

Manchester Airport Arrival Routes Information Pack

This document explains how aircraft approach Manchester Airport from the east and west. It also provides information about the number of aircraft arriving at Manchester Airport.



ABOUT YOUR AIRPORT

- ▶ Manchester Airport Group is the largest UK owned airport group with three airports.



Manchester Airport officially opened on 25 June 1938 and is today owned by the 10 Councils of Greater Manchester and Industry Funds Management (IFM).

▶ CARBON ACCREDITATION

In 2016, Manchester Airport became the first UK airport to be awarded Level 3+ carbon neutral status. In 2012 we achieved ISO 14001.



▶ VOLUNTEERING

9,270 volunteer hours in the community, from 558 volunteers, in 2018/2019.

▶ COMMUNITY TRUST FUND

The airport has supported community groups with over £3.6 million in grants since 1997.



▶ BEST UK AIRPORT

Manchester Airport was voted the Best UK Airport in the Travel Weekly Globe Travel Awards 2020.

1939 saw 7,600 passengers per year...

...today it's grown to

29.5m

FLYING TO 220 DESTINATIONS



With new flights to Dhaka, Beijing, LA, Boston and Shanghai, from over 60 Airlines.

2017 Manchester Airport joined the list of top 20 European airports.



▶ GROUND TRANSPORT

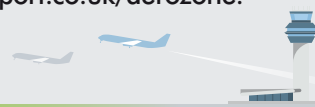
THE 5.5m PASSENGERS

visiting Manchester Airport station have access to:

- 140 trains a day to over 100 destinations;
- 440 busses a day;
- 132 coaches a day; and
- City Centre tram every 12 minutes.



Supporting over 13,000 children in education every year. A new AeroZone school resource opens in 2020. For more information see www.manchesterairport.co.uk/aerozone.



IN 2001
A SECOND
RUNWAY
WAS ADDED



OVER 100 STANDS



AND 200
ON-SITE
OPERATORS

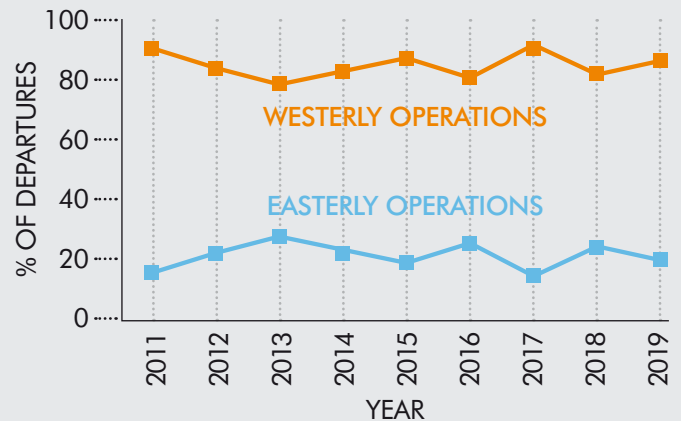
HOW WE OPERATE

RUNWAY DIRECTION

For safety reasons, aircraft must land and take off into the wind. At Manchester Airport the wind usually blows from the west, meaning aircraft approach from the east (over Stockport and Heald Green) and take off to the west (towards Knutsford). This is known as 'westerly operations'.

Sometimes the wind direction changes and moves to the east. In this case, aircraft approach from the west (over Knutsford) and take off to the east (over Heald Green and Stockport). This is known as 'easterly operations'.

On average, between 70% and 80% of our departures each year will be westerly operations. In 2019, 80% of flights were westerly operations and 20% of flights were easterly operations.



The wind direction may change several times in a day, so we may change our direction of operations to reflect this. The table above shows the percentage of movements in each direction over the last eight years.

USE OF RUNWAYS

Manchester Airport has two runways. We use both runways during the daytime, but planning permission does not allow us to use Runway 2 between 10pm and 6am, unless we are doing maintenance on Runway 1.

As the number of flights has increased, we have needed to extend the times during which we use both runways. This happened in July 2018. The changes will reduce delays and increase efficiency. For more information about this see our web page at www.manchesterairport.co.uk/dualrunwayuse.

We have a Night Noise Policy which means that we do operate at night, but flights are restricted. You can read more about our Night Noise Policy at www.manchesterairport.co.uk/nightnoise.

TIMES WHEN TWO RUNWAYS USED	
DAYS	Summer season from 30 March 2020
MONDAY TO FRIDAY	6.15am to 8pm
SATURDAY	6.15am to 4pm
SUNDAY	6.15am to 9.30am and 1pm to 8pm

MEASURING NOISE

Generally, the closer that you live to an airport and a departure or arrival route, the more noise you will hear.

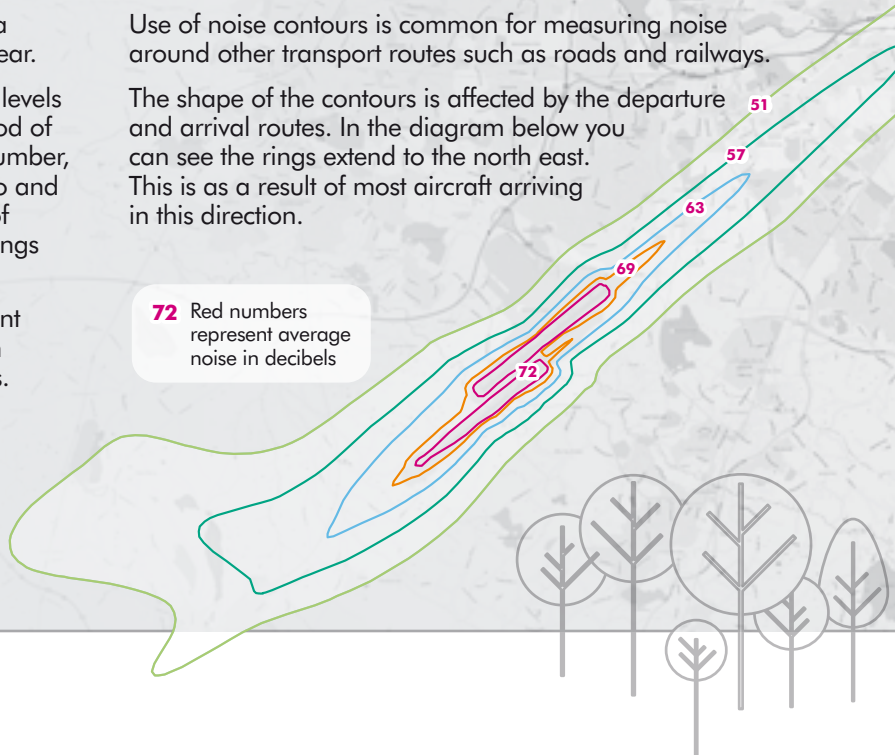
'Noise contours' give an indication of general noise levels and show the average noise reading over a set period of time. They use actual information on the position, number, heights and noise levels of arrivals and departures to and from Manchester. Noise contours look like a series of concentric rings, like in a tree trunk. The closer the rings are to the airport, the louder the noise is.

This is represented by a number. Current Government guidelines recommend noise insulation such as high performance glazing or loft insulation at 63 decibels. If you live in this area, you can apply for help at www.manchesterairport.co.uk/soundinsulation.

Use of noise contours is common for measuring noise around other transport routes such as roads and railways.

The shape of the contours is affected by the departure and arrival routes. In the diagram below you can see the rings extend to the north east. This is as a result of most aircraft arriving in this direction.

72 Red numbers represent average noise in decibels



WESTERLY ARRIVALS

The busiest month for westerly arrivals was August, with a total number of...

9695
arrivals

...while April was our quietest month.

3349
arrivals

There were westerly arrivals on 31 days in August

...compared with just 15 days in April.



The maximum number of arrivals on a single day in August was

350
...on 23 August

...compared with a maximum in April of

288
...on 29 April.

During August there were...

1,259
arrivals during the peak hours of 2pm to 4pm.

In August, during the night period from 11pm to 6am there were

1,616
arrivals.

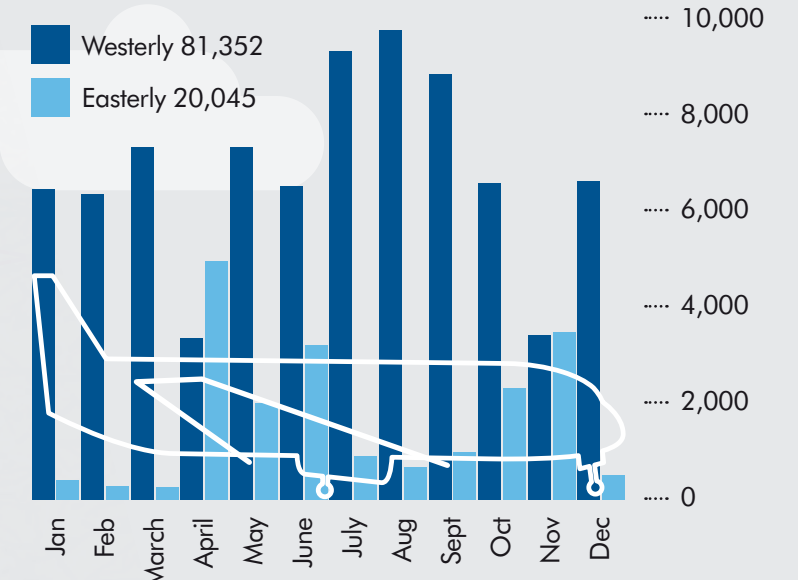
In April there were...

471
arrivals during the peak hours of 5pm to 7pm.

In April, during the night period from 11pm to 6am there were

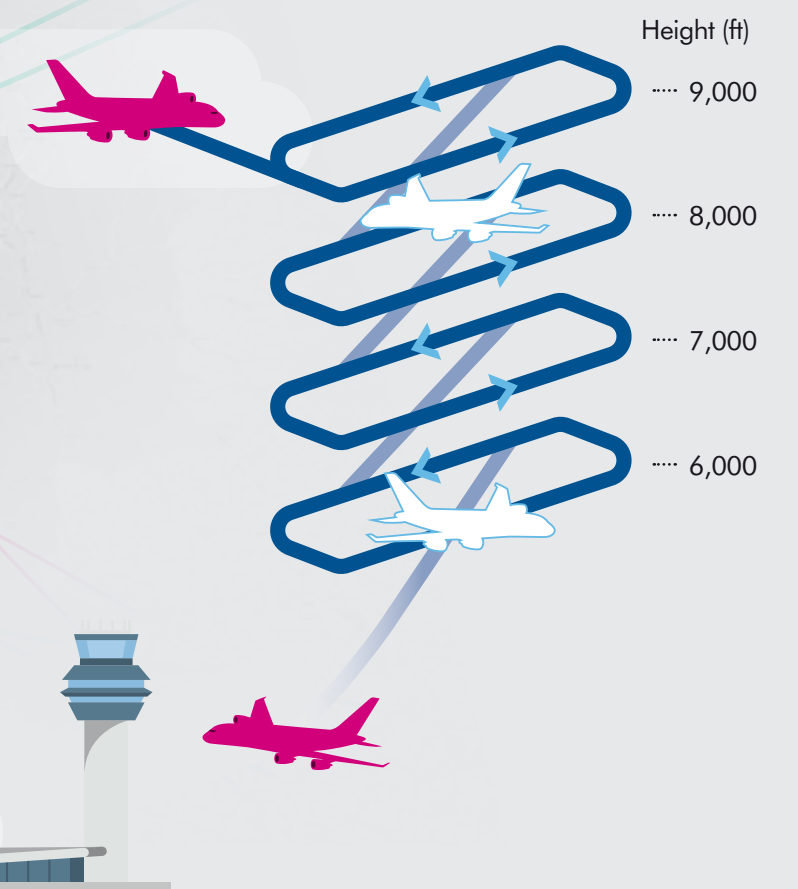
299
arrivals.

NUMBER OF ARRIVALS EACH MONTH DURING 2019



HOLDING STACKS

If an aircraft cannot land immediately they may be instructed to enter a 'stack'. Aircraft in a stack circle at different heights around a central point until the way is clear for them to land. Aircraft in the stack are 1,000 feet above each other. The lowest level of the stack is 6,000 feet. There are three stacks in use at Manchester Airport – DAYNE, MIRSI and ROSUN. DAYNE serves arrivals from the south and east, ROSUN from the north and east, and MIRSI from the west. The stacks are approximately 15 to 20 miles away from the Airport. Stacks are more likely to be used in poor weather when our movement-rate decreases.



EASTERLY ARRIVALS

The busiest month for easterly arrivals was April, with a total number of...

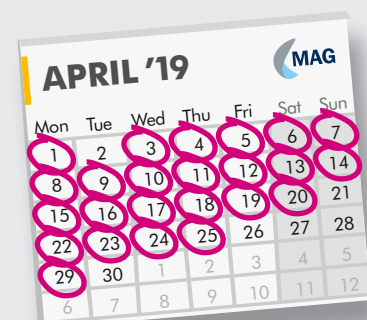
4927
arrivals
RUNWAY 1 – 3576, RUNWAY 2 – 1351

...while March was our quietest month, with...

282
arrivals
RUNWAY 1 – 212, RUNWAY 2 – 70

There were 24 days in April when there were easterly arrivals

...compared with just three days in March.



The maximum number of arrivals on a single day in April was

304
...on 15 April

...compared with a maximum in March of

253
...on 31 March.

During April there were...

677
arrivals during the peak hours of 7am to 9am.

In April, during the night period from 11pm to 6am there were

553
arrivals.

In March there were...

38
arrivals during the peak hours of 10pm to midnight.

In March, during the night period from 11pm to 6am there were

36
arrivals.

WILL THINGS CHANGE IN THE FUTURE?

AIRCRAFT

Over time, airlines will buy new aircraft. The improved engines are quieter and more efficient. The new sleeker planes can glide through the air with less friction, significantly reducing noise and emissions. All of this is beneficial to the communities that aircraft fly over.

AIRSPACE

An international review of upper airspace (above 24,500 feet) is taking place. This will reposition some of the main airways over the UK to increase efficiency and improve the customer experience with less time in hold, more timely arrivals and departures and reduced emissions. This review process will also enable us to create the best possible design to make sure we can achieve Manchester Airport's potential by securing further routes to destinations around the world. This will create more jobs and boost the region's economy.

The changes relate to three levels of airspace.

- High level – over 7,000 feet where aircraft are travelling to or from their final destination
- Arrival – below 7,000 feet heading to the final destination airport
- Departure – between 0 and 7,000 feet leaving the airport to join the high level routes
- Changes above 7,000 feet will be managed by NATS.

ARRIVALS

Aircraft currently approach the airport they are landing at and wait for an instruction to land. Ideally the approach is a continuous descent to land as this is fuel efficient and quiet.

If aircraft need to wait, they currently go into a 'holding pattern' away from the airfield. As a part of this project, NATS will examine if this is the best way to control aircraft approaching the airfield before they land.

There is more information about arriving aircraft in our runway data sheet www.manchesterairport.co.uk/runwaydatasheet.

MODERNISING AIRSPACE

In February 2017, the Department for Transport published 'Upgrading UK Airspace'. This document reviewed how modern aircraft can use the new technology on board for greater efficiency and reduced noise.

The Government has said that all UK airports must make these changes, and in December 2017 the CAA issued guidance on how airports should manage change in a document called Airspace Design CAP1616. This is available on the CAA website.

The first stage in the modernisation process is for an airport to issue a Statement of Need to the CAA for them to approve the start of a change process. We did this in March 2019 and the CAA gave approval to move forward. In 2019 we engaged with communities, through focus groups and an online questionnaire, to develop our Design Principles. The CAA have approved these and you can see them, and read about how we developed them, in our Executive Summary document at www.manchesterairport.co.uk/futureairspace. During 2020 we will follow the process set out in CAP1616 to continue with Stage 2 (developing and assessing options for changes to flight paths).

WANT TO KNOW MORE?

There is a booklet like this one for each of our departure routes.

Extra information is already available on our website in a range of formats including films and downloadable information sheets. You can see them all on our website at www.manchesterairport.co.uk/runwaydatasheet.

If you would like to talk to us you could:

- phone our Freephone number (08000 967967);
- send an email to community.relations@manairport.co.uk; or
- come to an outreach session (details are on our website at www.manchesterairport.co.uk/outreach).

You can watch aircraft movements and look at heights and positions over the ground using **webtrak**, which is on our website at www.manchesterairport.co.uk/webtrak.

