

Departures

Information on how aircraft depart at Gatwick

Introduction

Gatwick has approximately 450 departures a day during the summer period and around 300 in the winter. Most of these happen between 06:00 and 23:30 local time.

Take-off

To operate safely aircraft must land and take-off into wind. For take-off it will increase the lift-off produced by the wings. 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' and is shown opposite. If it's from the east, they will approach from the west and depart towards the east. This is called 'easterly operations' and is shown on the next page.

Direction

The direction of operations is decided by Air Traffic Control (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 at webtrak.emsbk.com/lgw2

Flight paths

Aircraft follow flight paths known as Noise Preferential Routes (NPRs) up to 3,000ft or 4,000ft depending on the route. NPRs were set by the Department for Transport in the 1960s to avoid over-flight of built-up areas where possible.

Each one consists of a 'centreline' and accompanying compliance monitoring swathe which at 3km across allows 1.5km either side of the NPR centreline. If each aircraft remains within this 'swathe' they are on track.

The location of NPRs remains the responsibility of the Government and Gatwick has no authority to change them. Any significant changes would be subject to a public consultation.

ATC is responsible for the routing of aircraft once they are airborne and when they reach 3,000 or 4,000ft may give a flight a more direct heading – known as vectoring – off the route. This may also happen below these altitudes if safety, weather or traffic demand it and may mean aircraft exiting the NPR below the vectoring altitude and flying over areas nearby.

Route 9 NPR

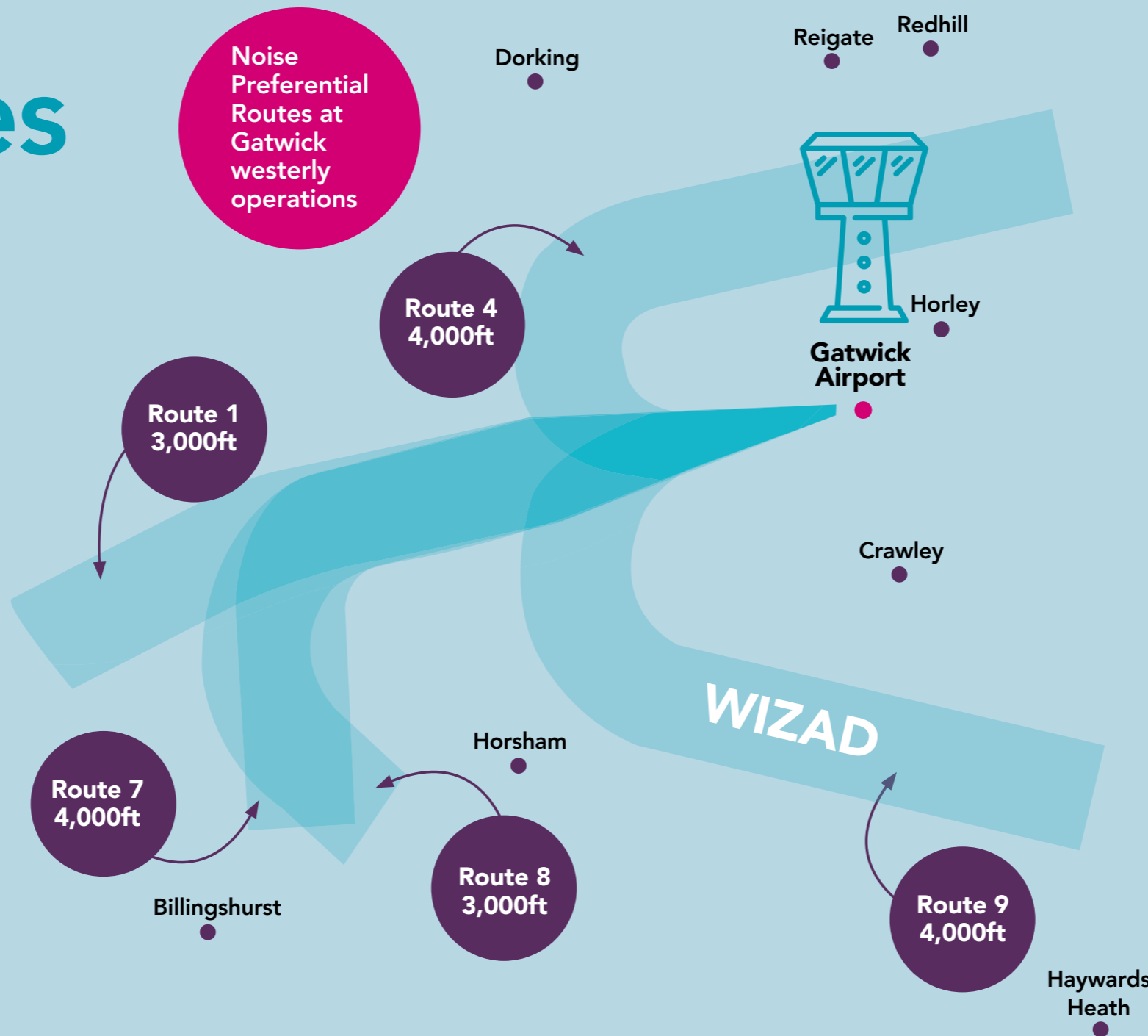
Also known as the WIZAD, Route 9 is a Tactical Offload Route and is not usually offered as a flight path. So, for example, if Route 4, to the north of Horley, is very busy, Route 9 may be offered as a last-minute alternative to ease the load. It may also be used if there are thunderstorms on other routes which aircraft should not fly through. It's not used from 23:30 through to 07:00 local time.

Track deviations

Any flights leaving the NPRs below the required altitudes are recorded as track deviations and automatically flagged by Gatwick's Noise and Track Keeping Systems. These are discussed by the Flight Operations Performance & Safety Committee, made up of representatives from Gatwick, the Department for Transport, ATC service providers and major airlines.

There are no financial sanctions for flying off track. Speed, wind, weight and temperature can all affect the performance of an aircraft. ATC may also authorise an aircraft to leave a route early for safety reasons.

We take track keeping very seriously and work with poor-performing airlines to improve. In recent years more than 98 per cent of our departures were on track.



Departures continued

P-RNAV

Gatwick implemented Precision Route Navigation (P-RNAV) on all departure routes in May 2014 granted following a consultation in 2012 and subsequent assessment by the Civil Aviation Authority (CAA). P-RNAV follows Government policy which says that airports should aim "to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise".

This supports the Future Airspace Strategy (FAS), an aviation industry collaboration led by the CAA, which is looking at modernising airspace routes and making them more efficient.

After P-RNAV was introduced, the CAA began a Post-Implementation Review (PIR) which is standard practice after an airspace change. You can read updates on P-RNAV at www.gatwickairport.com/noise

Noise in your area

Noise can affect people in different way – some can tolerate it to a certain level while it can cause disturbance to others.

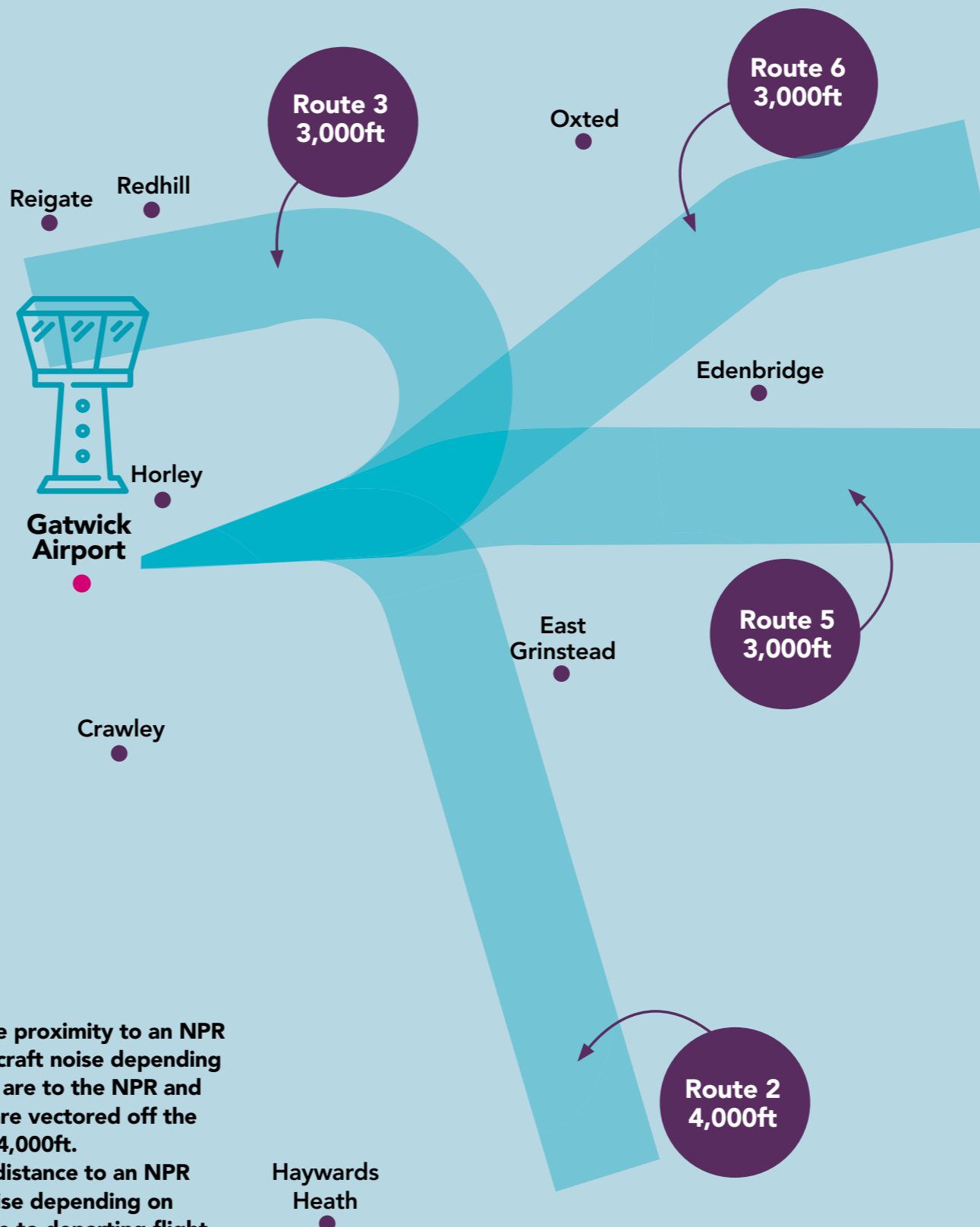
- If you live beneath an NPR, you will see aircraft taking off and you may hear noise when that NPR is being used. How often a particular NPR is used is decided by ATC taking into account the aircraft's final destination, traffic, weather, both locally and along the intended route.

Noise Preferential Routes at Gatwick easterly operations

- If you live in close proximity to an NPR you may hear aircraft noise depending on how near you are to the NPR and if/when aircraft are vectored off the NPR at 3,000 or 4,000ft.
- If you live some distance to an NPR you may hear noise depending on how close you are to departing flight tracks that have been vectored off the NPR after reaching 3,000/4,000ft depending on route.

To learn more about noise in your area use our flight tracking system at webtrak.emsbk.com/lgw2

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



Monitoring noise

Set by the DfT, noise limits only apply to departing aircraft and differ during the day (07:00 to 22:59 local time), night (23:30 to 05:59 local time) and 'shoulder periods' (06:00 to 06:59 and 23:00 to 23:29 local time). The noise is monitored at fixed sites at either end of the runway.

If an aircraft breaches the legal noise limits at the fixed sites, the airline is fined. All proceeds from these fines are passed to the independently run Gatwick Airport Community Trust, which together with other money raised at the airport, helps local charity and community projects. There have only been isolated infringements of these limits in recent years with fines levied against airlines.

In addition after take-off aircraft must climb to at least 1,000 ft above the airport level by 6.5km from when they begin moving on the runway. This encourages airlines to gain height as fast as possible so they can reduce engine power and noise as soon as possible.

We continue to work with our airline partners to encourage best practice in noise management and the continuing introduction of quieter aircraft types such as the Airbus A320 Neo family and Boeing 737-800 MAX, operating at our airport.

Data and reports from our current and historical noise monitoring sites is available via our website at www.gatwickairport.com/noise