

ACP-2020-096

TDA connecting the UK with continental Europe for
UAS cargo operations

Targeted Engagement with Aviation Stakeholders



Dear Stakeholder,

We are contacting you as a valued member of the aviation community in order to kindly request your feedback to the Temporary Airspace Change Proposal ACP-2020-096. This ACP aims to establish a Temporary Danger Area (TDA) during notified periods to enable trial operations of Unmanned Aircraft Systems (UAS) between Great Oakley Airfield in Essex and Woensdrecht Airport in the Netherlands in the conditions described in the following paragraphs.

This ACP process can also be consulted in the [Airspace Change Portal](#).

The project

[Windracers Ltd](#) and the [University of Southampton](#) have been working together since 2018 in the development of an Unmanned Aircraft System (UAS) specially conceived to provide a solution to a multitude of operational requirements that involve the transport of critical supplies for humanitarian and research activities.

As a result, we have developed the ULTRA UAS: a novel system that includes a 10-meter wing-span 350-kg MTOW aircraft capable of carrying 100-kg payloads with a fault-tolerant architecture that features multiple redundancy of critical subsystems, proven fail-safe mechanisms and electronic conspicuity.

In May 2020 we successfully deployed ULTRA UAS over the Solent and completed aerial point-to-point operations between mainland England and the Isle of Wight, executing a trial support service for the NHS as a response to the COVID-19 breakout. As part of this initiative, ULTRA UAS also completed a successful mission to the Isles of Scilly, connecting Land's End and St Mary's.

The events of 2020 have highlighted certain deficiencies in the current logistical network, particularly relating to the delivery of urgent medical payloads, where local and national lockdowns have led to remote areas of the UK being cut off from vital supplies (PPE, vaccines, test kits etc.). Covid-19, along with the end of the Brexit transition also threatened to cut off supply routes between mainland Europe and the UK in December, with ferry and train routes to France blocked.

Windracers believe the use of UAS can provide a solution to future disruption, adding capacity on demand for the urgent delivery of crucial goods, as well as supplementing and improving the quality of the current logistical network to the end user. Therefore, this project aims to trial an airbridge delivery service carrying a range of cargos regularly for a period of up to 6 weeks between the UK and the Netherlands. Such a route would further demonstrate the capabilities of the ULTRA UAS to provide a safe, green and economically viable service between the UK and the EU, and lay a foundation for future international UAS operations.

About ACP 2020-096

The proposed TDA intends to create a corridor between Great Oakley airfield on the East coast of Essex and the London Flight Information Region (FIR) boundary with the Amsterdam FIR. Ultimately, decisions on the geometry, altitudes and schedule are made based on the feedback from all airspace Stakeholders. The earlier we receive this feedback, the more likely it is to reach a solution that causes the least impact on the operations of all the stakeholders.

The initial proposal is to take a direct route to the boundary, with the aim of avoiding traffic by carefully selecting the altitudes based on stakeholder requirements and analysis of regular traffic in the area. Ground-risk is minimised by completing more than 95% of the mission over water.

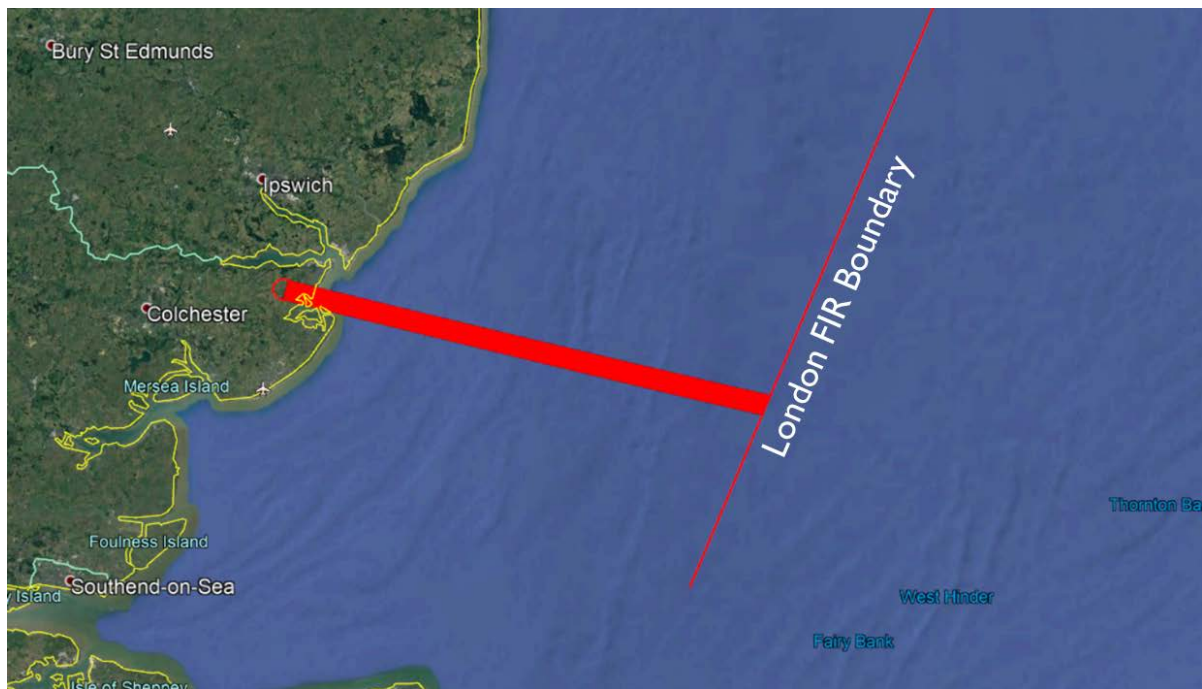


Figure 1 TDA Proposed Design (Horizontal Layout)

It is anticipated that the TDA will be activated via NOTAM during hours of low airspace activity throughout the working week over a period of up to six weeks.

Windracers will seek to make arrangements for air traffic services for this TDA.

Why are we contacting you?

During the planning of this airspace change we have identified a number of members of the aviation community that may be affected or might have interest in this airspace change, and we believe you (or the organization you represent) fall into this group.

You have been contacted as part of a Stakeholder Engagement Strategy intended to:

- ensure the safety and operational viability of the project,
- keep you informed of any changes to the ACP-2020-096 process,
- make sure that the principles of design and the proposed TDA will not have a harmful impact on other aviation activities, and
- develop deconfliction procedures with selected agencies to preserve adequate separation between the unmanned aircraft and other frequent airspace users.

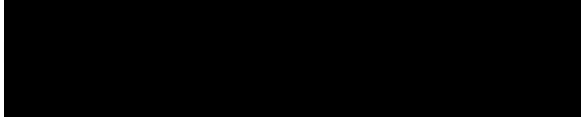
How to submit your feedback

We have created an online form for you to provide feedback. If using this method, please make sure to enter the security ID code that we have sent via email.

Access the online form [here](#).

Alternatively, you can choose to fill in the paper form and email it to [REDACTED] or print it and post it to the following address:

Windracers Limited

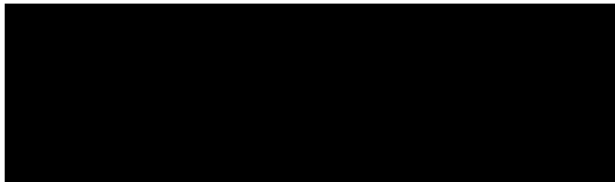


If you have any queries, please do not hesitate to include them in your feedback.

Please remember to submit your feedback as soon as possible to allow us the maximum time to discuss and implement all the steps needed to ensure the operations are safe, viable, and minimise the impact on stakeholders. The final deadline for stakeholder engagement is at 17:00 on Friday 12th March 2021.

We look forward to hearing from you.

Yours Faithfully,



Windracers Limited