WINTER SEASON 2026/2027

# Manchester Airport Runway Use Information Pack

Towns and villages affected: Antrobus / Chelford / Knutsford / Lach Dennis / Little Bollington / Lostock Gralam / Lostock Green / Lower Whitley / Mere / Mobberley / Ollerton / Over Peover / Over Tabley / Partington / Plumley / Rostherne / Swettenham

This document explains how we operated with both runways from February 2001 to March 2020, operations that resumed in April 2022.



manchesterairport.co.uk

MAG Manchester Airport

# 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.

| YEAR | DIRECTION OF OPERATION | PERCENTAGE OF DEPARTURES |
|---|---|---|
| 2019 | Easterly | 19% |
| | Westerly | 81% |
| 2020 | Easterly | 13% |
| | Westerly | 87% |
| 2021 | Easterly | 19% |
| | Westerly | 81% |
| 2022 | Easterly | 18% |
| | Westerly | 82% |
| 2023 | Easterly | 23% |
| | Westerly | 77% |
| 2024 | Easterly | 22% |
| | Westerly | 78% |
| 2025 | Easterly | 25% |
| | Westerly | 75% |

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 seven years.

## USE OF RUNWAYS

Manchester Airport has two runways. Between 2001 and 2020 we used both runways during the daytime. Our planning permission does not allow us to use Runway 2 between 10pm and 6am, unless we are doing maintenance on Runway 1 or there is an emergency.

Communities asked us to keep the use of both runways at the same time to a minimum. From 2001, when Runway 2 opened, until 2018 we were able to restrict operations in the middle of the day and at the weekends, and use just one runway in the early evenings. As the number of flights has increased, over the years, we have needed to change our hours of using both runways in order to meet the needs of our business. The changes:

- brought about more efficient operations, benefiting airlines and passengers by reducing delays; and
- offered us opportunities to reduce the time aircraft spend taxiing, so reducing ground noise and emissions.

We continue to plan the use of the runways to make available the capacity when it is required.

## NIGHT-TIME OPERATIONS

We operate through the night. We have a Night Noise Policy which restricts night-time movements. Operations are only be from Runway 1 between 10pm and 6am unless there is maintenance or an emergency. You can read more about our Night Noise Policy at www.manchesterairport.co.uk/nightnoise and the dates and details of runway closures at www.manchesterairport.co.uk/runwayclosures.

# REASON FOR CHANGE

Runway 1 is closest to the terminal buildings. When we are using a single runway, aircraft land on and depart from Runway 1. Air traffic control give pilots instructions so that only one aircraft is on the runway at a time. To speed things up, an aircraft can be on a nearby 'taxiway' waiting to enter the runway, having recently left the runway, or approaching the airfield.

Aircraft make a 'wake vortex' (waves in the air), and the larger the aircraft, the larger this air movement is. Smaller aircraft must wait for these waves to slow down before they can take off. Air traffic control will try to put aircraft in order of size, but this is not always possible due to the times that aircraft have been given to leave. Airports like Manchester, have a mixture of aircraft types and sizes. This makes it difficult to equally space departure times and causes delays. Some airports, such as Heathrow, have a lot of similar-sized aircraft and can consistently space departures closer together.

Delays in departure times mean that aircraft wait in line for their turn to depart. The time it takes to taxi to the runway from the stand where you board is normally about 15 minutes. However, delays in being given a departure instruction can often add another 12 minutes to this. When that happens, there is more noise on the ground, more emissions from the aircraft, and passengers are delayed in arriving at their destination airport.

Aircraft coming in to land need the runway to be clear. If only one runway is being used, there must not be any other aircraft on that runway. This may mean that aircraft have to wait and air traffic control will put them into a holding pattern until a space becomes available. (There is more information about this in our runway data sheet www.manchesterairport.co.uk/runwaydatasheet). When this happens, aircraft burn more fuel while waiting, and will create more emissions and noise. Also, passengers are delayed in arriving at Manchester.

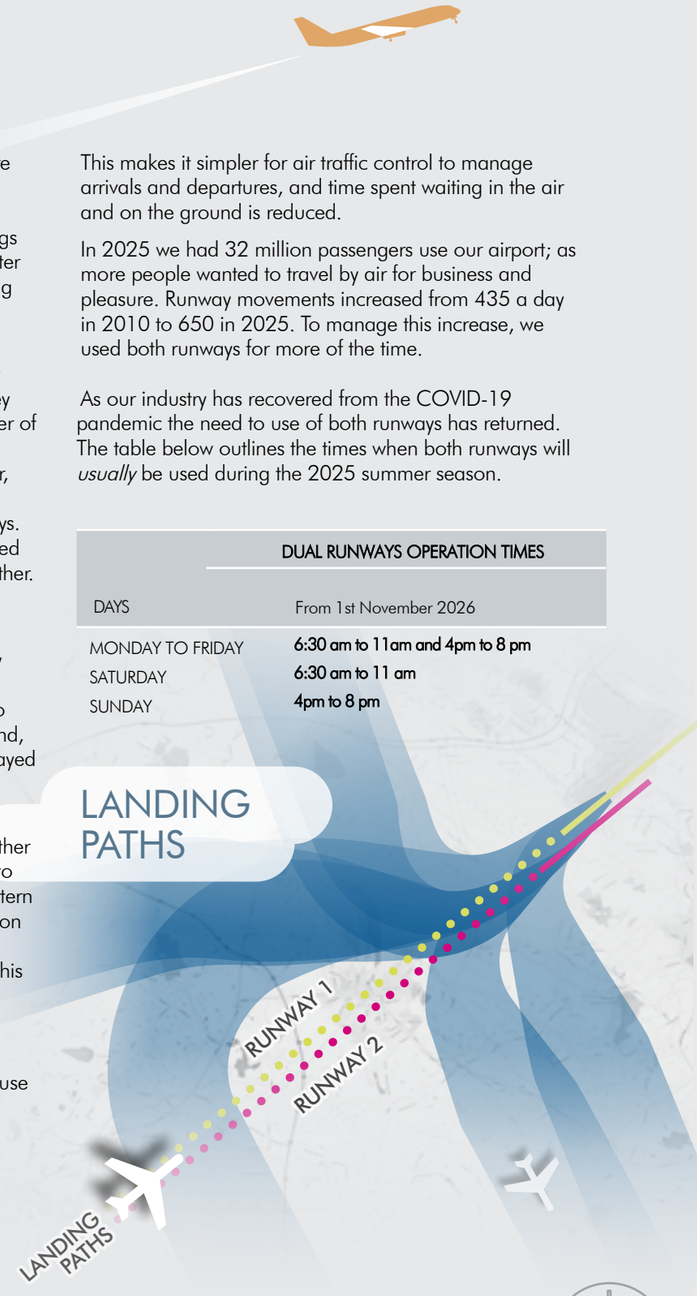
When we use Runway 1 and Runway 2, air traffic control use one runway for arrivals and one for departures.

This makes it simpler for air traffic control to manage arrivals and departures, and time spent waiting in the air and on the ground is reduced.

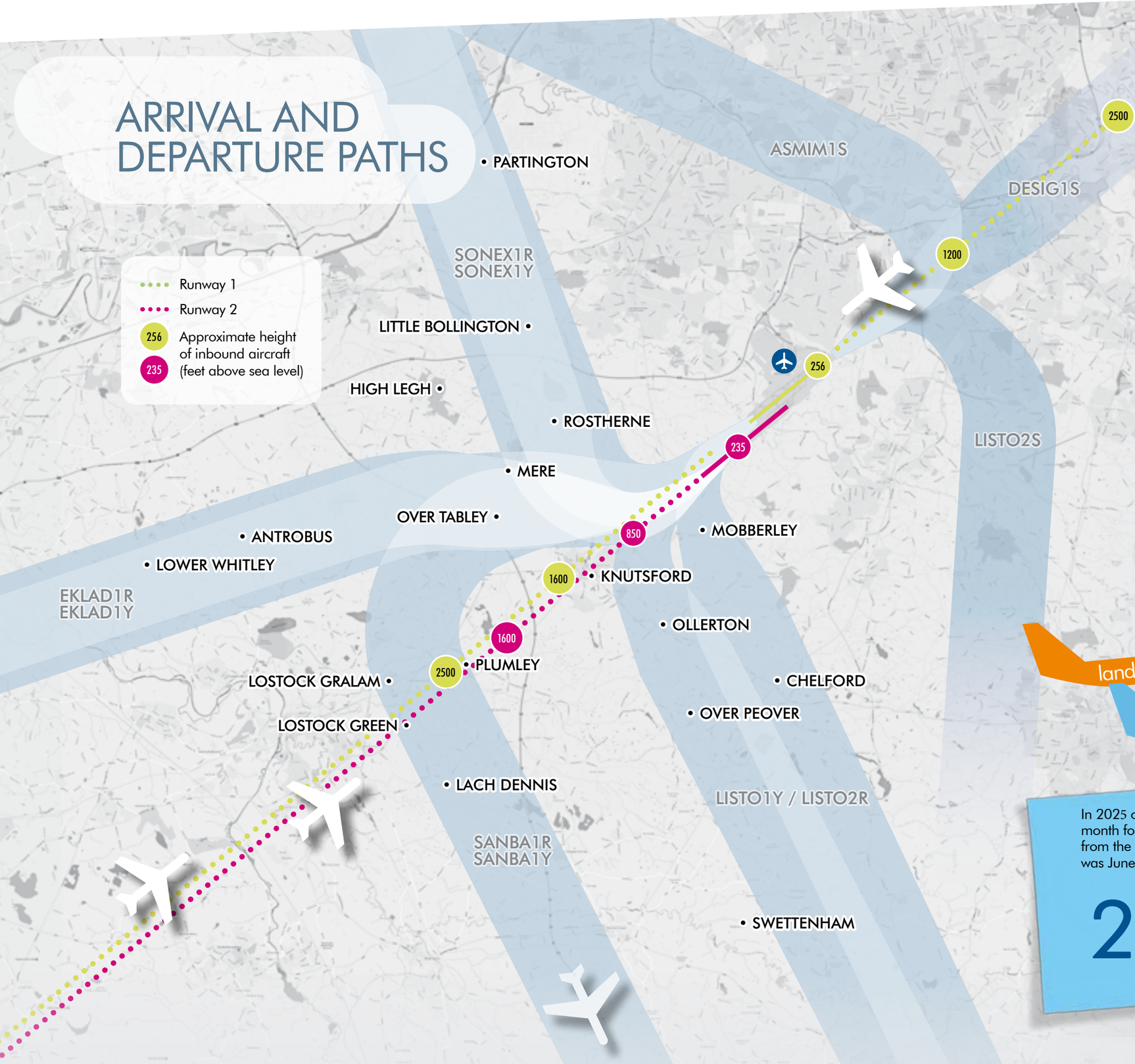
In 2025 we had 32 million passengers use our airport; as more people wanted to travel by air for business and pleasure. Runway movements increased from 435 a day in 2010 to 650 in 2025. To manage this increase, we used both runways for more of the time.

As our industry has recovered from the COVID-19 pandemic the need to use of both runways has returned. The table below outlines the times when both runways will *usually* be used during the 2025 summer season.

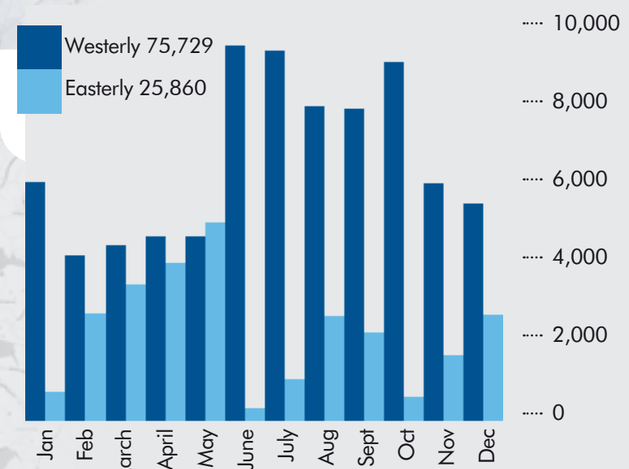
| | DUAL RUNWAYS OPERATION TIMES |
|---|---|
| DAYS | From 1st November 2026 |
| MONDAY TO FRIDAY | **6:30 am to 11am and 4pm to 8 pm** |
| SATURDAY | **6:30 am to 11 am** |
| SUNDAY | **4pm to 8 pm** |



# ARRIVAL AND DEPARTURE PATHS




## NUMBER OF ARRIVALS EACH MONTH DURING 2025




In 2025 our busiest month for arrivals, from the South West, was June. There were...

**4805**

of which...

**1545** landed on Runway 1

**3260** landed on Runway 2

In 2025 our quietest month for arrivals, from the South-West, was June with...

**299**

of which...

**122** landed on Runway 1

**177** landed on Runway 2

# MEASURING NOISE

## WHAT EFFECT DO THE CHANGES HAVE ON NOISE?

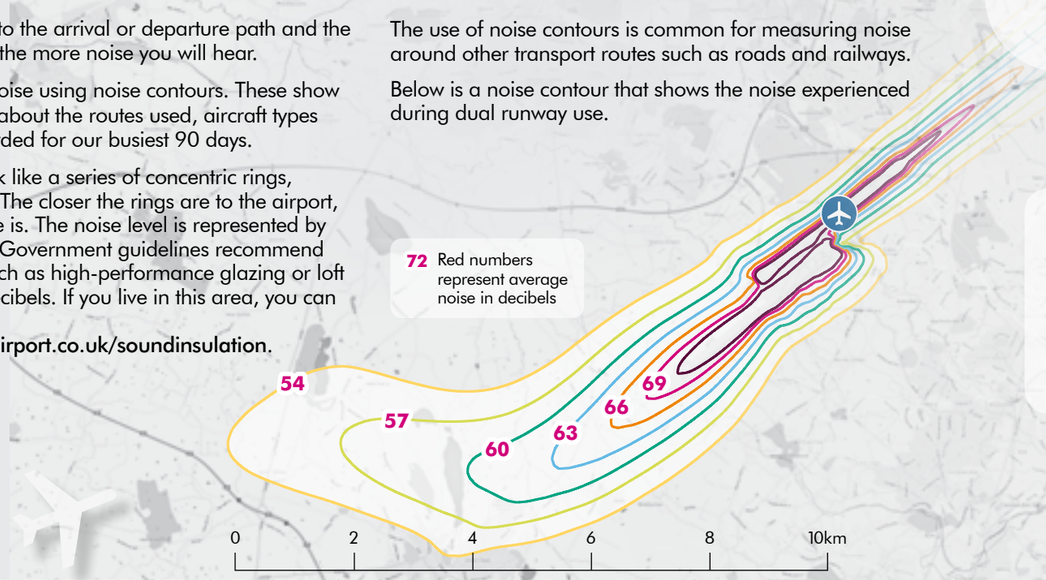
The closer you are to the arrival or departure path and the end of the runway, the more noise you will hear.

Airports measure noise using noise contours. These show actual information about the routes used, aircraft types and the noise recorded for our busiest 90 days.

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. The noise level 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**.

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

Below is a noise contour that shows the noise experienced during dual runway use.




## WHAT IS THE EFFECT OF CHANGING TO DUAL RUNWAY OPERATIONS?

The changes do not affect the night period from 10pm to 6am.

### RUNWAY MAINTENANCE

Each month we close Runway 1 for three nights so that we can do maintenance. At these times we use Runway 2 between 10pm and 6am. We advertise these dates on our web page at www.manchesterairport.co.uk/runwayclosures. To receive an email update for closures, email community.relations@manairport.co.uk with your details.

### ARRIVING AIRCRAFT

The position of the arrivals paths from the West to Runway 1 and Runway 2 stays the same. There are no changes from the East.

The maps on this page show an OS map with the centre line of the arrivals path marked with typical heights for landing aircraft on each runway.

The cross sections show the position of actual aircraft arriving to Runway 1 and Runway 2. These cross sections show that landing aircraft follow very similar paths, and the width of the paths flown for landing aircraft on the arrival route is approximately 150 feet. As aircraft approach the runway, this narrows to a central point on the runway.

### DEPARTING AIRCRAFT

Use of Runway 2 means that the distribution of aircraft along the westerly departure routes changes:

More departures along the LISTO2Y
Fewer departures along the LISTO2R

More departures along the SONEX1Y & POLE HILL 1Y
Fewer departures along the SONEX1R & POLE HILL 5R

More departures along the EKLAD1Y & KUXEM 1Y
Fewer departures along the EKLAD1R & KUXEM 1R

More departures on SANBA1Y
Fewer departures along the SANBA1R

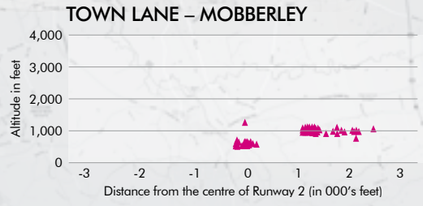
The change on LISTO2Y and LISTO2R is the most noticeable as this route turns south closest to the end of our runways. The changes are not noticeable, to most people on the other routes, and there is no change to the position of aircraft departing to the East.

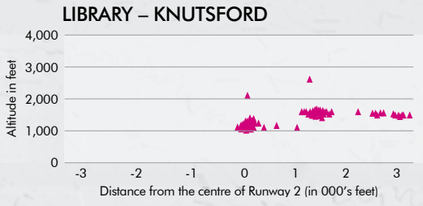
For more information about the position of aircraft on departure, see our departures data sheets at www.manchesterairport.co.uk/runwaydatasheet.

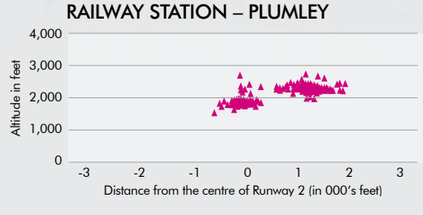
# DISTRIBUTION OF AIRCRAFT ARRIVING

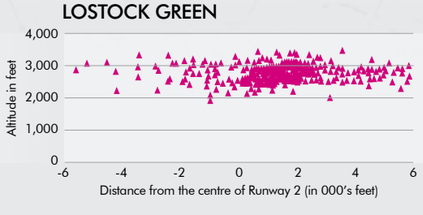



The graphics below show the height of aircraft at the places marked on the map. They show the concentration of aircraft in the centre of the routes and the height above sea level. As aircraft get closer to the runway, the landing paths for Runway 1 and Runway 2 become more distinct.



# 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. For more information see our page: **www.manchesterairport.co.uk/environment**

## THE MANCHESTER AIRPORT FUTURE AIRSPACE PROJECT

In 2017, the Secretary of State tasked the CAA with preparing and maintaining a coordinated strategy and plan for the use of UK airspace up to 2040, including modernisation. A framework for how UK airspace can be improved to accommodate predicted future growth in aviation, has been established, whilst addressing noise, emissions, and flight delay issues. The current departure and arrival routes for aircraft (as described in this data sheet) are based on navigation equipment on the ground. Modern aircraft can replace this method of navigation by using satellites. Satellite-based routes enable aircraft to follow departure and arrival routes with much greater precision.

## CONSULTATION ON CHANGES

The CAA consulted on a process for airports to work with communities when they modernise their airspace. This process was introduced in 2017 in a document called CAP1616, this sets out the detailed seven stage process that Manchester Airport must follow. You can read and/or download the version of CAP1616 that Manchester Airport (and other airports in the north and Midlands) are following, Version 5.1 of CAP1616, on/from the CAA website.

In April 2023 we passed through Stage 2, 'Develop and assess', of the CAP1616 process and we commenced Stage 3 'Consult'. In Stage 3, we have a great deal of work to complete in order to build a network of route options that can work together, safely and efficiently, to arrive and depart aircraft. Later in Stage 3 we will need to test these route options against our Statement of Need and Design Principles in a full public consultation.

## KEEPING IN TOUCH

To keep up to date please visit:
**manchesterairport.co.uk/futureairspace**
If you would like us to contact, you directly please email **futureairspace@manairport.co.uk** with the following information and we will add you to our mailing list:

- Your name.
- Your postcode (to help direct bespoke information)
- Your email address.

Your information will be used solely for the purpose of corresponding with you about Future Airspace and all details will be destroyed at the end of the consultation period.

# WANT TO KNOW MORE?

There is a booklet like this one for each of our departure routes and our arrival routes. Extra information is also 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 page 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.**

