AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group

Civil Aviation Authority

ACN Reference:	Version:	Date:	Date of Original
2023-08-0013	1.0	**28/04/2023**	**17/04/2023**

RADAR CALIBRATION
HARTLAND POINT PSR/SSR

NDS

Subject to NOTAM: No

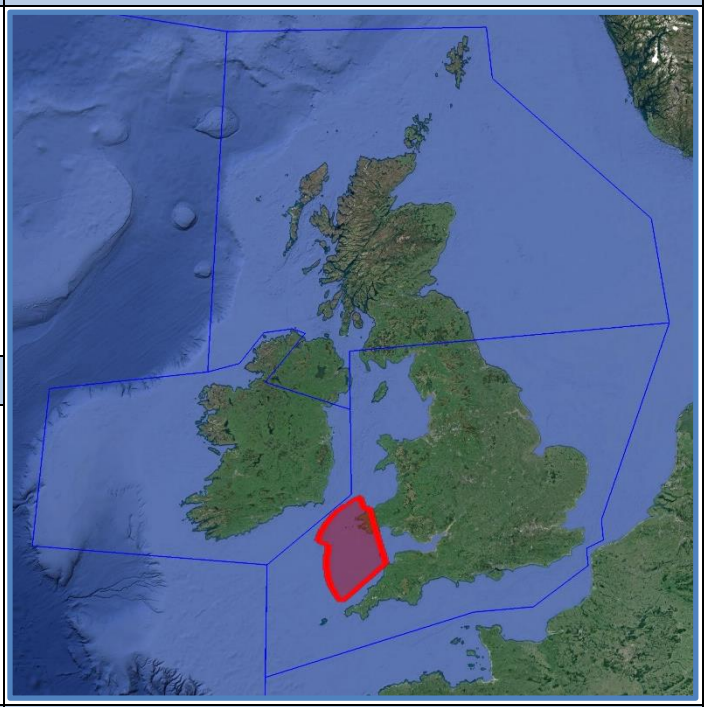
Date(s) of activity/Validity:	**Times - ALL TIMES UTC[1]**
23rd August 2023 – 30th September 2025	08:00 – 20:00 *(07:00 – 19:00)*
Vertical Limits:	**Allocated Mode 3A (SSR):**
5,000ft – 22,000ft **AGL**	0024
Aircraft Details:	**NDS Approved:**
Type: B200 Callsign: CLB*xxx*	**Yes** – *Subject to the conditions in Section 2*
Event Sponsor(s):	**Aircraft Operator(s):**
Thales Flight Inspection Service Hangar 3 Teesside International Airport Darlington DL2 1NL 01325 335346	Thales Flight Inspection Service Hangar 3 Teesside International Airport Darlington DL2 1NL 01325 335346

ATS Units/ Controlling Agencies:

Culdrose	01326 552415
Newquay	01637 861301
Shannon ACC	+353 61 366148
Swanwick Mil (78 Sqn) – West	01489 612417
Western Radar	01489 445560

Info: Aberporth, Plymouth Mil, Swanwick ACC – GS West, Yeovilton

Geographical Limits:



Airspace Reservations:

EG D064 All	South West MDA	01489 612495
EG D113 All	Castlemartin	01646 662496
EG D115 All	Manorbier	01834 871282
EG D201	Aberporth A, F, G, K	01239 813219
AARA 11	SW Approaches	01489 612495
AARA 12	SW Approaches	01489 612495

Departure/Destination Aerodrome(s)	**ACN Issued by:**
EGDR, EGNV	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 This ACN details the serials required to conduct a calibration of the combined Primary Search Radar (PSR) (Watchman) and Secondary Surveillance Radar (SSR) at Hartland Point. The antenna is located at (510117N 0043052W).

16. **This ACN is the second iteration and replaces ACN 2017-01-0040 (also known as ACN 2017-00-0037).**

17. **Notification.** The sponsor is to notify the agencies listed on page one of this ACN at least 1 week prior to the planned calibration. In addition, the pilot is to contact the appropriate agencies at least 24 hours prior to confirm that the flight will still take place and again at least 4 hours prior to departure to provide final details, agree a start time and confirm availability of an ATS.

18. **For notifying within airspace delegated to Shannon, the sponsor is requested to contact the Station Manager at Shannon ACC in the first instance (+353 61 366148).**

19. **Priority.** This flight has been afforded Non-Deviating Status (NDS) whilst established on a measured run only and within Controlled Airspace (CAS), (*UK AIP ENR 1.1 (4.2) & CAP 493 – Section 1, Ch4, Para 17 refers*). Outside CAS and in between runs, the aircraft is categorised as CAT Z, (CAP 493 – Section 1, Ch4, Para 10c refers) and attracts no priority. In order to reduce the impact to other airspace users, the controlling authority may request that the pilot hold, or accept radar vectors in order to make best use of the airspace, or to reduce overall delays.

20. **BANBA CTA - Delegated Airspace.** This check may require access to the BANBA CTA which is delegated by the UK to Shannon ACC. The sponsor is responsible for coordinating with Shannon ACC in advance, should this be required. Tactical coordination on the day will the be conducted by Swanwick Mil or Western Radar.

PSR

21. **Levels.** The aircraft will be required to operate at the following vertical altitudes & heights. The D Value[2] will then need to be added or subtracted, (value to be confirmed by the sponsor prior to departure), and the converted to a flight level (if above the transitional altitude). The sponsor is responsible for this conversion and confirm the exact requirement with the controlling agency prior to each run:

a.	8,000ft	56nm – 40nm	minimum of 3 runs required
b.	14,000ft	50nm – 38nm	minimum of 3 runs required
c.	16,000ft	66nm – 44nm	minimum of 3 runs required
d.	22,000ft		
	i.	66nm – 38nm	minimum of 2 runs required
	ii.	66nm – Radar Overhead	minimum of 1 run required
	iii.	60nm – 44nm	minimum of 3 runs required

22. **Radials.** The radials required by the aircraft are subject to wind speed and direction and may vary. A single radial will be chosen between the following range:

i. 230°T and 345°T

23. **Orbits.** No PSR orbits will be flown for this check.

[2] D' Values are corrected from ICAN standard atmosphere to actual conditions, thus aircraft on inbound leg may be unable to maintain whole Flight Levels

SSR.

24. **Levels.** The aircraft will be required to operate at the heights listed below. The D Value[3] will then need to be added or subtracted, (value to be confirmed by the sponsor prior to departure), and the converted to a flight level (if above the transitional altitude). The sponsor is responsible for this conversion and confirm the exact requirement with the controlling agency prior to each run:

a. 5,000ft **AGL**[4]

i. 40nm to 80nm Minimum of 4 runs

ii. 80nm to 40nm Minimum of 4 runs

b. 20,000ft **AGL**

i. Overhead to 80nm Minimum of 1 run

ii. 80nm to Overhead Minimum of 1 run

25. **Radials.** The radials required by the aircraft are subject to wind speed and direction and may vary. A single radial is expected be chosen between the options below[5], however any radial may be requested:

a. 290°T to 340°T

26. The number of runs is subject to engineering requirements and should be notified to ATC during the prenote.

27. **Orbits.** No orbits will be flown as part of this calibration.

28. **Air Traffic Service (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.

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

a. Culdrose 134.050 MHz

b. Newquay 133.405 MHz

c. Swanwick Mil – West 135.150 MHz

d. Western Radar 132.300 MHz

30. The radar is primarily used by Plymouth Mil, but as the radars are double stacked, Plymouth Mil will have no coverage over the majority of the area whilst the sensors are calibrated.

31. 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.

[3] D' Values are corrected from ICAN standard atmosphere to actual conditions, thus aircraft on inbound leg may be unable to maintain whole Flight Levels

[4] AGL in this instance relates to the height above the radar antenna – Antenna elevation is unknown and will be provided by the Sponsor during the prenote.

[5] This ACN is assessed against the stated radials only.

32. **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. EGTTZFZC Western Radar

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

34. 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.

35. **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.

36. **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.

SECTION 3

Area of Operation

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

Chart 1 – Overview

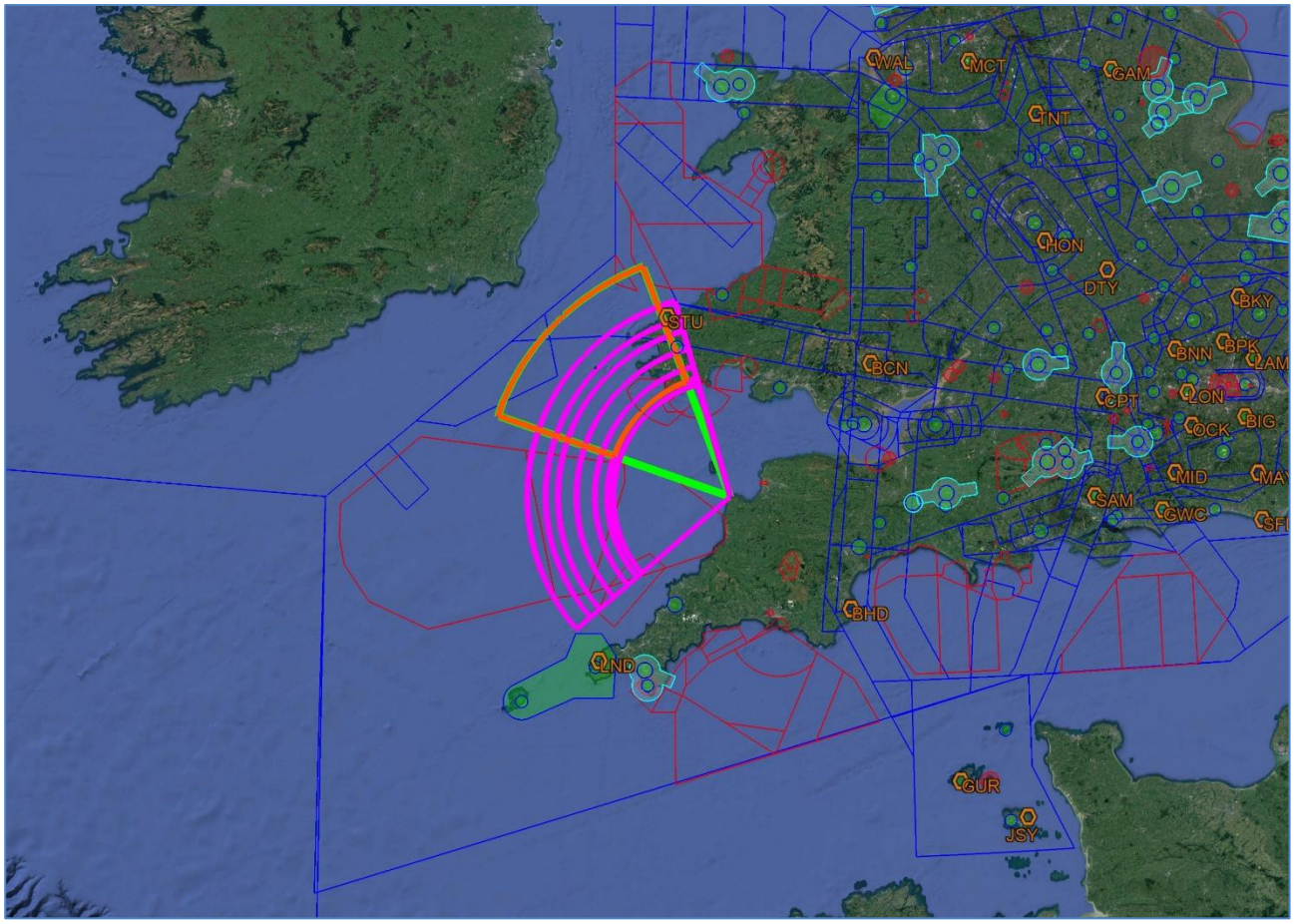


Chart 2 – PSR

8,000ft

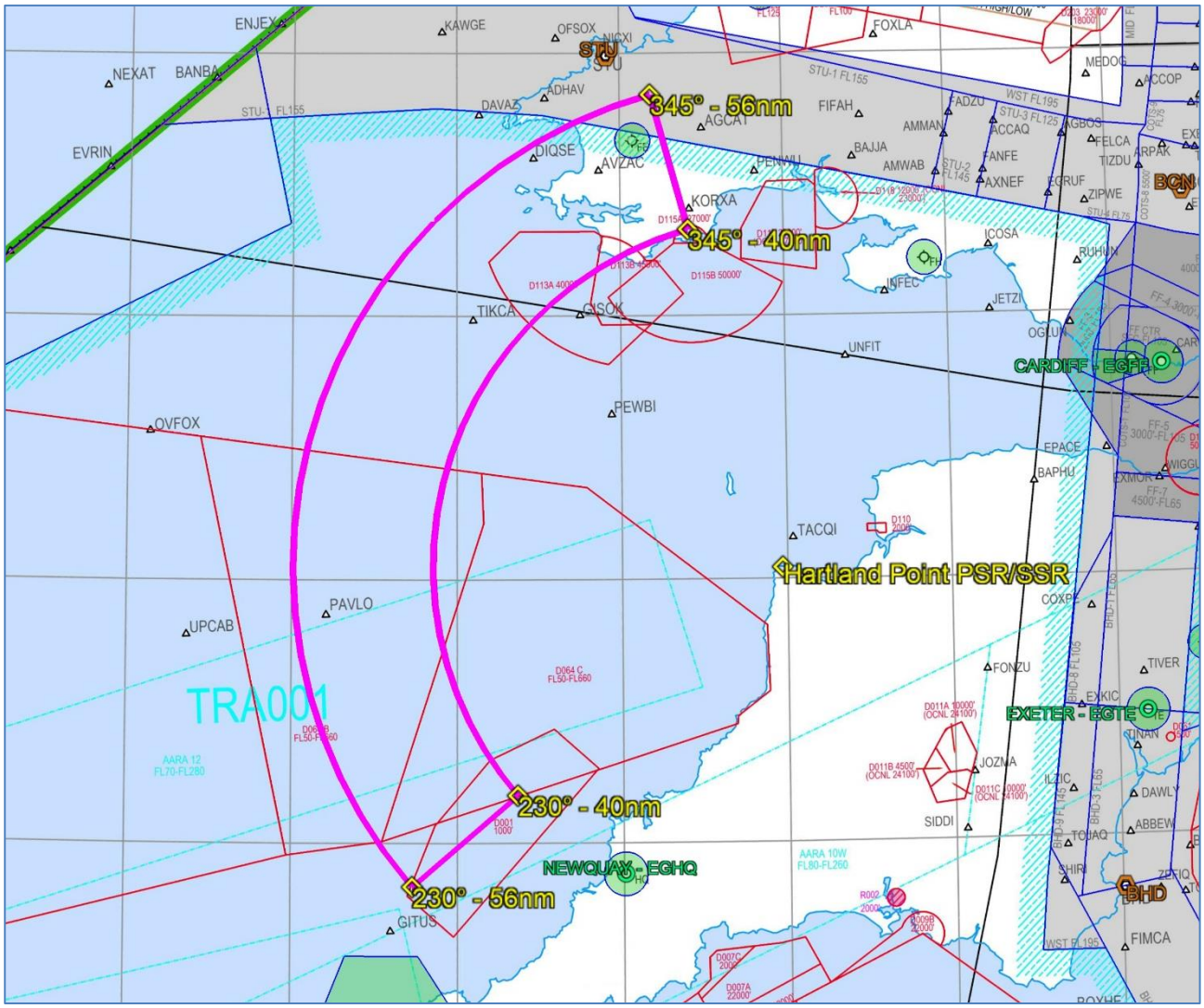


Chart 3 – PSR

14,000ft

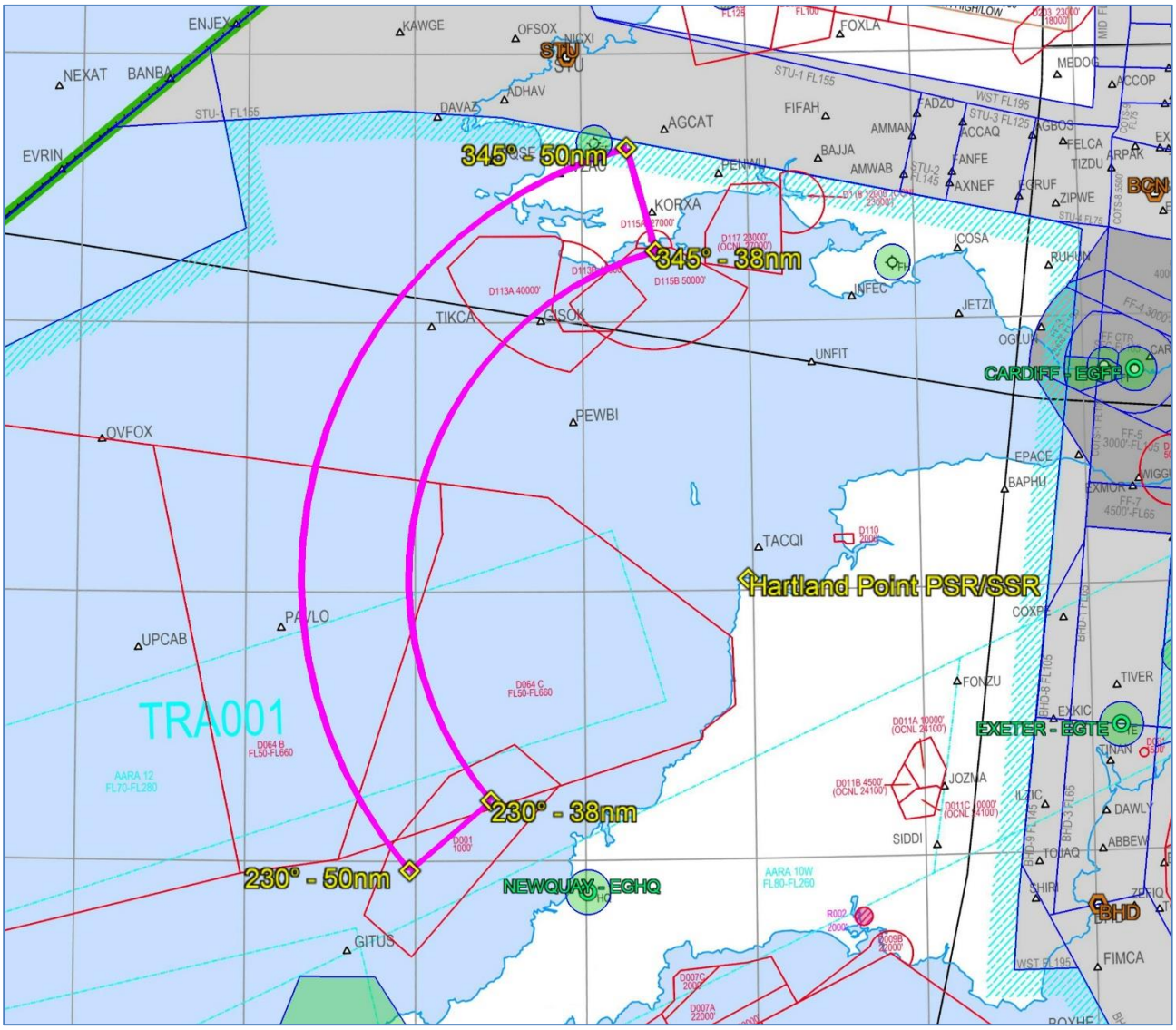


Chart 4 – PSR

16,000ft

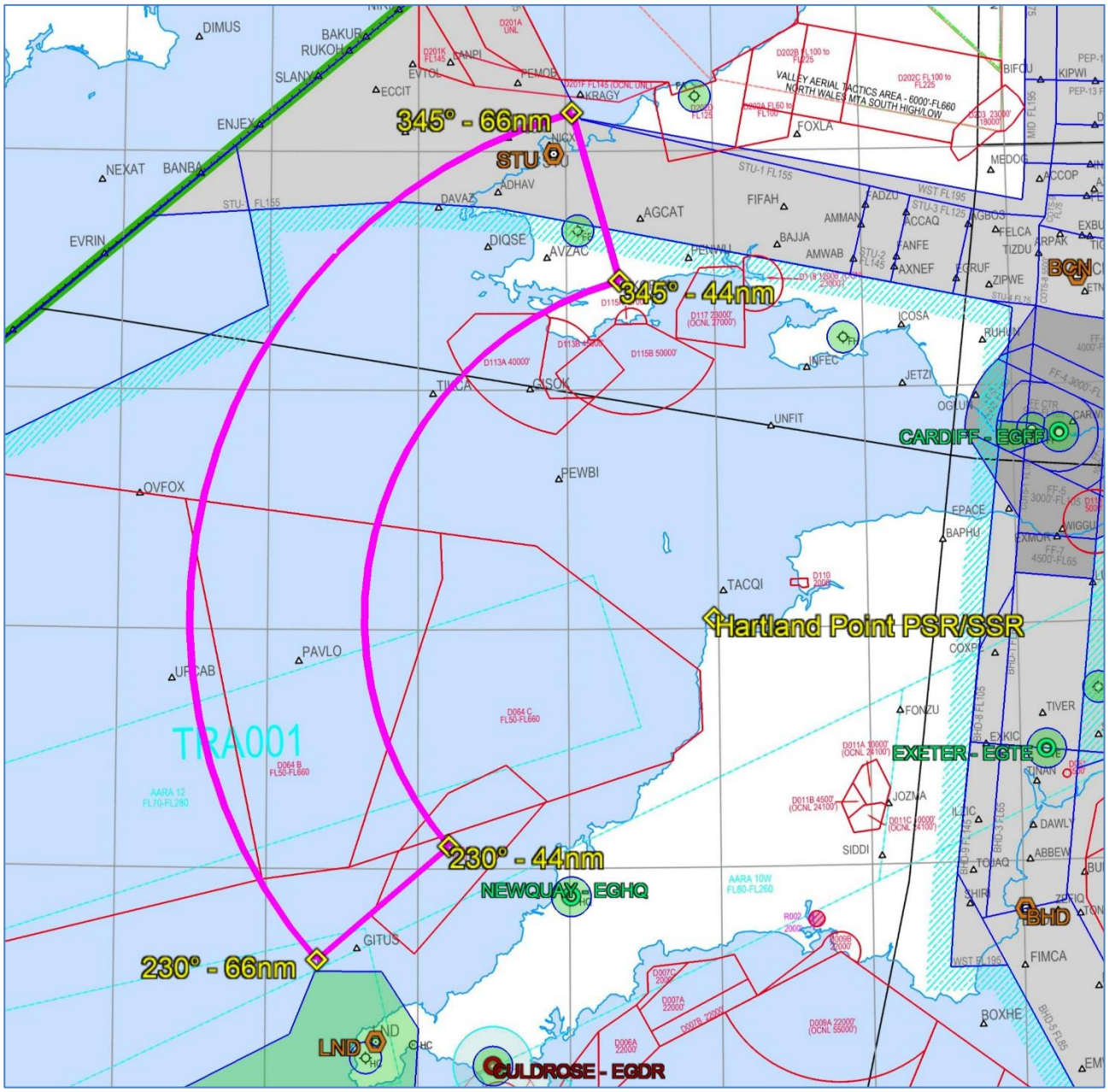


Chart 5 – PSR

22,000ft (66nm – 38nm)

Chart 6 – PSR

22,000ft (66nm – OH)

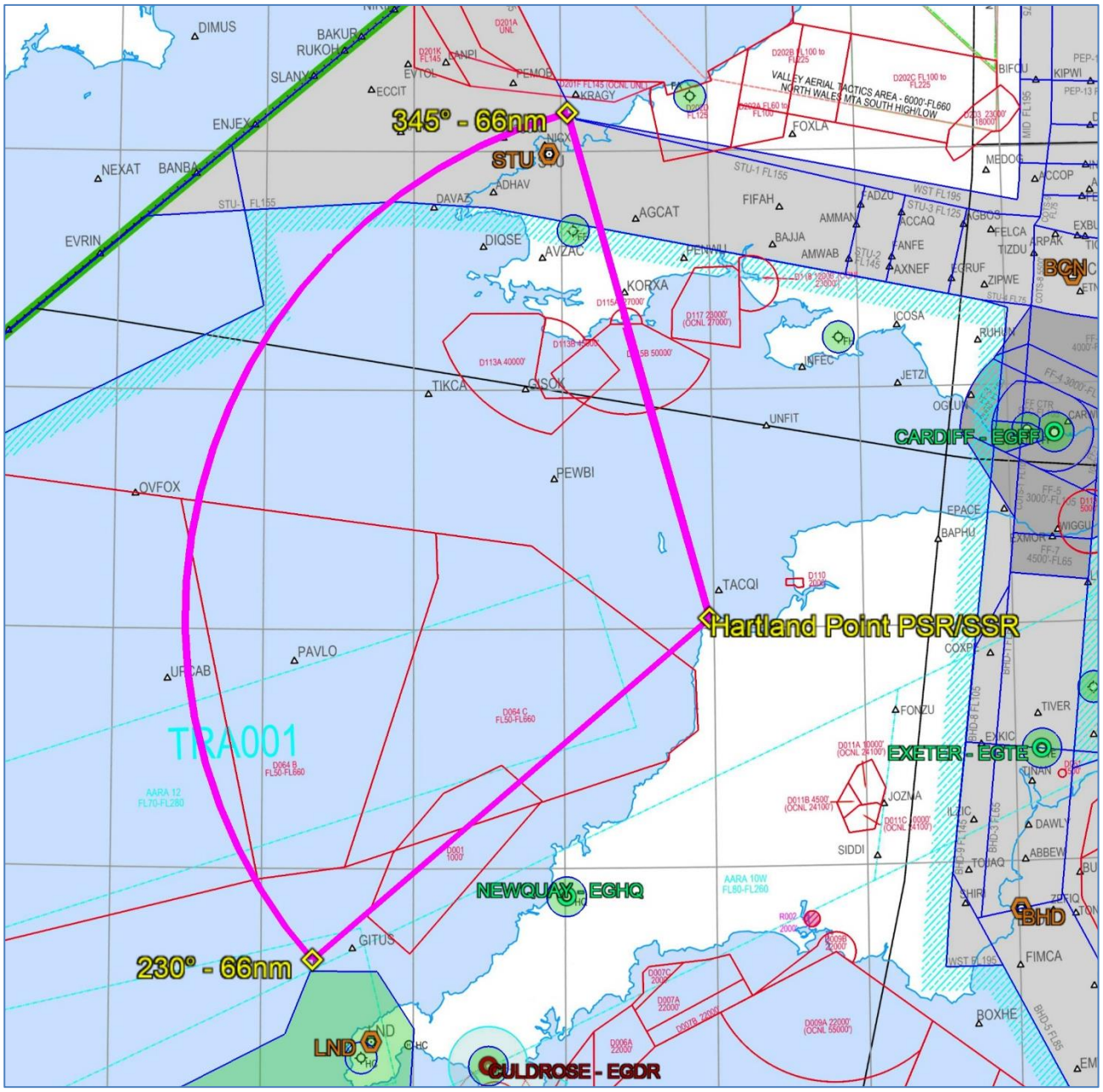


Chart 7 – PSR

22,000ft (60nm – 44nm)

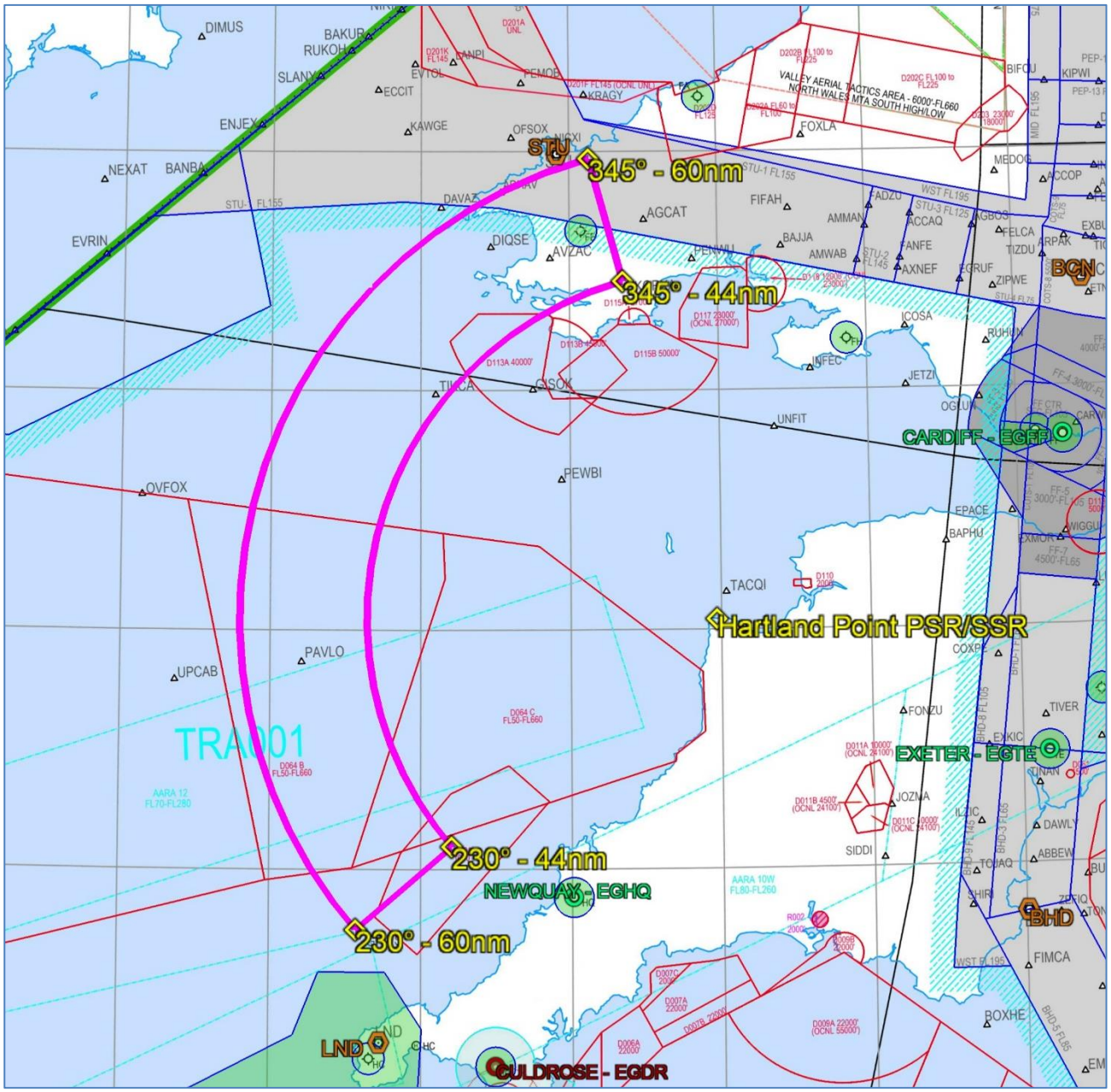


Chart 8 – SSR

20,000ft (80nm – Overhead)

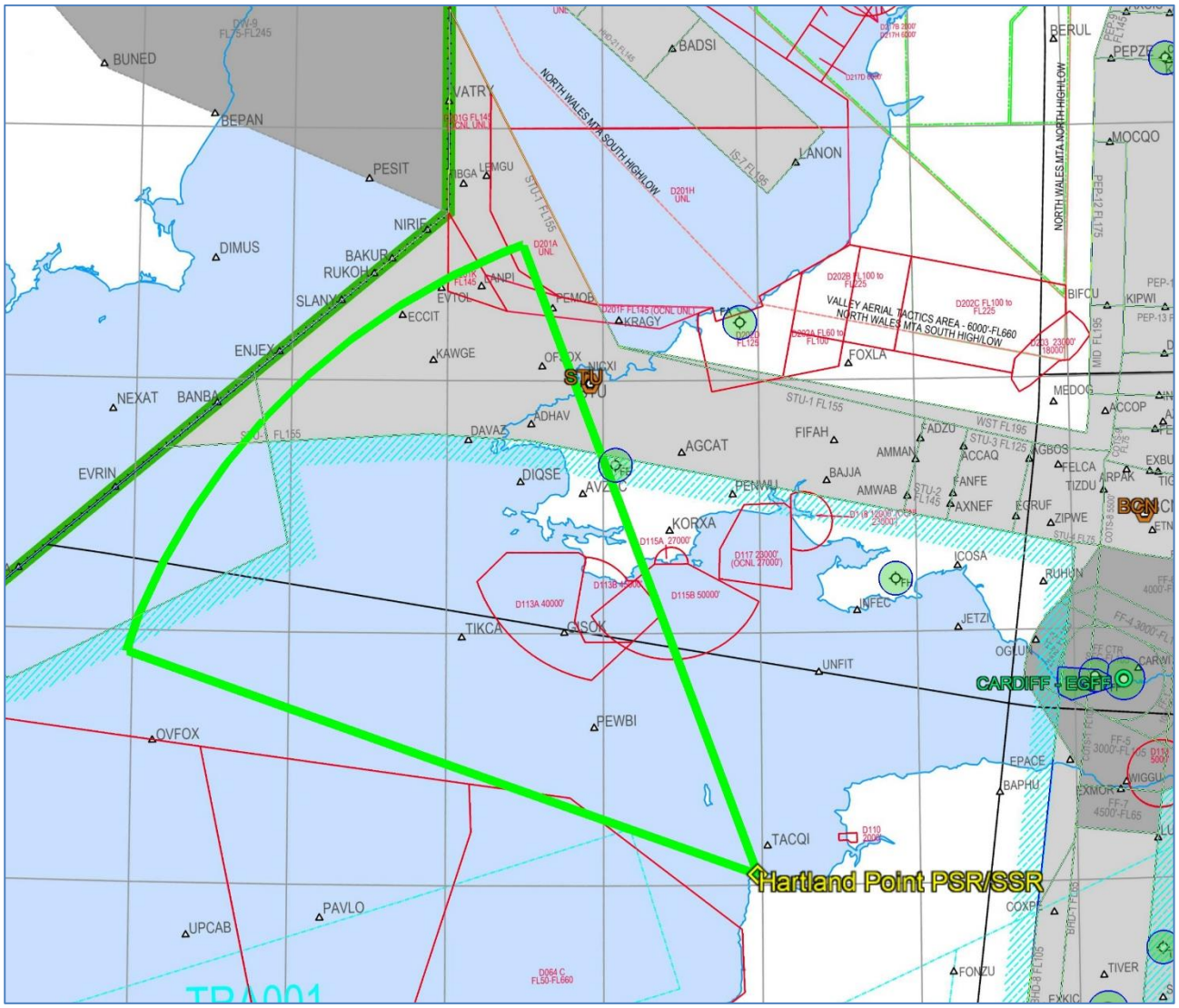


Chart 9 – SSR

5,000ft (80nm – 40nm)