AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group

Civil Aviation Authority

ACN Reference:	Version:	Date:	Date of Original
2023-04-0070	1.0	**14/04/2023**	05/04/2023

RADAR CALIBRATION
DEADWATER FELL PSR/SSR

NDS

Subject to NOTAM: No

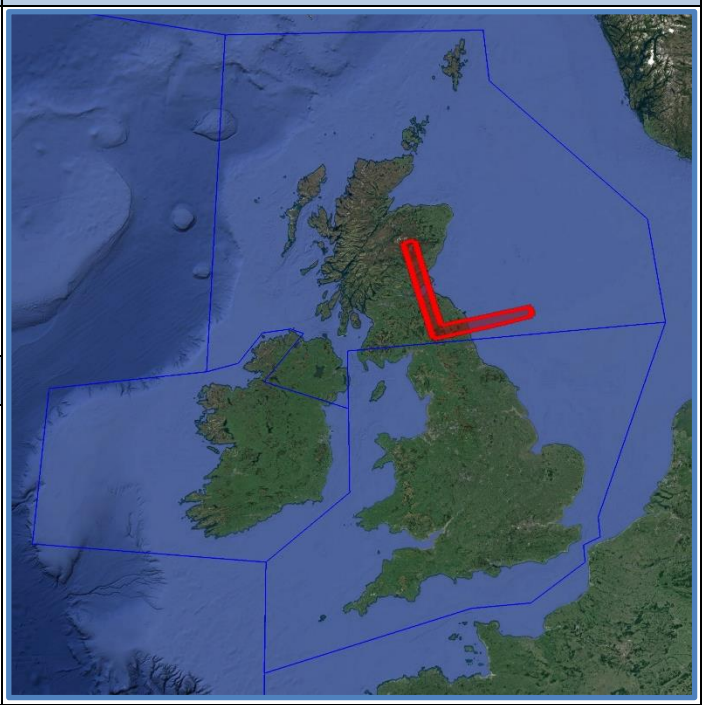
Date(s) of activity/Validity:	**Times - ALL TIMES UTC[1]**
14th April 2023 – 30th September 2025	09:00 – 21:00 *(08:00-20:00)*
Vertical Limits:	**Allocated Mode 3A (SSR):**
5,000ft – 20,000ft AMSL	0024
Aircraft Details:	**NDS Approved:**
Type: B200 Callsign: CLB*xxx*	**Yes** – *Subject to the conditions in Section 2*
Event Sponsor(s):	**Aircraft Operator(s):**
The Operations Officer Thales Flight Inspection Service Durham Tees Valley Airport Darlington DL2 1NL 01325 335346	The Operations Officer Thales Flight Inspection Service Durham Tees Valley Airport Darlington DL2 1NL 01325 335346

ATS Units/ Controlling Agencies:

Edinburgh	0131 348 4828
Leuchars	01334 848287
Newcastle	0191 214 8130
Prestwick ACC	01294 655300
Spadeadam	01697 749485
Swanwick Mil (78 Sqn) – North	01489 612943

Info: Aberdeen, CRC, Scottish Info

Geographical Limits:



Airspace Reservations:

EG D512 (All)	Otterburn	01912 394261
EG D513B	Duridge Bay	01489 612495
NSGA 01	Scotland	*See Para 29*
NSGA 01 A	Borders	*See Para 29*
TRAs	7A/B, 8B	01489 612495

Departure/Destination Aerodrome(s)	**ACN Issued by:**
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 ACN details the flight profiles required to conduct a routine calibration of the Deadwater Fell STAR NG Primary Search Radar (PSR) and the co-located RSM970 Secondary Surveillance Radar (SSR). The radar is located at 551602N 0023528W.

16. **This ACN replaces ACN 2021-11-0669.**

17. **Notification.** The sponsor is to notify the agencies listed on page one of this ACN at least 5 days prior to undertaking the task. In addition, the pilot or Radar Inspector is to contact the appropriate agencies at least 1 hour prior to departure to confirm final details and availability of an ATS. ATS Providers are requested to inform sectors/ATSUs in sectors that adjoin the chosen radial of the impending check and provide point outs where required.

18. **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*,). 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.

19. **Levels / Distances.** The following serials have been notified. The Pilot / Radar Inspector will notify ATS providers of the preferred sequence during the prenote. Some serials are flexible and ATS providers are able to make requests to the Pilot / Radar Inspector to change the sequence for ATM purposes. The Pilot / Radar Inspector will inform ATS providers of those serials that must run to a set sequence:

a. <u>STAR NG (PSR)</u>

i.	5,000ft AMSL	55nm – 20nm	Minimum of 3 runs
ii.	10,000ft AMSL	65nm – 30nm	Minimum of 3 runs
iii.	20,000ft AMSL	80nm – 47nm	Minimum of 2 runs
iv.	20,000ft AMSL	80nm – Radar OH	Minimum of 1 run

b. <u>RSM970 (SSR)</u>

i.	5,000ft AMSL	109nm – 79nm	Minimum of 3 runs each way[2]
ii.	10,000ft AMSL	109nm – 79nm	Minimum of 6 runs each way[3] [4]
iii.	20,000ft AMSL	109nm – Radar OH	Minimum of 1 run each way[5]

20. **RVSM Status.** The calibrator is Negative RVSM (RVN) for the entire duration of the flight.

21. **Radials.** The radials required by the aircraft are subject to wind speed and direction and may vary between subsequent days. Whilst the sponsor may opt for any radial, the expected radials are listed below

a. Primary: 346°T

b. Secondary: 080°T

[2] 3 runs required from 109nm to 79nm and 3 runs required from 79nm to 109nm.
[3] 6 runs required from 109nm to 79nm and 6 runs required from 79nm to 109nm.
[4] Mixture of Mode A/C and Mode S checks.
[5] 1 run required from

22. **Orbits.** No orbits have been notified.

23. **Controlling Agencies.** The controlling agencies will depend on the anticipated flight profiles and status of the various Danger Areas. The pilot is responsible for arranging the required ATS provision prior to departure. Based on the information above, the following controlling agencies *may* be involved:

a. Primary Radial – 346º.

i.	20,000ft AMSL	Mil ACC (N), Prestwick ACC
ii.	10,000ft AMSL	Spadeadam, Mil ACC (N), Prestwick ACC, Leuchars
iii.	5,000ft AMSL	Spadeadam, Edinburgh, Prestwick ACC, Leuchars

b. Secondary Radial – 080º.

i.	20,000ft AMSL	Mil ACC (N), Prestwick ACC
ii.	10,000ft AMSL	Spadeadam, Mil ACC (N), Prestwick ACC, Newcastle
iii.	5,000ft AMSL	Spadeadam, Mil ACC (N), Newcastle

24. **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.

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

a.	Leuchars	126.500 MHz	346º Radial
b.	Newcastle	124.380 MHz	080º Radials
c.	Spadeadam	128.725 MHz	
d.	Swanwick Mil – North	136.375 MHz	080º & 346º Radials

26. **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 Unit 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)

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

28. 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.

29. **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.

30. **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.*

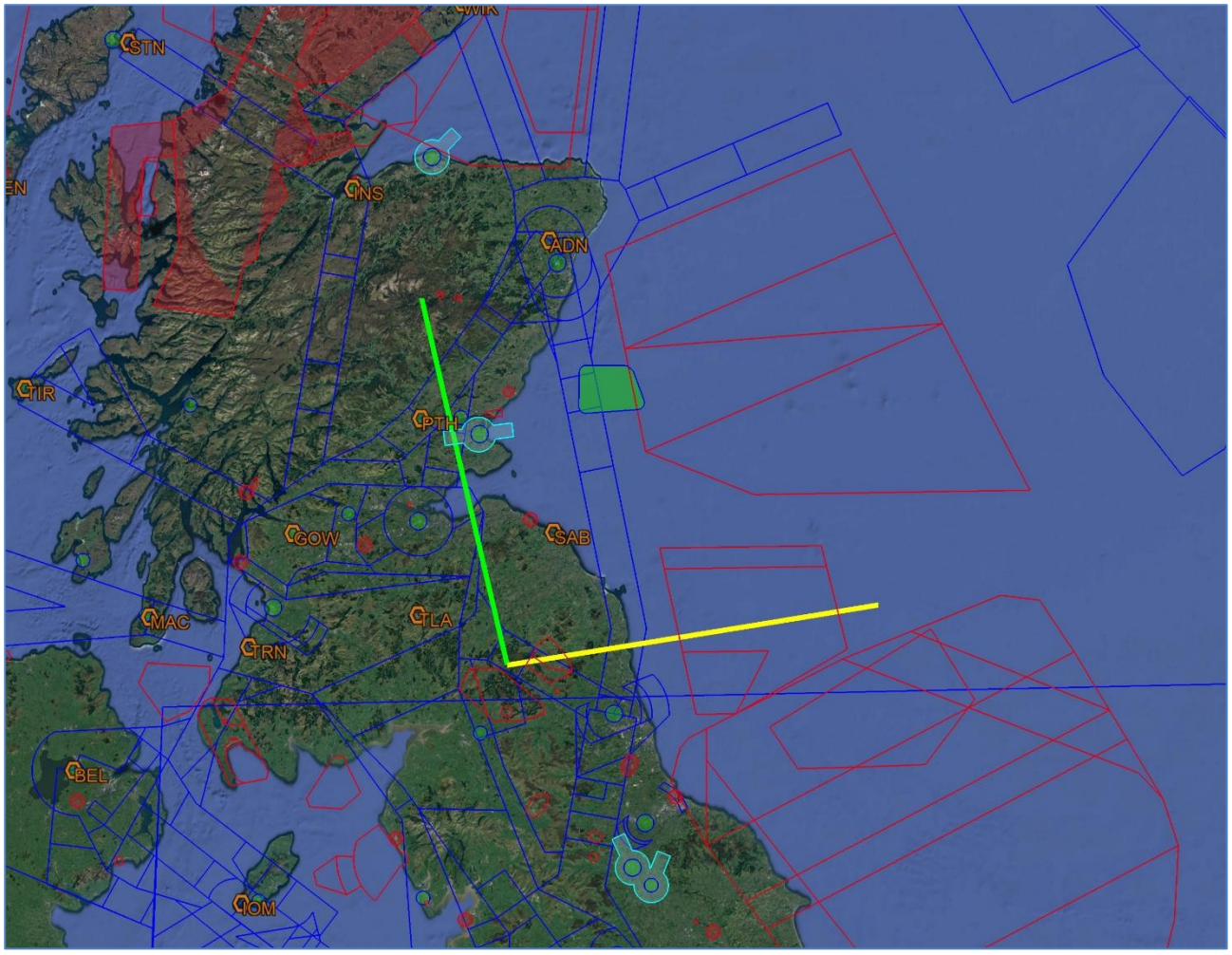
31. **Temporary Reserved Areas (TRA).** The sponsor is responsible for complying with the requirements for access to any TRA iaw the UK AIP – ENR 1.1 (Para 5.1.5).

SECTION 3

Area of Operation

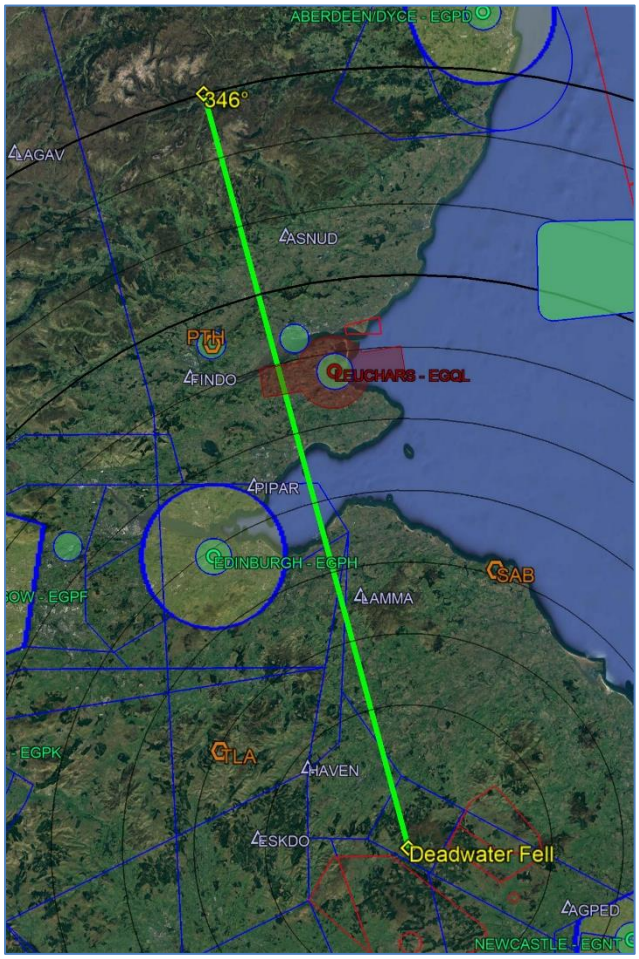
32. Charts highlighting the area of operation are shown below. These are for illustrative purposes only and not for operational planning.

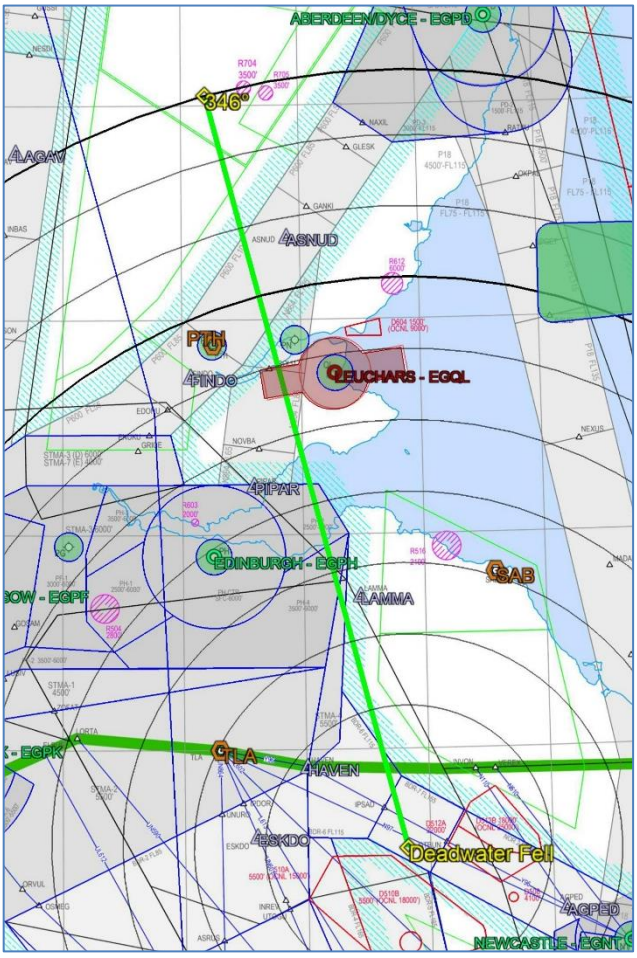
Chart 1 – Overview



Charts 2 & 3 – Primary Radial – 346ºT

Ghost range rings are 10nm intervals (starting at 20nm from the radar)
Solid black rings denote the maximum PSR (80nm) and SSR (109nm) ranges





Charts 4 & 5 – Secondary Radial – 080ºT

Ghost range rings are 10nm intervals (starting at 20nm from the radar)
Solid black rings denote the maximum PSR (80nm) and SSR (109nm) ranges