

Arrivals

Information on how aircraft arrive at Gatwick

Unlike the initial stages of flight for departing aircraft, there are no set routes to follow for inbound aircraft nor are there noise limits or fixed heights. This is because inbound aircraft arrive into UK airspace in a random pattern and need to be managed by Air Traffic Control (ATC). When the airport is busy, arriving aircraft may be put into a holding pattern as part of a 'stack' by ATC before being told to make their final approach. ATC also sequence the aircraft for safe separation by providing speed and direction instructions to join the Instrument Landing System (ILS).

ILS is a beam which extends out a horizontal distance of 25 nautical miles (nm) from the airport. It is aligned with the runway centreline to guide aircraft to land. Landing is a very busy and critical stage of the flight so it's vital that aircraft are set up for landing (with flaps correctly configured) and at the right speed some distance from touchdown. To achieve this ATC

has discretion over where they direct aircraft to join the ILS in the interests of both safety and separation. This means any area beneath the ILS will have arriving aircraft flying over as well as areas to the side as aircraft are directed on to the ILS. Note that aircraft arriving at Gatwick will usually join the ILS from the south to avoid the proximity of Heathrow Airport to the north.

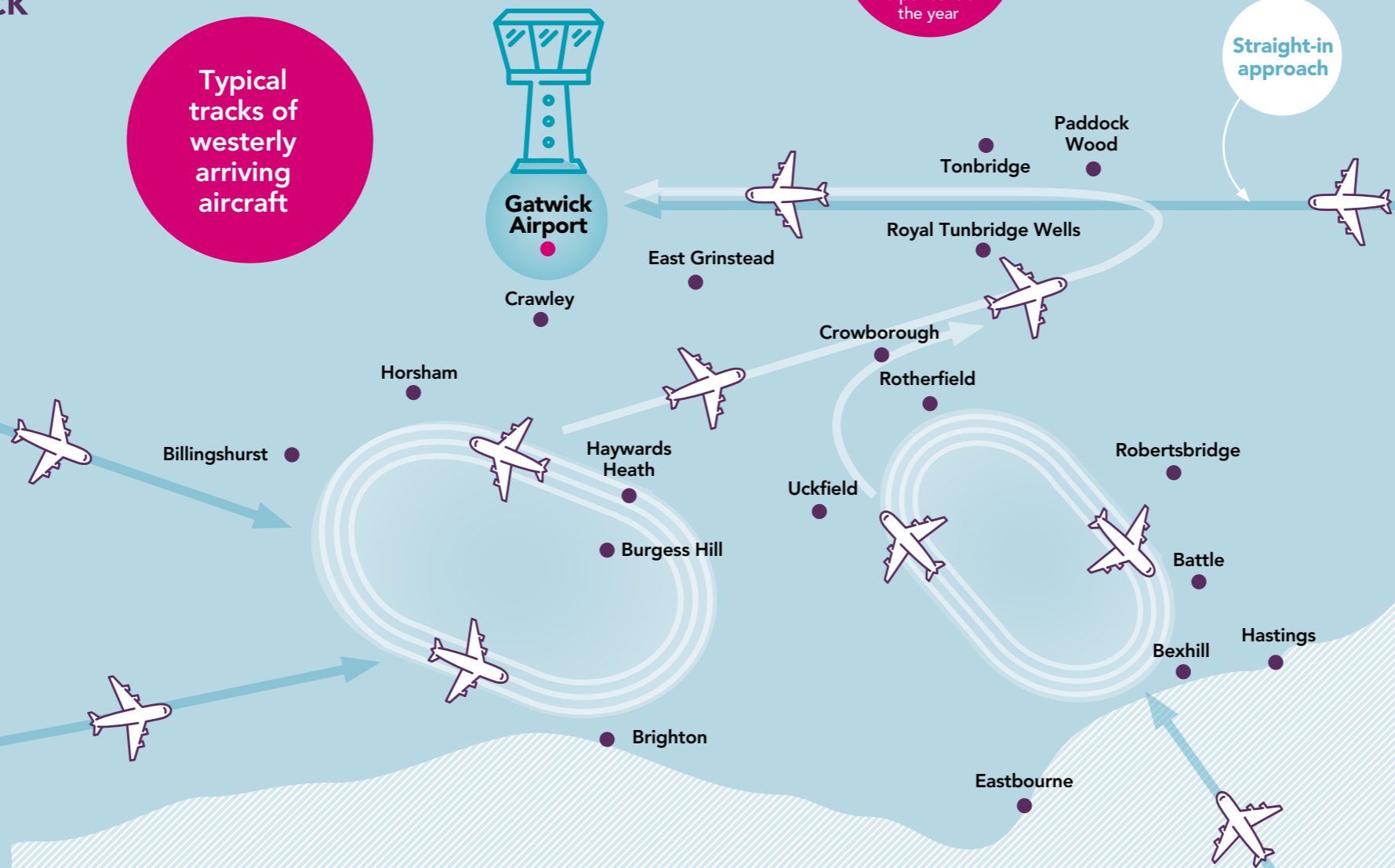
To operate safely aircraft must land and take-off into wind. For take-off it will increase the lift-off produced by the wings. For landing it will create lift, required until touchdown, while also helping to control airspeed. The direction the airport operates in is therefore driven by wind direction: if the

wind is from the west, aircraft will approach Gatwick from the east and depart, initially, towards the west. This is called 'westerly operations' (as shown above). If it's from the east, they will approach from the west and depart towards the east which is called 'easterly operations' (as shown on the next page).

Typical tracks of westerly arriving aircraft

Note: Aircraft approach the airport from a westerly direction for approximately 70 per cent of the year

Straight-in approach



Over the last decade, on average, around 70 per cent of aircraft operations have been in a westerly direction although this does fluctuate and conditions may see a prolonged period of one direction over another. The direction of operations is decided by ATC with help from aircrew reports. They must take into account wind at airfield level and at 1,000 and 2,000 ft which are the initial stages of take-off and final stages of approach. Wind speed at 2,000 ft is much faster than that on the ground and can vary a lot in direction. So wind direction you may experience at home or see on local weather reports won't determine in which direction Gatwick will be operating in. You can track the current operational direction of the airport using our flight tracking website.

FLIGHT TRACKING:
webtrak.emsbk.com/lgw2
 GATWICK WEBSITE:
www.gatwickairport.com/noise

Although there are no noise limits for arriving aircraft, there are noise abatement procedures to reduce the impact on the community. These were created by an Advisory Code of Practice (ACoP) made up of representatives from airlines, ATC, Civil Aviation Authority and Government representatives. You can read this at www.gatwickairport.com/noise

This map is a graphical representation, actual flight tracks may vary

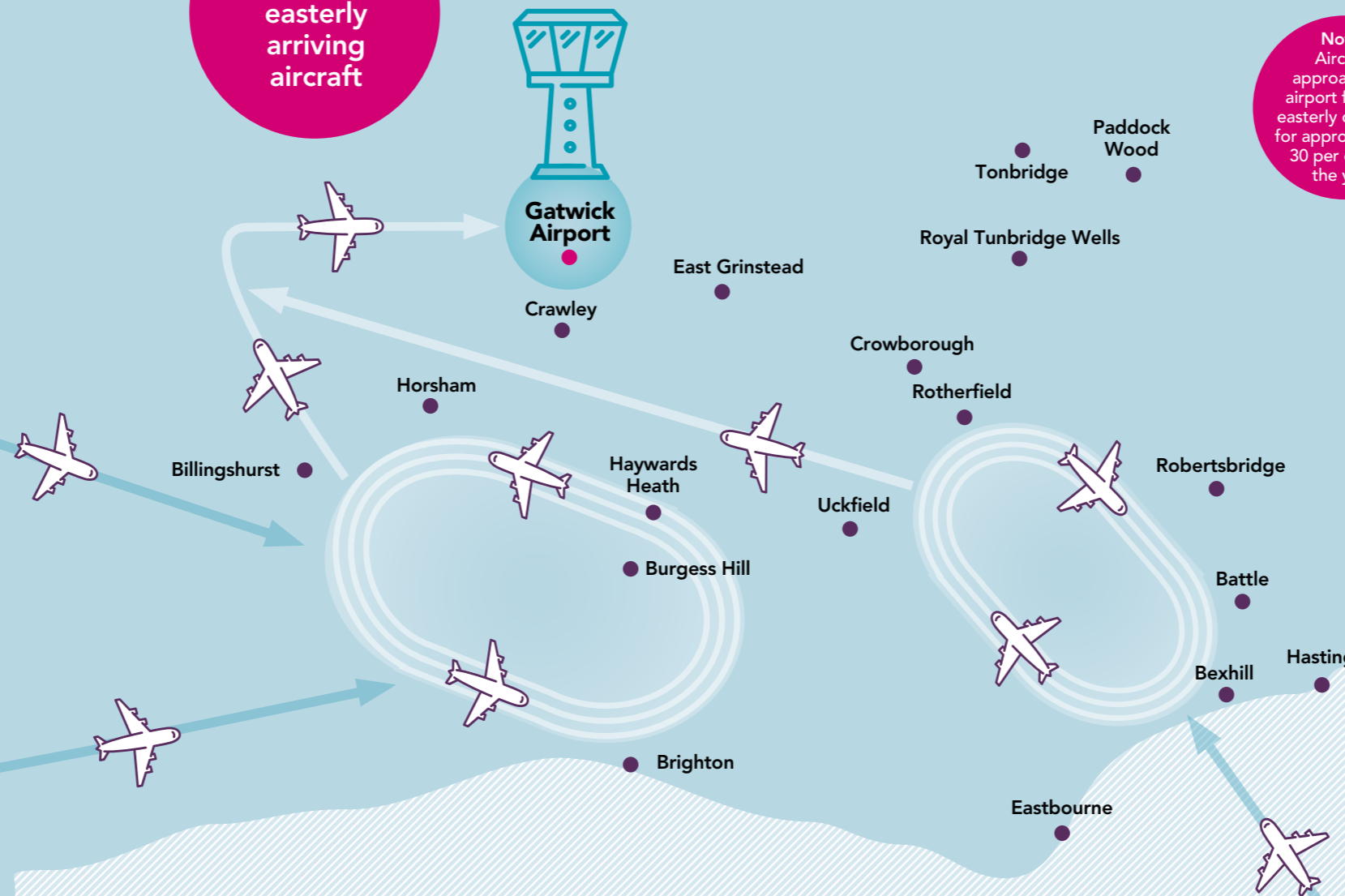
Arrivals continued

One of the main noise reduction measures, subject to safety requirements, is Continuous Descent Approach (CDA) which involves avoiding prolonged periods of level flight, which is noisier than CDA.

CDA sees the pilot continuously descending to join the ILS at the correct height. This avoids the need for long periods of level flight and means the aircraft can stay higher for longer. Not only does it help with noise reduction, but it also reduces fuel burn, so cutting emissions. At Gatwick we measure CDA performance from 7,000ft and report our performance in our quarterly and annual flight performance reports available on our website www.gatwickairport.com/noise. In recent years more than 90 per cent of aircraft performed a CDA during the 24-hour period.

There are other long-standing procedures to reduce noise. These apply to night-time operations where we aim to keep aircraft as high as possible for as long as possible. For example, between 23:30 and 05:59 aircraft must join the ILS at no less than 3,000ft and not within 10nm of the airport.

Typical tracks of easterly arriving aircraft



Note: Aircraft approach the airport from an easterly direction for approximately 30 per cent of the year

There are also restrictions around reverse thrust which is a way of slowing aircraft down once they've landed. Pilots have been asked to avoid using reverse thrust between 23:30 and 06:00 local time unless required for safety reasons, such as if the runway is wet.

We also charge noisier aircraft more to land as an incentive to the airlines to introduce quieter fleets. The Independent Arrivals Review, published in January 2016, recommended a charge to encourage airlines

operating A320 family aircraft to modify their aircraft to reduce a high pitched whining noise on approach. Since introducing the charge on 1 January 2018, 97 per cent of A320 family aircraft have been modified.

Gatwick is committed to reducing airport noise as much as it can for the local community. All procedures are monitored by a noise and track keeping system at Gatwick and any non-compliance is reported to the ATC and/or the airlines. Performance is also reported at the bi-monthly meetings of our Flight Operations Performance & Safety Committee. This was created to ensure the development of best practice by airline operators using Gatwick and is made up of airport representatives plus those from the Department for Transport, ATC service providers and major airlines operating at the airport.

This is just one part of Gatwick's extensive Noise Action Plan. Now in its third iteration having commenced in 2010, the five-year plan contains 55 actions to manage noise at Gatwick. You can read more about this plan and progress towards its implementation on our website: www.gatwickairport.com/noise