



ACP-2020-100 Webex

SkyGuardian Operations in UK Airspace Summer 2021

██████████ (Air Cap & Delivery)
██████████ (UAS CDC)

9 February 2021

ACP-2020-100 – SkyGuardian TDAs

Agenda:

- Introductions & Webex protocols
- SkyGuardian v Protector (different ACPs)
- ACP process for a TDA
- Brief on TDA requirement, design and operation
- TDA Management
- Draft flying schedule
- Questions received to date

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Introductions

Hosts

- [REDACTED] (UAS CDC Airspace Manager)
- [REDACTED] (Air Capability)

Webex protocols:

- Please stay on mute unless you are invited to unmute
- Questions
- All information to be shared is within the public domain
- A summary of the Webex will be posted on the ACP portal with a link sent to all stakeholders
- Feedback

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This ACP is not to be confused with ACP-2019-18, which is Protector operations from RAF Waddington from 2023

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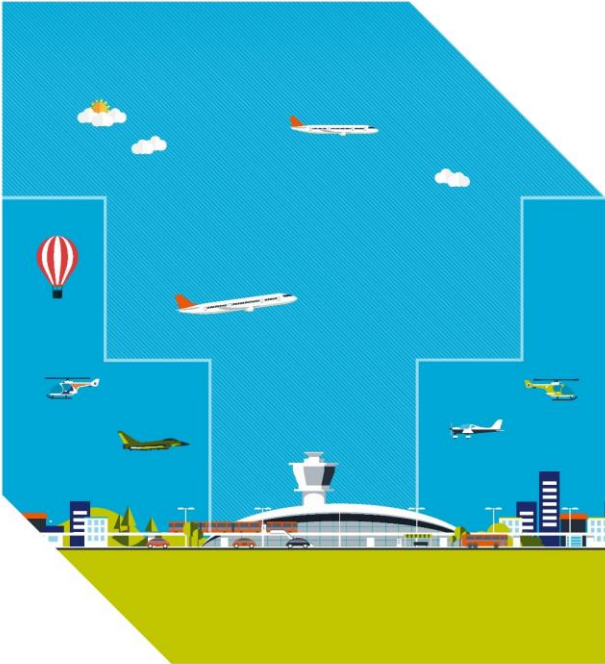

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Airspace Design:
Guidance on the regulatory process
for changing airspace design including
community engagement requirements

CAP 1616



Change categories
Glossary
Other categories
A. Self-issues
B. Environment
C. Consultation
D. Design
E. Options
F. Submission
G. Decision
H. PIR
A. Airspace Design



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ACP progress so far:

- Statement of Need posted on the ACP Portal
- Assessment Meeting completed
- CAA directed that the means by which to provide segregated airspace iaw its policy (CAP 722) is via implementation of Temporary Danger Areas (TDAs)
- TDA designs presented in engagement letter dated 29 Jan 2021

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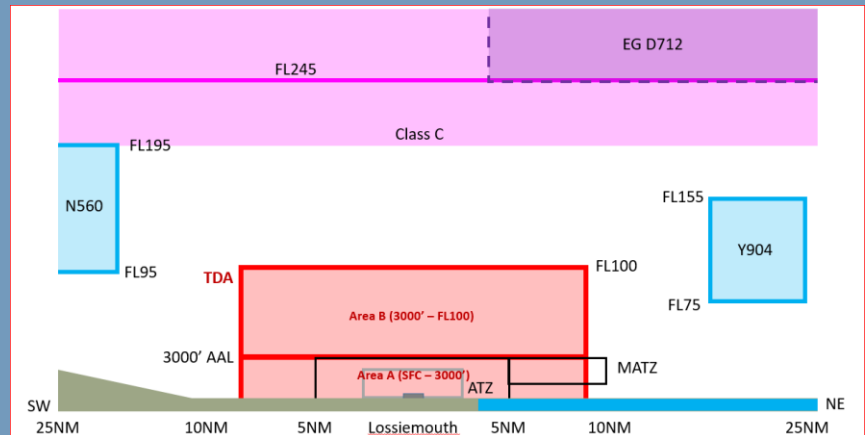
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Brief on TDA requirement, design and operation

- Background to TDA Requirement:
 - CAP 722 requirements for BVLOS flight without Detect and Avoid capability (DAA)
 - SkyGuardian's DAA
 - CAA approvals

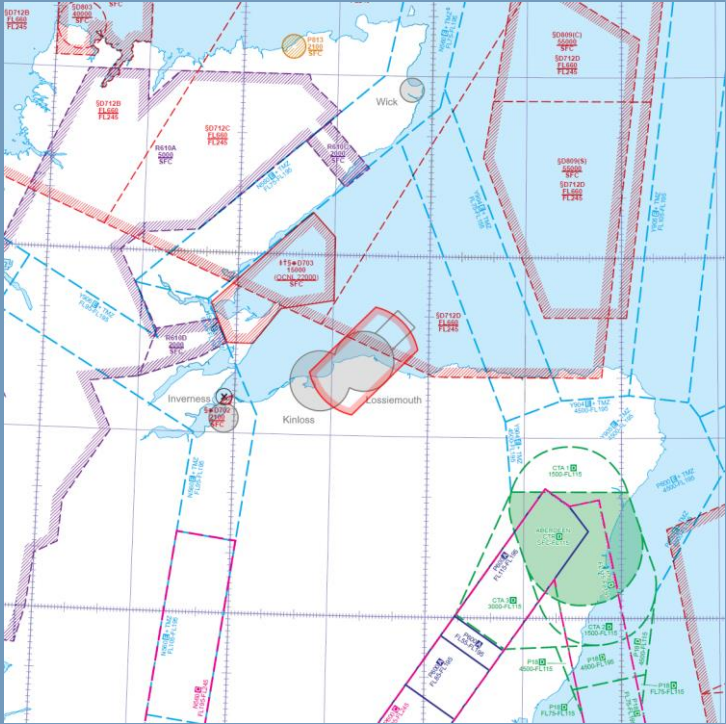


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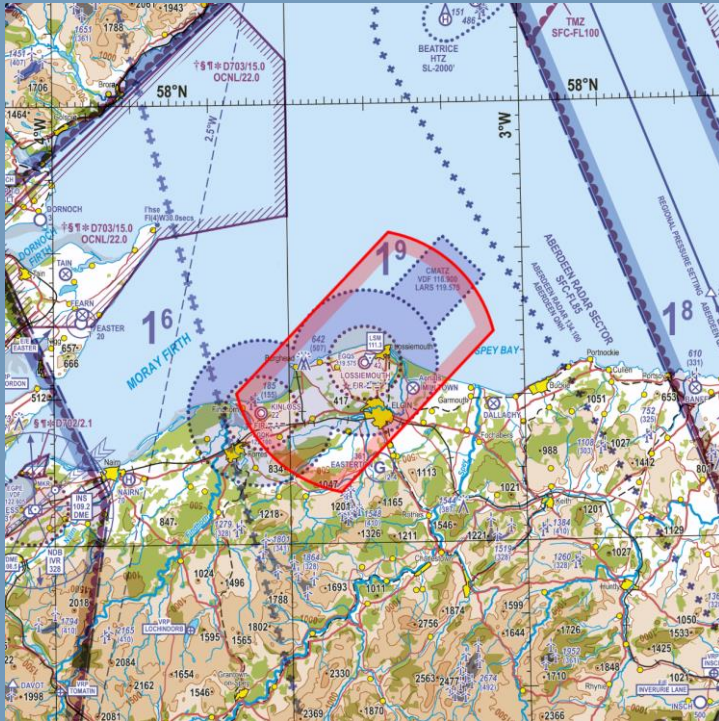
Brief on TDA requirement, design and operation

- TDA Design
 - Comprises 2 areas to cater for the CAA response to the manufacturer's application
 - Surface – 3000ft
 - 3000ft - FL100

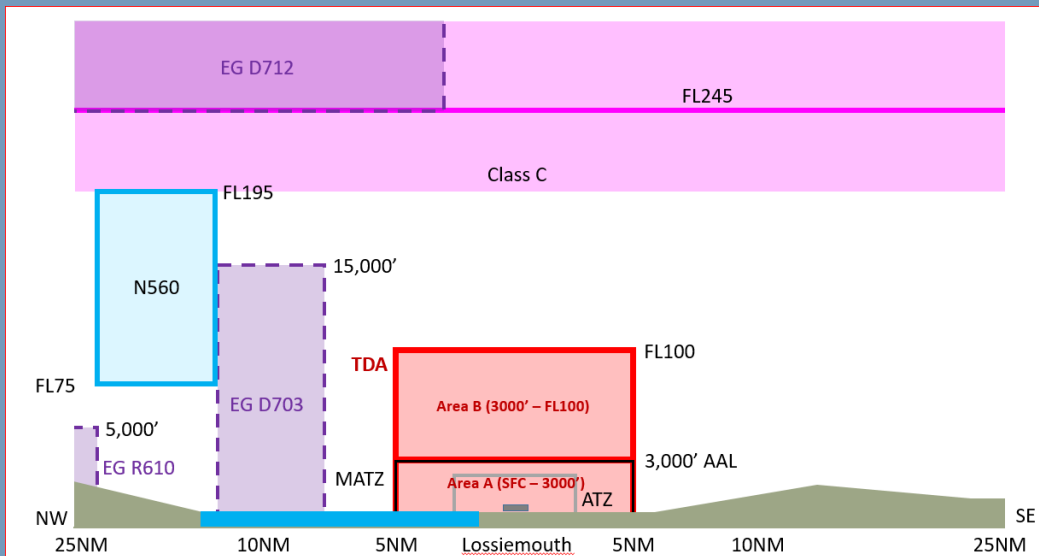
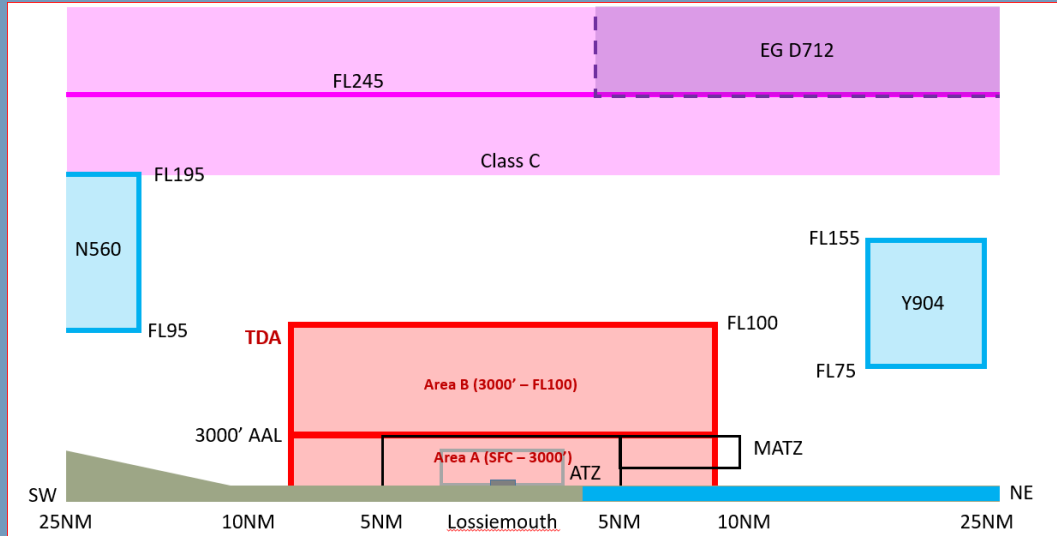
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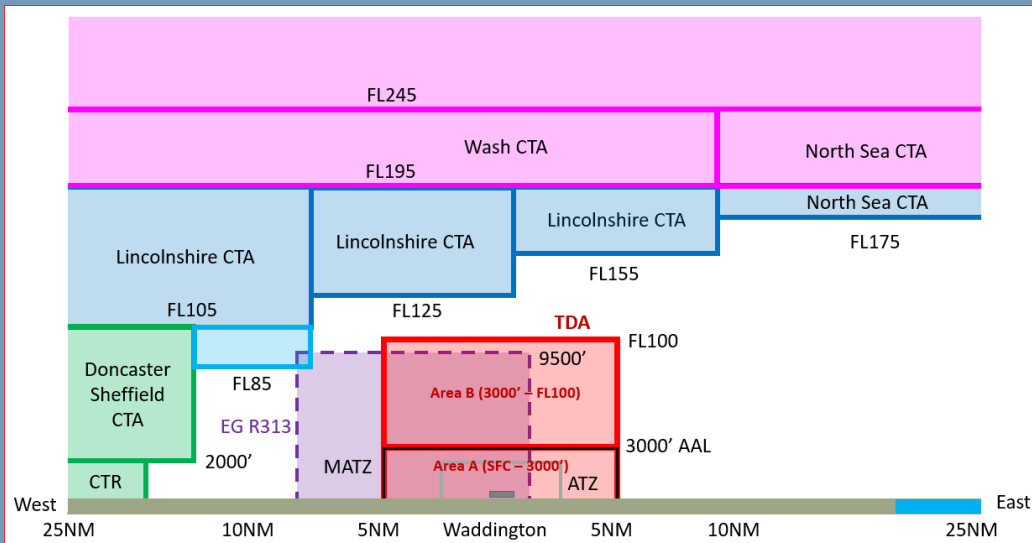
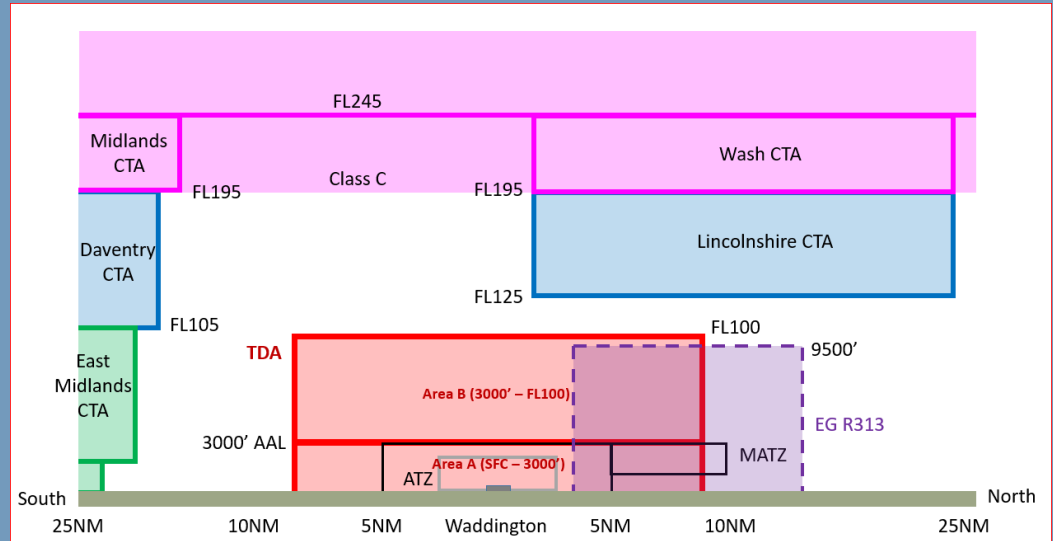


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Lossiemouth

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Waddington

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Airspace Management:

- Activated via NOTAM 24 hrs in advance
- Anticipated that DACS provided by Waddington / Lossiemouth ATC
- Minimise TDA activity as far as possible
- SkyGuardian will not routinely remain/operate in the TDA

GA Aircraft Requirements:

- No requirement to carry transponder
- Call for crossing service – ATC will accommodate you if possible

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Draft flying schedule

- Arrives UK 1 July 2021
- First flight 5 – 9 July 2021
- 12 – 14 July Prep for RIAT
- 16 – 18 July fly @ RIAT
- 20 - 22 July NATO days (probably ivo EG D323)
- 26 – 27 July MACA demos (as above)
- 2 – 6 Aug RN activity in South West DAs
- 9 – 27 Aug Protector de-risking activity (~3 flights per week)
- 6 – 10 Sep South West DAs (back-up)
- 13 Sep – 8 Oct fly at Lossiemouth in support of military exercise

- Weekend activity possible 17/18 July (RIAT)
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ACP-2020-100 – SkyGuardian TDAs

Questions received to date

1. GENERAL AVIATION ALLIANCE - We are concerned about the capabilities of the detect part of the detect and avoid. The UK has a considerable quantity of non-electronically conspicuous manned aviation that is known to paint poorly on radar, e.g. gliders, hang gliders, paragliders, etc. What information is available as to the testing against such targets that has been verified as part of the FAA certification? Is the MoD aware that manned aircraft with small or effectively no radar signatures are routinely allowed above FL100 without transponders?
2. Why is the volume of airspace needed down to the surface over 8nm from the touchdown point in use?
3. Will a non-functioning ADSB out facility be a no go item?

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Questions received to date

4. The documents on the CAP1616 portal talk about a visit to Yeovilton, how can it operate there without a TDA?
5. The documents on the CAP1616 portal talk about a visit to RIAT, will all activity be within RIAT's TDAs?
6. What are the deemed differences between operating at say 2,000ft and 3,500ft that necessitates the TDA ceiling of 3,000ft
7. What will typical sorties look like, and what will the associated TDA notifications look like?

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Questions received to date:

8. Accepting that the flying programme has not yet been decided what will be a typical number of flights per week?
9. The document says, “it is envisaged that the majority of SkyGuardian flying will take place Monday – Friday”. Other than for flights at RIAT can any weekend\Bank Holiday flying be notified at least a week in advance?
10. AIR AMBULANCE OPERATOR - The Engagement Letter states it is anticipated that ATC will be active anytime SkyGuardian flies, is this likely to be nailed down to a more mandatory requirement? Such as the TDA only being active if ATC are manned? (WAD)
11. Associated question regarding the co-ordination of Air Ambulance activity that is based at RAF Waddington. “At what height AGL would the SkyGuardian need to be to satisfy ATC should it be operating inside Part A when Helimed 29Alpha requests departure. “ (WAD)

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Questions received to date:

12. TEMPLE BRUER OPERATOR - Why not just simply use the existing MATZ/ATZ; complicating airspace with more overlays seems like overkill
13. There are at least 4 farm strips within the existing MATZ what arrangements will be made to support their continued operation.
14. A MATZ penetration service should surely ensure continued separation as with other air traffic, why is this any different?
15. What consideration has been made regarding Temple Bruer and the proposed TDA and what procedures will be developed to allow continued activity from it, with the minimum of disruption?
16. What climb and descent profiles, will SkyGuardian use for arrivals and departures?

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Questions received to date:

17. The TDA's marked on both the Lossiemouth and Waddington charts, contained in the engagement letter are bounded by solid red lines. This suggests they will be permanently active and only deactivated when notified by NOTAM. Is that the case?
18. Will the Waddington ATCU always be manned, when the danger area is active? The word anticipated in the engagement letter leaves some doubt regarding this.
19. A DA crossing service is envisaged, what level of service will be provided?
20. How often will the TDA be activated?
21. How long prior to launch and after recovery, will activation and deactivation of the TDA occur?

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Questions received to date:

22. Will the two segment parts of the TDA be Notamed and activated separately?
23. What oversight will be applied to ensure, that the TDA is only activated for its stated purpose and that it is not used, to exclude other airspace users for any other reason?
24. Has Skyguardian been permitted by the FAA to operate over densely populated areas in the USA including San Diego yet?

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Specific enquiries received to date:

1. National Grid Electricity Transmission
2. Lincs & Notts Air Ambulance
3. Western Power Ltd

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- CAA online Portal – www.airspacechange.caa.co.uk
 - Email – UASCDC-ACP@qinetiq.com
 - Tel – 01980 663091