



TDA Submission

ACP-2022-011

18th August 2022

CONFIDENTIAL

1. INTRODUCTION

Flylogix are an unmanned aircraft service provider, focused on the offshore energy sector. Flylogix have been contracted to complete methane emission surveys of oil and gas platforms in the Southern North Sea from October 2022. These surveys will be achieved by using an unmanned aircraft with a methane sensor fitted to it. The operations will be conducted in a Temporary Danger Area (TDA).

Flylogix have submitted an airspace change request (ACP-2022-011) to establish this TDA.

2. OBJECTIVES OF THIS DOCUMENT

This document gives the final submission for the TDA, following engagement with other air users.

3. DESIGN PRINCIPLES

When designing the proposed TDA Flylogix had four principles

1. Minimise the airspace within the TDA to reduce the impact on other air users
 - a. Where possible, segment the TDA to minimise the airspace contained within active portions of the TDA for individual operations and to ease DACS provision and deconfliction.
2. Ensure that in the planned flights and in the event of a failsafe the UA will not come within 1 mile horizontally of the edge of the TDA. Flying within 1 mile of the edge of the TDA triggers an emergency procedure in line with the OSC.
3. Keep the design of the TDA as simple as possible, to make it easy to communicate to others and reduce the chance of error, for example when inputting as a geofence into the UA autopilot.
4. Tactically manage the TDA through NOTAM to ensure it is only active when required, minimising the impact on other air users

4. FEEDBACK AND ACTIONS FROM STAKEHOLDER ENGAGEMENT

Flylogix conducted Stakeholder Engagement to understand the safety and operational viability of the proposed TDA and to ensure minimum possible impact on other air users. The strategy for this engagement is outlined in *Stakeholder Engagement Plan - ACP-2022-011* and the results of the engagement are included in *Summary of Stakeholder Engagement - ACP-2022-011*. Both of these have been submitted to the CAA and will be uploaded to the Airspace Change Portal.

Following the engagement Flylogix

- Reduced the ceiling of the TDA to 1,000ft from 1,300ft and reduced the transit altitude of the UA during BVLOS flight from 800ft to 600ft. This was following feedback that the TDA could impact coast following aircraft and by reducing the ceiling altitude this impact would be minimised.
- Flylogix agreed to contact a helicopter operator who are conducting flights to an oil and gas platform near the TDA in advance to get a schedule of their flights and avoid activating the TDA while they are flying.
- Flylogix will ask Anglia Radar about the possibility of a dedicated squawk for the operations

5. PROPOSED DESIGN

This has been laid out in the standard format of an AIC for clarity. Any changes to the originally proposed TDA have resulted from Stakeholder Engagement and application of the design principles laid out in Section 3.

TEMPORARY DANGER AREA (Southern North Sea)

BVLOS RPAS SURVEYING

22nd October 2022 to 4th January 2023

1. During the period between 22nd October 2022 to 4th January 2023, a Remotely Piloted Aircraft System (RPAS) will conduct BVLOS surveying of offshore installations situated in the Southern North Sea. The RPAS will depart from Holym Airfield and operate between surface and 600ft AMSL.
2. As the RPAS will be operating Beyond Visual Line of Sight and does not have full Detect and Avoid capability, a Temporary Danger Area complex will be established as below. The RPAS is also equipped with an ADS-B and Mode-S transponder.
3. The TDA complex is sponsored by FlyLogix Ltd in accordance with Airspace Change reference ACP-2022-011.
4. The TDA complex consists of two TDAs broken into segments, only those TDAs and segments required for a flight will be activated.

ALL DATES AND TIMES OF ACTIVATION WILL BE NOTIFIED BY NOTAM

5. EG DxxxxA

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N534630 E0001850

N534334 E0002552

N534124 E0000510

N534442 E0000112

N534630 E0001850

6. The TDA is established between surface and 1000 FT AMSL.

7. Within EG DxxxxA, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

8. **EG DxxxxB**

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N540412 E0001120

N540238 E0001818

N534334 E0002552

N534630 E0001850

N540412 E0001120

9. The TDA is established between surface and 1000 FT AMSL.

10. Within EG DxxxxB, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

11. **EG DxxxxC**

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N543322 E0012523

N542935 E0012743

N540238 E0001818

N540412 E0001120

N543322 E0012523

12. The TDA is established between surface and 1000 FT AMSL.

13. Within EG DxxxxC, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

14. EG DxxxD

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N543947 E0022024

N543108 E0022432

N542935 E0012743

N543322 E0012523

N543947 E0022024

15. The TDA is established between surface and 1000 FT AMSL.

16. Within EG DxxxD, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

17. EG DyyyA

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N534749 E0003256

N534428 E0003719

N534124 E0000510

N534442 E0000112

N534749 E0003256

18. The TDA is established between surface and 1000 FT AMSL.

19. Within EG DyyyA, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

20. EG DyyyB

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N535422 E0004641

N535422 E0005830

N534428 E0003719

N534749 E0003256

N535422 E0004641

21. The TDA is established between surface and 1000 FT AMSL.

22. Within EG DyyyB, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

23. EG DyyyC

When required between 22nd October 2022 and 4th January 2023, a TDA is established within the area bounded by straight lines joining successively the following points:

N540646 E0003108

N540820 E0011026

N535422 E0011026

N535422 E0003108

N540646 E0003108

24. The TDA is established between surface and 1000 FT AMSL.

25. Within EG DyyyC, a Danger Area Crossing Service (DACS) will be available from Anglia Radar on frequency TBC MHz

26. Further information regarding a DACS can be found within UK Enroute Information ENR 1.1 – General Rules.

27. DACS approval is not guaranteed

28. Further enquiries can be made to Airspace Regulation (Utilisation), Safety and Airspace Regulation Group, Civil Aviation Authority on telephone number 01293768202.

29. As part of the ACP process requirements, Flylogix is collecting feedback and complaints regarding this TDA and its impact over its duration which will be shared with the CAA. All feedback regarding this may be sent via email to [REDACTED] or [REDACTED]

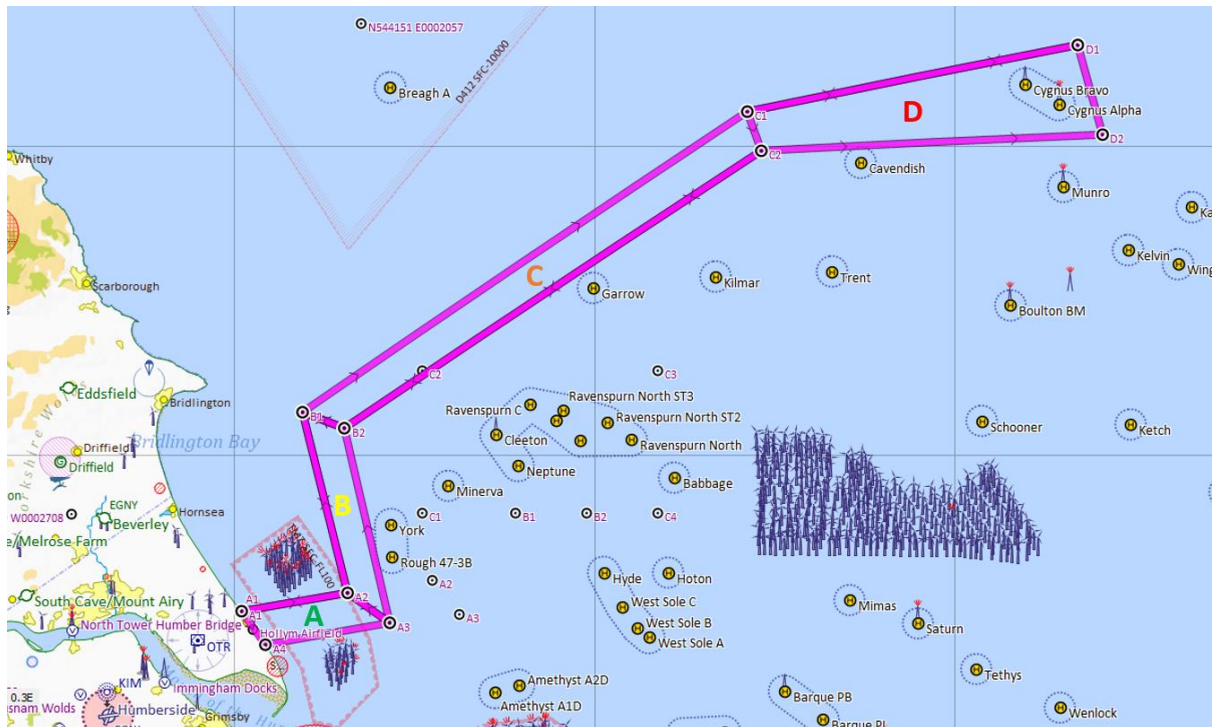


Figure 1 - Chart of TDA EG Dxxx (segments labelled)

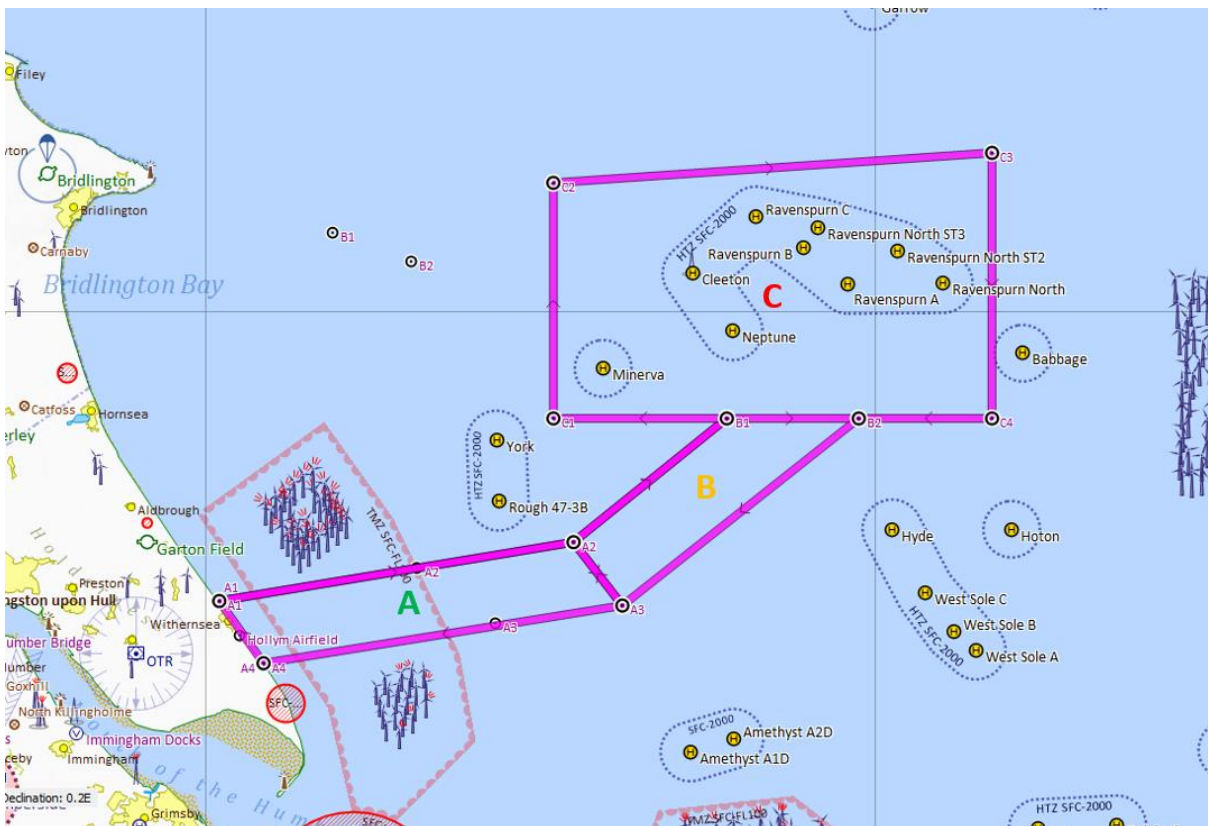


Figure 2 - Chart of TDA EG Dyyy (segments labelled)