

AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group



ACN Reference:	Version:	Date:	Date of Original
2021-02-0027	1.0	25/02/2021	07/01/2021

RADAR FLIGHT TRIAL & COMMISSIONING ODIHAM

NDS

Subject to NOTAM: No	
Date(s) of activity/Validity:	Times (ALL TIMES UTC)
15 th March 2021 – 15 th February 2022	Daytime – Subject to Agreed Times
Vertical Limits:	Allocated Mode 3A (SSR):
1,500ft – 32,000ft AMSL (<i>See Section 2</i>)	Tactically Issued by ATC
Aircraft Details:	NDS Approved:
Type: B200 Callsign: CLB xxx (<i>Suffix TBN</i>)	Yes
Event Sponsor(s):	Aircraft Operator(s):
John Hogan Thales Flight Inspection Service Hangar 3 Teesside International Airport Darlington DL2 1NL 07976 078553 johng.hogan@uk.thalesgroup.com	The Operations Officer Thales Flight Inspection Service Hangar 3 Teesside International Airport Darlington DL2 1NL 01325 335346
ATS Units/ Controlling Agencies:	Geographical Limits:
Benson 01491 827017 Boscombe Down 01980 663246 Bournemouth 01202 364150 Brize Norton 01993 897878 Farnborough 01252 526017 Middle Wallop 01264 784380 Odiham 01256 367276 Plymouth(Mil) 01752 557809 Southampton 02380 625875 Swanwick LAC – GS West 01489 612423 Swanwick LTC – GS Airports 02380 401106 Swanwick(Mil) – West 01489 612417	
Airspace Reservations:	
See Section 2	
Departure/Destination Aerodrome(s)	ACN Issued by:
EGNV, EGVO, EGVN	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 serials and requirements to conduct flight trials and the subsequent initial calibration of the new RAF Odiham STAR NG Primary Radar. The radar is located within the aerodrome boundary of RAF Odiham.

16. **Notification.** The sponsor is required to notify the appropriate agencies, at least 24 hours prior to departure, of their intent to conduct this check and the planned order of flight. This is vital for ATC planning purposes, specifically with regards to the orbit profile. At least 1 hour prior to departure, the sponsor is to contact LTC Swanwick (GS Airports) to confirm requirements and feasibility for access to CAS. **In addition, should this activity take place between the hours of 18:00 to 08:00, or at weekends, Swanwick(Mil) will require at least 14 days notice.**

17. **Dates.** Although this ACN is valid for 10 months, the anticipated commencement dates for each part of the check are as follows:

- a. Engineering Flight Trial:
 - i. Primary 15th & 16th March 2021
 - ii. Contingency 17th & 18th March 2021
- b. Commissioning Calibration
 - i. Primary 22nd – 25th March 2021
 - ii. Contingency 30th March – 03rd April 2021

18. **Priority.** This flight has been granted Non-Deviating Status (NDS), (*CAP 493 – Section 1, Ch4, Para 17 refers*), subject to the following caveats:

- a. NDS applies whilst the aircraft is established on a measured run.
- b. At all other times, the aircraft is categorised as CAT Z, (*CAP 493 – Section 1, Ch4, Para 10c refers*), and attracts no priority over standard traffic. 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.** The aircraft will be required to operate at the following vertical altitudes & heights. The D Value 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. The sponsor is responsible for this conversion and confirm the exact requirement with the controlling agency prior to each run:

- a. 30,000ft AMSL
- b. 20,000ft AMSL
- c. 10,000ft AMSL
- d. 5,000ft AMSL
- e. 3,000ft AGL Odiham Elevation – 405ft
- f. 1,500ft AGL Odiham Elevation – 405ft

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: 338°T and 280°T
- b. Secondary: 246°T and 332°T

22. For this activity to take place during the day, only the radials listed at Para 21a & b will be permitted.

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.** A minimum of one orbit will need to be flown at 5,000ft AMSL at a range of 15nm from the radar head. The orbit will be flown anti-clockwise and the aircraft will be positioned to start the profile at Midhurst VOR (MID). In order to fit in with other traffic, the aircraft may be required to hold in the vicinity of Goodwood (GWC) – the actual position will be notified by.

25. **Controlling Agencies.** The controlling agencies will depend on the anticipated flight profiles. Based on the information above, the following primary controlling agencies will be involved:

- a. 338°T
 - i. 1,500ft / 3,000ft AGL Odiham, Benson, Oxford , Brize
 - ii. 5,000ft AMSL Farnborough, LTC Swanwick, Benson, Brize
 - iii. 10,000 AMSL LTC Swanwick
 - iv. 20,000ft / 30,000ft AMSL Swanwick(Mil) West
- b. 280°T
 - i. 1,500ft / 3,000ft AGL Odiham, Boscombe Down, Bristol
 - ii. 5,000ft AMSL Farnborough, Boscombe Down, Bristol
 - iii. 10,000 AMSL LTC Swanwick
 - iv. 20,000ft / 30,000ft AMSL Swanwick(Mil) West
- c. 246°T
 - i. 1,500ft / 3,000ft AGL Odiham, Middle Wallop, Boscombe Down
 - ii. 5,000ft AMSL Farnborough, Boscombe Down
 - iii. 10,000 AMSL LTC Swanwick
 - iv. 20,000ft / 30,000ft AMSL Swanwick(Mil) West
- d. 332°T
 - i. 1,500ft / 3,000ft AGL Odiham, Benson, Brize
 - ii. 5,000ft AMSL Farnborough, Brize
 - iii. 10,000 AMSL LTC Swanwick
 - iv. 20,000ft / 30,000ft AMSL Swanwick(Mil) West

26. **Airspace Reservations.** The following airspace reservations have been identified within the potential operating area:

a. EG D015	Bovington	01929 403765
b. EG D031	Portland	01752 557752 / 557550
c. EG D036, 037, 039, 040	Portsmouth	01752 557752 / 557550
d. EG D026	Lulworth	01929 404859
e. EG D120	Boscombe Down	01980 663246
f. EG D122A-C	Wessex Complex	01980 663246
g. EG D123	Imber	01980 674710 / 674730
h. EG D124	Lavington	01980 674710 / 674730
i. EG D125	Larkhill	01980 674710 / 674730
j. EG D126	Bulford	01980 674710 / 674730
k. EG D127	Porton	01980 663246
l. EG D128	Everleigh	01980 674710 / 674730
m. EG D129	Western-on-the-Green	01993 8951473
n. EG D130	Longmoor	01420 483405
o. EG D132	Ash Ranges	01483 798304
p. EG D133A & B	Pirbright	01483 798304
q. EG D157	Hyde Park	SI 1300/2017 Refers
r. EG D158	City of London	SI 2092/2004 Refers
s. EG D159	Isle of Dogs	SI 2091/2004 Refers
t. EG D206	Cardington	01234 744657
u. EG R101	Aldermaston	SI 1003/2016 Refers
v. EG R104	Burghfield	SI 1003/2016 Refers
w. EG R105	Highgrove House	SI 907/2018 Refers

27. **Temporary Danger Areas (TDAs).** Whilst a TDA may be established at any time, there is one complex that will potentially be in operation during the period of this flight calibration & certification check. EG D096A & B has been established in the Channel adjoining the eastern side of EG D040. Due to the activity taking place within EG D096 A & B, should this danger area be activated, access will be refused. The sponsor is to check the AIS website (<http://www.nats-uk.ead-it.com/public/index.php.html>) for the most up to date information on TDA's. Activation times of these areas may be stipulated in the briefing sheet or notified via NOTAM.

Notes:

- For Plymouth(Mil) controlled Danger Areas, it is strongly suggested arrange access via the controlling authority on 01752 557752 before Thursday of the proceeding week. For access inside this timeframe, please contact 01752 557550.
- For access to EG R157, EG R158 and EG R159, the sponsors attention is drawn to the stated Statutory Instruments and access request process laid down in the UK AIP ENR 1.1, Para 4.1.6, which may take up to 28 days to process.
- For access to EG R101 and EG R104, separate approval is required under the Air Navigation (Restriction of Flying) (Nuclear installations) Regulations 2016. This can be arranged via initial email to AROps@caa.co.uk quoting this ACN and requesting a nuclear installations exemption. Please note that applications may take up to 28 days to process.
- For access to EG R105, separate approval is required under the Air Navigation (Restriction of Flying) (Highgrove House) (restricted Area EG R105) Regulations 2018, from the Gloucestershire Constabulary Royalty Household Protection Group (01452 907146).

SECTION 3

Area of Operation

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

Chart 1 – Overview
Primary Radials – Purple – Secondary Radials – Yellow
15nm Orbit and 60nm Ring shown in red



Chart 2 – 15nm Orbit
5,000ft AMSL

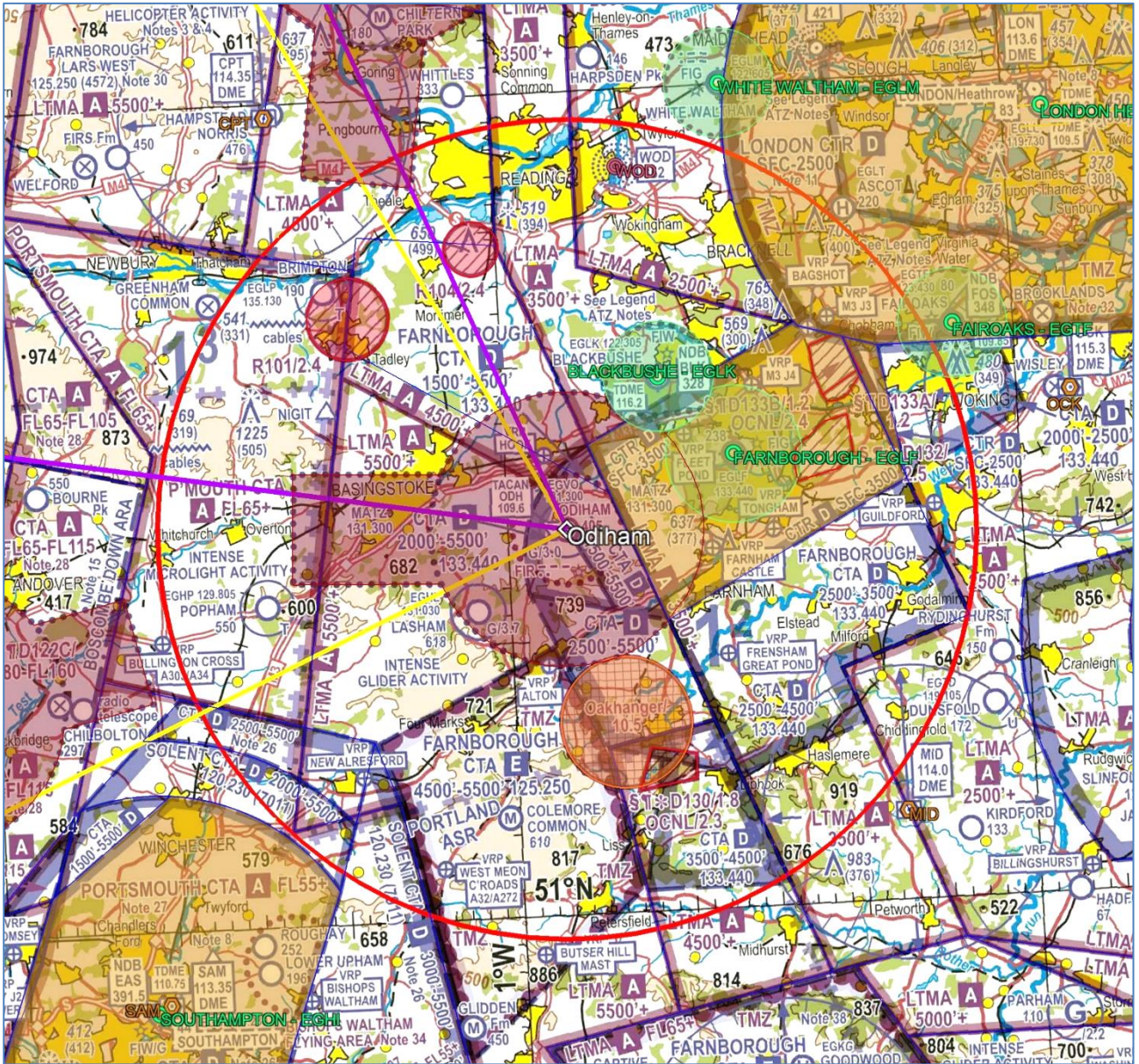


Chart 3 – Primary Radial – 338°T
Various Heights/Altitudes – See Para 18

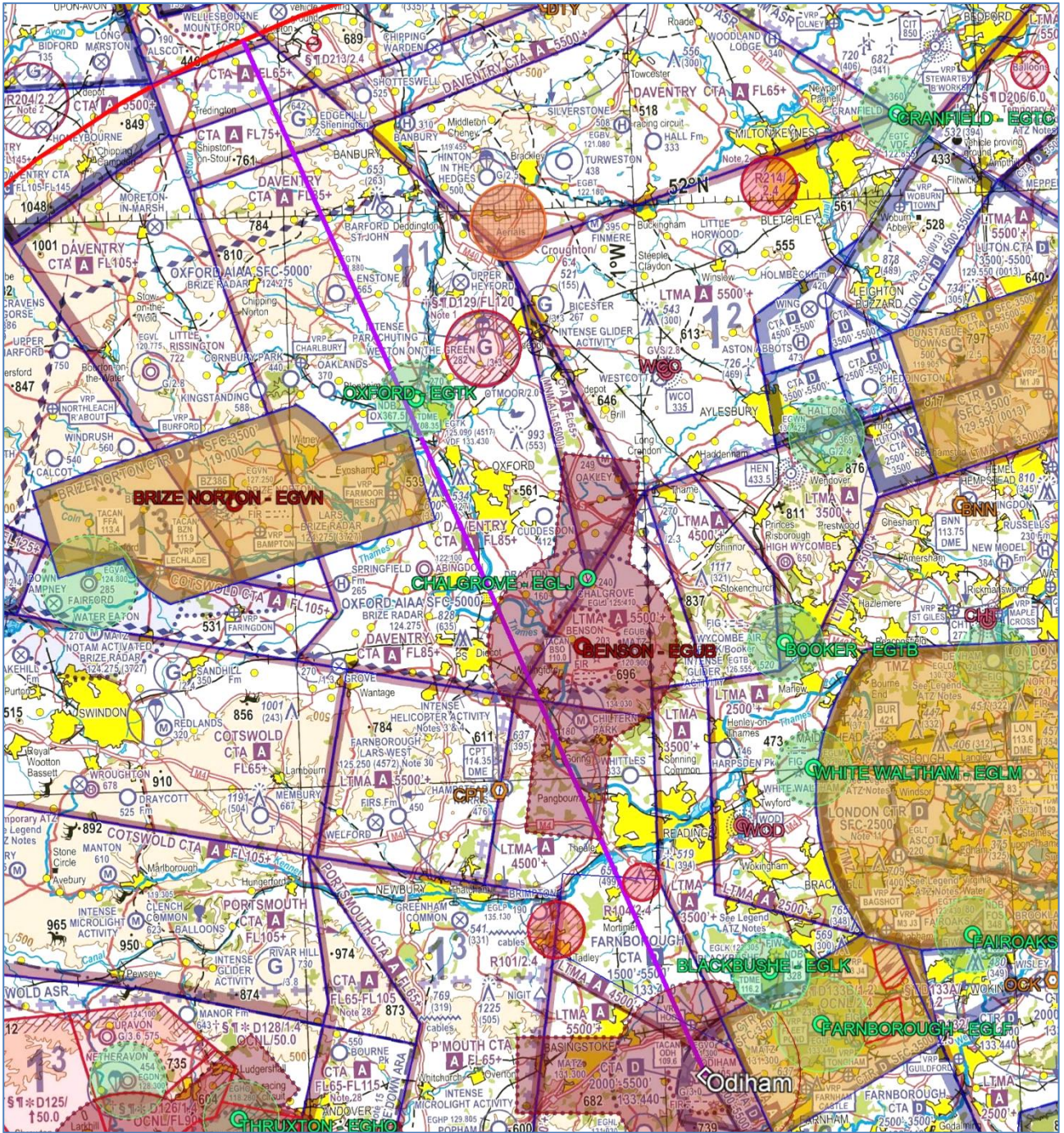


Chart 3 – Primary Radial – 280°T
Various Heights/Altitudes – See Para 18

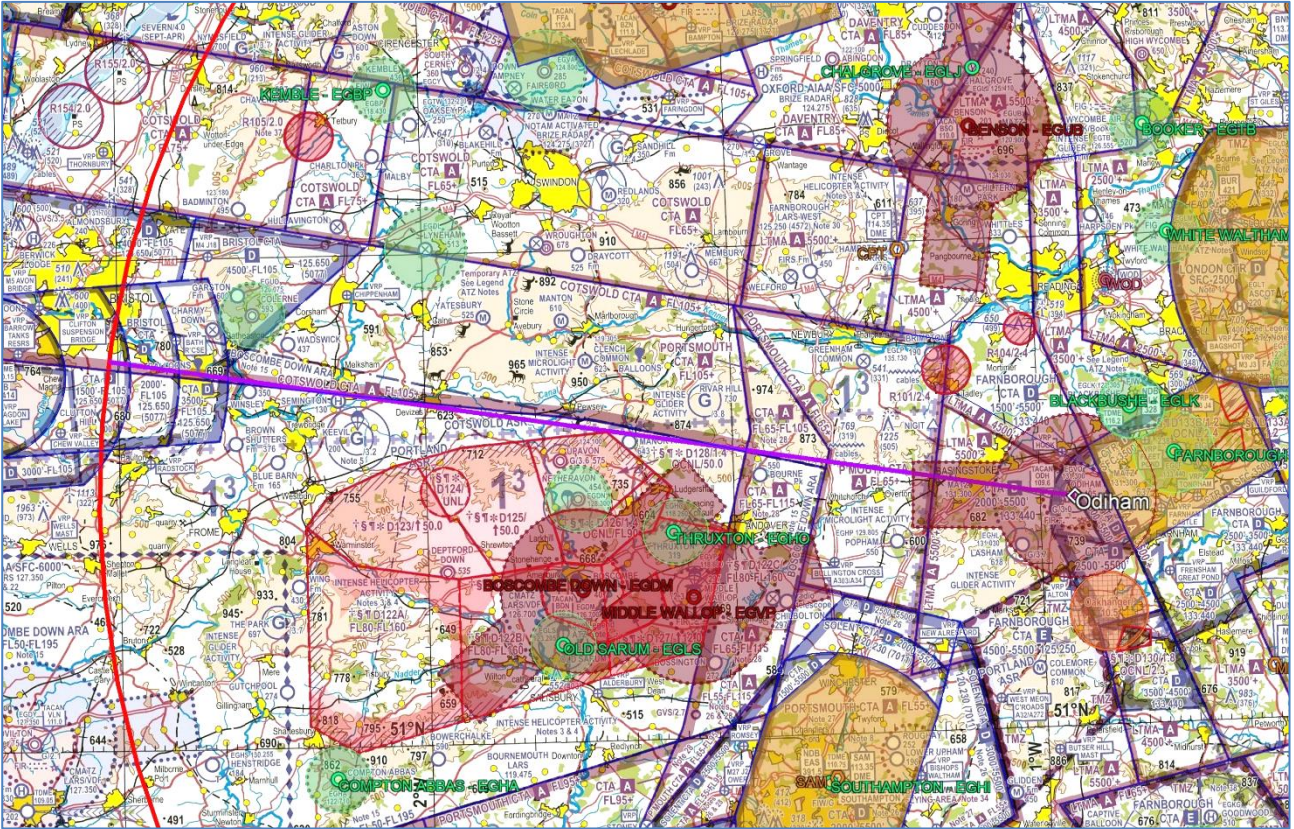
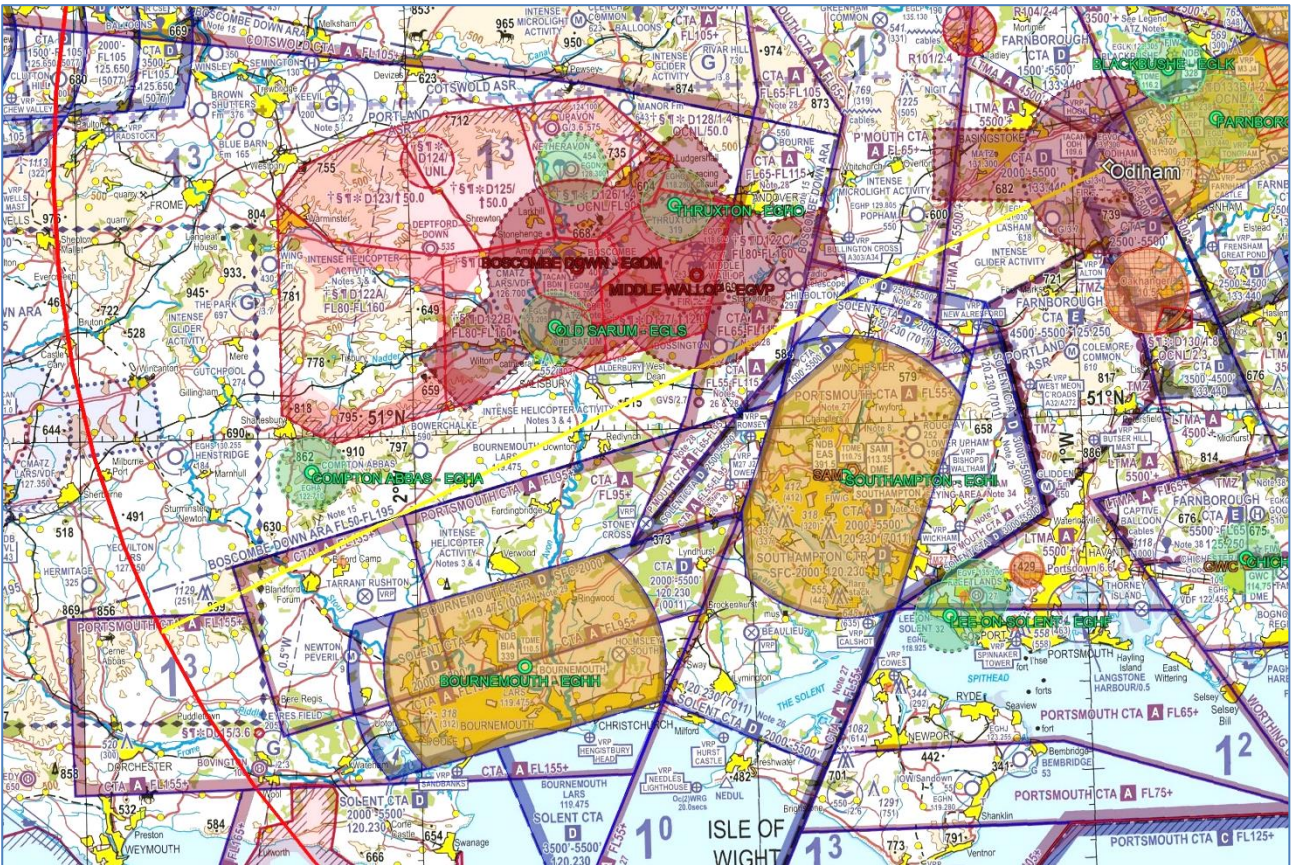
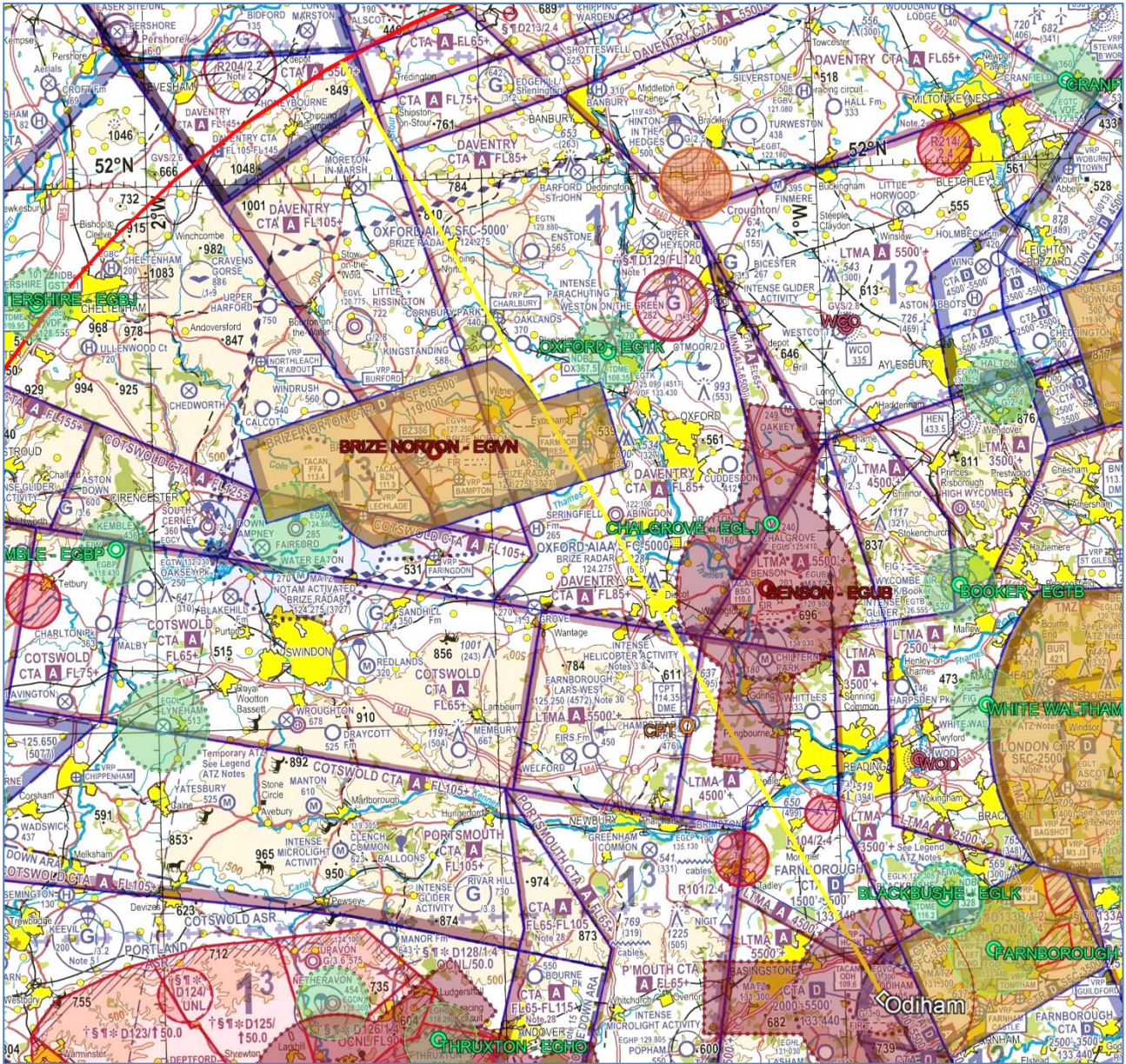


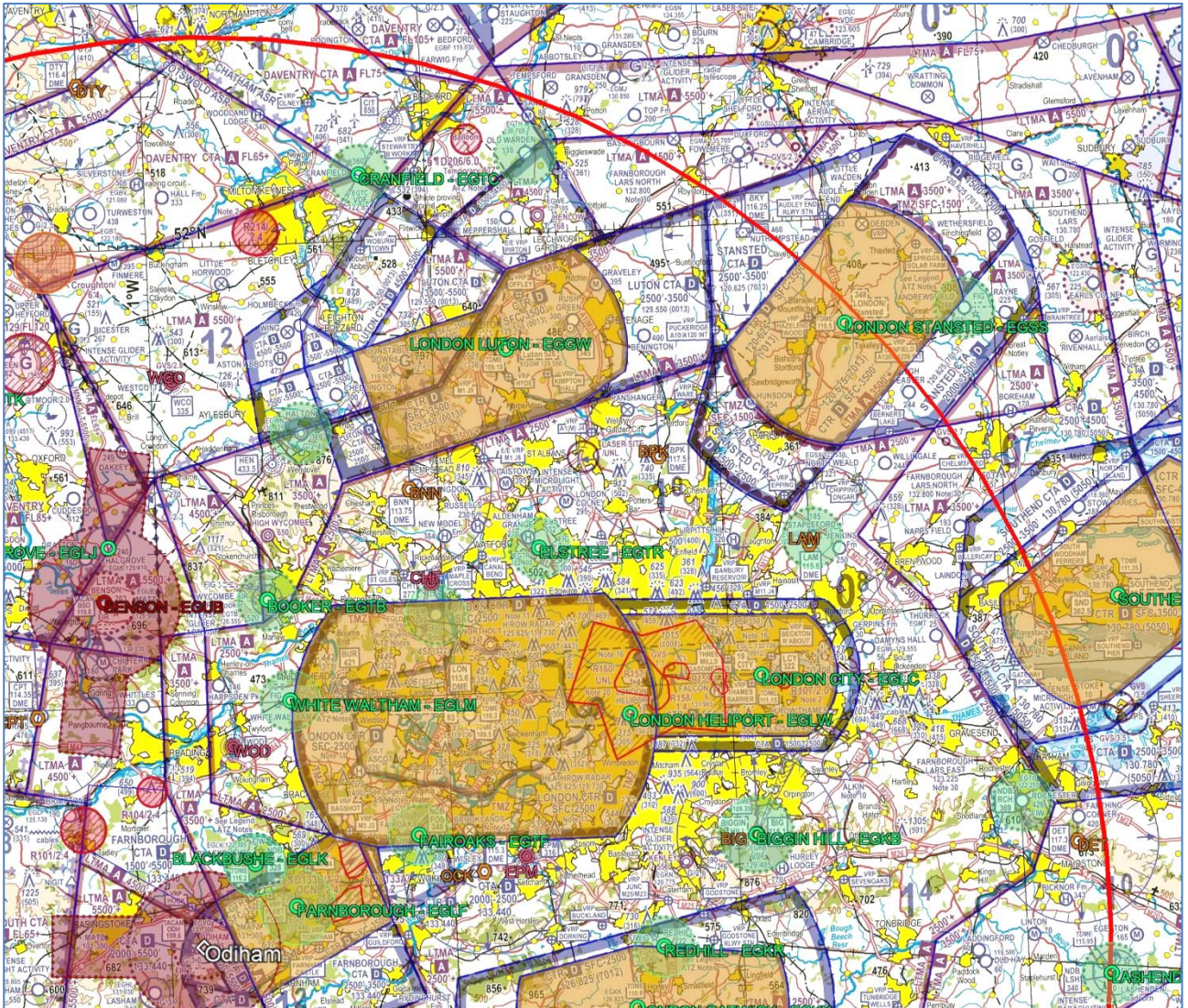
Chart 4 – Secondary Radial – 246°T
Various Heights/Altitudes – See Para 18



**Chart 4 – Secondary Radial – 332°T
Various Heights/Altitudes – See Para 18**



**Chart 5 – North East Quadrant (For Info)
Various Heights/Altitudes – See Para 18**



**Chart 5 – South East Quadrant (For Info)
Various Heights/Altitudes – See Para 18**

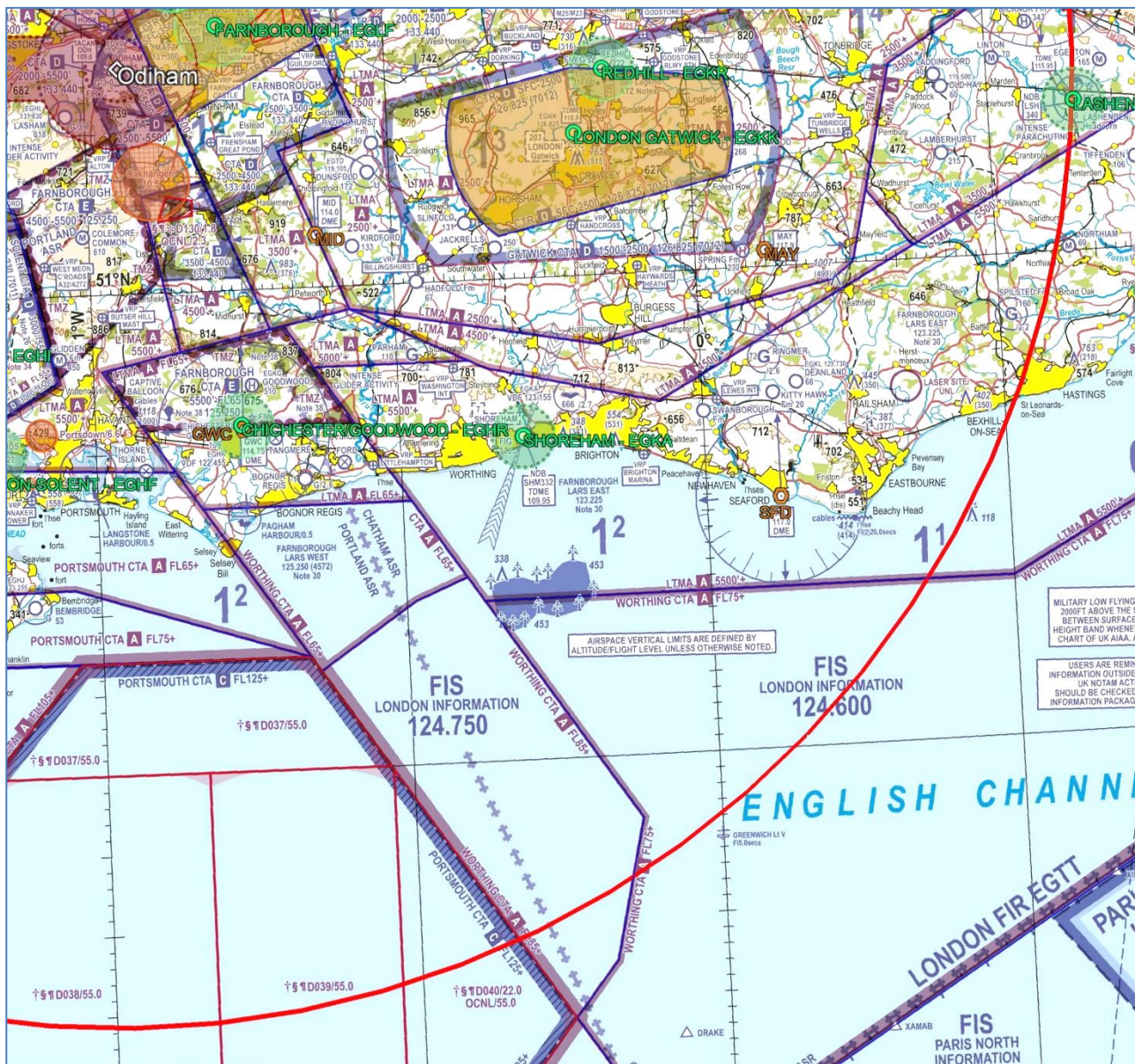
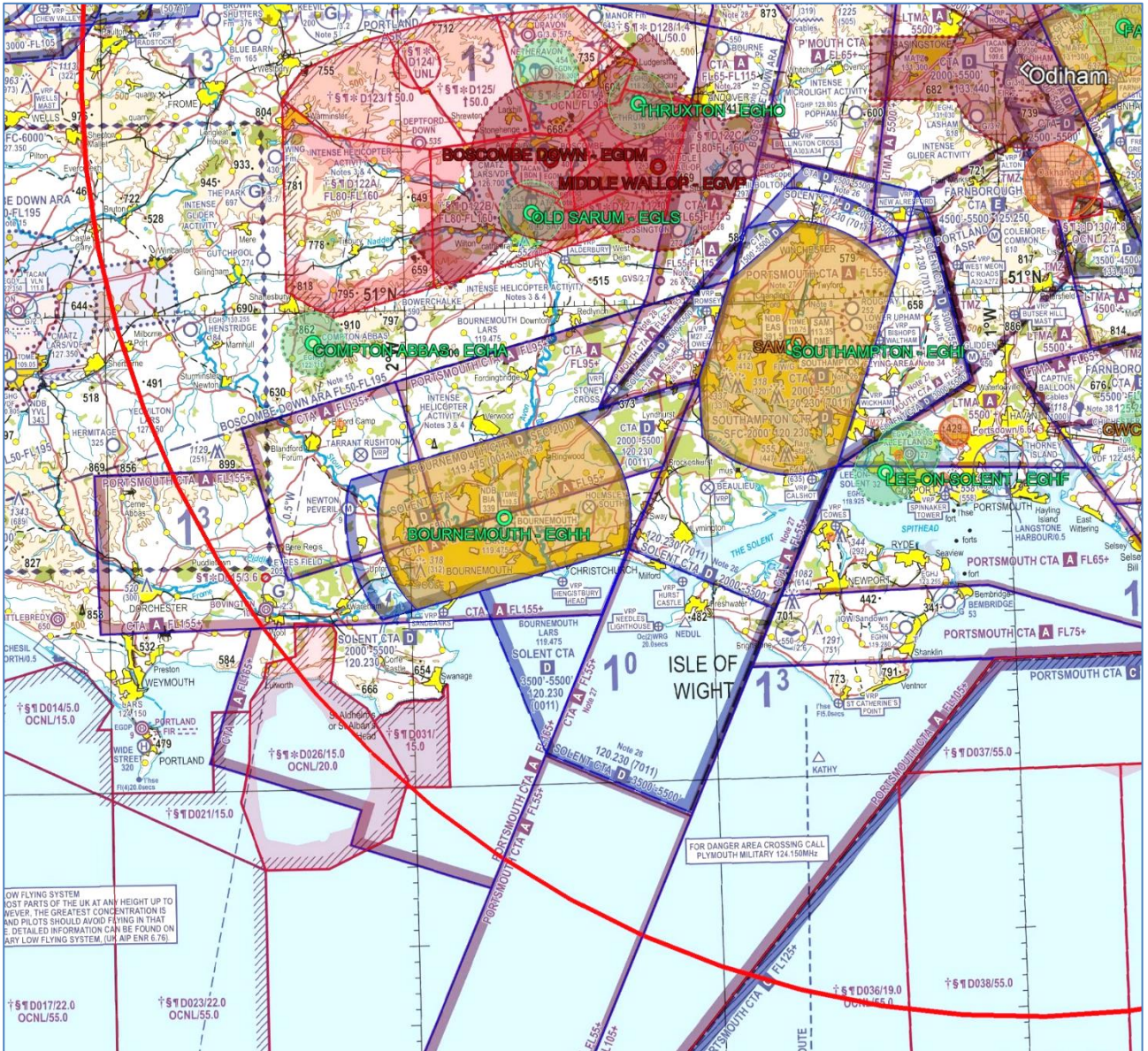


Chart 5 – South West Quadrant (For Info)
Various Heights/Altitudes – See Para 18



**Chart 5 – North West Quadrant (For Info)
Various Heights/Altitudes – See Para 18**

