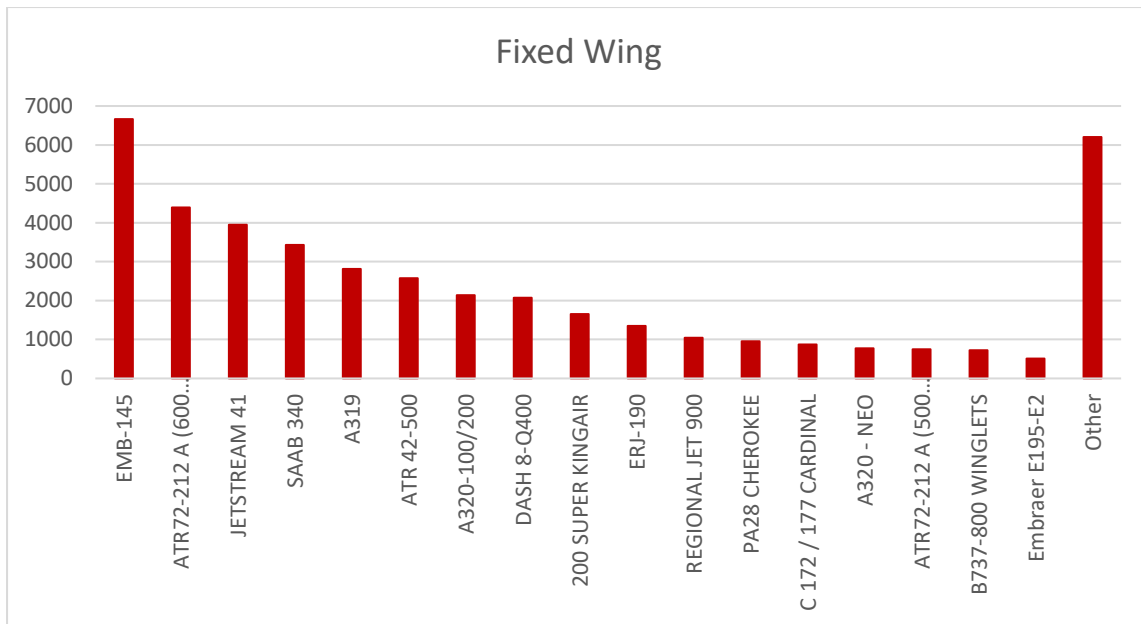


Figure 2 – Number of movements completed by each fixed wing aircraft type ('Other' – all aircraft with < 500 movements).

The helicopter movements were completed using much fewer models of aircraft. Figure 3 highlights the aircraft used, showing the S-92 (one of the larger models – carrying up to 19 passengers) being used for 56% of all helicopter movements. The H175 completed 19% of all helicopter movements, with the remaining 25% of movements being completed with a variety of other models.

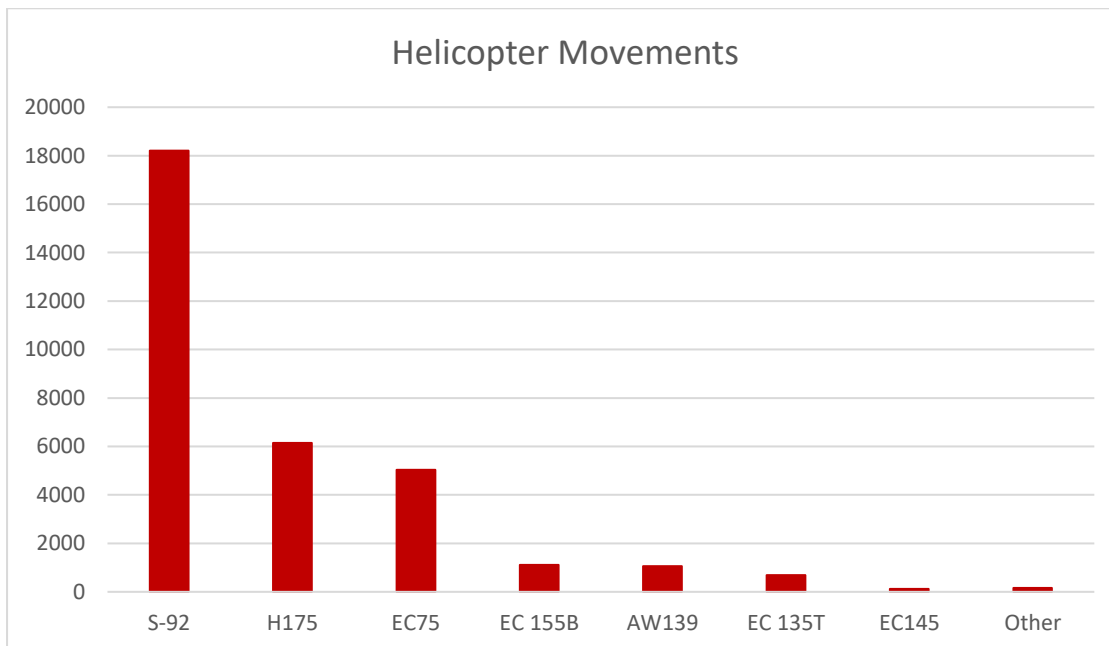


Figure 3 – Number of movements completed by each helicopter type ('Other' – all aircraft with < 100 movements).

Figure 4 shows the monthly ATMs across 2021-2023. In 2021 there were still elements of travel restriction from CV-19. Since then, there has been a continual increase in monthly traffic movements until Mar 2023 where numbers are level with 2022. The summer months in 2023 were the peak of the year, with a dip towards winter, as is the normal trend.

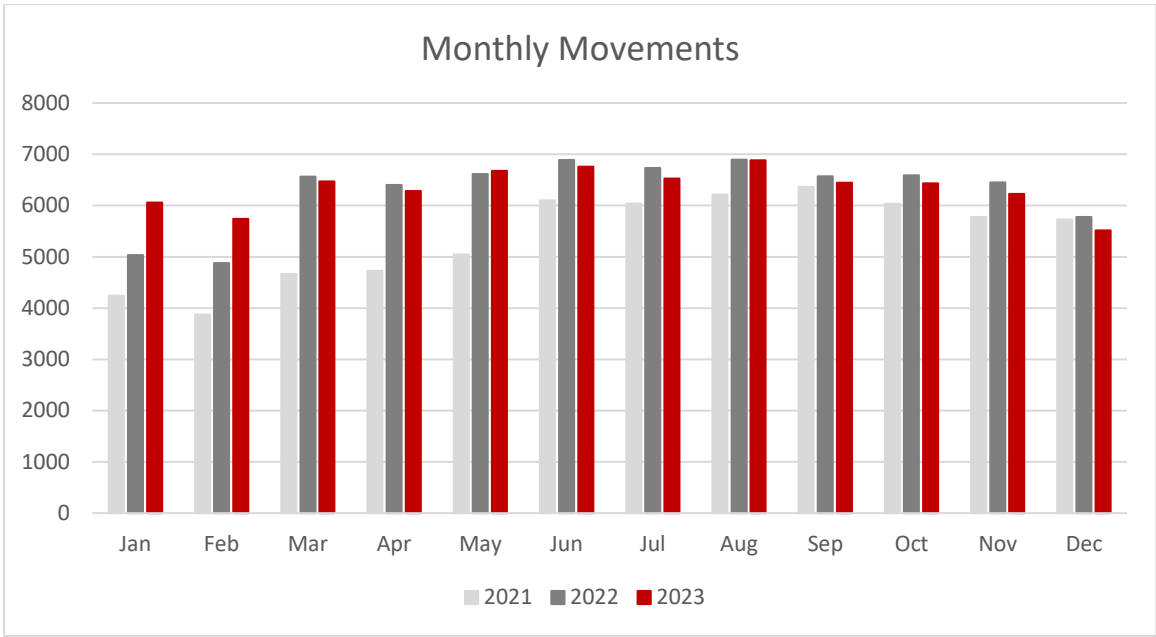


Figure 4 – Monthly aircraft movements from 2021-2023, including fixed-wing and helicopters.

Figure 5 explores the average daily movements per month across 2023 and 2022. There is a slight increase in average daily movements at the start of the year for 2023, then from March onwards the movements are level with 2022. The month with the lowest average daily movements in 2023 was December, and the quietest day was December 25th, with 17 total ATMs. The busiest day in 2023 was the 16th of June, with 308 ATMs.

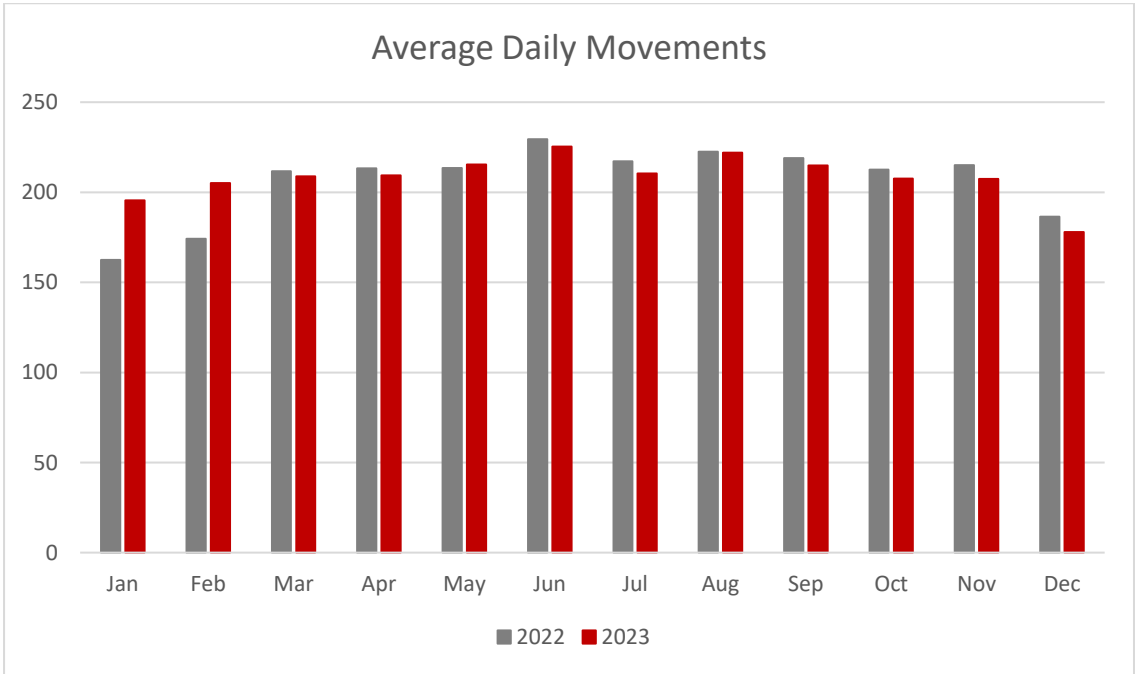


Figure 5 – Average daily aircraft movements per month in 2022-2023.

AIAL operates 24 hours, 7 days a week, with the busiest time for overall ATMs being between 1000-1059 with a total of 6812 movements across 2023. Figure 6 shows the hourly breakdown of ATMs at the airport, with a split between helicopters and fixed wing aircraft. The peak hours for fixed wing movements were 0900-0959 and 1600-1859. For helicopter movements this was 0700-0759 and 1000-1059. Both fixed wing and helicopter operations tailed off from 1900 towards the end of the day.

Helicopters are not allowed to fly between the hours of 22:30 and 06:00, except for medical and emergency flights. Figure 6 indicates the level of operations between 22:30-06:00. There were 114 helicopter operations (including any arrivals and departures), making up 0.15% of all movements. These flights were made up of medical and emergency operations. Although fixed wing aircraft are allowed to operate at any time, only 2.1% of all flights occurred between 2230-0600.

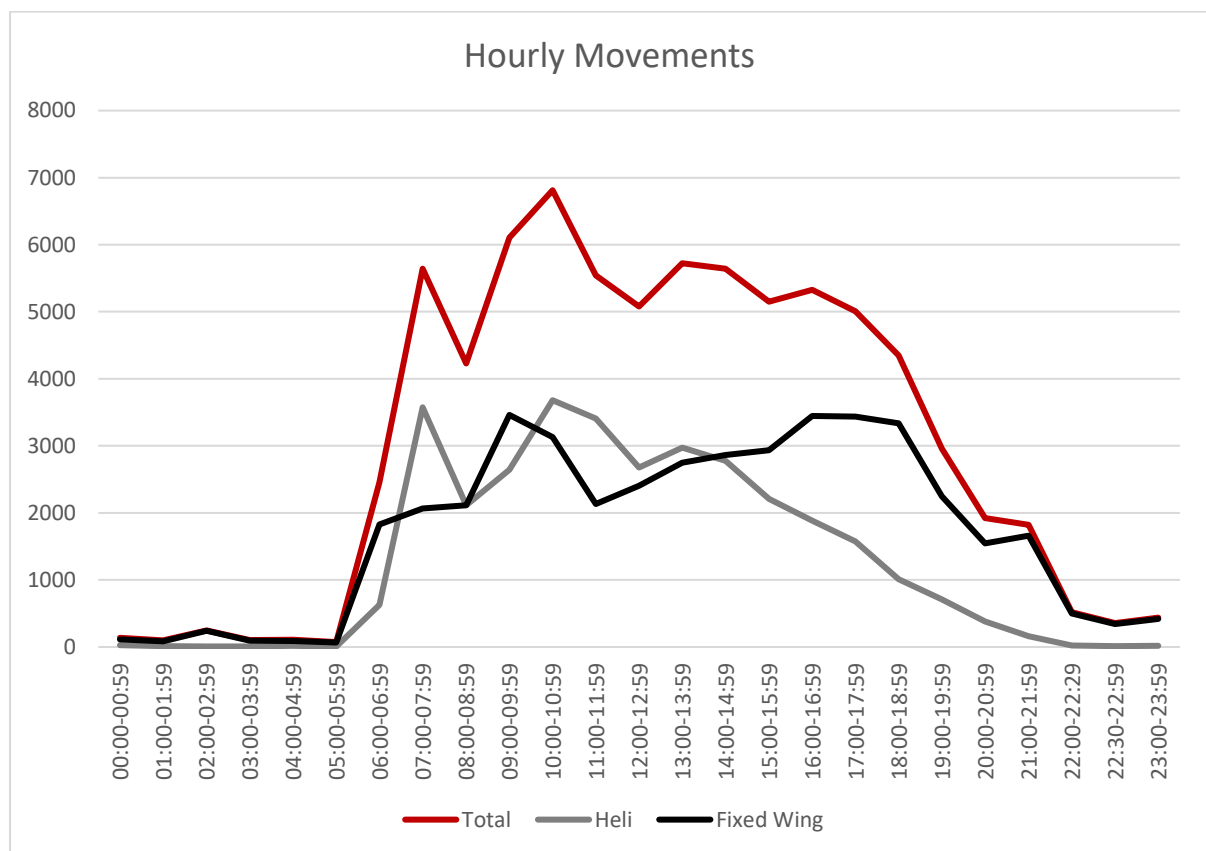


Figure 6 – Total flight movements for 2023 per hour. Detailing a split between helicopter and fixed wing.

Runway Movements

AIAL has a unique combination of helicopter and fixed wing operations. To ensure the airfield operates effectively and safely, whilst limiting ground running and taxiing time, we operate four runways – fixed wing operate solely on the main runway whilst helicopters arrive and depart on all four.

The main runway 16/34 runs from North-North-West (NNW) to South-South-East (SSE), whilst our other runways run South West to North East (05/23), North West to South East (14/32) and North (36)

only. Of these runways, numerous factors can dictate the nature of operations on each. For example, Runway 36 only operates arrival flights to ensure a safe operation due to proximity to buildings and length of the runway. The same rule applies for Runways 23 and 32. Figure 7 shows the total movements for each runway in 2023 (H denotes helicopter movements). Runway 16 had 44% of all movements from 2023, and Runway 34 had 39% of all movements. The remaining movements were mostly on Runway 23 and 32. There were only 6 movements split across runway 05 and 36. The split between runway usage is dependent on the prevailing weather conditions on each day.

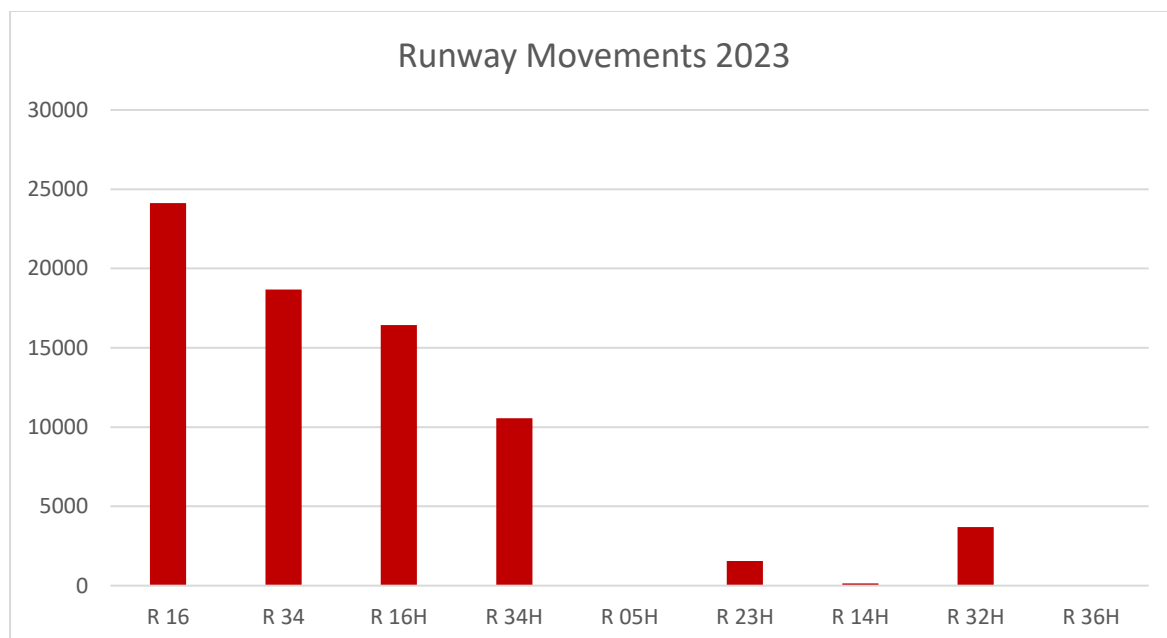


Figure 7 – Runway movements for 2023. H indicates helicopter movements.

Operational Noise Abatement Measures

Continuous Descent and Continuous Climb

Aberdeen Airport has a continuing effort to mitigate noise disturbance to residents, and as such our aircraft are measured against a noise mitigation procedure called Continuous Descent Approach (CDA) for arriving aircraft and Continuous Climb Departure (CCD) for departing aircraft. CCDs and CDAs are operating techniques used in fixed wing aircraft that deliver environmental and economic benefits – including noise reduction, reduced fuel burn and reduced fuel costs. Air Traffic Control (ATC) facilitate CCD/CDA at AIAL and they aim to maximise these movements as much as possible. CCD/CDA are affected by various factors (e.g., wind, air pressure, weight of aircraft), so may not always be possible. Targets are set for both movements for airlines to achieve.

Figure 8 shows the CCD/CDA performance against targets in 2023. With CCD performing at 97% overall against a target of 90% and CDA performing at 60% against a target of 45%. Helicopters, due to the difference in landing-take off cycles, in-flight height profiles and operations, cannot complete CCDs or CDAs. Instead, all operators, in cooperation with ATC, work to mitigate noise and fuel burn on a flight-by-flight basis.

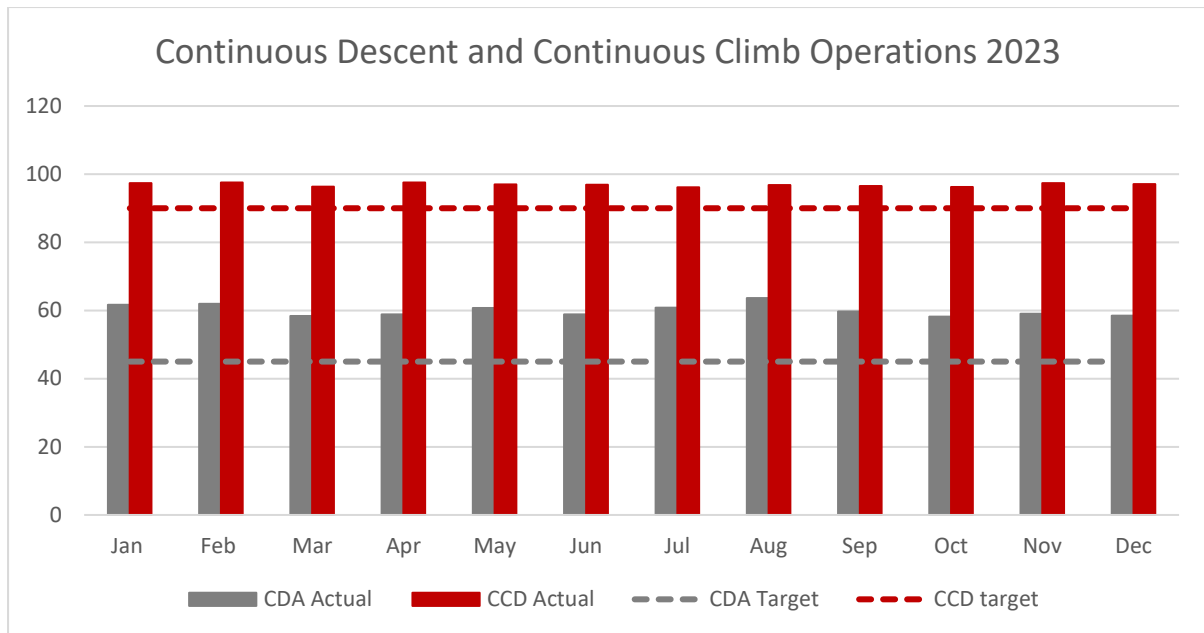


Figure 8 – Continuous climb and descent operations per month in 2023, with targets indicated.

Aircraft Engine Testing

Aircraft will routinely test their engines to ensure they are operating correctly. Given the complexity of operations at AIAL, these tests must be requested to Airside Operations and ATC, and include location, duration, and reason for test. The times and locations of engine tests are restricted to ensure noise disturbance is minimised. Engine tests are not permitted between the hours of 22:30-06:00, except in exceptional circumstances, and between 11:00-13:00 local time on a Sunday. All ground idle and start/stop tests are permitted on stands and leased areas on the east apron, whilst high power tests are performed on designated areas, to mitigate noise to nearby residents. Table 1 shows the number of engine tests completed at AIAL in each quarter, and in what timeframe throughout 2022. There was a total of 403 engine tests completed in 2023, and out of this, 10 tests were completed between 2230-0600. Only 4% of all tests were completed within the first hour of unrestricted time during 2023.

Table 1 – Time of engine tests completed at AIAL.

	0600-0700	0700-2230	2230-0600	Total
Q1 Jan-Mar	8	104	1	113
Q2 Apr-Jun	6	89	2	97
Q3 Jul-Sep	3	92	5	100
Q4 Oct-Dec	0	91	2	93

Ground Power Units and Auxiliary Power Units

Ground and auxiliary power units constitute a source of noise emission, and therefore the use of these is also restricted and cannot be used out with the times of 06:00-22:30, unless a battery powered Ground Power Unit (GPU) is utilised. Due to the noise emissions, and to reduce the noise impacts to

local residents, the use of Auxiliary Power Units (APU) on the east apron is suggested to no more than 45 minutes prior to aircraft departure and no longer than 45 minutes after arrival. Beyond these times a GPU should be utilised. Finally, the use of APU's for maintenance purposes is only permitted where the task cannot be achieved using a GPU.

Helicopter Air Testing

Air tests are maintenance requirements for all helicopters after any form of repair has taken place, be it engine, rotor blades or electronics. The duration, height, speed, and route of each test will vary depending on the item being tested, the weather conditions, air traffic etc. Air test clearances are at approximately 1500ft and these are often conducted on land to avoid the offshore traffic. They can range anywhere between 20 minutes and hours.

Air tests are done sporadically and when required. Tests can be completed once, or they may take place multiple times over multiple days, depending on the nature of the fault. Routine maintenance tests must also be completed after each aircraft has flown a certain number of miles.

There is no requirement at AIAL for these tests to be logged, however, helicopter operators keep this data for maintenance logs and these flights must be completed within commercial helicopter operating hours when and where possible.

Correspondence and Complaints

At AIAL we strive to be a respectful neighbour and addition to the local community and economy. As part of this commitment, we have a dedicated noise action and complaint email inbox which is monitored daily. We endeavour that all complaints will be responded to within five working days. All complaints are tracked, logged and trends reviewed.

Given the complex nature of operations, and the wide variety of complaint types received by the AIAL Noise complaint e-mail, AIAL works very closely with ATC and helicopter operators when resolving them. The noise complaint mailbox deal with all noise and disturbance related complaints, from both fixed wing and helicopter operations, rather than delegating to specific operators per complaint. Not only does this ensure we have a full understanding of all complaints, but it ensures continuity and quality of response and solutions every time.

A total of 70 complaints were received in 2023, this was an 18% decrease compared to 2022. Figure 9 shows the trend of complaints from 2021-2023. The month with the highest number of complaints in 2023 was February, receiving 13 complaints. The lowest months were April, November, and December, each receiving 3 complaints.

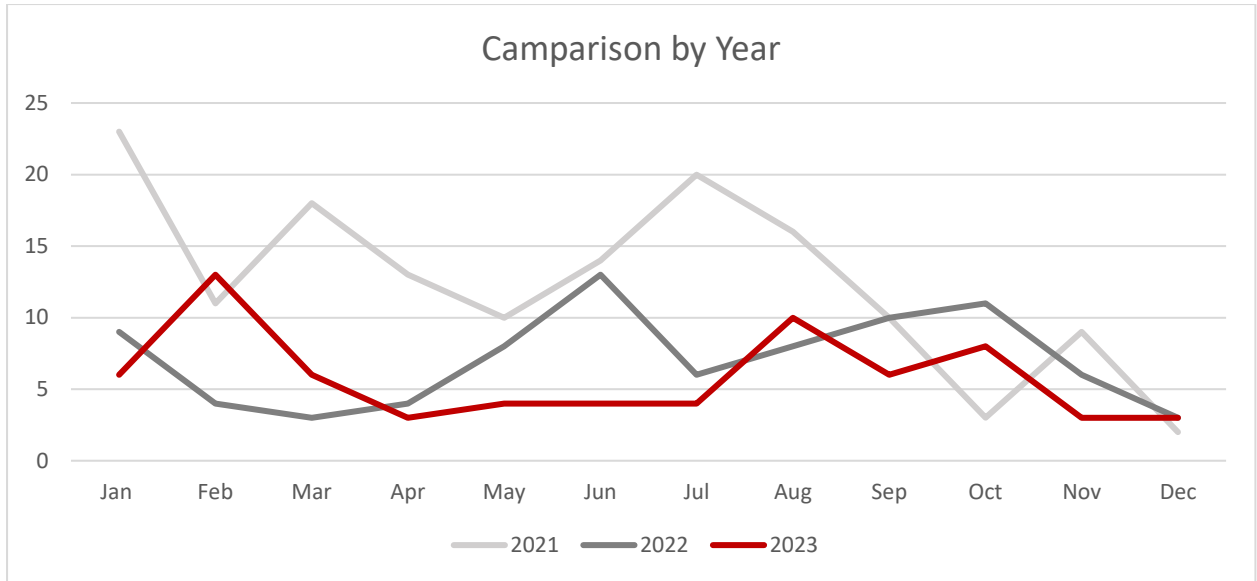


Figure 9 – Number of complaints received each month from 2021-2023

The area that noise complaints ranges across the city and shire. Figure 10 shows the main locations noise complaints came from. The area with the most complaints was Dyce, accounting for 52% of all complaints. Bridge of Don (11%) and Bucksburn (9%) were the next largest areas. These three areas are all either adjacent or close to the airfield so will be most susceptible to potential noise from operations. Those locations in 'Other' include complaints from 9 different areas, including Ellon, Mastrick, and Sheddocksley.

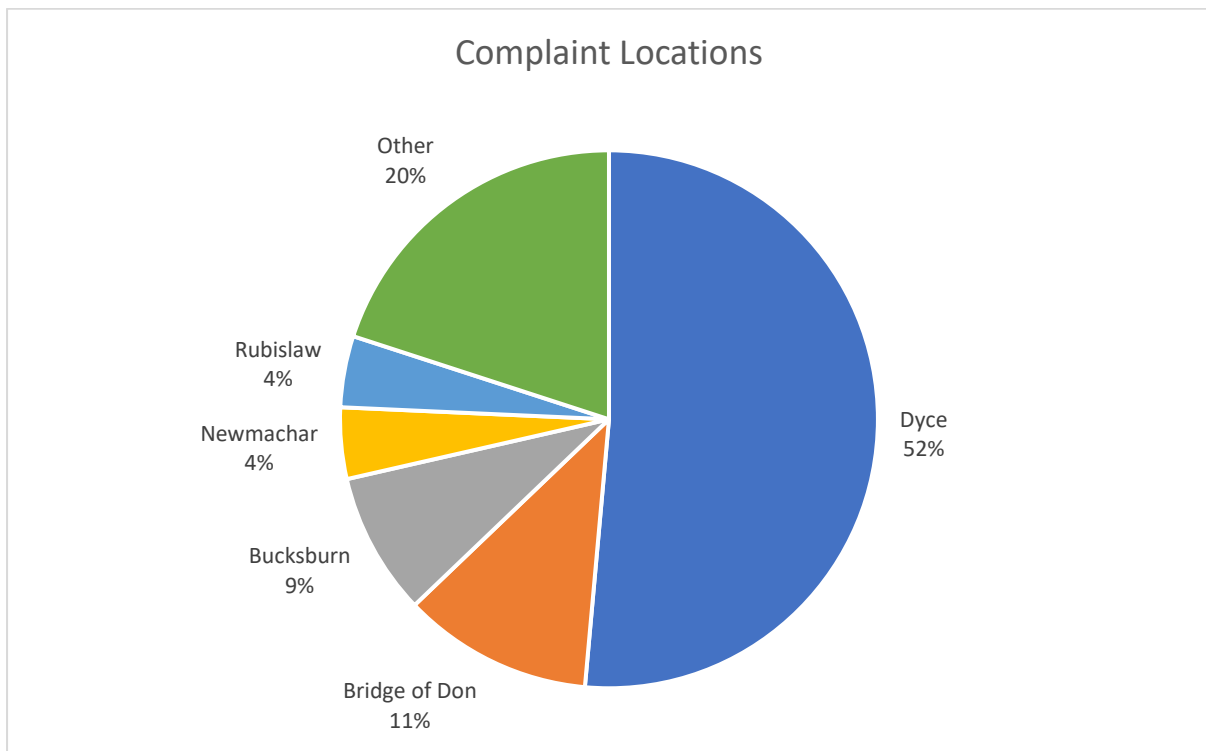


Figure 10 – Percent complaints received from each area ('Other' includes locations with less than 3 complaints).'

To better understand the cause of complaints, each complaint received is broken down into either 'fixed wing', 'helicopter' or 'other' as a noise type. This gives a quick show of what is causing most noise complaints. In 2023, 40% of complaints were attributed to helicopters, 14% to fixed wing aircraft

and 46% to other. The 'other' category included complaints related to noise sources from ground operations, such as APU usage, engine testing, and emergency operations. The monthly breakdown of this is shown in Figure 11.

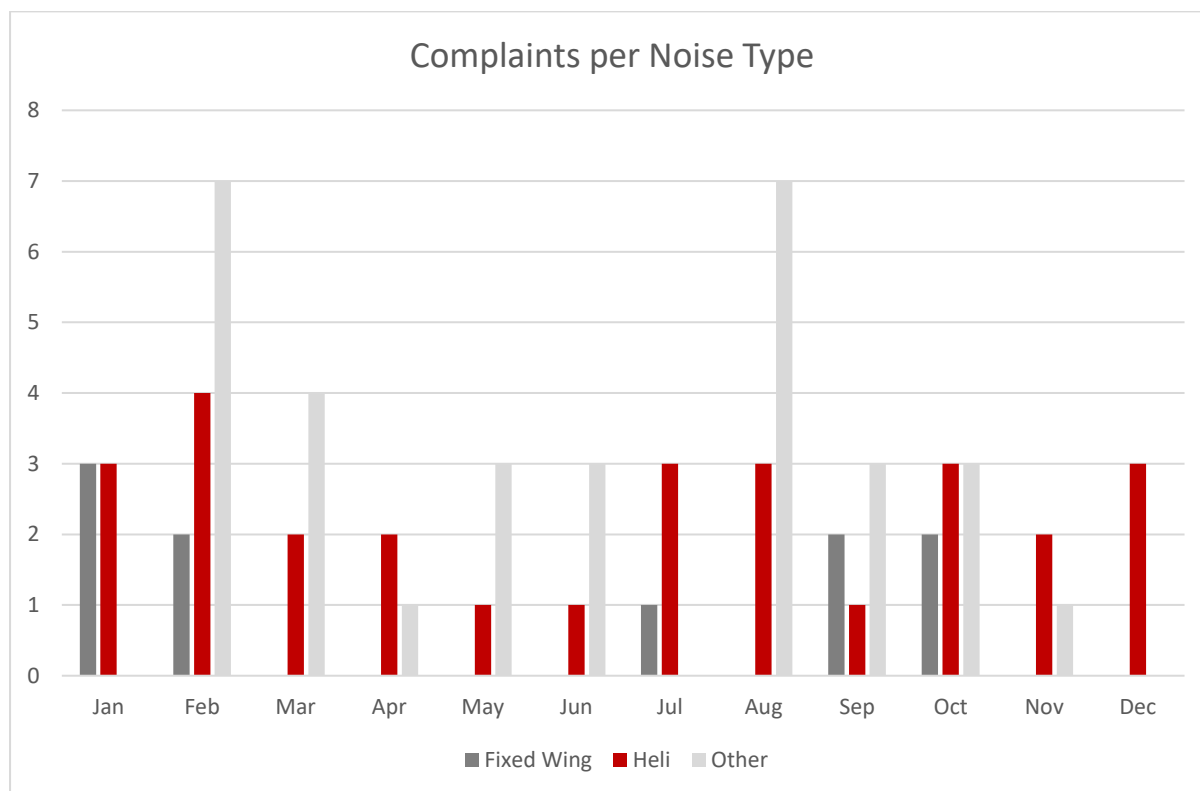


Figure 11 – Monthly breakdown of noise type for each complaint

Flight Tracking Portal

Aberdeen Airport has introduced an enhanced flight tracking system which will help local communities monitor aircraft movements.

The Flight Tracking Portal will replace the former system and delivers a near live 3D visualisation of every flight and aircraft type operating to and from the airport.

Residents who may wish to know more about the aircraft operating in the skies above their homes are now able to use the portal to track each flight and its modelled noise footprint throughout its journey.

The portal also includes enhanced features such as a play-back function to allow users to track a flight from a specific date and time. There are also three separate 3D viewing positions, including one which presents a representation from within the cockpit of the aircraft being tracked.

As well as being utilised by a number of other UK airports, Volans is also licensed by air traffic control providers NATS for use by the Airspace Change Organising Group (ACOG).

Globally, Volans is also used by the US Federal Aviation Administration (FAA) as the key visualisation tool for all Airspace Change, Outreach and Consultation projects, and by major US Airports such as

San Francisco, Los Angeles, Chicago O'Hare/Midway Airports and by air traffic organizations worldwide such as NavCanada and Air Services Australia.

To view the Aberdeen Airport Flight Tracking Portal click [here](#).

Community Liaison

Aberdeen Consultative Committee

AIAL hosts the Aberdeen International Airport Consultative Committee (AIACC) – a regular, independent forum for the management of the airport to discuss matters related to the airport operations and developments with a range of representatives of the wider Aberdeen City and Shire communities. Meetings are held quarterly, and noise is a standing agenda item for each meeting. More information about the AIACC can be found on our website : [Airport Consultative Committee | Aberdeen Airport](#).

ABZ Noise Working Group

All at AIAL work to understand and improve noise impact of airport activities. AIAL understands the unique operations they have at the airport and the impact this may have on surrounding communities. As a result, AIAL has an internal noise Working Group, with representatives from AIAL, ATC and all four helicopter operators. This group communicates quarterly, highlighting any areas of concern from any recent noise complaints.

Noise Insulation Policy

The Noise Insulation Grant Scheme (NIS) has been established by Aberdeen Airport to provide an opportunity for eligible properties to apply for a noise insulation grant. The NIS reflects our aim to be respectful of the local community and our impact on people who live and learn in close proximity to Aberdeen Airport. The NIS was launched end of the year 2023. There are four eligible properties in this round of the scheme. We will be reviewing the contour data end of 2024 and contacting the eligible houses. The 2023 noise contour can be found in Appendix A of this report or [here](#) . The management of the NIS is overseen by an independent management committee made up of airport managers and representatives of the local communities, known as the Airport Consultative Committee (ACC). For further information on the scheme see our [dedicated web page](#)

Noise Action Plan

Aberdeen International Airport 2018-2023 Noise Action Plan	
NAP Commitment	Progress
We will develop, publish, and implement a policy prioritising airlines operating Chapter 4 and Chapter 14 aircraft when introducing new business to Aberdeen.	This action is currently being progressed through a benchmarking 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.	This action is currently being progressed through a benchmarking review
We will work with other helicopter operating airports to understand and share best practice, to provide learning opportunities for noise reduction at the airport.	In Progress and Ongoing – We are working on this through our Noise Group
We will investigate the option of installing Fixed Electrical Ground Power (FEGP) to reduce noise and air quality impacts.	We have accounted for this as part of our AGS Airports Sustainability Strategy
Land-use Planning and Management	
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 Aberdeen International Airport.	Excellent links with local planning authorities continuing. We continue to work with the local authorities to make them aware that any application which may affect aerodrome safeguarding would need to be reviewed by the airport team and have applicable references in the local plan.
We will develop and implement an updated Noise Insulation Policy to mitigate noise for residents most affected by aircraft noise in line with UK Airspace Policy.	This was launched in 2023, and will be updated on an annual basis.
We will review helicopter noise routes and flying procedures to maximise the reduction and impact of noise on residential properties.	Aberdeen Airport will shortly be consulting on two proposed changes to the airspace surrounding the airport. An impact assessment process determined that to make changes to the helicopter routes would have a significant detrimental impact on our ability to operate and so will not be changed as part of this process. We do intend to consult on improvements to ground based procedures as part of the NAP review this summer 2024.
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
Noise Abatement Operational Procedures	

We will promote adherence to the Arrivals Code of Practice (ACOP) and in particular the achievement of Continuous Descent Approaches (CDA) and Continuous Climb Departure and (CCD) where possible through forums such as Flight Ops Safety Committee and other communication events.	Complete. Please see section on 'Continuous Descent and Continuous Climb' for further information.
Continue to engage with our aviation partners through our Flight Operations Performance and Safety Committee (FLOPSC) to seek to improve adherence to noise standards.	FLOPSC meetings continue on a quarterly basis, where noise is a standing agenda.
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 45 minutes. We will investigate any complaints received from ground running activity and revisit our policies if appropriate.	Engine Runs are logged and monitored and discussed at Flight Operations Committee Investigated where noise complaints are made. Please see section on Aircraft Engine Testing for further information.
We will review the current locations utilised for the ground running of aircraft to reduce noise impact on local communities.	Completed in 2020 and reviewed in 2023. A further review will be undertaken via the NAP review this summer.
We will review our operational procedures enhance our noise management systems including the effectiveness of east side protocols ensuring aircraft safety is considered always.	Completed in 2020 and reviewed in 2023. A further review will be undertaken via the NAP review this summer.
Operating Restrictions	
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.	In place and continuously monitored.
Working with Local Communities	
We will discuss noise issues and report on our progress against the Noise Action Plan under a standing agenda item of the Consultative Committee.	Noise is discussed at the ACC and in preparation for the forthcoming NAP and ACP consultations has a standing agenda point
We will carefully consider any best practice guidance published by ICCAN on information and communication requirements.	ICCAN has since been disbanded, we review any relevant guidance available
We will continue to operate a dedicated online noise complaint system. We will log all complaints, seek to respond to 95% of complaints and enquiries within 5 working days and publish our performance at the Airport Consultative Committee and community newsletter.	Complete. All complaints responded to within timeframe – or if unable due to information gathering – complaint is acknowledged.
We will look to establish a local noise group with helicopter companies and parties interested in progressing noise issues.	Complete. Quarterly communications to all party members.

Appendix A: 2023 Average Summer Day Noise Contours

