

Arriving and departing aircraft

Runway direction

Edinburgh Airport has one primary runway (Runway 06/24), which operates in two directions. When Runway 06 is in operation, aircraft arrive from the west and depart to the east. When Runway 24 is in operation, aircraft arrive from the east and depart to the west. The direction of operation is entirely dependent on weather conditions as, where possible, aircraft will take off and depart into wind. Due to local weather conditions (south-westerly is the prevalent wind direction at Edinburgh Airport), R24 is in operation approximately 70% of the time and R06 is in operation approximately 30% of the time.

No statutory controls exist for aircraft noise or to prevent aircraft overflying a particular area. Aircraft can operate anywhere in this area as Air Traffic Control (ATC) maintain an orderly flow of air traffic, whilst ensuring safe aircraft separation. ATC integrate arriving and departing aircraft and as safety is paramount, flexibility is necessary to achieve this.

We are aware of the impact that aircraft operations can have on our local communities and work closely with our Air Traffic Control provider NATS and our airline partners to encourage compliance with the procedures detailed in this document.

Noise Fining

In May 2006, Edinburgh Airport chose to introduce a voluntary system of noise fining. Any aircraft that breaks the stated noise thresholds set down by the UK Government (90db during the night period, 100db during the day period) is now automatically fined, with the level of the fine dependent on the level of infringement.

Two different noise thresholds are used, one for daytime and one for night time. The level of fines imposed were doubled in 2007 and since the introduction of this new system, Edinburgh Airport has seen a significant fall in the number of aircraft making excessive noise on departure from the airport. All money raised from noise fines is placed into the Edinburgh Airport Community Fund.

The Instrument Landing System (ILS)

The most common approach to the runway uses the Instrument Landing System (ILS).

The ILS is a radio system that transmits two beams, the localiser and the glide path. The localiser beam defines the centreline of the runway and extends along the approach path for approximately 20 nautical miles. The glide path beam defines the glide slope that aircraft should fly while following the localiser course to approach the runway. Aircraft arriving descend at a 3° angle, the ILS provides a safe and manageable descent to the runway ensuring that an aircraft's final descent is controlled in an assured manner.

Arriving aircraft do not have a specified route to follow before joining the ILS. They will be vectored by ATC, this means there is more variation in the position of arriving aircraft. Aircraft join the final approach at heights consistent with the use of the ILS, however pilots are generally instructed to maintain an altitude of at least 2,500 feet until they are turned towards the ILS by ATC.

Visual approach

Although the majority of arrivals will follow the ILS, there are times when aircraft will use a visual approach and the pilot will land using visual references. These are required as part of a pilot's training schedule and will be authorised by, and under the control of, Air Traffic Control.



Non-Directional Beacon approach

Should the ILS be out of service, a Non Directional Beacon (NDB) approach is used. These are also required as part of a pilot's training schedule so may, on occasion, be used even when the ILS is operational.

An NDB is a single aerial transmitter which transmits directional information to an aircraft. Instrumentation on board the aircraft will home into the transmissions, and the aircrew will fly towards the beacon, making adjustments to the track as they fly towards the runway. When an NDB approach is used, aircraft are positioned approximately five degrees east of the ILS localiser.

As the NDB beacon is located off to one side of the runway, the NDB flight path over the ground can vary slightly and, therefore, is not so precise as an ILS approach.

Continuous Descent Approach (CDA)

Arriving aircraft are encouraged to use Continuous Descent Approaches. This encourages aircraft to stay higher for longer, by descending at a continuous rate. This requires significantly less thrust leading to reduced air emissions and noise, and also results in cost savings for the airlines. Improvements in CDA rates at Edinburgh are estimated to be saving airlines over £150,000 worth of fuel per year.

Standard Instrument Departure (SID) Routes

Standard Instrument Departure Routes are a set of instructions which a pilot will refer to when departing from the airport. These routes are not compulsory, but rather ensure that all departures are safe and efficient.

SIDs are given their name by a place or position/point that they lead to. For example, GRICE is a point in rural Perthshire and TALLA is near Carlisle.

In the 1970s, when Runway 06/24 was designed and built, SID construction was not as rigorous or sophisticated as it is today. There was limited technology, so instructions were fairly simple, involving directions to be taken once an aircraft had reached a certain height or travelled a certain distance.

The following SID are currently in use at Edinburgh Airport; GRICE, GOSAM and TALLA.

Noise Preferential Routes (NPRs)

Noise Preferential Routes are corridors, extending 1 mile in each direction from the centre of the SID line, that aircraft are expected to fly when departing from the airport. NPR are not a statutory control but, rather, are used to reduce noise disturbance on our local communities. Departing aircraft are required to follow the NPR until they reach an altitude of 3,000ft. When they reach 3,000ft they can depart these routes and fly towards their final destination. Since July 2015, to alleviate noise intrusion in the Uphall area, we have raised this height/turn level to 4000ft for jet aircraft.

On occasion, and to ensure aircraft safety, aircraft may be permitted to deviate from the NRP. The most common reason for this is extreme weather conditions in the airport vicinity. All arriving and departing aircraft are monitored using our Noise and Track Keeping (NTK) system. Track keeping refers to aircraft flying in the NPRs. If an aircraft is found to be off-track, we will contact NATS and the airline directly to understand why and work with the airline to ensure they understand the correct procedures and follow these in the future.

Continuous Descent Departures (CDD)

Like CDAs, Continuous Descent Departures are encouraged due to the fuel savings and noise reductions on local communities.