

Aerodrome Operations and Noise Information Pack





Introduction

Located within the City of Salford, part of Greater Manchester, we are proud of the contribution that Barton Aerodrome gives to the local community, providing leisure, events and commercial activities, creating employment opportunities on the aerodrome and supporting local charities and schools through various initiatives.

Manchester Barton Aerodrome is operated by City Airport Ltd and holds an Aerodrome Licence issued by the Civil Aviation Authority. The company recognises that in operating a safe, successful and thriving aerodrome there will inevitably be some environmental and noise impact to individuals and our local communities.

It is our aim to take account of the interests of those who live near to the aerodrome, and to residents further afield. Within the rules and procedures of our operations and developments of any aspect of the aerodrome, careful consideration is made to keep any impact as low as reasonably practicable.

Historic and Current Aerodrome Use

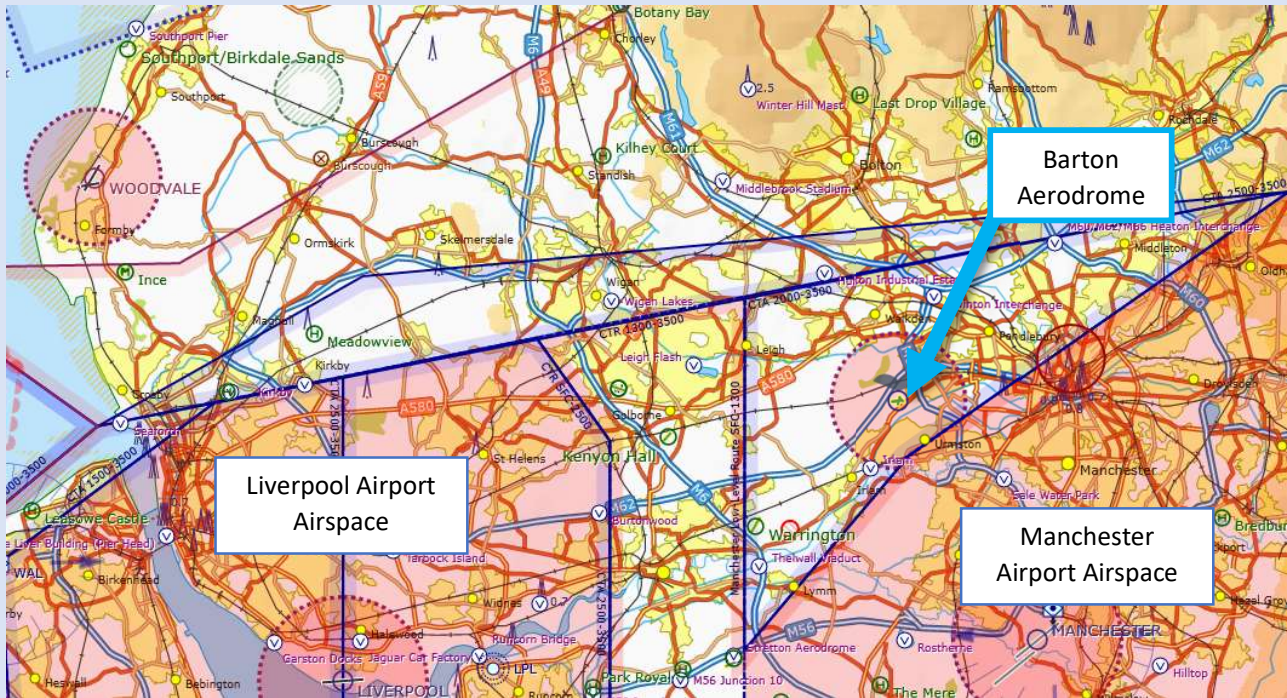


Barton Aerodrome was opened in 1930 and was the original chosen site for Manchester's first municipal airport. However, in 1934, after discussions with KLM (Royal Dutch Airlines), it was decided that the surface conditions were unsuitable for the increasingly large aircraft and so a new site was found for Manchester Airport at the present day Manchester International (Ringway).

The airport continued in use however and has grown steadily. At first, there were no marked runways, and aircraft took-off and landed into-wind. Several runway directions were later established.

Today, the aerodrome has 6 main runway directions. These allow aircraft to operate safely in most wind conditions. Barton Aerodrome handles around 16,000 flights per year, approximately 50,000 aircraft movements. A movement is defined as a take-off, landing, touch and go, or go-around. The majority of these are training flights and many of these pilots go on to careers with commercial airlines. The remainder of flights are mostly private, plus several charter, utility and military helicopters. The aerodrome is also home to two helicopters operated by the North West Air Ambulance and a unit of the National Police Air Service. The aerodrome and other businesses located on site together employ over 150 people, the majority from the immediate local area.

Airspace and Operations



Local Airspace

The region’s airspace features various areas of controlled and uncontrolled airspace, serving both Manchester and Liverpool Airports.

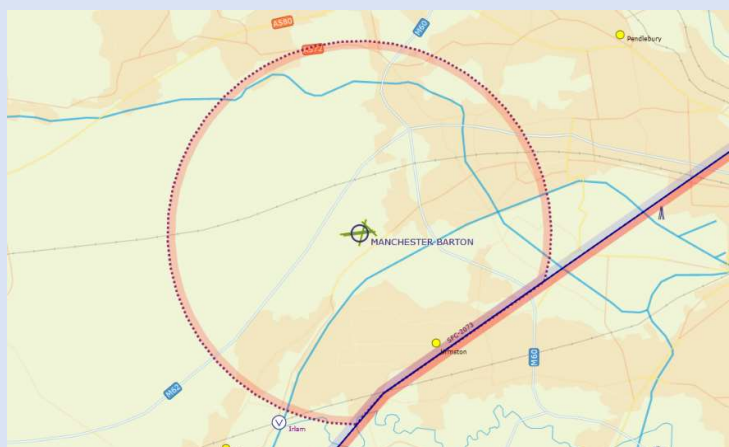
Most aircraft operating from Barton Aerodrome fly within areas of airspace known as class ‘G’ airspace. This airspace is uncontrolled and aircraft are permitted to fly in this airspace without any assigned or approved flight plan. Barton Aerodrome has no direct control over where aircraft fly once they have left the aerodrome.

The class ‘G’ airspace is vertically constrained at various levels between 1300 and 3500 feet due to the controlled airspace above. This means most light aircraft are restricted to operating below these altitudes.

Aerodrome Traffic Zone

Barton Aerodrome has an established Aerodrome Traffic Zone (ATZ). This has a radius of 2 nautical miles around the aerodrome up to 2000 feet in height.

Aircraft flying within this ATZ are not controlled directly by our Air Traffic Service, but aircraft should abide by various standardised aviation rules and local procedures, designed to ensure the safety of operations in the vicinity of the aerodrome.



How we operate

Use of Runways

We have three runway alignments which allow aircraft to operate in most wind directions.

Each runway can be used in either direction giving 6 methods of operation.

These are:

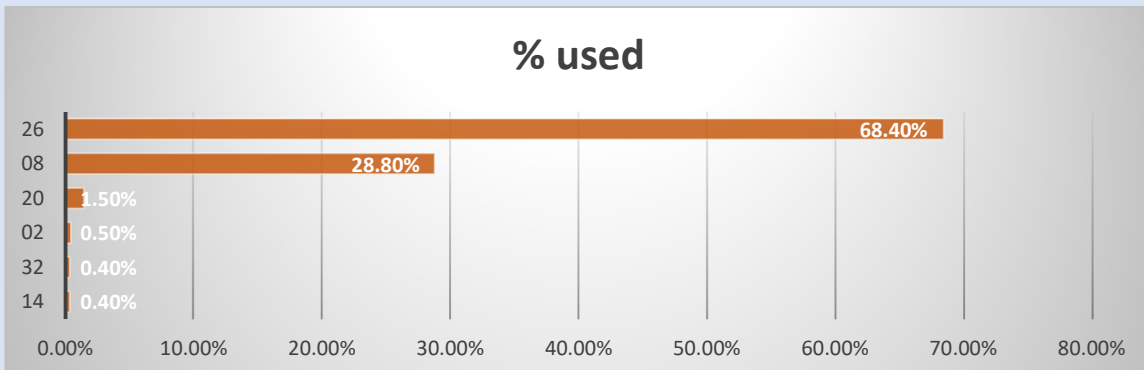
- Runway 14 / 32
- Runway 02 / 20
- Runway 08 / 26 (two parallel runways)

Runway Selection and Use

To operate safely, aircraft must land and take-off into the wind direction. The orientation of the runway in use is selected by the Air Traffic Service (ATS) based on wind speed and direction at the aerodrome to ensure safe, stable operations for aircraft as they land and depart.

Where possible in calm wind conditions, runway 26 is used to minimise noise impact.

The graph below shows our typical annual runway utilisation. Most of our operations occur using runway 26 or runway 08.



Aircraft Engine Noise

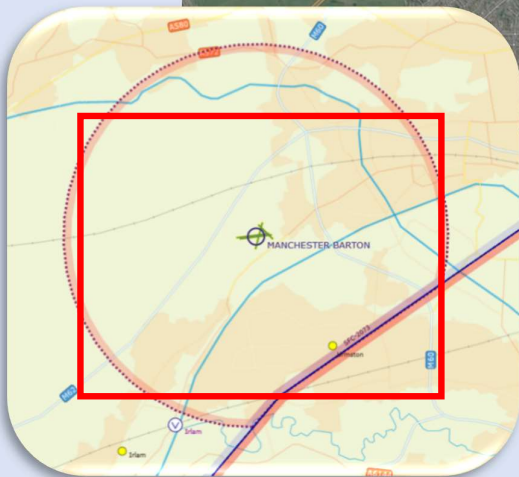
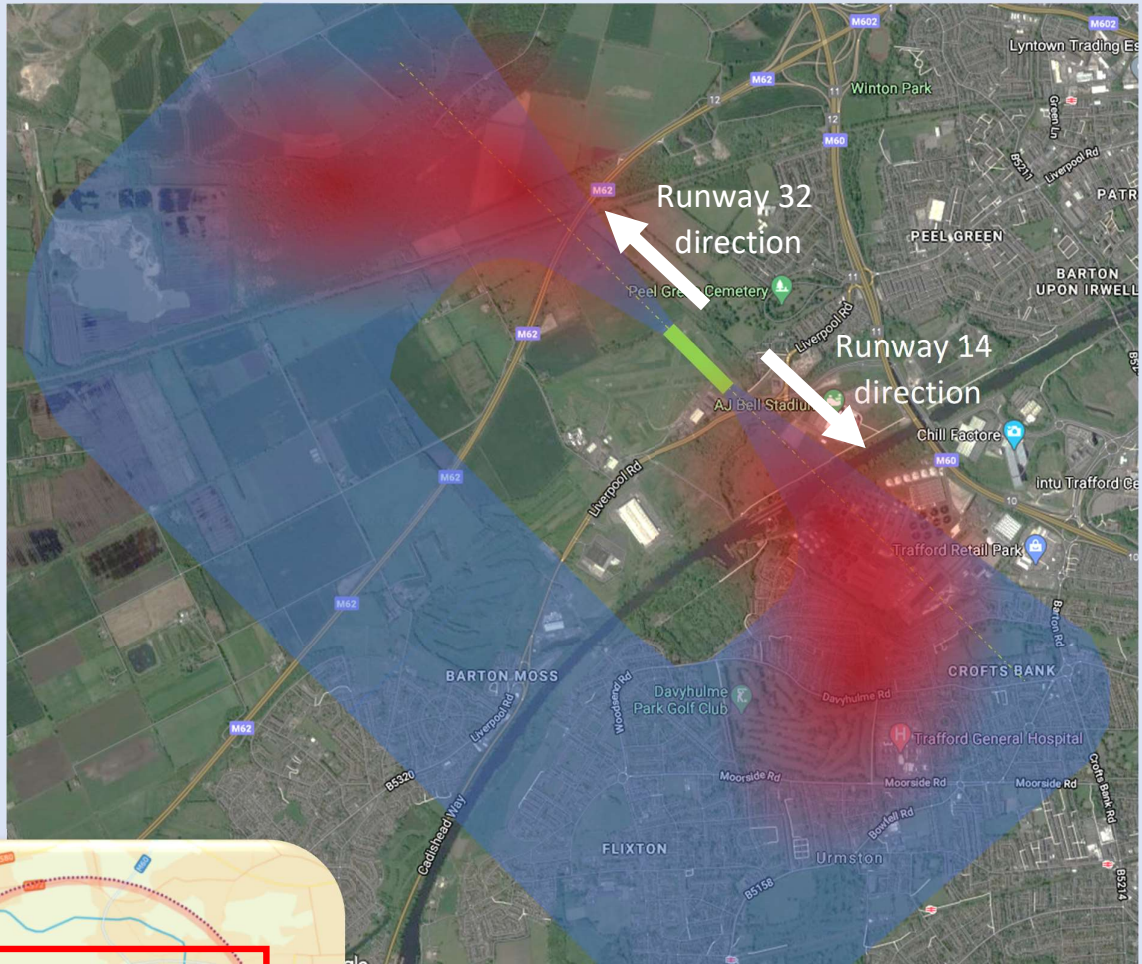
Aircraft engines typically generate most noise when at full power, and when on or near idle power produce very little noise.

This means that the majority of aircraft noise will be heard on the ground when under or near the flight path of an aircraft taking off, until the aircraft reaches a height where the sound is dispersed and less concentrated over the ground. After take-off, aircraft will not usually make their first turn until they have reached 500 feet height.

When aircraft are making an approach to land, engine power will be low or at idle and so very little engine noise will be heard on the ground under or near the approach flight path.

The following pages detail the typical circuit areas for each of our runways and the area where noise is most likely to be more significant.

Runway 14 / 32 Operations



Blue shaded area shows the typical area that most aircraft will operate when landing, departing and flying within the circuit pattern. Red area shows the area where noise may be most prominent when used in that direction for take-off.

Runway length: 398m

Runway usage: 14 – 0.4% 32 – 0.4%

Due to its shorter length, runway 14 and 32 are typically only used when the mean wind speed is greater than 10-15 knots.

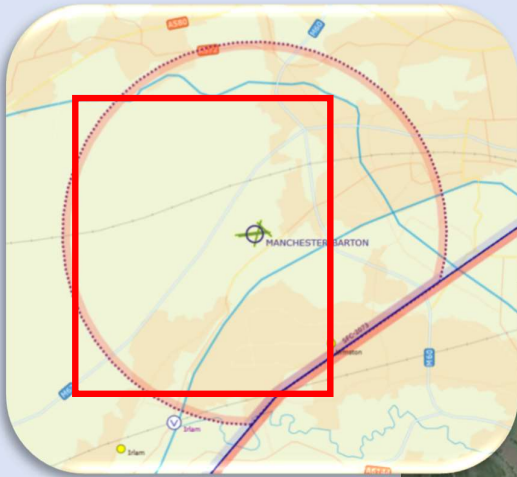
Runway 02 / 20 Operations

Runway length: 518m

Runway usage: 02 – 0.5% 20 – 1.5%

Due to its shorter length, runway 02 and 20 are typically only used when the wind speed is greater than 10 knots.

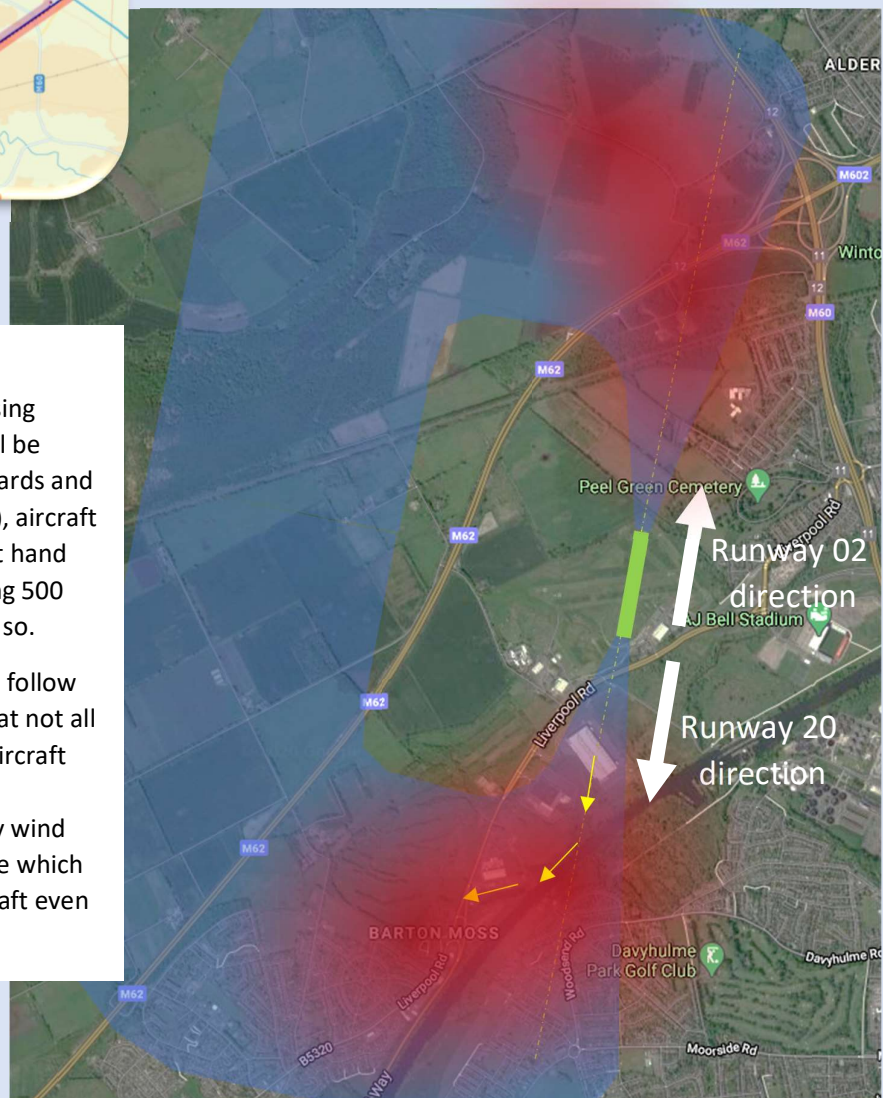
Occasionally aircraft performing pilot training may use this runway to practice cross-wind take-off and landings.



Noise Abatement

To reduce the noise impact when using runway 20, (where aircraft noise will be higher during aircraft taking off towards and over the area of Flixton/Davyhulme), aircraft are permitted to make an early right hand turn after departure (before reaching 500 feet height) provided it is safe to do so.

Whilst most aircraft are expected to follow the early turn, it should be noted that not all aircraft will be able, depending on aircraft type, weight, configuration. Aircraft performance will also be affected by wind speed, direction and air temperature which may alter the flight path of the aircraft even when an early turn is made.



Blue shaded area shows the typical area that most aircraft will operate when landing, departing and flying within the circuit pattern. Red area shows the area where noise may be most prominent when used in that direction for take-off.

Runway 08 / 26 Operations

Runway length: 08L/26R - 641m, 08R/26L – 625m

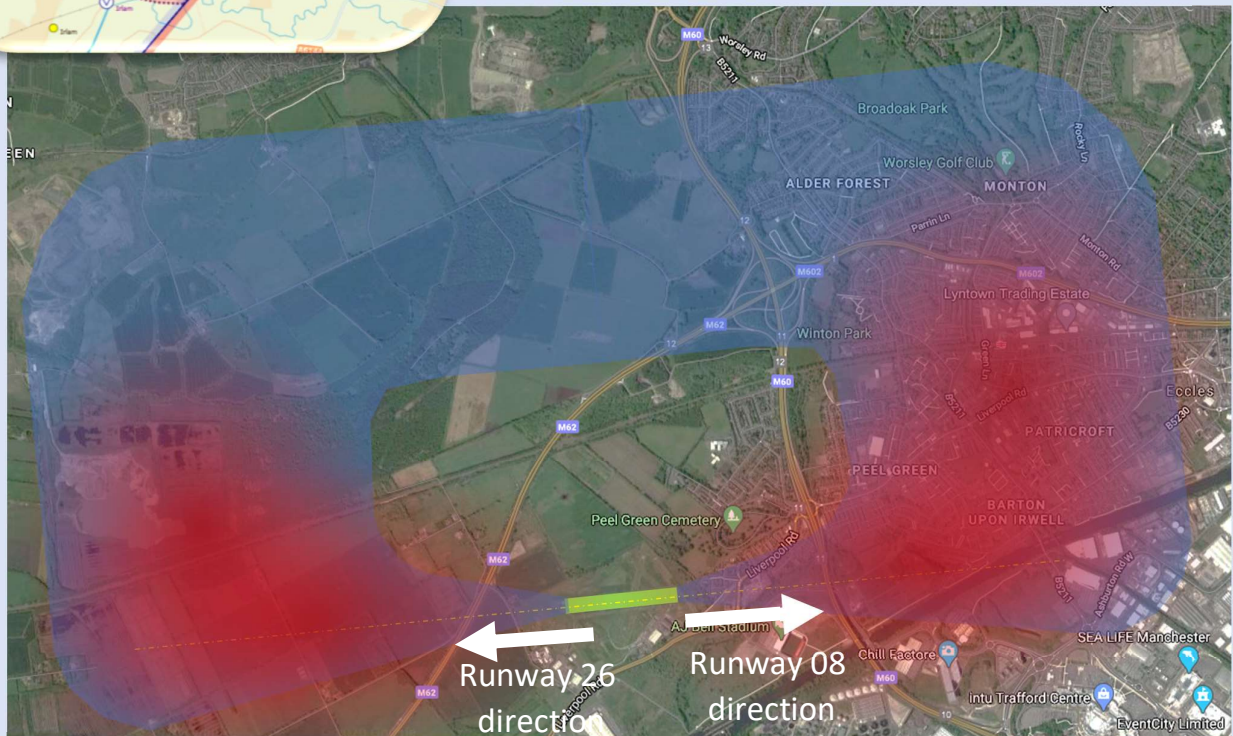
Runway usage: 08 – 28.8% 26 – 68.4%

Most aircraft movements take place using this Runway. The runway consists of two parallel runway strips which helps spread the surface wear across the grass surface.



Noise Preference

To reduce the frequency of noise over built up areas east of the aerodrome, runway 26 is chosen as the preferred runway when the wind speed is calm or predominantly from a westerly flow.



Blue shaded area shows the typical area that most aircraft will operate when landing, departing and flying within the circuit pattern. Red area shows the area where noise may be most prominent when used in that direction for take-off.

Helicopter Operations

Helicopter Training Circuit

Standard helicopter routes are established for helicopters engaged in training as shown in the opposite diagram.

Helicopters flying these routes will fly up to 500 feet height.

Helicopter Preferred Routes

Helicopters routing to and from the aerodrome will usually follow preferred routes, via Astley, Worsley or Irlam. These routes may be varied where required to allow the helicopter to integrate with other aircraft and helicopters established within the circuit.



Military

Military helicopters operating in the area and to/from the aerodrome may operate at a lower level, often down to 200 feet at any time of day or night.

Utility and Survey Helicopters

There are several different helicopters that operate surveys of railways, electricity pylons and cables and gas pipelines. These will often operate at very low level, often moving slowly as they conduct necessary surveys.

Emergency Services

Police and Air Ambulance helicopters will usually fly the most direct route due to the nature of the operation, often down to 200ft. The air ambulance will usually land at any place required to attend an emergency.

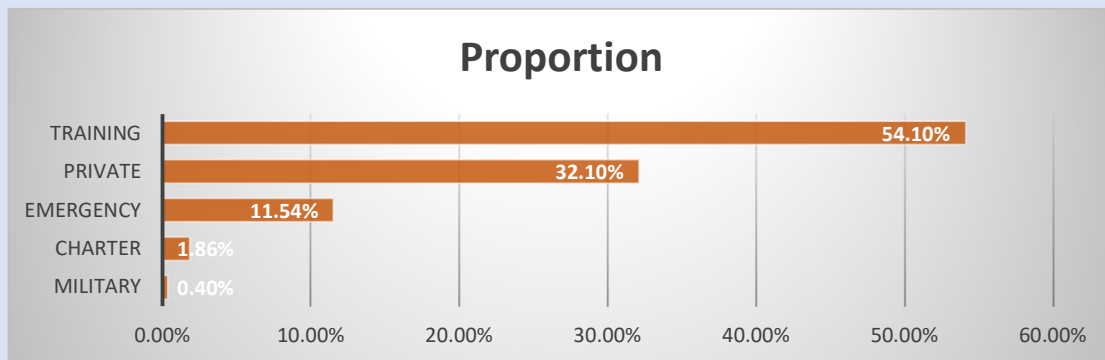
The police helicopter operates 24/7 whilst the air ambulance operates during daytime hours only.

Types of Flights

Types of Flights

Over half of all aircraft and helicopter movements at Barton Aerodrome are training flights. These are conducted by several flying school businesses that are based at the aerodrome.

The remaining movements are split between private flights (leisure and utility services), emergency services, charter and military helicopters.



Variations and Training

Circuit Flying – Aircraft undergoing pilot training will fly multiple circuits. During a circuit an aircraft will take off, climbing to 1000 feet and fly a rectangular pattern descending back to land. The aircraft may then perform a Touch and Go manoeuvre which is a landing followed by an immediate take-off. Typically an aircraft performing a circuit flight will complete this manoeuvre for an hour, usually consisting of between 5 to 10 circuits in that period.

Glide and Flapless Approaches – An aircraft making a training circuit may vary the type of approach flown. These will be flapless (simulating a landing without using flaps), or glide (a minimal power landing). Aircraft conducting these approach types may fly slightly different profiles.

Go-Arounds – A Go-Around is a standard aviation procedure and is used when a pilot decides to abort an approach. Pilots conducting training will actively practice this manoeuvre and may be seen to abort an approach and apply power, commencing a climb.

Engine Failure Practice – Pilots practice a variety of in-flight simulated emergencies. One of these involves simulating an engine failure. An aircraft taking off may be seen to suddenly lower its power and descend before re-applying power and climbing. Engine failure practice is only undertaken on certain runway directions and with an instructor on board.

Variations in Flight Path – Due to the nature of multiple aircraft types, aircraft performance and weather conditions, there is no absolute fixed path that an aircraft will fly, and multiple variations will be observed during both aircraft take-off, approach and circuits.

Aerobatics

Aerobatic Aircraft

A number of aircraft operate from the aerodrome which conduct aerobatic manoeuvres. The aerodrome has restrictions on such manoeuvres directly overhead the aerodrome due to airspace and operational constraints and so such flights will generally operate within local, class “G” unrestricted airspace. Whilst a small number of these flights are privately operated, the majority are operated by businesses providing professional instruction.

The aerobatics training conducted by these businesses is a flight safety course approved by the Civil Aviation Authority. Aerobatic flying is a perishable skill and pilots must continue to practice and exercise their aerobatic flying in order to maintain proficiency.

Pilots must demonstrate their ability to fly a sequence of manoeuvres safely within a ‘box’ no larger than 1km in diameter. Our locally based aerobatic operators are highly motivated and conscientious of noise. They make best efforts to be good neighbours – however, some noise from these flights is unavoidable. It will however, be short lived in periods of less than 20 minutes. Aerobatics is not conducted over built up areas and is generally flown as high as airspace allows in order to reduce the noise footprint.

In order to avoid disturbances on the ground as much as practicable, pilots vary the location of their training (there is a system in place to minimise multiple uses of the same location for aerobatics on any given day). However, due to the availability of airspace there are only a limited number of locations available for practice.

Aircraft Control and Noise Mitigation

Aerodrome Flight Information Service

Barton Aerodrome operates under a licence issued by the Civil Aviation Authority. This ensures that strict Safety Management Systems are in place appropriate to the scale and complexity of the operation.

Within the control tower, an Aerodrome Flight Information Service is provided to pilots. This service is not permitted to 'control' aircraft in the air and can only offer information and advice. All aircraft are expected to follow standard aviation practice, local rules and procedures and the Aerodrome Flight Information Officer (AFISO) will monitor all aircraft flying within the immediate vicinity for compliance with such requirements.

Our measures to ensure safety and minimise aircraft noise

City Airport Ltd has established several measures to minimise the impact of airborne aircraft noise. This includes the following initiatives: -

- Maintaining a noise complaints recording system.
- Encouraging based operators to operate their aircraft in a manner, which will cause the least likely disturbance.
- Monitoring of aircraft operating from the Aerodrome Flight Information Service.
- Publication of the aerodrome noise abatement policy.
- Selection of runway in use to minimise noise disturbance.
- Establishment of circuit patterns, which avoid densely populated areas where possible.
- Strict limitations for aerobatic flights that take place overhead the aerodrome.
- Standardised rules and procedures when operating within the ATZ.
- Limitations and restrictions on operating hours.

Frequently Asked Questions

Why does the same aircraft keep flying over?

If an aircraft is seen flying over the same location multiple times in short succession, it is likely to be an aircraft engaged in training. As part of the requirements for obtaining a Pilot Licence, and for some types of further and continuation training, pilots must practice take-off and landings. Typically, an aircraft engaged in such training will perform multiple circuits for an hours duration at a time. When weather conditions are suitable, several aircraft may perform circuit training at the same time.

Why can't you change runway?

Runway selection and direction is determined by the wind direction and runway availability. We always select the runway most suitable for aircraft safety. Sometimes due to weather pressure systems, we may be on the same runway for several consecutive days which can make it appear that we are busier than usual. As wind conditions change through the day, we may change runways several times, however, we will always revert to runway 26 when wind conditions allow to keep our noise impact to a minimum.

Why can't you stop flying?

We operate the aerodrome as a commercial business, and equally most flights taking place such as training are operators that are running their own businesses. These businesses pay rent, fees and charges to utilise the aerodrome facility and so we are unable to prevent any aircraft from operating their business unless on the grounds of safety.

Do aircraft operate at night?

No, only certain helicopters can use the aerodrome at night. If your concern is regarding aircraft operating during darkness, these are likely to be survey, military or police operated flights, or flights from another airport in the region.

How do I submit a complaint?

We are unable to take complaints by telephone or social media. To ensure your complaint or concern is properly recorded and dealt with, please submit the details via our website at the following address:

www.bartonaerodrome.co.uk/noise

What happens after my complaint or concern is submitted?

Once we receive a complaint, we will register it on our complaint register. We will then investigate the nature of the concern or complaint to determine whether any action is required. We will then write to you to acknowledge your complaint or concern including any action we have taken. We aim to provide a response within ten working days.

Details of your complaint will be shared with the Aerodrome Consultative Committee which reviews our database of complaints at each meeting.

Consultative Committee

Barton Aerodrome recognises the benefits of dialog with its users and neighbours, and so hosts an Aerodrome Consultative Committee.

The committee convene every 6 months and comprises representative from aerodrome management, aerodrome operators, local area councils, resident associations and groups.

The primary purpose of the committee is as follows:

- Provide an opportunity for information exchange between the aerodrome and interested parties.
- Provide a structured forum for discussion so as to make recommendations to the aerodrome management and other bodies when appropriate.
- Provide the opportunity to reach a common understanding between interested groups about the nature of aerodrome operation, thereby increasing the scope for issues to be resolved amicably. However, people interested in and affected by an aerodrome operation may have mutually inconsistent viewpoints and it is not realistic to expect that all matters of concern will be able to be resolved through discussion.
- Promote understanding about aerodrome operations more widely, through dissemination of relevant information by committee members.
- Promote understanding by the aerodrome operator of the nature of its impacts on local communities and businesses.

Government guidelines on Aerodrome Consultative Committee remit make clear that a Consultative Committee should not:

- detract from or constrain the responsibility of the aerodrome owner and/or operator to manage the aerodrome.
- prevent interested parties from raising concerns directly with the aerodrome, or through other channels.
- serve as a forum for the resolution of disputes; or
- have any executive or decision-making power over the aerodrome.

Meetings are held annually, and minutes of these meetings are available on request.

To contact the Aerodrome Consultative Committee, please email info@bartonaerodrome.co.uk

Submit a Complaint or Concern

Aircraft noise is not currently a statutory nuisance in the UK. It is not covered by the Environmental Protection Act 1990 or the Noise Act 1996. This means that local authorities do not have the legal power to take action on matters of aircraft noise, and nor does the Civil Aviation Authority have the legal power to prevent aircraft flying over a particular location or at a particular time for environmental reasons.

Further information about aircraft noise can be found on the Civil Aviation Authority website:

www.caa.co.uk/consumers/environment/noise/noise

Submit a Complaint or Concern

If you wish to raise a concern regarding aircraft noise, you may do so by visiting our website:

www.cityairportandheliport.com/noise

Please note that due to our operational teams primary duties in managing the operational safety of the aerodrome on a day to day basis, we are unable to discuss noise concerns by telephone or social media. All noise concerns must be submitted via the above link.

For Complaints or Concerns Regarding Military or Emergency Services

Military - www.raf.mod.uk/contact-us

National Police Air Service - www.npas.police.uk

North West Air Ambulance Service - www.nwairambulance.org.uk