

AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group



ACN Reference:	Version:	Date:	Date of Original
2023-07-0114	1.0	14/07/2023	12/07/2023

Warton EFT Offshore Windfarms

CAT Z

Subject to NOTAM: No

Date(s) of activity/Validity:	Times - ALL TIMES UTC ¹
24 Jul 23 – 4 Aug 23 inclusive	Daylight Hours

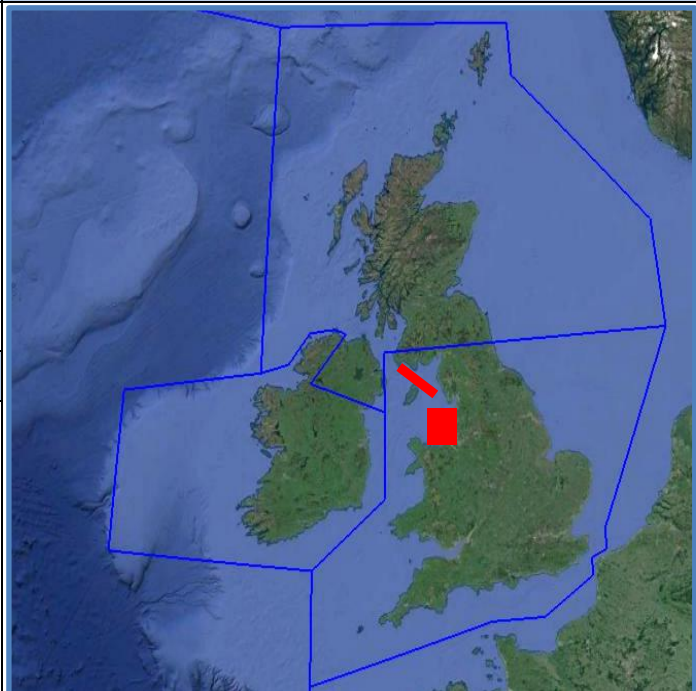
Vertical Limits:	Allocated Mode 3A (SSR):
SFC – 30000ft	Tactically Issued by ATC

Aircraft Details:	NDS Approved:
Type: DA42 Callsign: N242CV	No

Event Sponsor(s):	Aircraft Operator(s):
Christopher Birkett BAE Systems Warton Aerodrome Preston Lancashire PR4 1AX UK Christopher.birkett2@baesystems.com	Christopher Birkett BAE Systems Warton Aerodrome Preston Lancashire PR4 1AX UK Christopher.birkett2@baesystems.com

ATS Units/ Controlling Agencies:	Geographical Limits:
-------------------------------------	----------------------

Warton	01772 852374
Liverpool	0151 907 1541
Isle of Man Ronaldsway	01624 827548
Belfast Aldergrove	079 2087 7721
Valley	01407 762241 x7461
Scottish Control	01294 655300



Airspace Reservations:
Nil

Departure/Destination Aerodrome(s)	ACN Issued by:
EGNO	AS3

¹ **AIS Temporal Reference System:** Daylight saving time is UTC plus 1 hour. The expression "summer period" indicates that part of the year in which "daylight saving time" is in force. The other part of the year is named the "winter period". Times applicable during the "summer period" are given in brackets.

SECTION 1: CO-ORDINATION ARRANGEMENTS (GENERAL)

1. The pilot/operator is requested to telephone the ATC authorities on the cover prior to departure in order to notify or update the sortie details including area(s) of operation and planned levels (quoting the ACN Reference). A minimum of 24 hours' notice should be given unless specified in Section 2.
2. There may be other aircraft and/or activities outside Controlled/Regulated Airspace unknown to ATC.
3. The carriage and operation of a serviceable transponder (including Mode 'C') has been specified.
4. The pilot will be responsible for obtaining all necessary ATC clearances and for maintaining R/T contact with appropriate ATC authorities.
5. The pilot/operator will be responsible for obtaining prior clearances to enter any UK Danger Areas affected by the flight profile from the appropriate Range Control Authority unless this is specifically detailed in Section 2.
6. Other Unusual Aerial Activities (UAAs) may be notified to the CAA Safety and Airspace Regulation Group (SARG) and may take place within the airspace encompassed by this flight. The pilot/operator is to ensure that UK Daily NOTAM Nav Warnings are consulted prior to each flight.
7. All flights within Controlled Airspace are subject to the requirements of a Flight Plan in accordance with UK AIP ENR1.10. The ACN Reference should be entered into Field 18 of the Flight Plan together with any relevant 'special handling' codes.
8. Flight prioritisation and Non-Deviating Status is in accordance with the information specified on the ACN Cover. Such status may be afforded to part or all of the flight – see Section 2.
9. Availability of an ATS from Plymouth Military, Swanwick Military (78 Sqn) or Western Radar is subject to unit capacity, priorities and limitations of radar and radio coverage. Minimum pre-flight notification as per UK AIP ENR 1.6 unless otherwise specified in Section 2 of this ACN.
10. The CAA actively encourages the use of Moving map technology in the planning and flying phases of flights to reduce the risk of airspace infringements.

PUBLICATIONS AND CHANGES

11. The activity area may lie within Controlled and Uncontrolled Airspace as well as airspace reserved for military use. Aircrew are to thoroughly familiarise themselves with UK airspace structures and procedures, in particular those laid down within the UK Aeronautical Information Publication (UK AIP), ENR 1.1 and be fully conversant with UK Flight Information Services in accordance with UK CAP 493 (MATS Pt 1).
12. The CAA VFR 1:500,000 and 1:250,000 charts and the UK AIP ENR 5 depict some, but not all aviation activity sites and amendments should also be checked. Please refer to <http://www.nats-uk.ead-it.com>
13. This ACN details specific coordination essential to the activity taking place and does not remove the need for aircraft operators to comply with national flight planning and notification procedures. Pilots and ANSPs are required to ensure that all related aviation sites are aware of this planned activity and of subsequent changes not captured within this document.
14. The Sponsor or Event Organiser should co-ordinate any changes to this ACN with SARG quoting the ACN Reference at the top of the page.

Airspace Regulation (Utilisation) – AS3
Email: AROps@caa.co.uk
Tel: 01293 983880

SECTION 2: CO-ORDINATION ARRANGEMENTS (SPECIFIC)

15. This ACN details Engineering Flights to test BAES new radar optimisation performance, including serials over nominated offshore windfarms in the Irish Sea area. The locations are all relative to the WARTON ARP and are mainly over the Irish Sea and Offshore windfarms.

16. **The sponsor is responsible for obtaining any required permits to fly within UK airspace; this ACN does not constitute approval to fly in UK airspace, but only outlines the coordination process/contacts to facilitate the flight.**

17. **Dates.** 24 Jul 23 – 4 Aug 23 inclusive.

18. **Notification.** The sponsor is to notify the agencies listed on page one of this ACN at least 24 hours prior to undertaking the task. In addition, the pilot is to contact the appropriate agencies at least 4 hours prior to departure to confirm final details and availability of an Air Traffic Service (ATS).

19. **Priority.** This flight has been categorised as CAT Z, (*CAP 493 – Section 1, Ch4, Para 10c refers*) and attracts no priority. Subject to the prevailing traffic conditions on the day, there may be level restrictions, or the aircraft may be provided vectors / requested to hold to allow most efficient use of airspace.

20. **ATS Provision – Controlled Airspace (CAS).** Access to controlled airspace is subject to the prevailing traffic situation and controller workload. The pilot is responsible for obtaining a clearance to enter controlled airspace prior to penetration.

21. **ATS Provision – Outside CAS.** The survey area is within the coverage of the following units:

a. Warton	129.530 MHz
b. Liverpool	119.855 MHz
c. Isle of Man / Ronaldsway	120.855 MHz
d. Belfast Aldergrove	133.125 MHz
e. Valley	125.225 MHz
f. Scottish Control	133.050 MHz

22. Availability of an ATS from a unit is not guaranteed, is subject to controller availability, unit workload and possible reduced hours of operations. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.1, AD2 or UK Military AIP, shall be notified via NOTAM.

23. **ATS Provision above FL100.** This service is available to all aircraft flying outside Controlled Airspace in the UK FIRs between FL 100 and FL 190, and within active TRAs and is subject to Unit capacity. The Units providing this service together with their boundaries are depicted within the UK AIP on the chart ENR 6-12. ENR 1.6 (4.2) lists their hours of operation, the RTF operating frequency on which this service is normally provided and a telephone number for pre-flight contact. A FPL should be filed and include the following addresses:

a. EGZYOATT	Swanwick Mil (78 Sqn)
b. EGTTFZC	Western Radar

24. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.2, shall be notified via NOTAM.

25. Between the hours of 18:00 to 08:00 (local time) on a weekday, at any time on a weekend or during a UK public holiday, Swanwick Mil (78 Sqn) require at least two weeks prior notice in order to obtain an ATS in support of this task.

26. **Air-to-Air Refuelling Areas (AARAs).** For details of the AARAs see the UK AIP – ENR 5.2. Activation is by NOTAM, and when active, information can be obtained from Swanwick Mil.
27. **Danger Areas (DAs).** Access to any DA is subject to range requirements and access is not guaranteed. The sponsor is to engage with the DA Authority at the earliest opportunity to coordinate access, noting that access may only be possible outside notified operating hours.
28. **Non-SSR Gliding Areas.** The sponsor should exercise caution when operating in these areas, as gliders without transponders may be encountered up to FL195. For info see the UK AIP: *ENR 1.1 (Para 1.12), ENR 5.2 (NSGA) and ENR6-63.*
29. **Temporary Reserved Areas (TRA).** The sponsor is responsible for complying with the requirements for access to any TRA iaw the UK AIP – ENR 1.1 (Para 5.1.5).

SECTION 3

30. Charts highlighting the area of operation are shown below. These are for illustrative purposes only and not for operational planning.

Area of Operation Item 1 of 8 - Radials at Climb Step

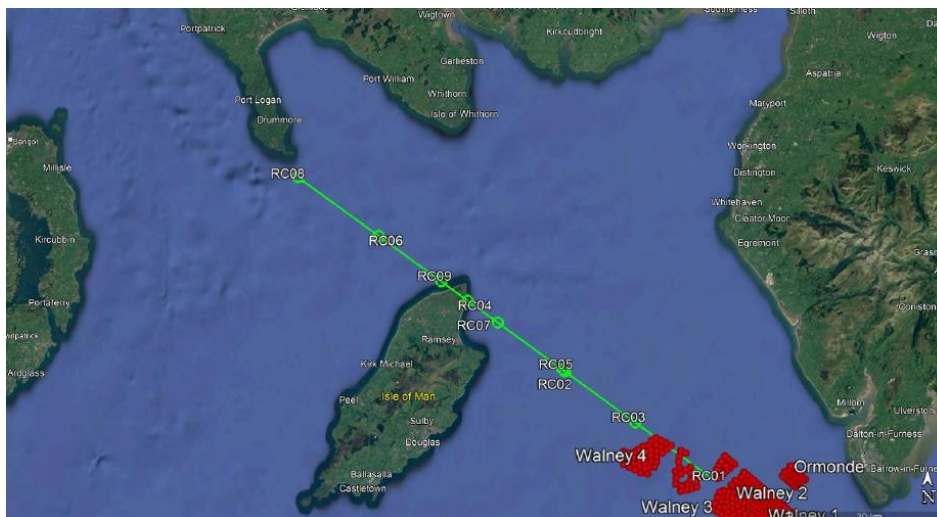
Radials at Climb Step: Note 1: Pilot to fly outbound and inbound starting from 1000 ft. Then, Pilot to climb at steps of 1000 ft during the tear drop manoeuvre to change from inbound to outbound. Note 2: Limitation of radar visibility by see horizon, see table below:

Height amsl [ft]	1000	2000	3000	4000	5000	6000	7000	8000	9000
Geometric Visibility [NM]	45.2	59.1	69.8	78.9	86.8	94.0	100.6	106.8	112.6
Radar Visibility [NM]	52.2	68.3	80.7	91.1	100.3	108.6	116.2	123.3	130.0

Climb Step Flight Card First Part:

Id	Flight Step Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint	
							Latitude [°]	Longitude [°]
12	Entry Point	307	1000	cruise		RC01	54.091913	-3.677828
13	Radial Outbound	307	1000	cruise	17.00	RC02	54.261501	-4.063495
14	Tear Drop	127	1000	cruise	3.66	RC02	54.261501	-4.063495
21	Radial Inbound	127	1000	cruise	7.00	RC03	54.191820	-3.904308
22	Tear Drop and Climb	307	2000	cruise	3.66	RC03	54.191820	-3.904308
23	Radial Outbound	307	2000	cruise	19.00	RC04	54.380464	-4.337640
24	Tear Drop	127	2000	cruise	3.66	RC04	54.380464	-4.337640
31	Radial Inbound	127	2000	cruise	10.00	RC05	54.281371	-4.109076
32	Tear Drop and Climb	307	3000	cruise	3.66	RC05	54.281371	-4.109076
33	Radial Outbound	307	3000	cruise	21.00	RC06	54.488964	-4.590335
34	Tear Drop	126	3000	cruise	3.66	RC06	54.488964	-4.590335
41	Radial Inbound	126	3000	cruise	13.00	RC07	54.360680	-4.291839
42	Tear Drop and Climb	307	4000	cruise	3.66	RC07	54.360680	-4.291839
43	Radial Outbound	307	4000	cruise	23.00	RC08	54.587142	-4.821223
44	Tear Drop	126	4000	cruise	3.66	RC08	54.587142	-4.821223
51	Radial Inbound	126	4000	cruise	16.00	RC09	54.429847	-4.452336
52	Tear Drop and Climb	306	5000	cruise	3.66	RC09	54.429847	-4.452336

Chart 1 – Climb Step 1



Climb Step Flight Card Second Part

Id	Flight Step Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint	
							Latitude [°]	Longitude [°]
53	Radial Outbound	306	5000	cruise	25.00	RC10	54.675124	-5.029973
54	Tear Drop	126	5000	cruise	3.66	RC10	54.675124	-5.029973
61	Radial Inbound	126	5000	cruise	19.00	RC11	54.488964	-4.590335
62	Tear Drop and Climb	306	6000	cruise	3.66	RC11	54.488964	-4.590335
63	Radial Outbound	306	6000	cruise	27.00	RC12	54.753028	-5.216288
64	Tear Drop	126	6000	cruise	3.66	RC12	54.753028	-5.216288
71	Radial Inbound	126	6000	cruise	22.00	RC13	54.538108	-4.705640
72	Tear Drop and Climb	306	7000	cruise	3.66	RC13	54.538108	-4.705640
73	Radial Outbound	306	7000	cruise	29.00	RC14	54.820959	-5.379901
74	Tear Drop	126	7000	cruise	3.66	RC14	54.820959	-5.379901
81	Radial Inbound	126	7000	cruise	25.00	RC15	54.577344	-4.798084
82	Tear Drop and Climb	306	8000	cruise	3.66	RC15	54.577344	-4.798084
83	Radial Outbound	306	8000	cruise	31.00	RC16	54.879010	-5.520580
84	Tear Drop	126	8000	cruise	3.66	RC16	54.879010	-5.520580
91	Radial Inbound	126	8000	cruise	28.00	RC17	54.606724	-4.867533
92	Tear Drop and Climb	306	9000	cruise	3.66	RC17	54.606724	-4.867533
93	Radial Outbound	306	9000	cruise	33.00	RC18	54.927261	-5.638121

Chart 2 – Climb Step 2

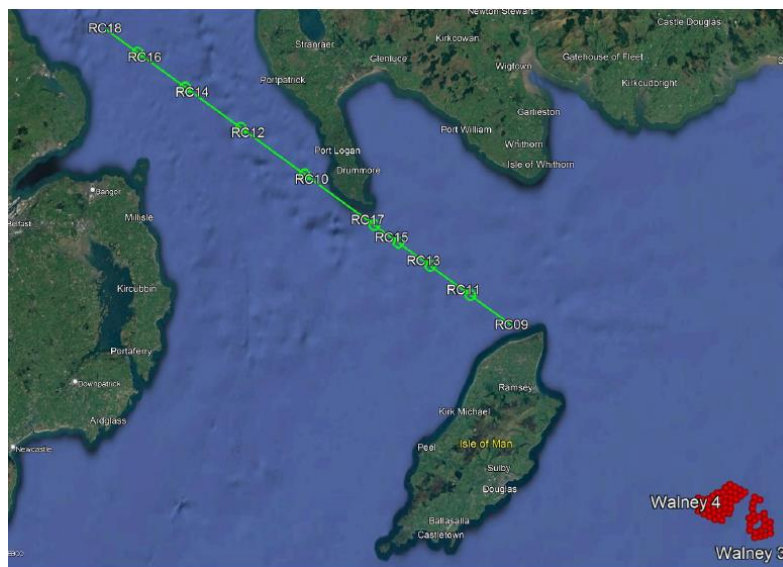


Chart 3 – Radials at Climb Step



Area of Operation Item 2 of 8 – Climb and Descent Radial

Note 1: Waypoints are computed on the basis of the geometric visibility. Final waypoints will be determined on the basis of the results of the radials at climb steps. Note 2: Limitation of radar visibility by see horizon, see table below:

Height amsl [ft]	1000	2000	3000	4000	5000	6000	7000	8000	9000
Geometric Visibility [NM]	45.2	59.1	69.8	78.9	86.8	94.0	100.6	106.8	112.6
Radar Visibility [NM]	52.2	68.3	80.7	91.1	100.3	108.6	116.2	123.3	130.0

Climb and Descent Flight Card

Id	Flight Step Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint	
							Latitude [°]	Longitude [°]
01	Line up to Entry Point	307	1000	cruise		CD01	54.091913	-3.677828
02	Level Outbound	307	1000	cruise	10.18	CD02	54.193595	-3.908349
03	Gentle Cimb	307	2000	cruise	13.96	CD03	54.332329	-4.226352
04	Gentle Cimb	307	3000	cruise	10.71	CD04	54.438217	-4.471827
05	Gentle Cimb	306	4000	cruise	9.03	CD05	54.527100	-4.679766
06	Gentle Cimb	306	5000	cruise	7.96	CD06	54.605114	-4.863721
07	Gentle Cimb	306	6000	cruise	7.19	CD07	54.675405	-5.030641
08	Gentle Cimb	306	7000	cruise	6.62	CD08	54.739843	-5.184656
09	Gentle Cimb	306	8000	cruise	6.16	CD09	54.799647	-5.328455
10	Gentle Cimb	306	9000	cruise	5.78	CD10	54.855663	-5.463907
11	Gentle Cimb	306	10000	cruise	7.42	CD11	54.927261	-5.638121

Id	Flight Step Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint	
							Latitude [°]	Longitude [°]
12	Tear Drop	125	10000	cruise	3.66	CD11	54.927261	-5.638121
13	Gentle Descent	125	9000	cruise	7.42	CD10	54.855663	-5.463907
14	Gentle Descent	126	8000	cruise	5.78	CD09	54.799647	-5.328455
15	Gentle Descent	126	7000	cruise	6.16	CD08	54.739843	-5.184656
16	Gentle Descent	126	6000	cruise	6.62	CD07	54.675405	-5.030641
17	Gentle Descent	126	5000	cruise	7.19	CD06	54.605114	-4.863721
18	Gentle Descent	126	4000	cruise	7.96	CD05	54.527100	-4.679766
19	Gentle Descent	126	3000	cruise	9.03	CD04	54.438217	-4.471827
20	Gentle Descent	126	2000	cruise	10.71	CD03	54.332329	-4.226352
21	Gentle Descent	127	1000	cruise	13.96	CD02	54.193595	-3.908349
22	Level Inbound	127	1000	cruise	10.18	CD01	54.091913	-3.677828

Area of Operation Item 3 of 8 - Arc About Radar Tower (Inspecting Area of Known Poor Cover)

Note 1: Arcs are centred on Warton Radar Tower (53.738931°, -2.892706°). The Inner arc with radius of 7NM and azimuth from 30° to 240°, to be flown clockwise at minimum obstacle clearance altitude and turn on to the second outer arc. The outer arc with radius of 8NM and azimuth from 240° to 30°, to be flown anti-clockwise with continuous climb at a rate of 400 ft/min from minimum obstacle clearance altitude to 5000 ft. Note 2: Bearing value at waypoint on the assumption of constant bank throughout the arcs. Note 3: The flight card can be flown in reverse order, where the outer arc is descending from 5000 ft at rate of 400 ft/min, and inner arc at minimum obstacle clearance altitude. Note 4: Pattern flown in circular polarisation and may be repeated in linear polarisation depending on results achieved.

ARC Flight Card

Id	Flight Steps Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint		Time on Waypoint [hh:mm:ss]	Notes
							Latitude [°]	Longitude [°]		
01	Line Up	120	(3)	cruise		A01	53.839570	-2.795193		Start of arc clockwise
02	Bend Right	150	(3)	cruise	3.62	A02	53.796937	-2.723250		
03	Bend Right	180	(3)	cruise	3.62	A03	53.738770	-2.697153		
04	Bend Right	210	(3)	cruise	3.62	A04	53.680683	-2.723721		
05	Bend Right	240	(3)	cruise	3.62	A05	53.638211	-2.795664		
06	Bend Right	270	(3)	cruise	3.62	A06	53.622676	-2.893706		
07	Bend Right	300	(3)	cruise	3.62	A07	53.638211	-2.991748		
08	Turn Left	120	(3)	cruise	1.57	A19	53.623816	-3.005716		Start of arc counter-clockwise
09	Bend Left	90	(3)	cruise	4.14	A18	53.606068	-2.893706		
10	Bend Left	60	(3)	cruise	4.14	A17	53.623816	-2.781696		
11	Bend Left	30	(3)	cruise	4.14	A16	53.672342	-2.699476		
12	Bend Left	0	(3)	cruise	4.14	A15	53.738721	-2.669074		
13	Bend Left	330	(3)	cruise	4.14	A14	53.805204	-2.698861		
14	Bend Left	300	(3)	cruise	4.14	A13	53.853940	-2.781081		
15	Turn Right	120	(3)	cruise	1.57	A01	53.839570	-2.795193		Go to step 2 in case of repetition

Chart 6 – Arc About Radar Tower

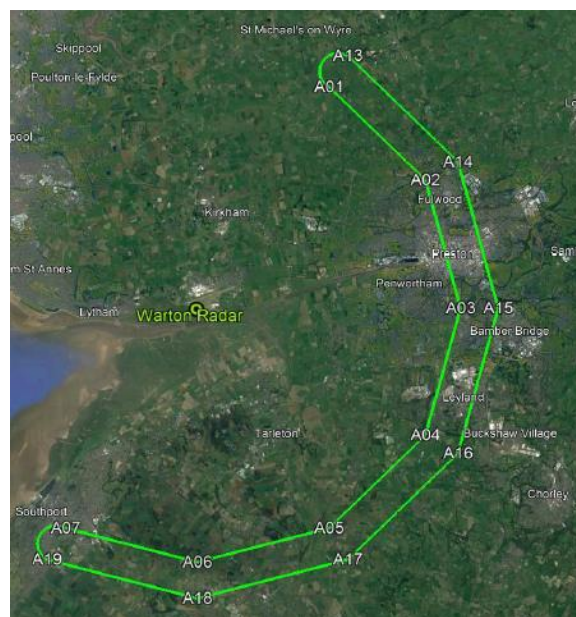


Chart 7 – Arc About Radar Tower



Area of Operation Item 4 of 8 - Pattern Chorley Lake (Inspecting Area of Known Poor Cover)

Note 1: Pilot to fly the flight card at 3,500'. Note 2: In case of repetition, fly at 2,500' and 1,500'. Note 3: Pattern flown in circular polarisation and may be repeated in Linear polarisations depending on results achieved.

Chorley Lake Flight Card

Id	Flight Steps Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint		Time on Waypoint [hh:mm:ss]	Notes
							Latitude [°]	Longitude [°]		
01	Line up to Entry Point	153	(1)	cruise		CL01	53.709215	-2.708625		
02	Straight	153	(2)	cruise	8.89	CL02	53.577906	-2.594738		
03	Turn Left	333	(2)	cruise	2.54	CL04	53.590182	-2.554413		
04	Straight	333	(2)	cruise	8.89	CL03	53.721490	-2.668174		
05	Turn Right	153	(2)	cruise	2.54	CL05	53.733752	-2.627700		
06	Straight	153	(2)	cruise	8.89	CL06	53.602443	-2.514064		
07	Turn Right	333	(2)	cruise	5.09	CL02	53.577906	-2.594738		
08	Straight	333	(2)	cruise	8.89	CL01	53.709215	-2.708625		
09	Turn Right	153	(2)	cruise	2.54	CL03	53.721490	-2.668174		
10	Straight	153	(2)	cruise	8.89	CL04	53.590182	-2.554413		
11	Turn Left	333	(2)	cruise	2.54	CL06	53.602443	-2.514064		
12	Straight	333	(2) (3)	cruise	8.89	CL05	53.733752	-2.627700		
13	Turn Left to Exit Point	153	(4)	cruise	5.09	CL01	53.709215	-2.708625		Go to step 2 in case of repetition

Chart 8 – Pattern Chorley Lake

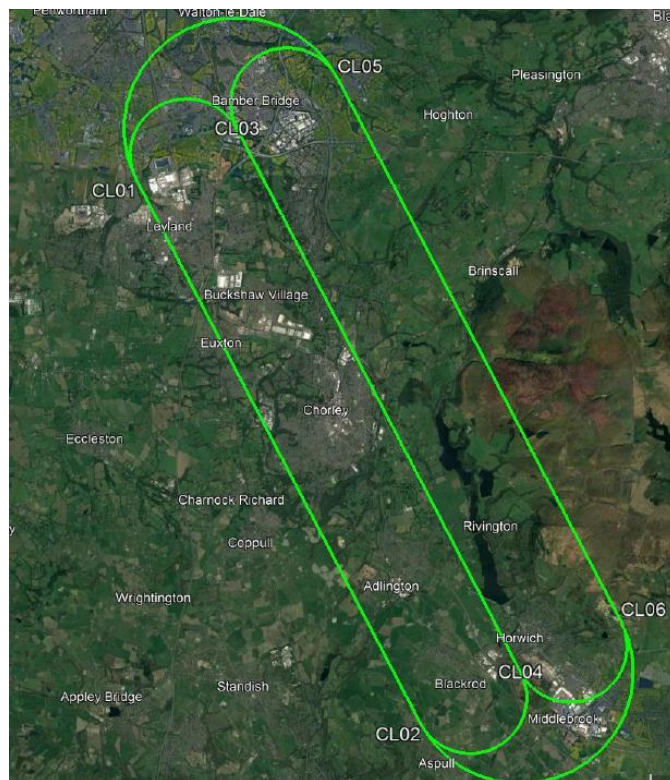
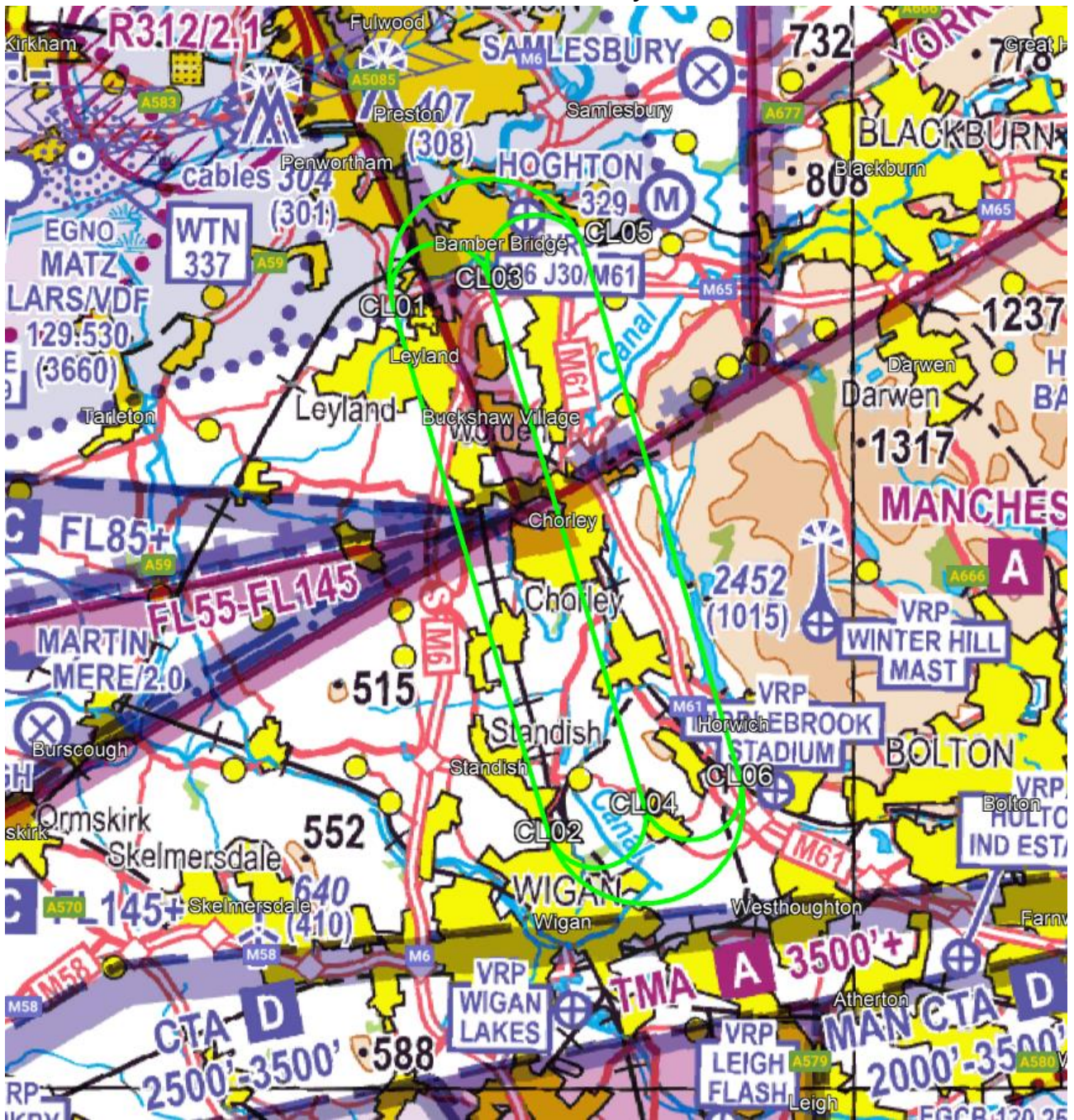


Chart 9 – Pattern Chorley Lake



Area of Operation Item 5 of 8 - Slice on Burbo Bank Offshore Wind Farm

Note 1: Pilot to line up at altitude according to flight briefing and instruction of ATC. Note 2 Level Flight between waypoints. Note 3: Descend 1000' during teardrop turn. Note 4 First Slice at 6,000' and then descending to be repeated at 5,000' then 4,200', then 3,500', then 2,900' then 2,400' then 2,000'. Note 5: Pattern flown in circular polarisation and may be repeated in linear polarisation depending on performance achieved.

Burbo Bank Flight Card:

Id	Flight Steps Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint		Time on Waypoint [hh:mm:ss]	Notes
							Latitude [°]	Longitude [°]		
01	Line up to Entry Point	270	(1)	cruise		C38	53.502084	-3.203034		
02	Straight	270	(2)	cruise	6.08	A01	53.501490	-3.372710		
03	Tear Drop	90	(3)	cruise	3.66	A01	53.501490	-3.372710		
04	Straight	90	(2) (4)	cruise	6.08	C38	53.502084	-3.203034		
05	Tear Drop	270	(5)	cruise	3.66	C38	53.502084	-3.203034		Go to step 2 in case of repetition

Chart 10 – Slice on Burbo Bank

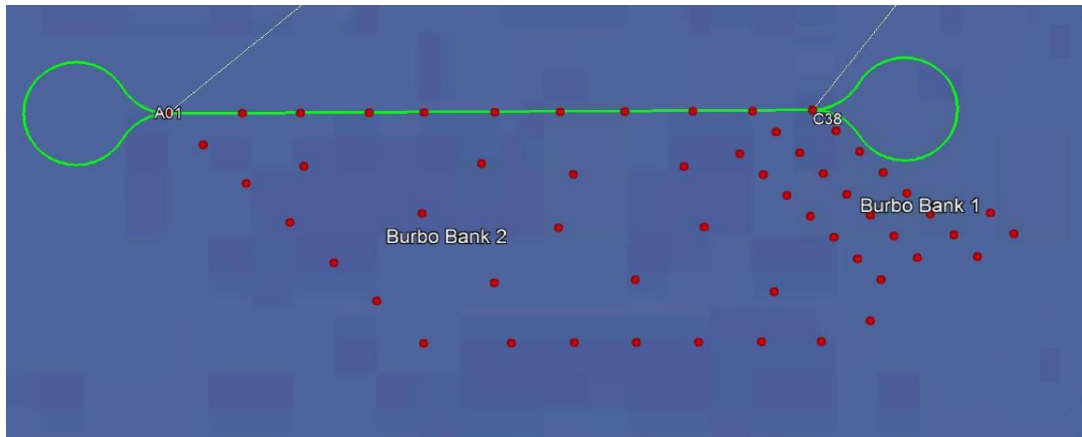


Chart 11 – Slice on Burbo Bank



Area of Operation Item 6 of 8 - Slice on Gwynt-Y-Môr Offshore Wind Farm

Note 1 Pilot to line up at altitude according to flight briefing and instruction of ATC. Note 2 Level Flight between waypoints. Note 3: Descend 1000' during teardrop turn. Note 4 First Slice at 7,300' and then descending to be repeated at 6,000' then 5,000' then 4,200', then 3,500', then 2,900' then 2,400'. Note 5: Pattern flown in circular polarisation and may be repeated in linear polarisation depending on performance achieved.

Gwynt-Y-Mor Flight Card

Id	Flight Steps Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint Latitude [°]	Waypoint Longitude [°]	Time on Waypoint [hh:mm:ss]	Notes
01	Line up to Entry Point	270	(1)	cruise		H20F	53.452117	-3.462067		
02	Straight	270	(1) (2)	cruise	8.23	H19F	53.450783	-3.691650		
03	Tear Drop	89	(3)	cruise	3.66	H19F	53.450783	-3.691650		
04	Straight	89	(2) (4)	cruise	8.23	H20F	53.452117	-3.462067		
05	Tear Drop	270	(5)	cruise	3.66	H19F	53.450783	-3.691650		Go to step 2 in case of repetition

Chart 12 – Slice on Gwynt-Y-Môr Offshore Wind Farm



Chart 13 – Slice on Gwynt-Y-Môr Offshore Wind Farm



Area of Operation Item 7 of 8 - Slice Beyond Gwynt-Y-Môr Offshore Wind Farm

Note 1: Altitudes to be briefed on the day (Subject to results of Item 6). Note 2 Altitude to be achieved during the tear drop descent to be advised on the day (Subject to results of Item 6).

Slice beyond Gwynt-Y-Mor Flight Card

Id	Flight Steps Descriptor	Bearing [°]	Height amsl (ft)	Air Speed (kts)	Leg Length (NM)	Waypoint Id	Waypoint Latitude [°]	Waypoint Longitude [°]	Time on Waypoint [hh:mm:ss]	Notes
01	Line up to Entry Point	236	(1)	cruise		E01	53.422764	-3.681760		
02	Straight	236	(1)	cruise	20.00	E02	53.234387	-4.139835		
03	Tear Drop	55	(1)	cruise	3.66	E02	53.234387	-4.139835		
04	Straight	55	(1) (2)	cruise	20.00	E01	53.422764	-3.681760		
05	Tear Drop	236	(3)	cruise	3.66	E01	53.422764	-3.681760		Go to step 2 in case of repetition

Chart 14 - Slice Beyond Gwynt-Y-Môr Offshore Wind Farm

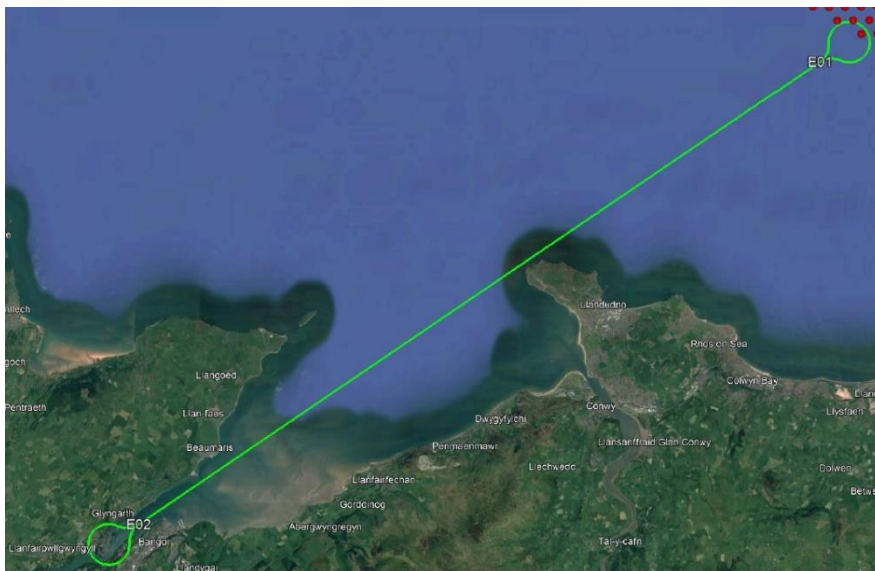


Chart 15 - Slice Beyond Gwynt-Y-Môr Offshore Wind Farm



Item 8 of 8 - Flight on West Duddon Sands and Walney 3 Offshore Wind Farms

Note 1 Pilot to line up at altitude according to flight briefing and instruction of ATC. Note 2 Level Flight between waypoints. Note 3: Descend 1000' during teardrop turn. Note 4 First Slice at 6,000' and then descending to be repeated at 5,000' then 4,200', then 3,500', then 2,900' then 2,400' then 2,000. Not all levels may be flown because when radar performance is not met ATC will inform and terminate the slice. Note 5: Pattern flown in circular polarisation and may be repeated in linear polarisation depending on performance achieved.

West of Duddon Sands and Walney 3 Flight Card

Id	Flight Steps Descriptor	Bearing [°]	Height amsl [ft]	Air Speed [kts]	Leg Length [NM]	Waypoint Id	Waypoint		Time on Waypoint [hh:mm:ss]	Notes
							Latitude [°]	Longitude [°]		
01	Line up to Entry Point	324	(1)	cruise		B12	53.945931	-3.474198		
02	Straight	324	(2)	cruise	3.39	B03	53.991770	-3.529943		
03	Bend Left	300	(2)	cruise	1.95	A14E	54.007920	-3.577692		
04	Bend Left	298	(2)	cruise	3.65	A07E	54.036431	-3.668600		
05	Tear Drop	118	(3)	cruise	3.66	A07E	54.036431	-3.668600		
06	Straight	118	(2)	cruise	3.65	A14E	54.007920	-3.577692		
07	Bend Right	120	(2)	cruise	1.95	B03	53.991770	-3.529943		
08	Bend Right	144	(2) (4)	cruise	3.39	B12	53.945931	-3.474198		
09	Tear Drop	324	(5)	cruise	3.66	B12	53.945931	-3.474198		Go to step 2 in case of repetition

Chart 16 - Flight on West Duddon Sands and Walney 3 Offshore Wind Farms

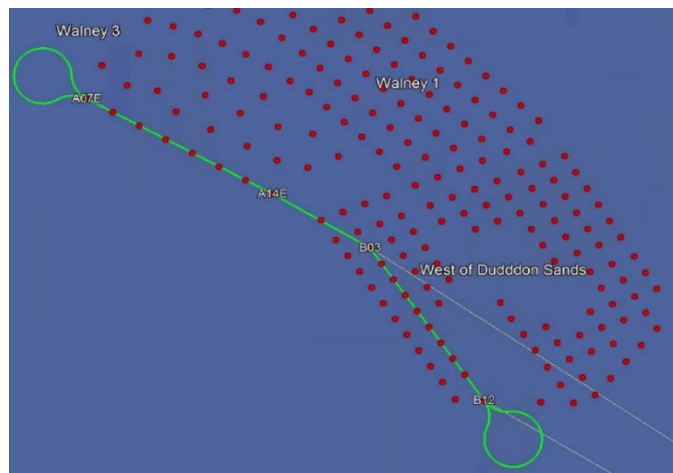


Chart 17 - Flight on West Duddon Sands and Walney 3 Offshore Wind Farms

