

AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group



ACN Reference:	Version:	Date:	Date of Original
2023-05-0217	2.0	09/06/2023	17/04/2023

RADAR CALIBRATION & COMMISSIONING LOSSIEMOUTH PSR

NDS

Subject to NOTAM: No

Date(s) of activity/Validity:	Times - ALL TIMES UTC ¹
10 th June 2023 – 30 th June 2025	08:00 – 20:00 (07:00 – 19:00)

Vertical Limits:	Allocated Mode 3A (SSR):
1,500ft AGL – 30,000ft AMSL RVN (See Section 2)	0024

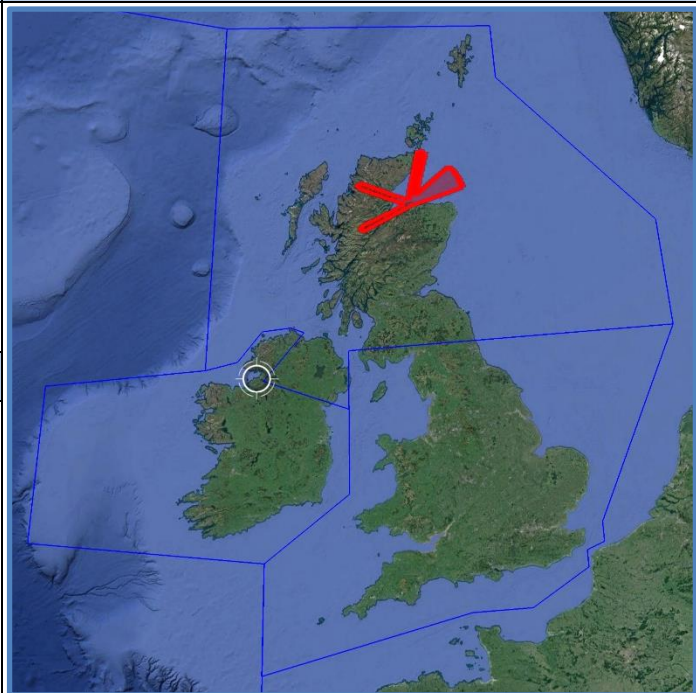
Aircraft Details:	NDS Approved:
Type: B200 Callsign: CLBxxx	Yes – Subject to the conditions in Section 2

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:	Geographical Limits:
Aberdeen Inverness 01667 464293 Lossiemouth 01343 816075 Prestwick ACC 01294 655300 Swanwick Mil (78 Sqn) – North 01489 612943	

Airspace Reservations:
EG D703 Tain 01862 894164 EG D712C&D Northern MDA 01489 612495 EG D809S Moray Firth 01489 612495 EG R610A The Highlands 01489 443100 NSGA 1 Scotland See Para 32

Departure/Destination Aerodrome(s)	ACN Issued by:
EGNV, EGQS	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 serials and requirements to conduct flight trials and the subsequent initial calibration of the new RAF Lossiemouth STAR NG Primary Radar. The radar is located within the aerodrome boundary of RAF Lossiemouth.

16. **This ACN is the second iteration and replaces ACN 2022-01-0032.**

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. Lossiemouth ATC are responsible for informing and coordinating with adjacent ATC Units on the proposed tactical plan.

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

21. **Levels.** The aircraft will be required to operate at the following vertical altitudes & heights. The D Value² 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. Engineering Flight Trial (If Required)

i. 30,000ft AMSL **RVN**

- | | |
|---------------------|------------------|
| 1. 60nm – 35nm | Minimum of 1 run |
| 2. 60nm to Radar OH | Minimum of 1 run |

ii. 10,000ft AMSL

- | | |
|---------------------|------------------|
| 1. 60nm – 35nm | Minimum of 1 run |
| 2. 60nm to Radar OH | Minimum of 1 run |

iii. 5,000ft AMSL

- | | |
|----------------|-------------------|
| 1. 60nm – 30nm | Minimum of 2 runs |
|----------------|-------------------|

iv. 3,000ft **AGL³**

- | | |
|----------------|-------------------|
| 1. 60nm – 30nm | Minimum of 2 runs |
|----------------|-------------------|

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

³ Lossiemouth Elevation 40ft.

a. Commissioning Flight

- i. 30,000ft AMSL **RVN**
 - 2. 60nm – 35nm Minimum of 1 run
 - 3. 60nm to Radar OH Minimum of 1 run
- ii. 10,000ft AMSL
 - 4. 60nm – 35nm Minimum of 10 runs
 - 5. 60nm to Radar OH Minimum of 2 runs
- iii. 5,000ft AMSL
 - 6. 60nm – 30nm Minimum of 6 runs
- iv. 3,000ft **AGL⁴**
 - 7. 60nm – 30nm Minimum of 6 runs
- v. 1,500ft **AGL**
 - i. 35nm – 05nm Minimum of 6 runs

22. **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: A radial between 046°T and 074°T
- b. Secondary: 014°T
- c. Tertiary: 244°T or 292°T (FL50 and above only)

23. The number of runs will vary dependent on the success other profiles. As a guide, it is anticipated that between 2 and 6 runs will be required at each level. The maximum range from the radar overhead that a run will commence is 60nm, with runs terminating prior to, at or -2nm past the radar overhead.

24. **Orbits.** No orbits are required to be flown.

25. **Air Traffic Service (ATS) Provision – 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.

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

- a. Aberdeen 119.055 MHz
- b. Inverness 122.605 MHz
- c. Lossiemouth 119.575 MHz
- d. Swanwick Mil – North 136.375 MHz (ICF)

⁴ Lossiemouth Elevation 40ft.

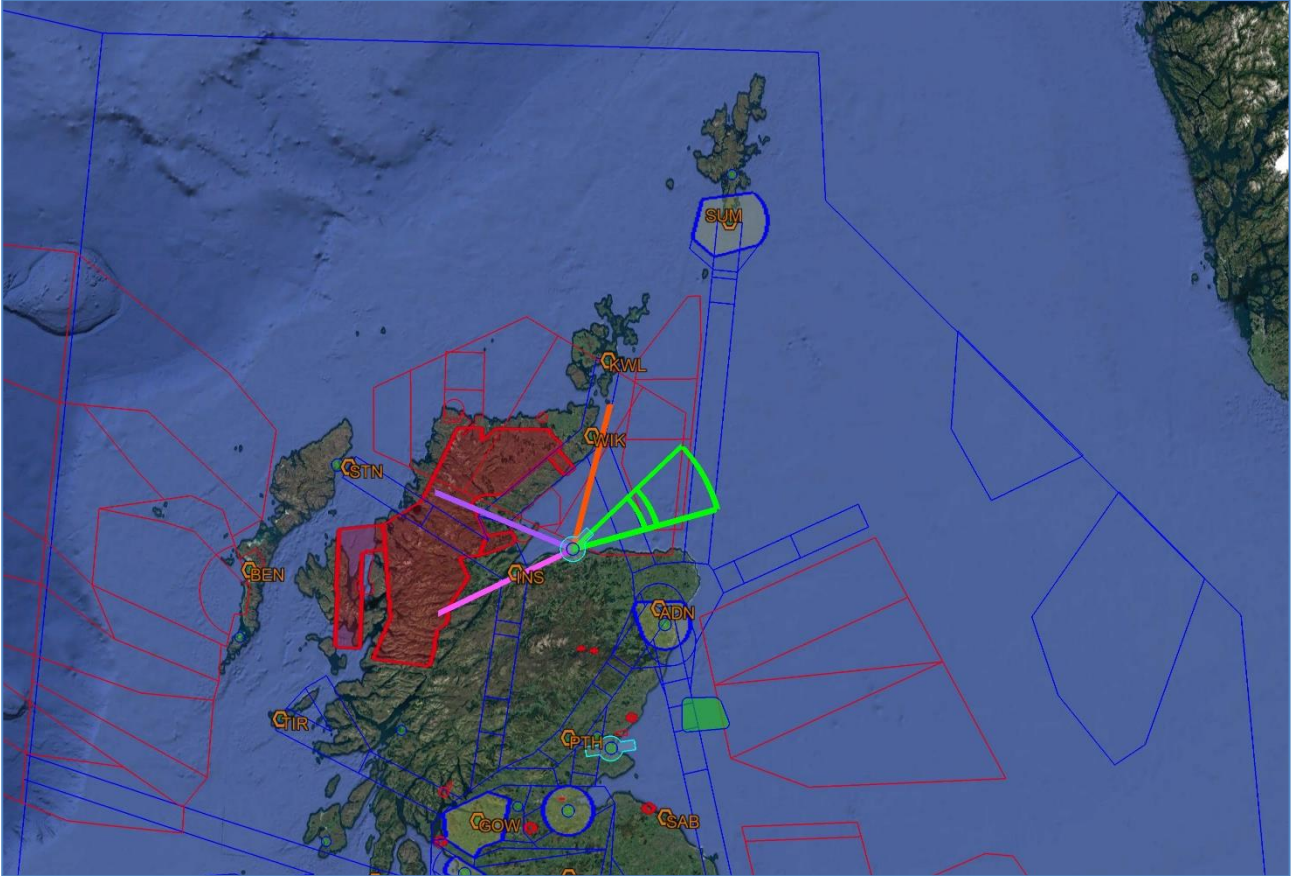
27. Availability of an ATS from a unit is not guaranteed, is subject to controller availability, unit workload and possible reduced hours of operations. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.1, AD2 or UK Military AIP, shall be notified via NOTAM.
28. **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)
29. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.2, shall be notified via NOTAM.
30. 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.
31. **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.
32. **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.*
33. **EG R610A (The Highlands).** The airspace of EG R610 is not routinely activated by the MOD and requires the CAA to issue a new Statutory Instrument (The Air Navigation (Restriction of Flying) (Scottish Highlands) Regulations), at least 2 weeks prior to any planned periods of use. If such approval is granted, the Military Airspace Management Cell (Low Flying) will issue J Series NOTAMs notifying the activation times and will manage all airspace bookings.

SECTION 3

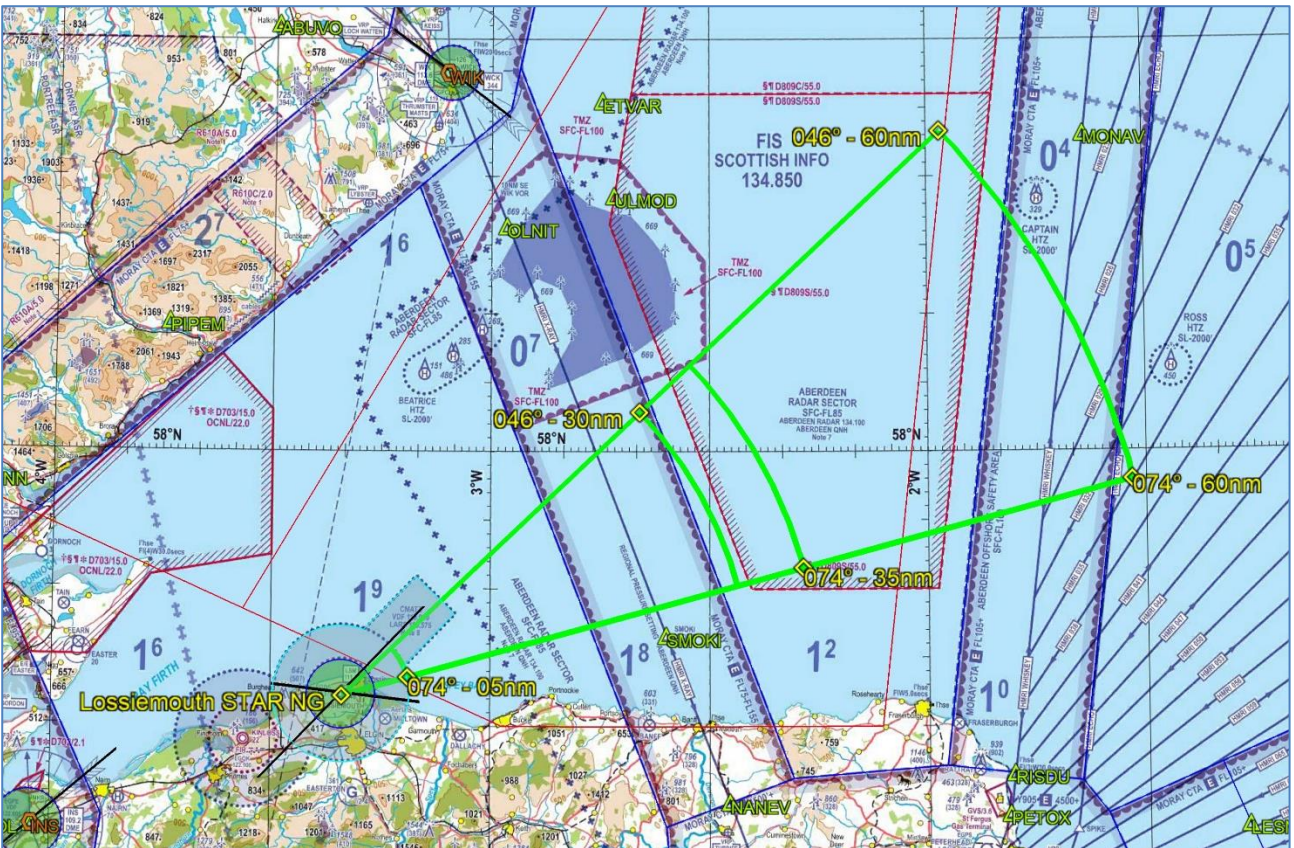
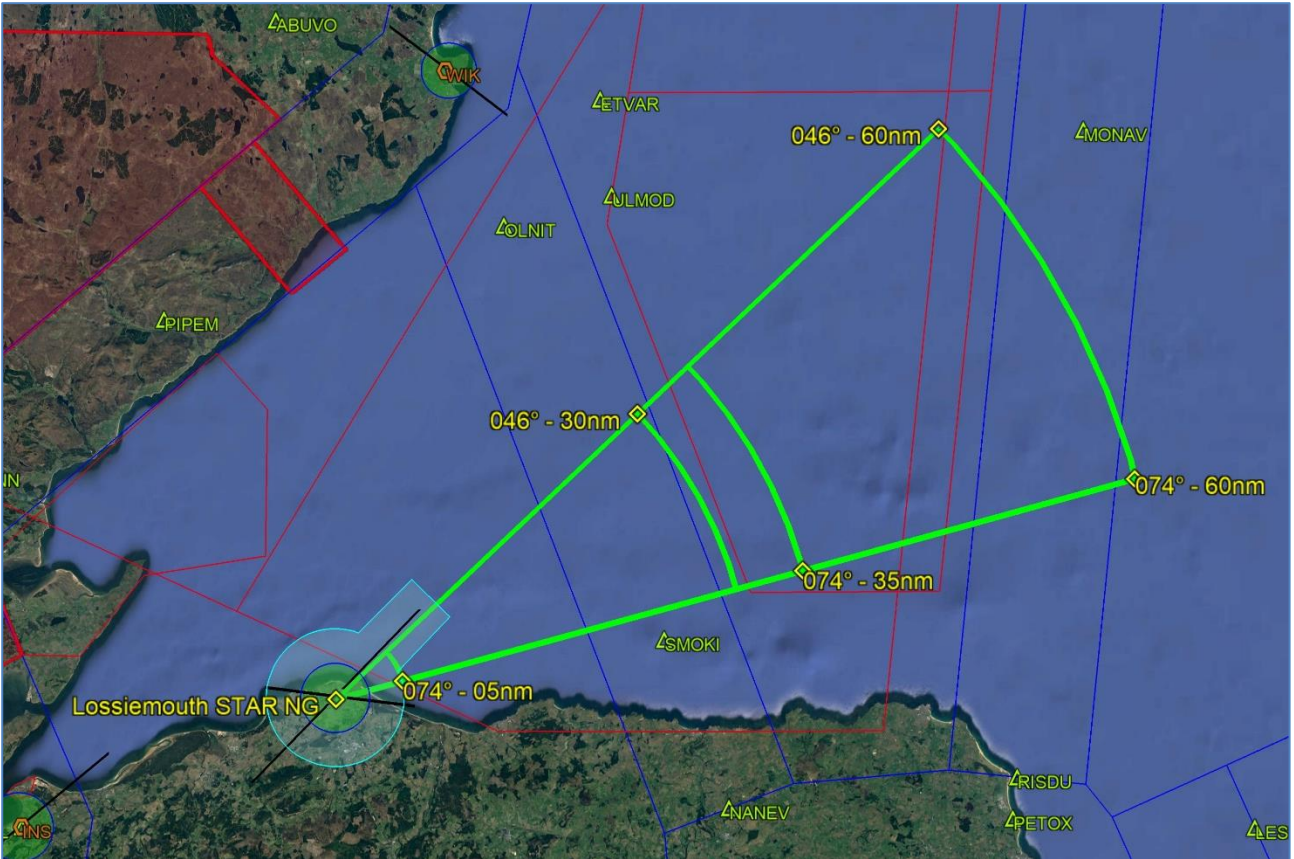
Area of Operation

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

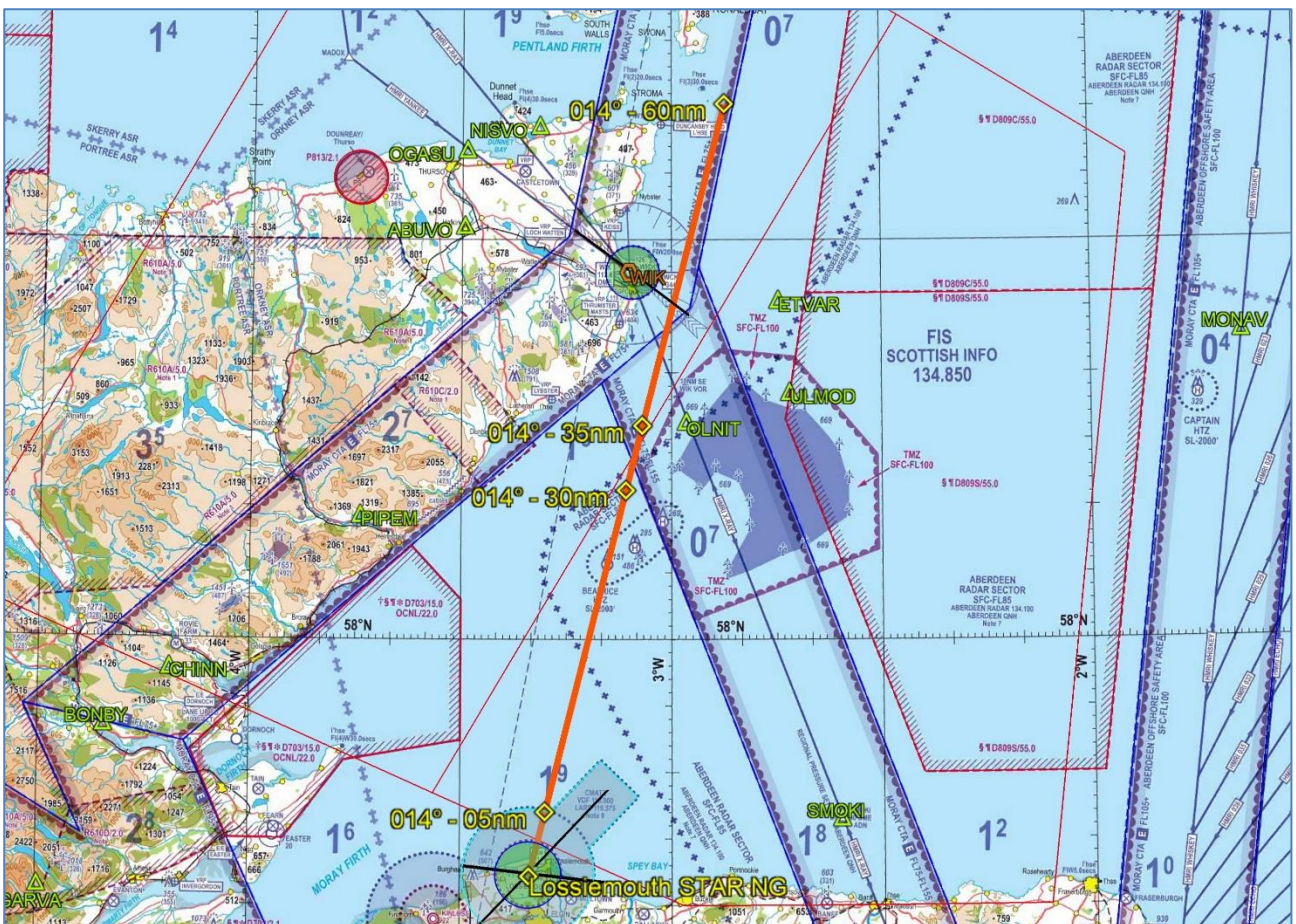
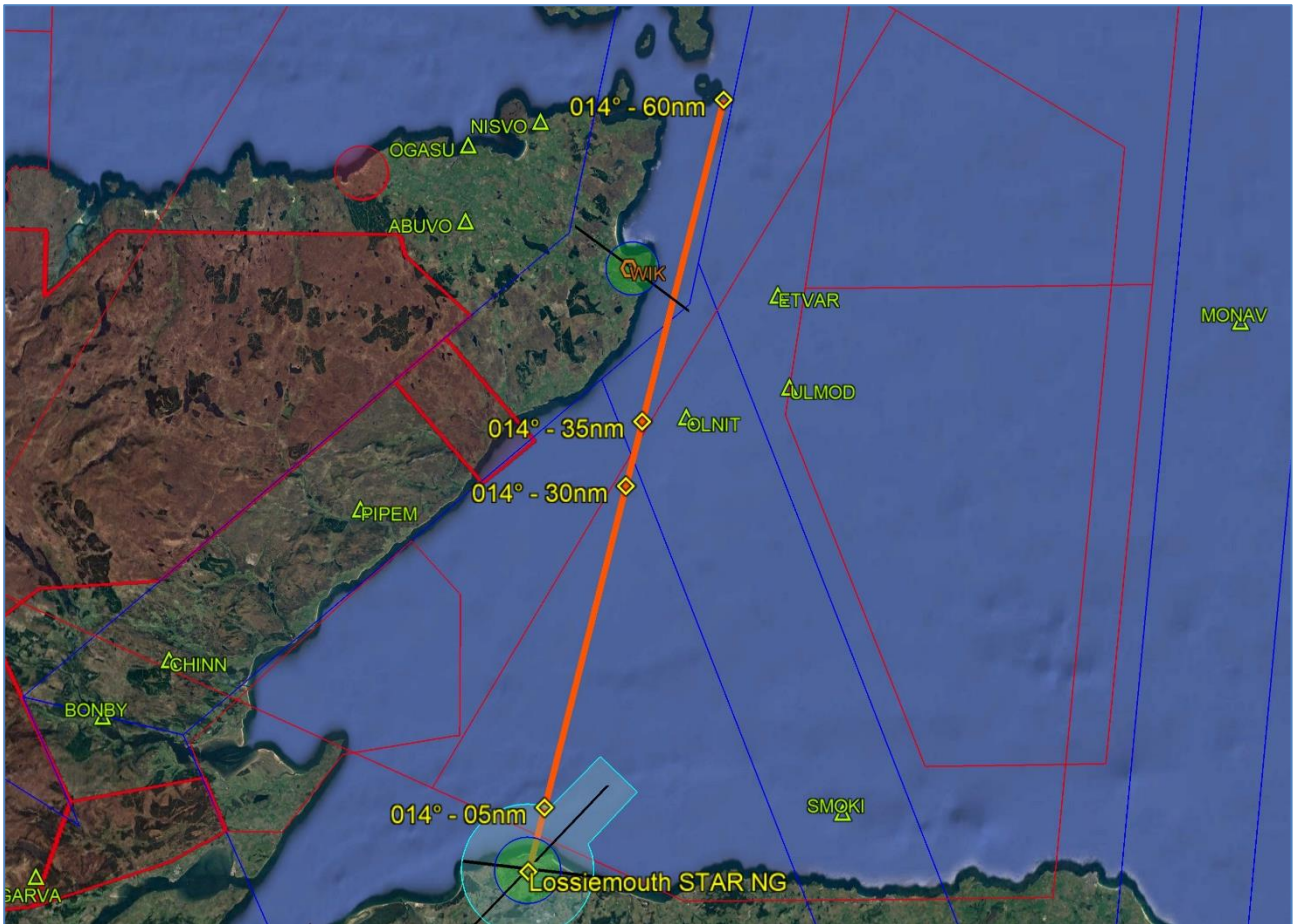
Chart 1 – Overview



Charts 2 & 3 – Primary Radial Options



Charts 4 & 5 – Secondary Radial Option



Charts 6 & 7 – Tertiary Radial Options

