

The anatomy of a control tower

When most people think of an airport control tower they imagine air traffic controllers in a room with huge windows. While that is certainly true, it is only part of the story.

Not only do each of those controllers have very different roles, there are more who are working out of sight and using radar to guide aircraft flying miles away. And then there's the team of highly skilled engineers managing and maintaining the systems that make it all possible.

This infographic takes a closer look at the inner workings of the tower at Manchester Airport, a dual runway operation that requires separate controllers for the arrival and departure runways.

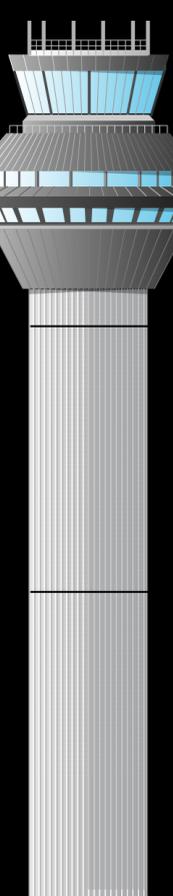
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Manchester tower facts

60m tall
Manchester control tower is the second tallest in the UK

64
Aircraft movements per hour (peak)

70
Different computer systems support the operation



> VCR
Visual Control Room
Controls all airport traffic including ground, landing and take-offs. Manages planes within 8 miles of the airport.

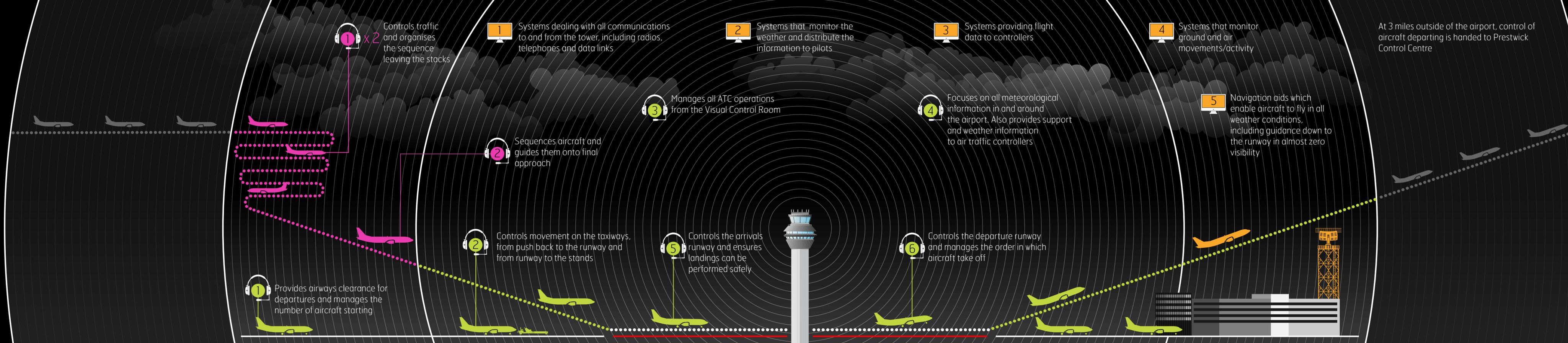
- 1 Ground movement planner
- 2 Ground movement controller
- 3 Supervisor
- 4 Air traffic assistant
- 5 Arrivals air traffic controller
- 6 Departures air traffic controller

> ACR
Approach Control Room
Controls aircraft 30 miles to 8 miles from the airport. Handles aircraft in the stack and agrees spacing and sequence of final approach.

- 1 Approach controllers x 2
- 2 Final director

> MER
Main Equipment Room
Ensures that all the tower systems are well managed and maintained.

- 1 Communications
- 2 Weather
- 3 Data
- 4 Surveillance
- 5 Navigation



Capacity

Manchester Airport is the UK's third busiest airport, serving over 22 million passengers a year. More than 100 airlines offer direct flights from Manchester to 225 destinations worldwide, more than any other UK airport.

225
Worldwide destinations

170,000
Aircraft movements a year

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