Manchester Airport Departure Routes Information Pack

SOUTH EASTERLY DEPARTURES IN WESTERLY OPERATIONS (ROUTES LISTO2R AND LISTO2Y)

Flying over: Mobberley / east Knutsford / Ollerton / Chelford / Swettenham

This document explains how we operate and provides some information about the number of aircraft and passengers currently flying from Manchester Airport.
HOW WE OPERATE

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.

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 2018, 76% of flights were westerly operations and 24% 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.
There are four routes with weekly departures shown on this diagram. These are used for on average 76% of our flights. In 2018, there were 4321 departures on route LISTO2R (Runway 1) and route LISTO2Y (Runway 2) – 6% of weekly departures.

Our information is based on the most recent complete year, which was 2018, and our busiest month in that year (August), compared to our quietest month (February).

The following graphs focus on the combined information from routes LISTO2R and LISTO2Y heading to southern Europe and London.

### Positions of Aircraft along Routes LISTO2R and LISTO2Y

Currently aircraft navigate using navigational equipment on the ground close to and around our runways. A series of instructions will navigate the aircraft along the whole route (for example, to fly straight ahead for a set distance and then turn at a particular point to a compass bearing of …).

Outwardly the accuracy with which an aircraft navigates depends on the following:

- **The size of the aircraft**
- **The weight of the aircraft**
- **What technology the aircraft has on board**
- **Weather conditions**

The maps opposite show a general picture of position and spread of flights using the LISTO2R and LISTO2Y routes in August 2018. The colours show the position of aircraft on the route in August 2018. The key shows how frequently areas were flown over August 2018.

### Changes in the Future

**Aircraft**

Over time, airlines will buy new aircraft. The improved engines are quieter and more efficient. The new-dealer plane is able to climb quicker and with less friction, significantly reducing noise and emissions. All of this is beneficial to communities that the aircraft fly over.

Aircraft using the LISTO2R and LISTO2Y routes range from small 10-seat aircraft up to the larger 150-seat aircraft.

**Modelling 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 current departure routes for aircraft are based on navigation equipment on the ground. Modern aircraft can replace the model of navigation by using satellites. Satellite-based routes enable aircraft to more accurately follow the centre lines of departure routes while maintaining safety.

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 ‘Upgrading UK Airspace Design CAP 1616’. 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 so that the CAA can give approval for change. In 2019 there will be a period where we consult our community and the industry on Design Principles. We will follow the process set out in CAP1616. Find out more at www.manchesterairport.co.uk/futuresairspace.

**Airspace Levels**

A review of airspace above 24500 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.

The 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 – over 7000 feet where aircraft are travelling to or from their final destination**
- **Arrival – below 7000 feet heading to the final destination airport**
- **Departure – between 0 and 7000 feet leaving the airport to join the high level routes**

**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 go into a ‘holding pattern’ away from the airport. As part of the project, NMA will approve if this is the best way to control aircraft approaching the airport before they land.

There is more information about arriving aircraft in our arrivals data sheet. You can find this at www.manchesterairport.co.uk/ runwaydatahandle.
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 an 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 with this at www.manchesterairport.co.uk/soundinsulation.

Noise contours are common for measuring noise around other transport routes such as roads and railways.

WANT TO KNOW MORE?

There is a booklet like this one for each of our departure and arrival routes. Extra information is already available on our website in a range of formats including films and downloadable information sheets. You can see them at www.manchesterairport.co.uk/runwaydatasheet.

We will need to consult widely about changes to airspace in the future. If you would like to be on a mailing list to make sure you receive information direct, please email future.airspace@manairport.co.uk.

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;
– 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.

manchesterairport.co.uk