



# Aberdeen International Airport Annual Noise Report 2022

## Contents

Air Traffic Statistics .....	3
2022 Summary .....	3
Aircraft Movements .....	3
Runway Movements .....	6
Operational Noise Abatement Measures .....	7
Continuous Descent and Continuous Climb .....	7
Aircraft Engine Testing .....	8
Ground Power Units and Auxiliary Power Units .....	8
Helicopter Air Testing .....	9
Correspondence and Complaints.....	9
Community Liaison.....	11
Aberdeen Consultative Committee .....	11
ABZ Noise Working Group .....	11
Noise Insulation Policy .....	12
Noise Action Plan .....	12

## Air Traffic Statistics

### 2022 Summary

Through 2022 Aberdeen International Airport Limited (AIAL) facilitated 2.03 million passengers across 75,372 air traffic movements (ATMs). This includes passengers both arriving and departing from commercial, private, and chartered flights. Passenger numbers increased by 78% compared to 2021, and ATM numbers by 16%, a sign of the continued recovery from the COVID-19 pandemic. This, however, does not represent the pre-pandemic levels in 2019 of nearly 3 million passengers. Of the 2.03 million passengers in 2022, 1.66 million were facilitated through the main fixed wing terminal, and the remaining 358,000 transited through one of four helicopter terminals on site.

AIAL supports over 15 airlines and flies to many destinations across the UK and internationally. More information can be found at [Our Destinations | Aberdeen Airport](#). Figure 1 below shows the percentage split of ATMs between each operator in 2022. Loganair has the highest number of ATMs with 21% 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 47% of all movements at AIAL, with the other 53% of movements from fixed wing operations – a growth of 6% since 2021.

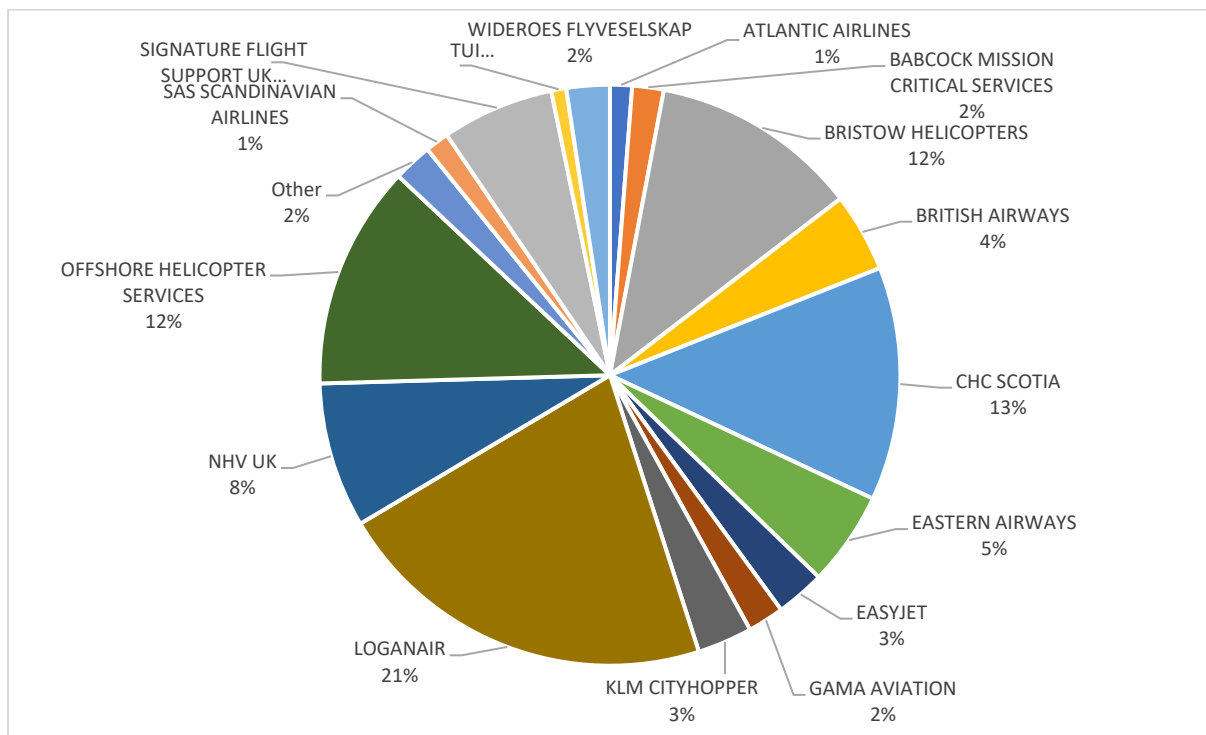


Figure 1 – Percentage split of Air Traffic Movements (ATMs) by operators ('Other' includes any operator with < 500 movements).

### 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 2022. The EMB-145 accounted for 13% of all fixed wing movements. This is followed by the Saab 340 and the Jetstream 41, highlighting the importance of regional flights at AIAL.

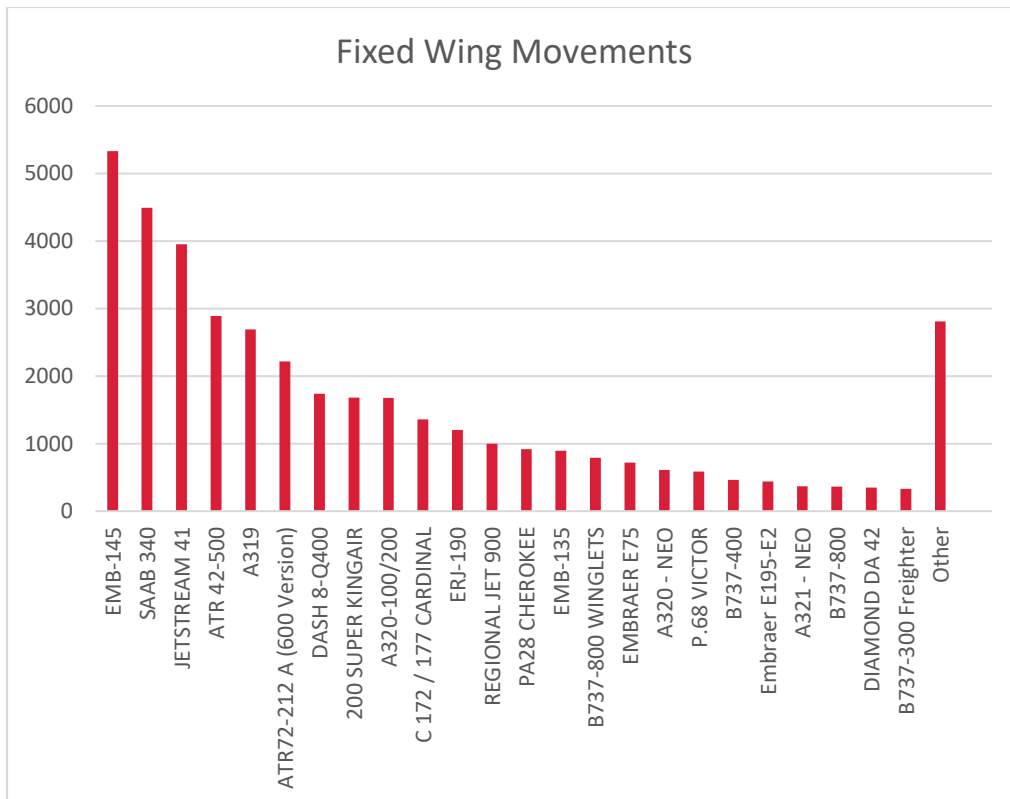


Figure 2 – Number of movements completed by each fixed wing aircraft type ('Other' – all aircraft with < 300 movements).

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 25% of all helicopter movements, with the remaining 19% of movements being completed with a variety of other models.

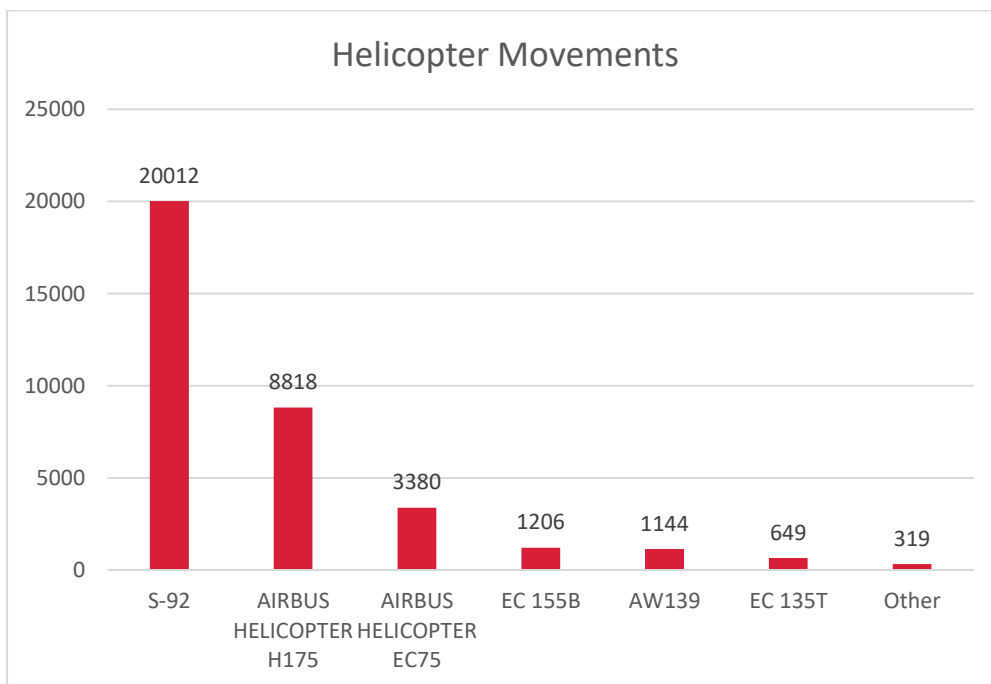


Figure 3 – Number of movements completed by each helicopter type ('Other' – all aircraft with < 100 movements).

Figure 4 shows the monthly ATMs across 2020-2022. It is evident where the COVID-19 pandemic restrictions started (March/April 2020), and since then there is a clear continual increase of monthly traffic movements between years. The summer months in 2022 were the peak of the year, with a dip towards winter, as expected.

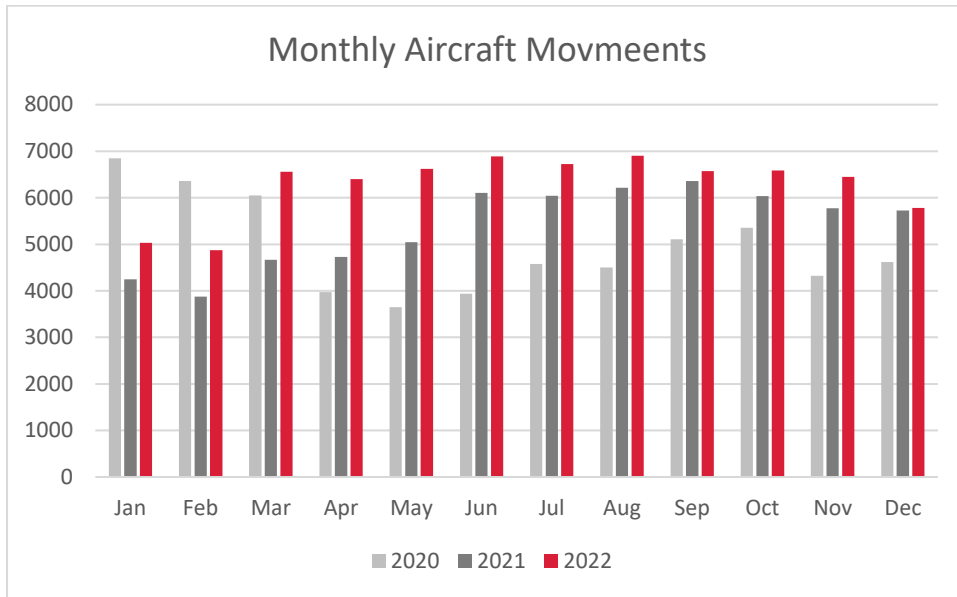


Figure 4 – Monthly aircraft movements from 2020-2022.

Figure 5 explores the average daily movements per month across 2022 and 2021. Here the increase in traffic is observed, with every month’s average daily movements increasing in 2022 – except for December which is level with 2021. The quietest month in 2022 was January, and the quietest day was December 25<sup>th</sup>, with only 16 total ATMs. The busiest days in 2022 were the 14<sup>th</sup> of April and the 25<sup>th</sup> of October, both with 306 ATMs.

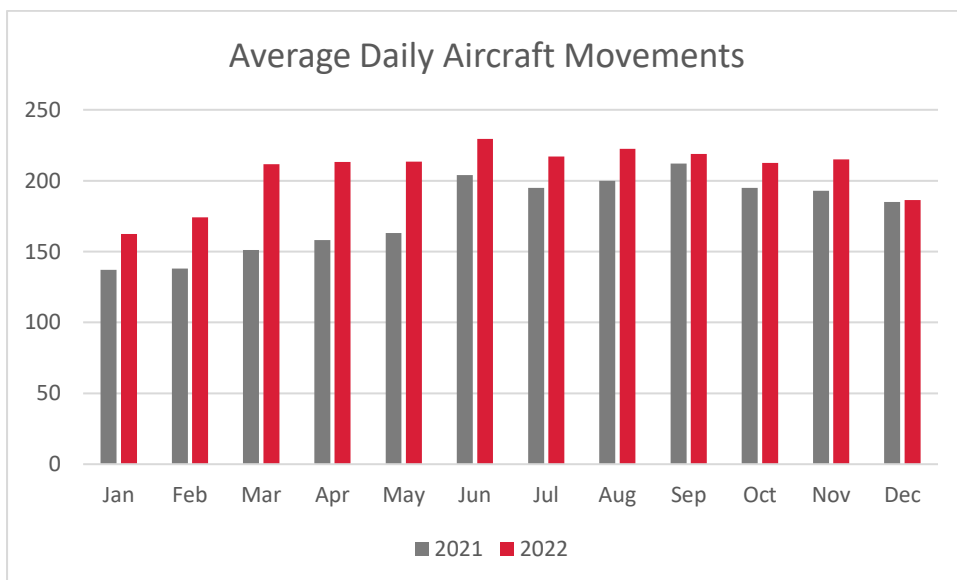


Figure 5 – Average daily aircraft movements per month in 2021-2022.

AIAL operates 24 hours, 7 days a week, with the busiest time for overall ATMs being between 1000-1059 with a total of 6519 movements. Figure 6 shows the hourly breakdown of ATMs at the airport, with a split between helicopters and fixed wing aircraft. Both fixed wing and helicopter movements have three peaks of movements, at 1000-1059, 1300-1359 and 1600-1800. All operations tailed off towards the end of the day.

A noise mitigation strategy at AIAL means helicopters are not allowed to operate 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 with 719 operations (including any arrivals and departures), making up 2% of all helicopter movements. Although fixed wing aircraft are allowed to operate at any time, only 1.8% of all flights occurred between 2230-0600.

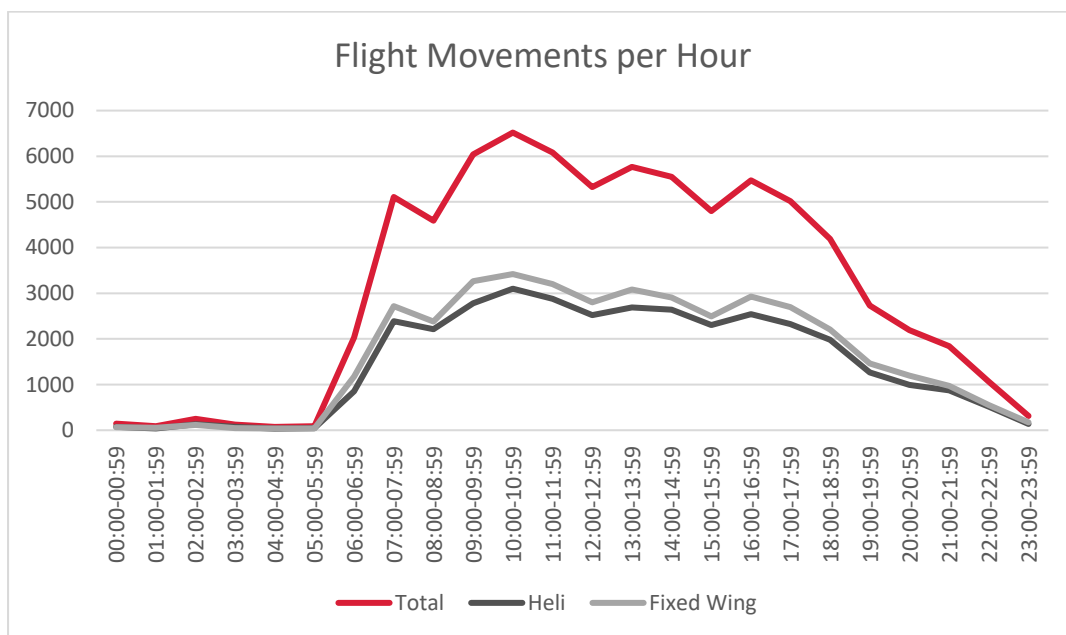


Figure 6 – Total flight movements for 2022 per hour. Detailing a split between helicopter and fixed wing.

### 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. This is decided under CAA criteria and is assessed through numerous factors, including runway length, slopes and level of rescue and fire fighting protection required.

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 2022 (H denotes helicopter movements). Runway 16 had 60% of all

movements from 2022, and Runway 34 had 33% of all movements. The remaining movements were mostly on Runway 23 and 32. There were only 10 movements split across runway 05 and 36. The split between runway usage is dependent on the prevailing weather conditions on each day.

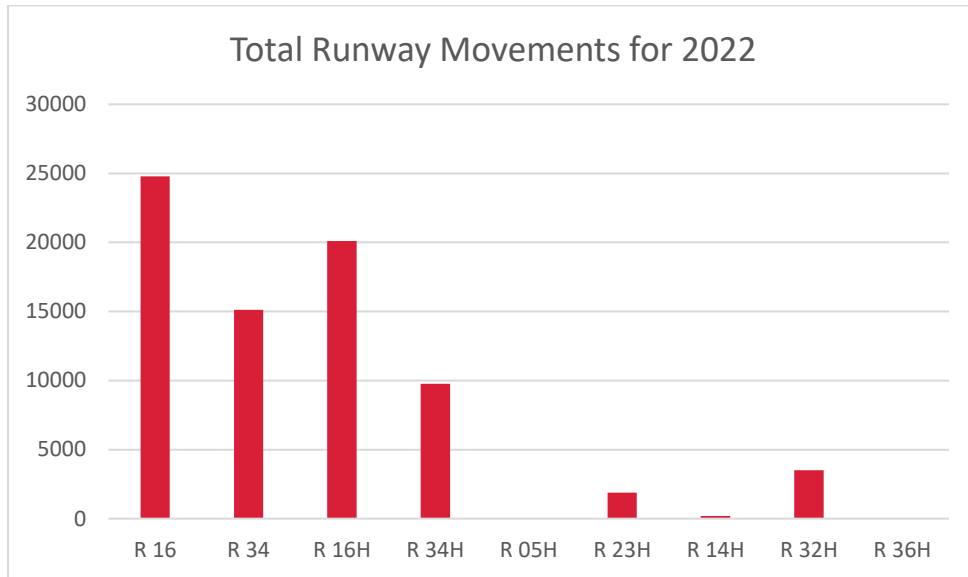


Figure 7 – Runway movements for 2022. H indicates helicopter movements.

## 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 2022. With CCD performing at 96% overall against a target of 90% and CDA performing at 63% against a target of 40%. 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.

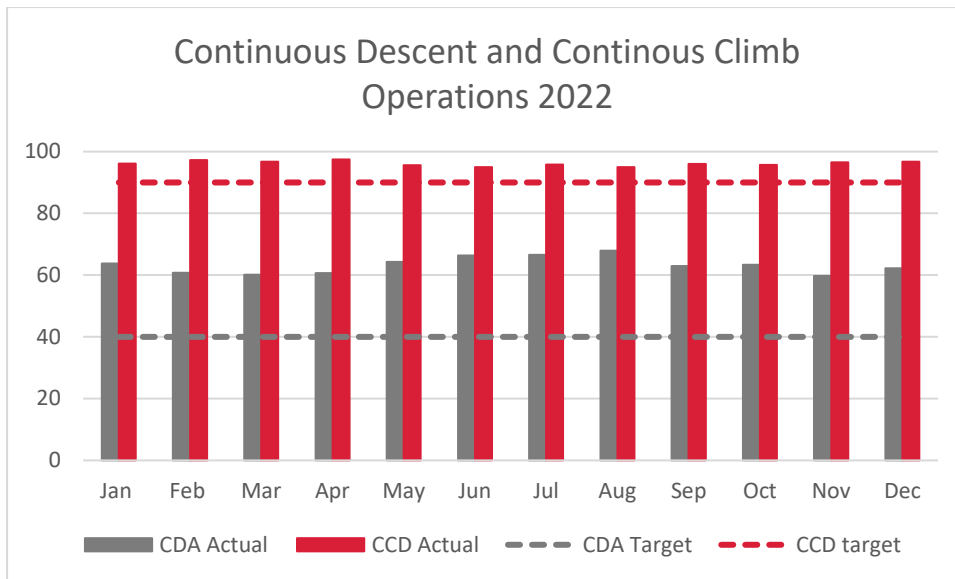


Figure 8 – Continuous climb and descent operations per month in 2022, with targets indicated..

### 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 392 engine tests completed in 2022, and out of this, 1 test was completed between 2230-0600. Only 7% of all tests were completed within the first hour of unrestricted time during 2022.

Table 1 – Time of engine tests completed at AIAL.

	0600-0700	0700-2230	2230-0600	Total
<b>Q1 Jan-Mar</b>	5	79	0	84
<b>Q2 Apr-Jun</b>	9	97	1	107
<b>Q3 Jul-Sep</b>	6	110	0	116
<b>Q4 Oct-Dec</b>	8	77	0	85

### 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 85 complaints were received in 2022, this was a 43% decrease compared to 2021. Figure 9 shows the trend of complaints from 2020-2022. The month with the highest number of complaints in 2022 was June, receiving 13 complaints. The lowest months were March and December, both receiving 3 complaints.

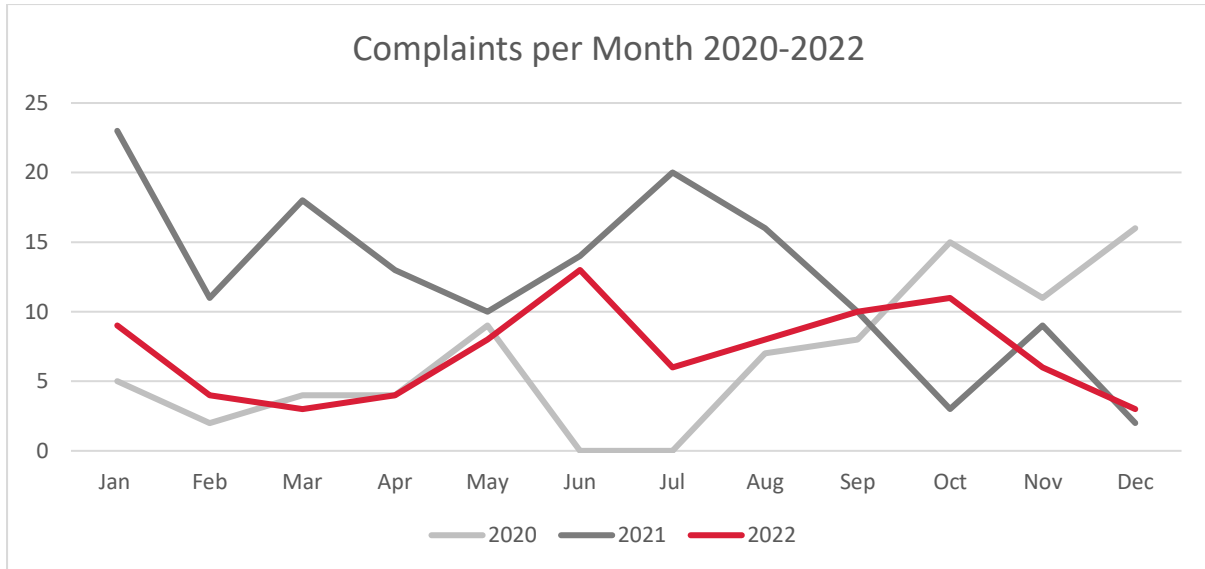


Figure 9 – Number of complaints received each month from 2020-2022

The area that noise complaints come from is very diverse. Figure 10 shows the main locations noise complaints came from. The area with the most complaints was Dyce, accounting for 35% of all complaints. Stoneywood (14%) and Bridge of Don (12%) were the next largest areas. Stoneywood and Dyce are both adjacent to the East side of the airfield so will be most susceptible to helicopter arrivals and departures. Those locations in ‘Other’ include complaints from 17 different areas within the city and further afield, including Peterhead, Inverurie and Stonehaven.

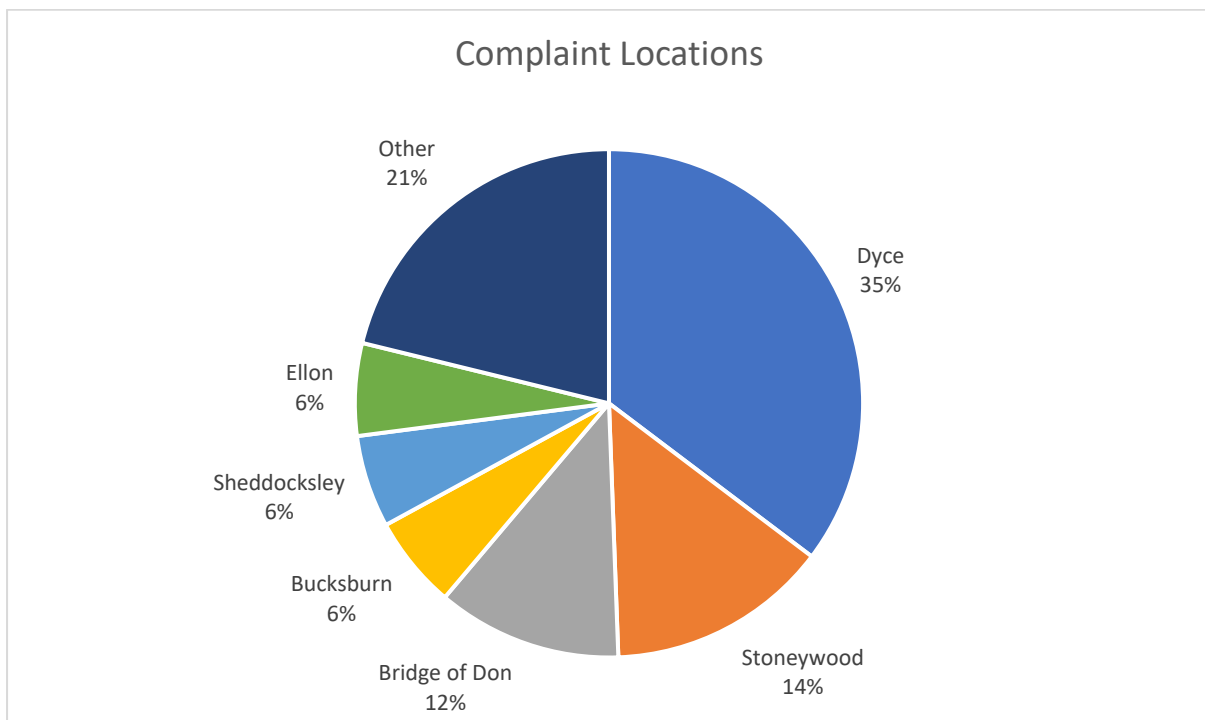


Figure 10 – Percent complaints received from each area (‘Other’ includes locations with less than 5 complaints).’

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 2022, 51% of complaints were attributed to helicopters, 18% to fixed wing aircraft and 31% to other. The ‘other’ category included complaints related to noise sources from ground

operations, such as APU usage and engine testing. The monthly breakdown of this is shown in Figure 11.

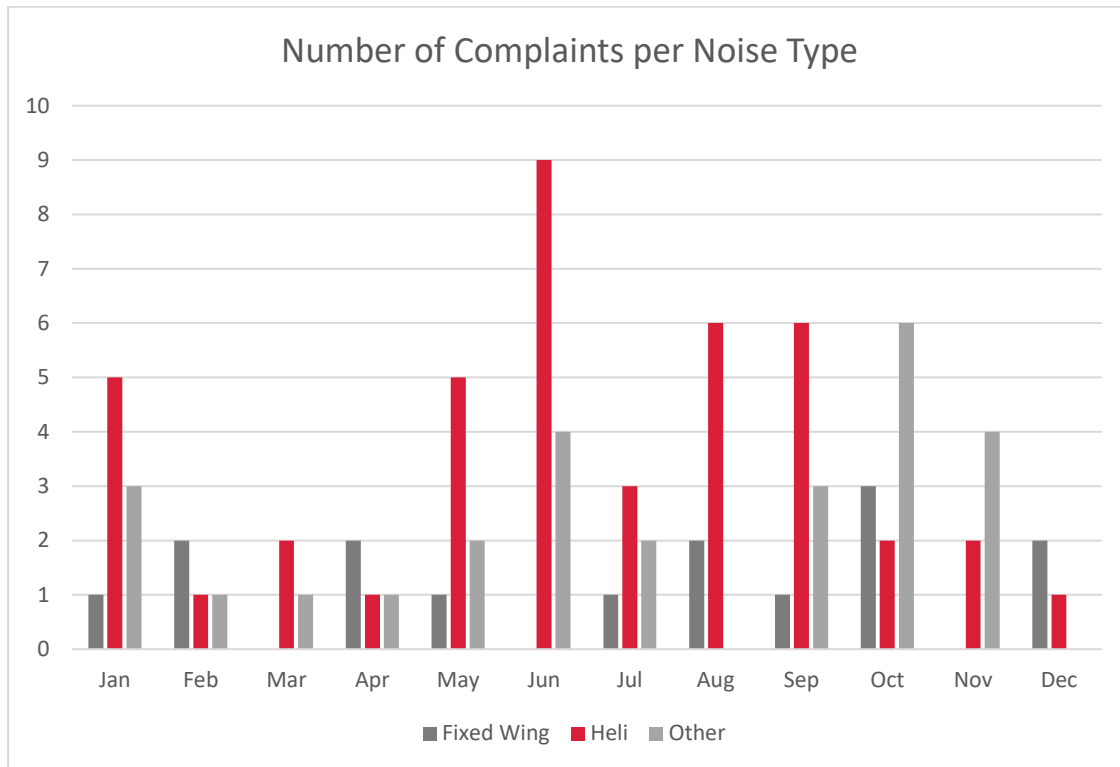


Figure 11 – Monthly breakdown of noise type for each complaint

## 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 consistently to better neighbours and strive for improved practices to those impacted by 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 to highlight any areas of concern, understand, and share any best practices and to cooperate in noise mitigation measures for communities.

## 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, we chose to defer the roll out. We therefore intend to revisit the scheme early in 2023 when we have access to our summer 2022 noise data.

## 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.	In progress and ongoing
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 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 <a href="#">AGS Airports Sustainability Strategy</a>
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.	We have a good relationship with local authorities and discuss plans with them
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.	Delayed due to the pandemic. Launching early 2023
We will review helicopter noise routes and flying procedures to maximise the reduction and impact of noise on residential properties.	ACP in progress and implementation due 2025
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 and ongoing
Continue to engage with our aviation partners through FLOPSC to seek to improve adherence to noise standards.	Complete and ongoing
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.	Complete and ongoing
We will review the current locations utilised for the ground running of aircraft to reduce noise impact on local communities.	Completed in 2020 and will be reviewed no later than 2023
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 will be reviewed no later than 2023
<b>Operating Restrictions</b>	
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.
<b>Working with Local Communities</b>	
We will discuss noise issues and report on our progress against the Noise Action Plan under a standing agenda item of the Consultative Committee.	Complete and ongoing.
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 and ongoing
We will look to establish a local noise group with helicopter companies and parties interested in progressing noise issues.	Complete and ongoing