

# HOLDING STACKS

## What is a stack?

A stack is a fixed circling pattern in which aircraft fly whilst they wait to land.

When airports are busy, there can be a build up of aircraft waiting to land. The primary use of an aircraft stack is to delay an arriving aircraft due to aircraft congestion, sometimes due to poor weather conditions (e.g. snow clearing) or runway unavailability.

Air Traffic Control (ATC) must ensure there is a safe gap between each aircraft as they come in to land. To achieve this, aircraft will sometimes circle around in the stack until air traffic controllers are able to fit them into the landing pattern. You may well have experienced this yourself when flying into a busy airport.

As aircraft flying in circles is an inefficient and costly usage of time and fuel, measures are taken to try and limit the amount of holding necessary. Aircraft are required to carry extra fuel specifically for holding, should this become necessary.

Any aircraft with an emergency would take priority and bypass the stack.

## Where are the stacks?

Each airport may have a number of stacks and they can be shared with other regional airports. At London Stansted there are two holding stacks, they are known as Lorel, which is located near Royston and Abbot, near Sudbury.



## Is noise created by aircraft holding in a stack?

The minimum height of aircraft in the stack is 7,000ft so the noise from aircraft in the stack should not cause a nuisance on the ground.

## What about when aircraft leave the stack?

People living between the stack and the final approach may hear noise as the aircraft leaves the stack and makes their way to the final approach to London Stansted.

As there are no set heights or routes for arriving aircraft, once they have left the stack, aircraft are directed individually by ATC to ensure they are safely spaced for arrival. Therefore, they can legitimately go anywhere they are directed. ATC do this to ensure high levels of safety and efficiency.

This process means that people living or working anywhere between the stacks and the final approach to the airport may be over flown by arriving planes and so may be affected by aircraft noise.

## What is done about noise from arriving aircraft?

Please see the Arrivals factsheet for full details of our measures to manage noise created by arriving aircraft.

