

London Luton Airport arrivals airspace change

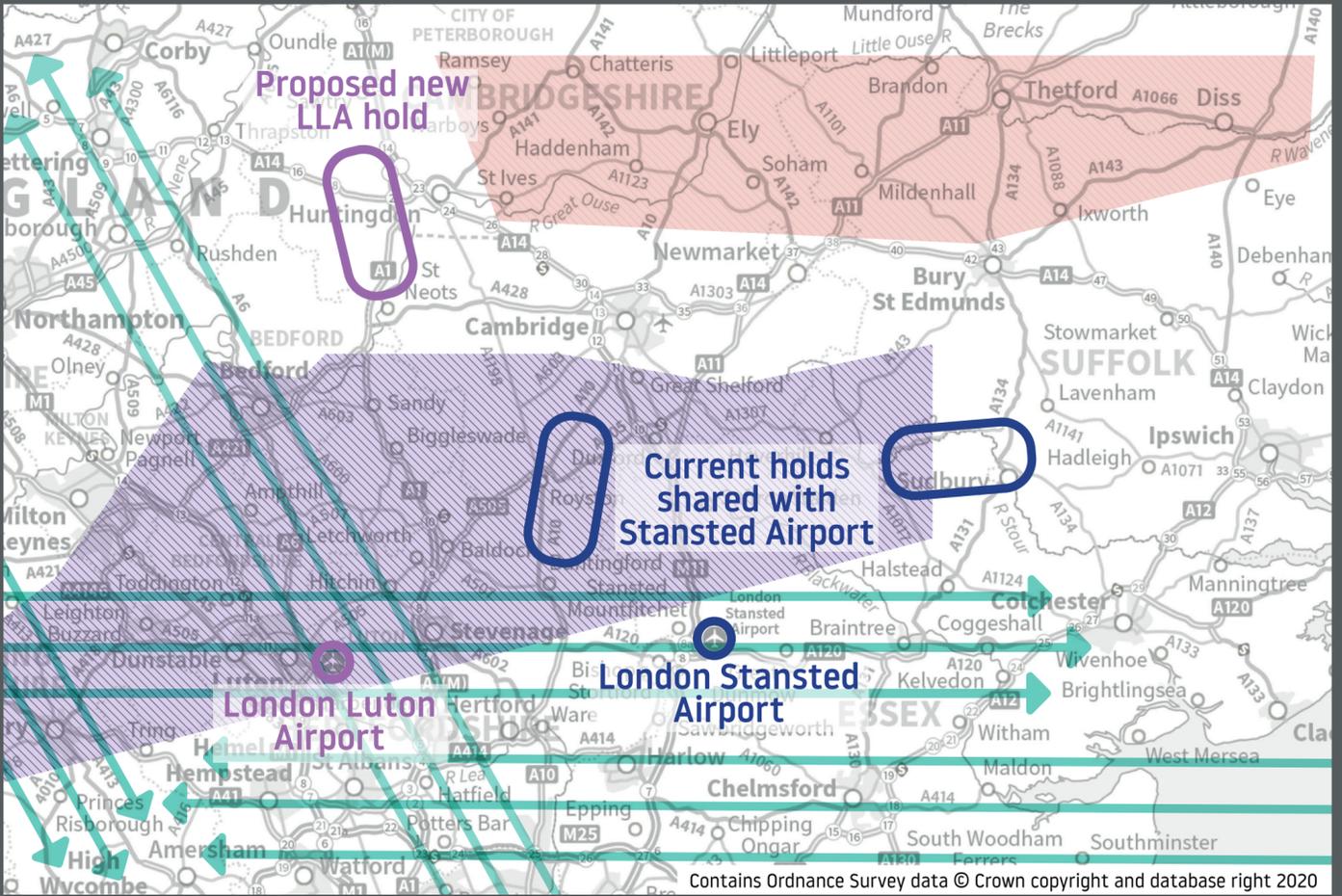
Today's airspace around London Luton Airport (LLA) and Stansted Airport is largely unchanged despite growth in recent years. The airports currently share arrival routes and the same two holds, which is unique in the UK for two major airports. Any arrival delay or disruption at one airport can cause unnecessary arrival delay to the other, impacting the travelling public and local communities.

Our proposals involve separating LLA's arrivals flightpaths from Stansted's and establishing a new hold for LLA to reduce delay, maximise efficiency of the airspace and assure safety for the future. This design was developed in accordance with the Civil Aviation Authority's airspace change process, CAP1616.

A new hold exclusively for LLA traffic

At the previous stage of this proposal, Stage 2, it became clear that we needed a hold, to deal with heavy traffic and for contingency. Holds in other locations were evaluated, including different types and having no hold at all and these were rejected on the basis of safety—there was no safe alternative to the position in the proposal. Aircraft in the proposed hold would not be lower than approximately 8,000ft, one of the highest hold bases in London airspace. Keeping aircraft higher for longer after they have left the hold will utilise a continuous descent approach, minimising noise impact and increasing efficiency.

We do not expect the hold to be used at all times but it is likely to be used during busy periods of the day or when there is a need, for example, due to severe fog. The separation of LLA arrivals from Stansted arrivals means holding should become less frequent than today, for both airports, and our initial air traffic simulations support this. A solution will be required regardless of whether or not either airport grows beyond pre-pandemic levels.



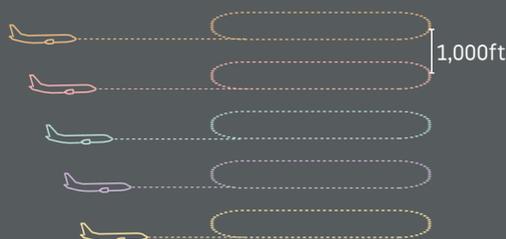
How do holds work?

A hold is usually a racetrack-shaped pattern, that keeps aircraft queued in a small area of airspace, stacked at 1,000ft intervals, while they wait for onward clearance towards the runway. The next aircraft would join at the next available altitude, for example 9,000ft, the next at 10,000ft and so on, up to a maximum of 14,000ft. Each holding level can only contain one aircraft, and each aircraft joins at the lowest available empty level.

The hold can cater for a maximum of seven aircraft, but it is extremely unlikely that all levels would be occupied even at the busiest times—but it could happen if the runway was temporarily closed.

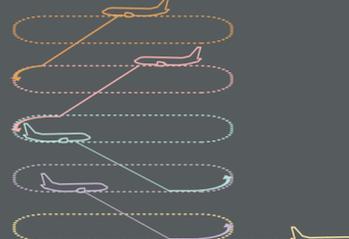
Entering the hold

An aircraft (yellow) enters the hold at the lowest altitude (about 8,000ft). The next aircraft (lilac) enters at the next empty level, 1,000ft higher.



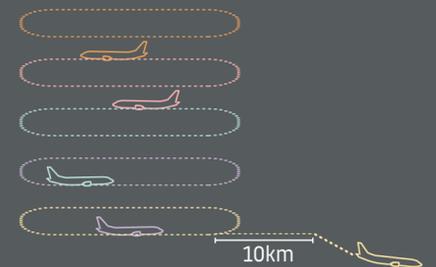
Using the hold

As aircraft leave the hold at about 8,000ft, the aircraft at 9,000ft is descended to 8,000ft and so on, with the highest vacant level then available for another aircraft.



Leaving the hold

The aircraft leaving the hold at about 8,000ft would not descend for at least 10km.



How high is 8,000ft?

