

# UK Free Route Airspace

OPSGROUP Team

7 December, 2021



December 2 has been a big day in the UK – it marks the **biggest airspace change ever implemented in the United Kingdom.**

A big portion of UK airspace is now free route airspace, and here's what you need to know about it.

## What is 'free route' airspace?

In '*not* free route airspace' you are confined to what is effectively a motorway (freeway if you're American) in the air – a big corridor, defined by points along it, and you follow these until you reach your junction and turn off. It is rarely the most direct route.

Free route airspace allows you to route from a defined entry to a defined exit point direct. Straight through the fields if you like. It also allows more freedom for operators to fly the most time or fuel efficient route, taking into account weather.

## The benefit is big.

That it is.

The new airspace structure in the UK is expected to **save around 500,000 nm a year** of flying and that means a big reduction in CO2 – they are estimating around **12,000 tonnes a year.**

Here is NATS own article on it.

Largest airspace  
change ever  
undertaken in  
the UK



x2

over 150,000  
nautical miles<sup>2</sup>  
- a footprint  
twice the size  
of the UK

Enables

5 0 0 0 0 0

nautical miles of flying saved per  
year for aircraft using this airspace



x23

equivalent to  
23 trips around  
the world

Reduction of up to

12,000

tonnes of CO<sub>2</sub>  
per year in UK airspace



equivalent to the  
carbon footprint of

3,500

family homes



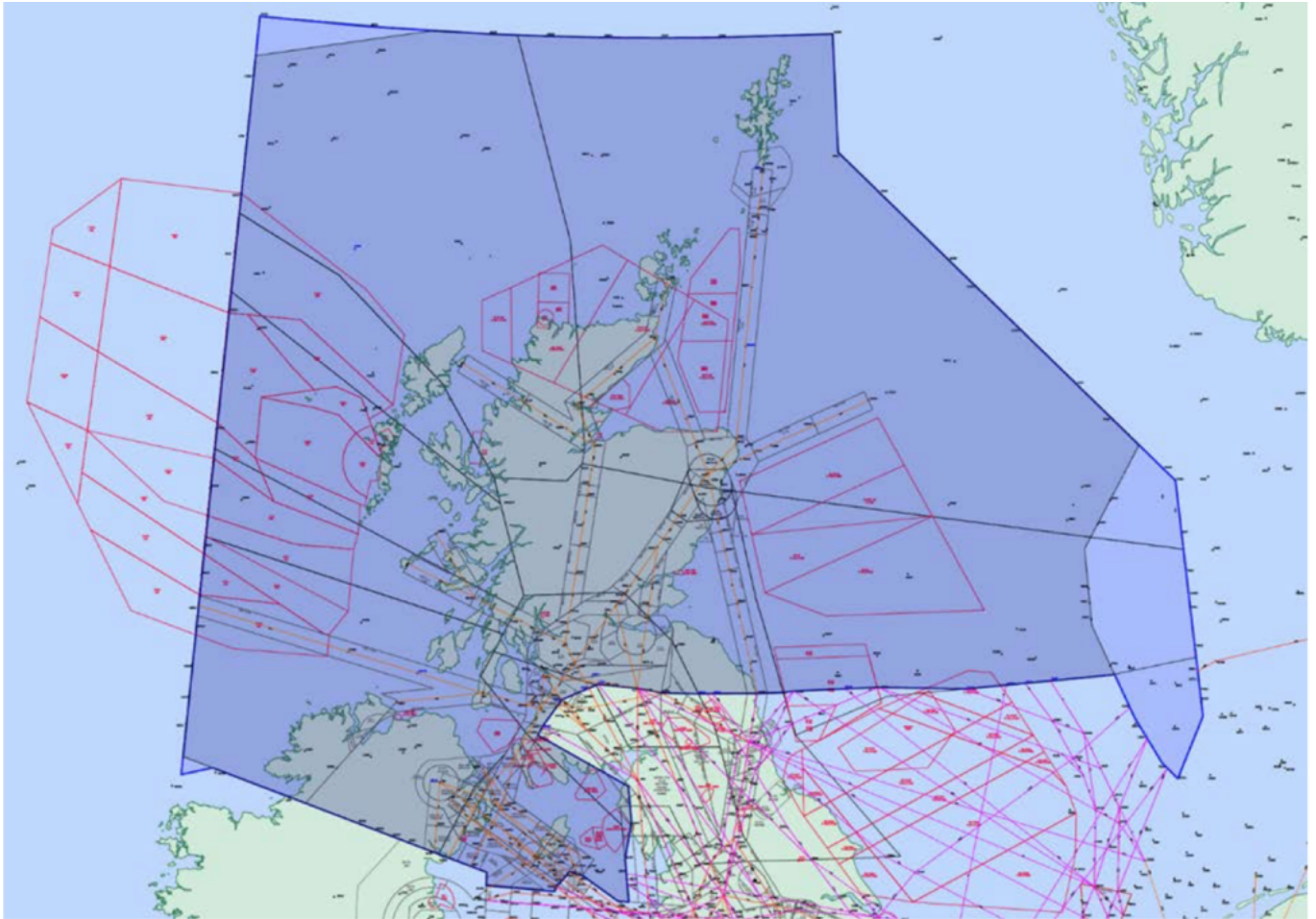
flying time per day  
for aircraft using  
this airspace

Benefits enabled through collaboration with the Borealis Alliance. Statistics sourced from airspace change proposal analytics and Eurocontrol forecasts.

And their nice graphic too.

## Where is this airspace?

It is in northern UK and **consists of 150,000 nm<sup>2</sup> of airspace** over the North Sea, Scotland, North Atlantic, Northern Ireland and a small portion of northern England – so within the Scottish UIR, London UIR and Shanwick OCA, and affecting the route network over some international waters. There will also be FRA in the London UIR within the region known as the PEMAK Triangle and TAKAS box.



Not the best picture, but you get the idea.

This airspace accommodates up to **2000 flights a day** and supports around **80% of transatlantic traffic**.

The Free Route Airspace is **H24** and between **FL255-FL660**.

You can find the full info on the relevant airspace here, including dimensions and how it links with other high seas airspace.

### **Where else is this happening?**

You might want to take a look at the Free Route Airspace implementation taking place across **the rest of Europe** as well. This has been going on a little longer, and large areas of Europe already have it implemented.





**Anything else to know?**

While cross border operations are in place for much of it, the interface between Shanwick OAC and Reykjavik OAC will not change.