AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group

Civil Aviation Authority

ACN Reference:	Version:	Date:	Date of Original
2021-04-0276	3.0	**04/06/2021**	13/04/2021

RADAR CALIBRATION
WEMBURY SECONDARY SURVEILLANCE RADAR (SSR)

NDS

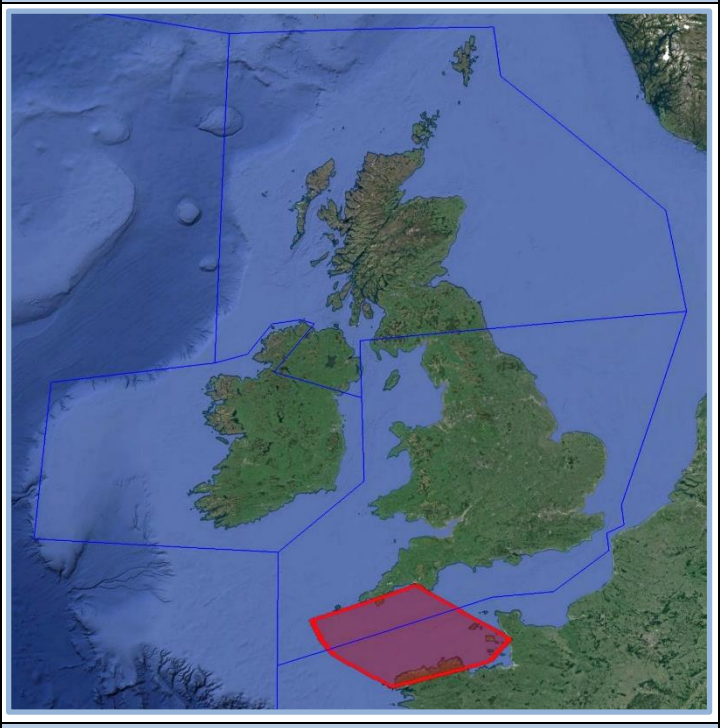
Subject to NOTAM: No

Date(s) of activity/Validity:	**Times (ALL TIMES UTC)**
15th June 2021 – 30th August 2021	0800-2000
Vertical Limits:	**Allocated Mode 3A (SSR):**
1,500ft – 30,000ft AMSL **RVN** *(see section 2)*	0024 (*See Para 24)*
Aircraft Details:	**NDS Approved:**
Type: BE20 or FA20 Callsign: CLB*xxx*	**Yes – subject to the conditions in section 2.**
Event Sponsor(s):	**Aircraft Operator(s):**
John Hogan Thales Flight Inspection Service Teesside International Airport Darlington DL2 1LU 07976 078553 Johng.hogan@uk.thalesgroup.com	Thales Flight Inspection Service Teesside International Airport Darlington DL2 1LU 01325 335346

ATS Units/ Controlling Agencies:

Brest ACC	+33 2 98 37 34 50
Culdrose	01326 552212
Jersey Radar	01534 446086
Newquay	01637 861301
Plymouth(Mil)	01752 557808
St. Marys, Isles of Scilly	01720 424335
Swanwick ACC – GS Channel	01489 612415
Swanwick ACC – GS West	01489 612413
Swanwick(Mil) – West	01489 612417
Western Radar	01489 445560

Geographical Limits:



Airspace Reservations:

EG D003	Plymouth
EG D004	Plymouth
EG D005B	Predannack Corridor
EG D006 Complex	Falmouth Bay
EG D007 A & B	Fowey
EG D008 Complex	Plymouth
EG D009 Complex	Wembury

LF D5
LF D7
LF D12 Global A or North A

Departure/Destination Aerodrome(s)	**ACN Issued by:**
EGDR, EGDY, EGHQ, EGNV or EGTE	AS3

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 survey. 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(Mil), Swanwick(Mil) 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 the flight profiles required to commission and calibrate the Wembury Radar SSR (50°19'5.89" N 004°6'26.96" W).

16. **Dates.** Whilst this ACN is valid for the duration listed on page 1, the anticipated flight dates are as follows:

a. 15th & 16th June Engineering Flight Trials

b. 21st to 23rd June Radar Calibration

17. **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 ATS.

18. Out with the above, for flights on a Monday, initial notification shall take place no later than 11:00 UTC on the preceding Friday. For coordination with Brest ACC, should the number on page 1 not be answered the sponsor should call Pascale Ferezou directly on +33 2 98 37 34 57.

19. **Priority.** This flight has been afforded Non-Deviating Status (NDS) whilst established on a measured run within the London FIR/UIR, (*UK AIP ENR 1.1 (4.2) & CAP 493 – Section 1, Ch4, Para 17 refers*,). 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. **Levels.** The aircraft will require to operate at various levels +/- the D value. The pilot is responsible for informing ATC of the required level, converted (where appropriate) to a Flight Level. **The aircraft is Negative RVSM (RVN).**

21. **Profiles.** The radials required will be dependent on the wind direction and speed at the beginning of the trial and may vary from day to day, however only one radial shall be flown per day and not all radials may be used:

a. Preferred Radials:

i. 124°T Back up

ii. 140°T Back up

iii. 195°T Back up

iv. **230°T – 253°T** **Primary Spread**

b. Maximum radial range is 120nm from the Wembury Radar.

22. **Engineering Serials.** The following serials will be required to be flown for the engineering trial. Altitudes are either AMSL or Above the Radar Reference Point (ARP):

Serial	Altitude	Aircraft Transponder	Range (nm)		Number of Runs	
			Start	End	Option 1	Option 2
1a	30,000ft AMSL	Mode S	120	Radar -2nm	1 x Inbound	2 x Inbound
3a	10,000ft AMSL	Mode S	120	Radar -2nm	1 x Inbound	2 x Inbound
3d	10,000ft AMSL	Mode A/C	120	100	1 x Inbound or Outbound	1 x Inbound & 1 x Outbound
3e	10,000ft AMSL	Mode 1	120	100	1 x Inbound or Outbound	1 x Inbound & 1 x Outbound
3f	10,000ft AMSL	Mode 2	120	100	1 x Inbound or Outbound	1 x Inbound & 1 x Outbound
4	5,000ft AMSL	Mode S	109	89	1 x Inbound or Outbound	1 x Inbound & 1 x Outbound
6	1,500ft ARP	Mode S	77	57	1 x Inbound or Outbound	1 x Inbound & 1 x Outbound

23. **Commissioning Serials.** The following serials will be required to be flown for the commissioning flight calibration. Altitudes are either AMSL or Above the Radar Reference Point (ARP):

Serial	Altitude	Aircraft Transponder	Range (nm)		Number of Runs
			Start	End	
1a	30,000ft AMSL	Mode S	120	Radar -2nm	2 x Inbound
1b	30,000ft AMSL	Mode S	120	100	2 x Inbound & 2 x Outbound
2	20,000ft AMSL	Mode S	120	100	2 x Inbound & 3 x Outbound
3a	10,000ft AMSL	Mode S	120	Radar -2nm	2 x Inbound
3b	10,000ft AMSL	Mode S	120	100	2 x Inbound & 2 x Outbound
3d	10,000ft AMSL	Mode A/C	120	100	1 x Inbound & 1 x Outbound
3e	10,000ft AMSL	Mode 1	120	100	1 x Inbound & 1 x Outbound
3f	10,000ft AMSL	Mode 2	120	100	1 x Inbound & 1 x Outbound
4	5,000ft AMSL	Mode S	109	89	3 x Inbound & 3 x Outbound
5	3,000ft ARP	Mode S	95	75	3 x Inbound & 3 x Outbound
6	1,500ft ARP	Mode S	77	57	3 x Inbound & 3 x Outbound

24. **Aircraft:** The majority of the flights shall be made using a BE20, however for serials 3e and 3f the aircraft may be swapped for a FA20 to enable the Mode 1 and Mode 2 tests.

25. **SSR Code.** Within UK airspace, the aircraft shall set code SSR 0024. In French airspace a separate code shall be issued.

26. **Air Traffic Service (ATS) Provision – General.** Swanwick(Mil) have agreed, subject to Unit priorities, to provide an ATS to the aircraft within the London FIR/UIR. Should Swanwick(Mil) be unable to provide an ATS, London Control or a suitable terminal unit may be approached to assist. If a unit, other than Swanwick(Mil), provides the ATS for a radial that require to cross into French airspace, the appropriate UK supervisor is to inform the Brest ACC Supervisor.

27. **ATS Provision – Inside Controlled Airspace (CAS).** Access to CAS 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.

28. **ATS Provision – Outside CAS (including Lower Airspace Radar Service (LARS)).** The survey area is within the coverage of the following units:

a. Culdrose 134.050 MHz

b. Jersey Control 125.205 MHz (Basic Service only, within the London FIR)

c. Newquay 133.405 MHz

29. Availability of a service from any ATS unit is not guaranteed, is subject to controller availability, unit workload and possible reduced hours of operations (due to COVID-19 or operations reasons). Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.1, shall be notified via NOTAM.

30. **Plymouth(Mil).** Whilst the calibration is being undertaken the existing radar at Wembury will be taken out of service which will result in a reduced cover in the area.

31. **Channel Islands CTR.** Within the Channel Islands CTR, ATS will be provided by Jersey Control (125.205 MHz)

32. **Brest FIR/UIR.** For flight within the Brest FIR/UIR, the notification timescales listed in para 17 must be adhered to. Swanwick(Mil) shall be the coordinating authority on the UK side and will be responsible for any tactical coordination with French ATC authorities.

33. **Flight Plan.** The sponsor shall file a flight plan including the following in Field 18:

a. RMK/Flight in accordance with ACN 2021-04-0276

b. RMK/Non Deviating Status Approved in UK Airspace

c. RMK/ATCCOR

34. Additionally, unless specified by Brest ACC during the coordination telephone call, the following points shall be added to the route for flight within French airspace:

a. Radial 120º SALCO–MUREL–JSY–SKESO

b. Radial 140º SALCO–MUREL–ARE–DIN–MANIG

c. Radial 195º Subject to Departure AD

i. GANTO–ROSMU–LIZAD

ii. ANNET–NERLA–ROSMU–NERLA–LIZAD

d. Radial 230º Subject to Departure AD

i. GANTO–NERLA–DEKOR–TALIG

ii. TALIG–SUPAP–CAMBO–DEKOR–CAMBO–TALIG

35. **ATS Provision above FL100 – London FIR/UIR.** 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 military 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)

b. EGTTZFZC Western Radar

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

37. 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) require at least two weeks prior notice in order to obtain an ATS in support of this task.

38. **Plymouth Danger Areas (DA).** It is strongly suggested book access via the controlling authority on 01752 286146 before Thursday of the proceeding week. For bookings inside this timeframe, please contact 01752 557550.

39. **French DAs.** The following DAs are impacted by the flight (please note the temporarily amended upper vertical limits):

a.	LF D5	Active: FL195-FL305	Radial 195º / 230º
b.	LF D7	Active: FL195-FL305	Radial 195º
c.	LF D12 Globale A/Nord A	Active: FL195-FL305	Radial 195º

40. The sponsor is required to contact CCMAR ATLANTIQUE with the planned details, the day prior to the flight, either by email or phone:

a. Phone (Ops Room): +33 298 31 8272 or + 33 298 31 8269

b. Email: ccmar-atlantique.cqops.fct@intradef.gouv.fr

41. The sponsor can obtain the latest DA statuses from Brest ACC.

42. Whilst Radial 235º is close to the boundary of LF D5, the calibrator shall remain outside of the danger area and within the London FIR/UIR

SECTION 3

Area of Operation

43. A chart highlighting the various areas of operation are shown below. This is for illustrative purposes only and not for operational planning.

Chart 1 – Overview

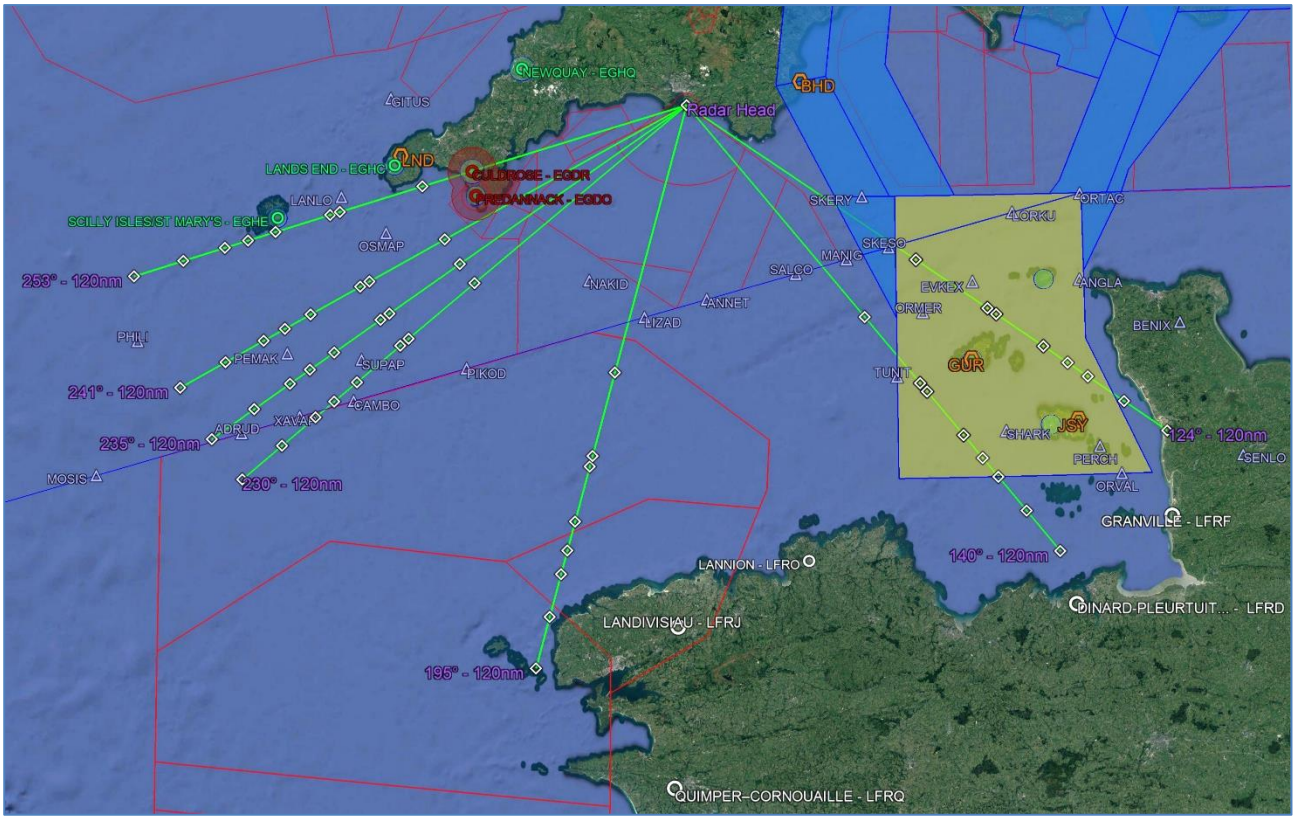


Chart 2 – 124º & 140º Radials

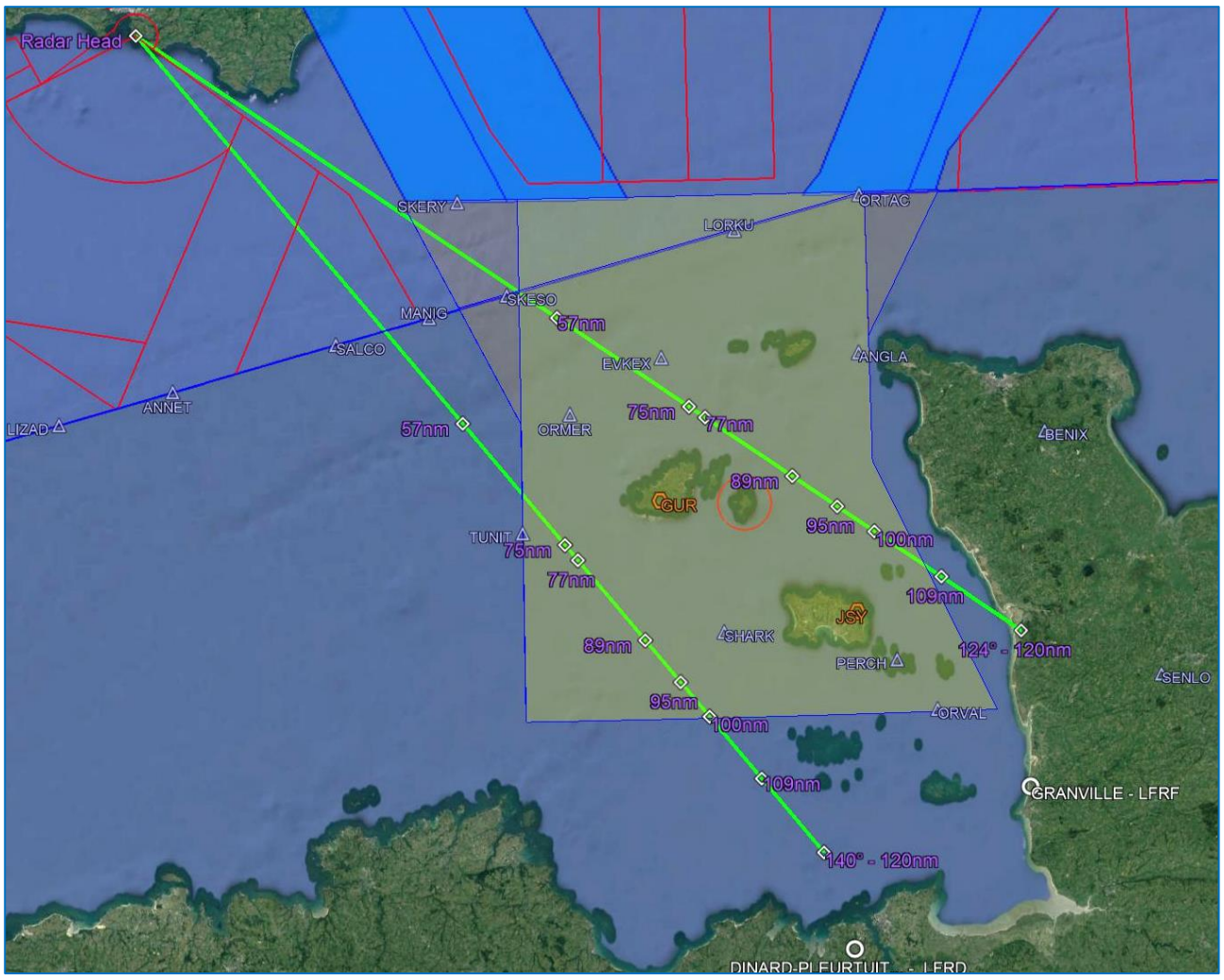


Chart 3 – 195º & 230º Radials

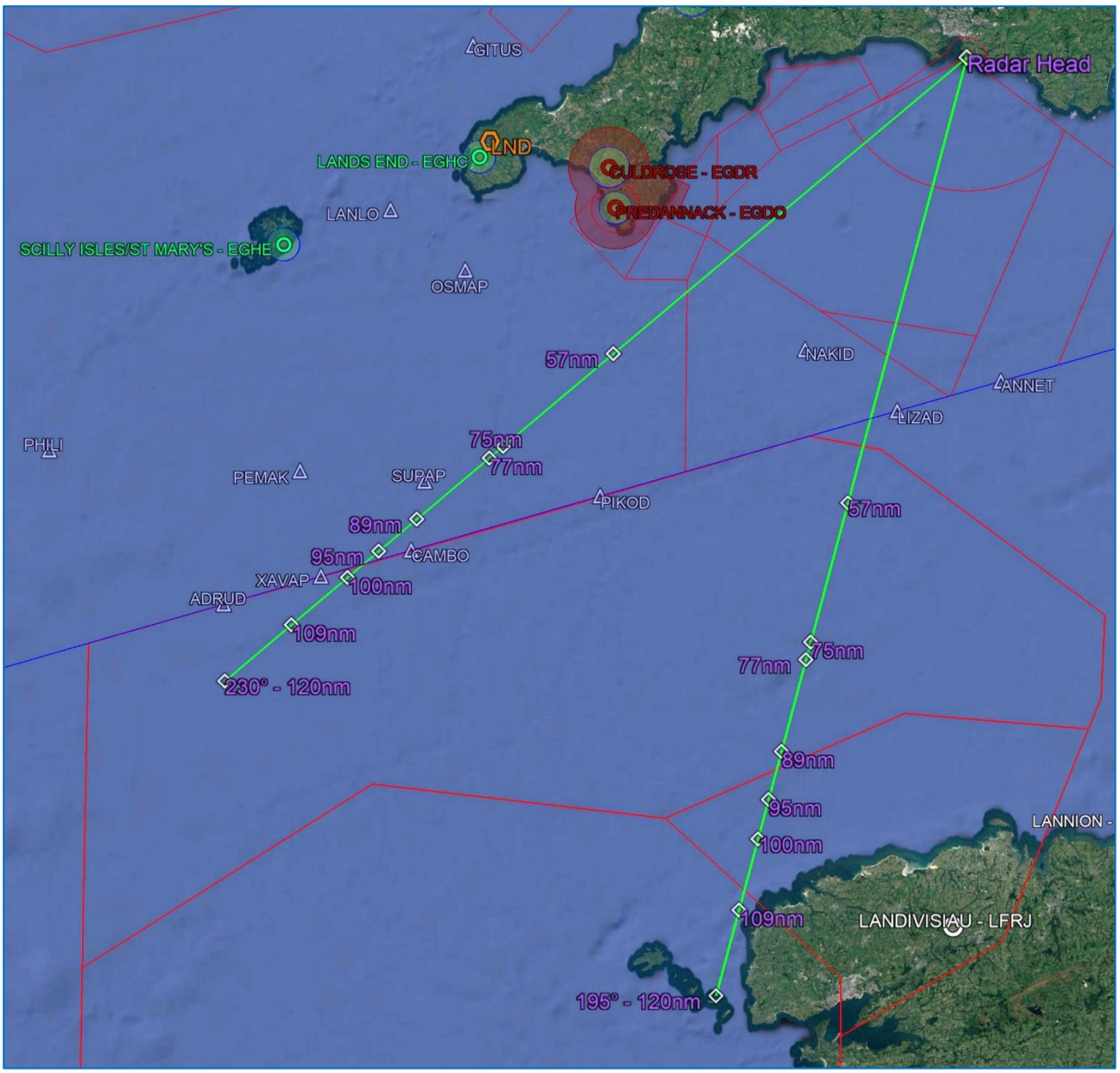


Chart 4 – 235º, 241º & 253º Radials