KEEVIL AIRFIELD
AIRSPACE CHANGE PROPOSAL BRIEF

[redacted]

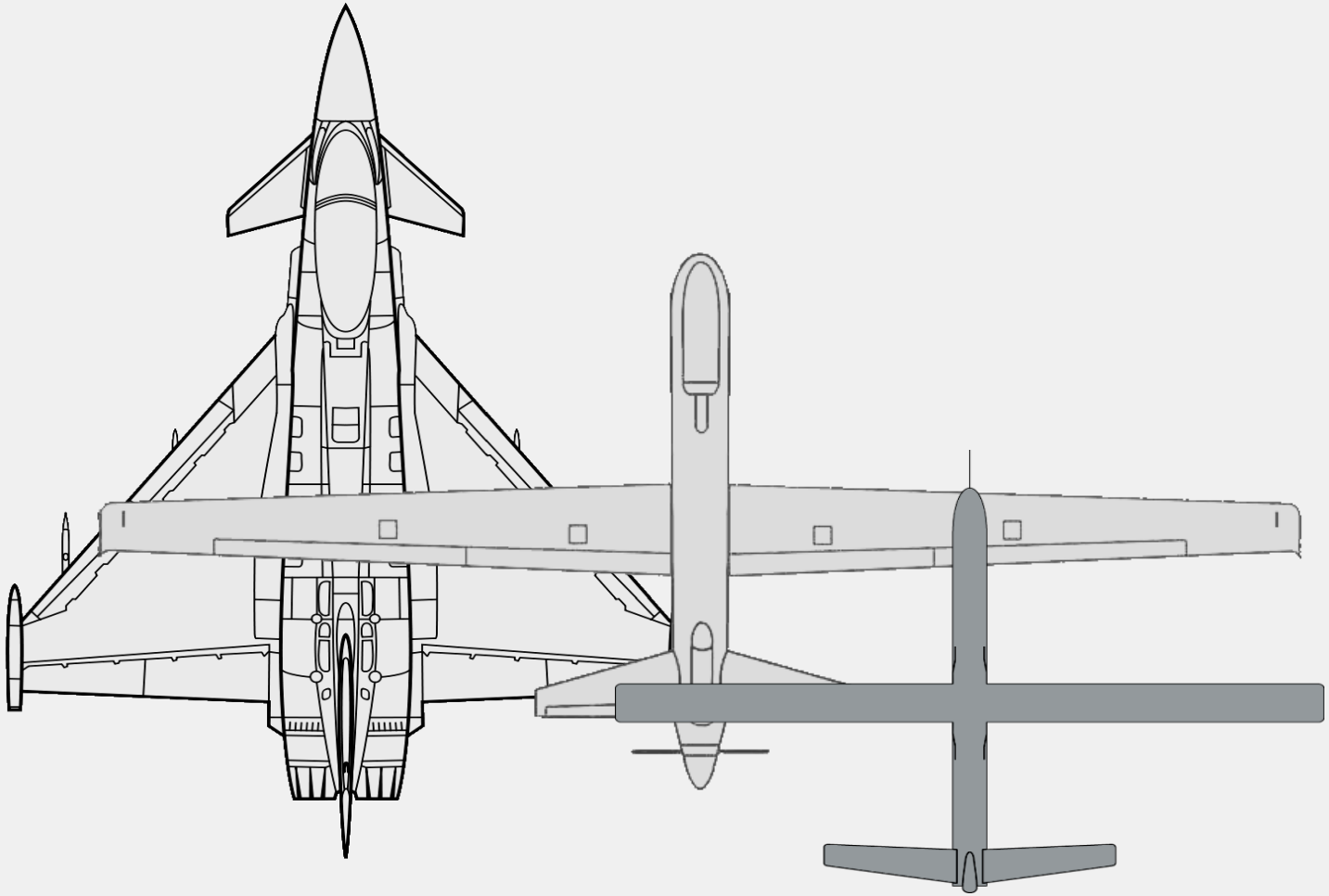
SCOPE

ARMY
BE THE BEST

CAPABILITY OVERVIEW

WK SYSTEM COMPOSITION

Dimensions	
Wingspan	[redacted]
Length	[redacted]
Gross Weight	[redacted]
Performance	
Range	[redacted]
Max Speed	[redacted]
Endurance	[redacted]
Altitude	Up to [redacted]
Payloads	[redacted]
Take off / Landing	[redacted]
Limitations	
Wind	[redacted] [redacted] headwind [redacted] crosswind [redacted] tailwind
Met	[redacted]



Size Comparison: Typhoon, MQ9 and WK

CAPABILITY OVERVIEW

AIR SYSTEM

CAPABILITY OVERVIEW

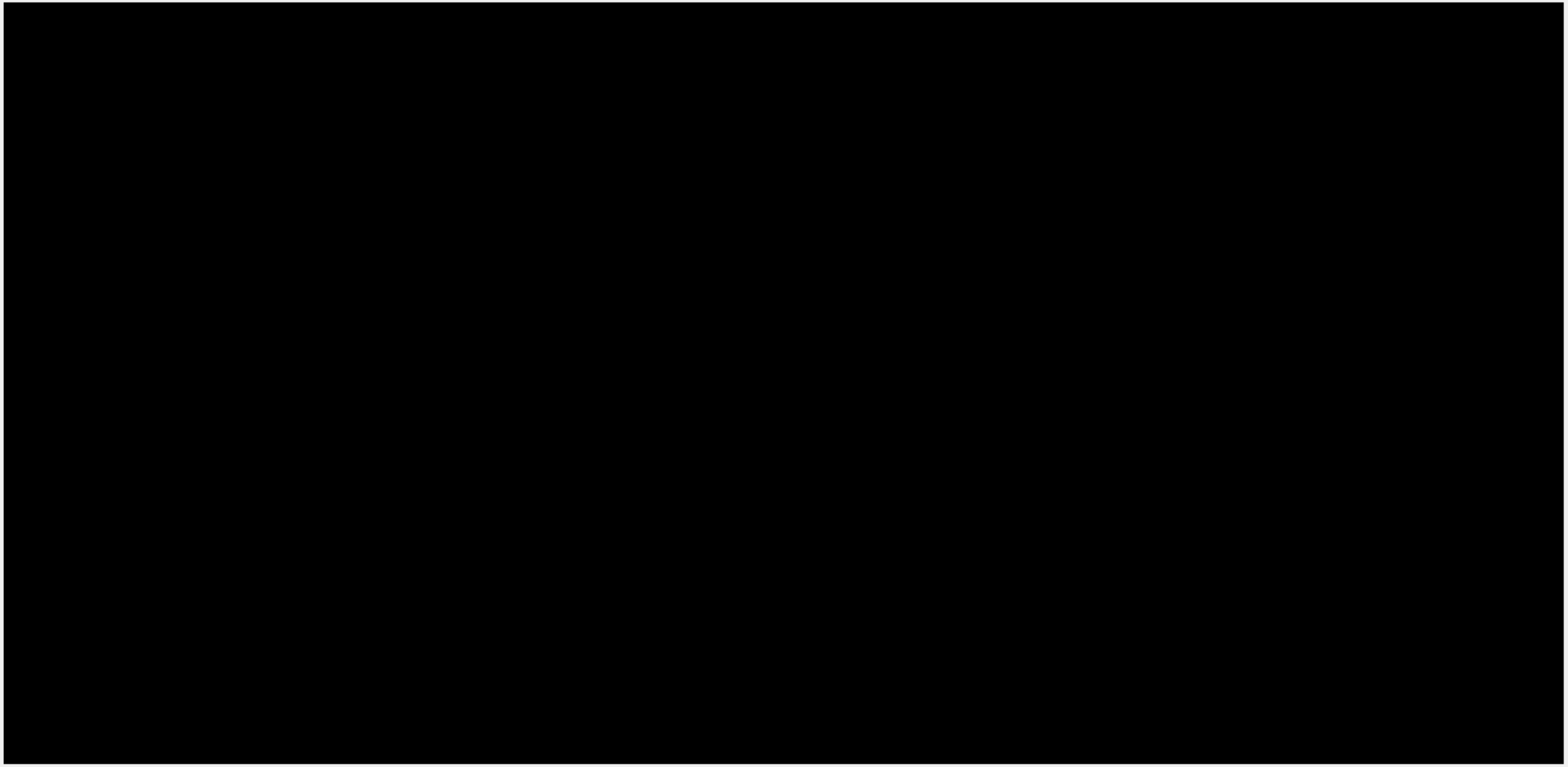
GROUND DATA TERMINAL

CAPABILITY OVERVIEW

ELECTRO-OPTICAL / INFRA-RED SENSOR CAPABILITY

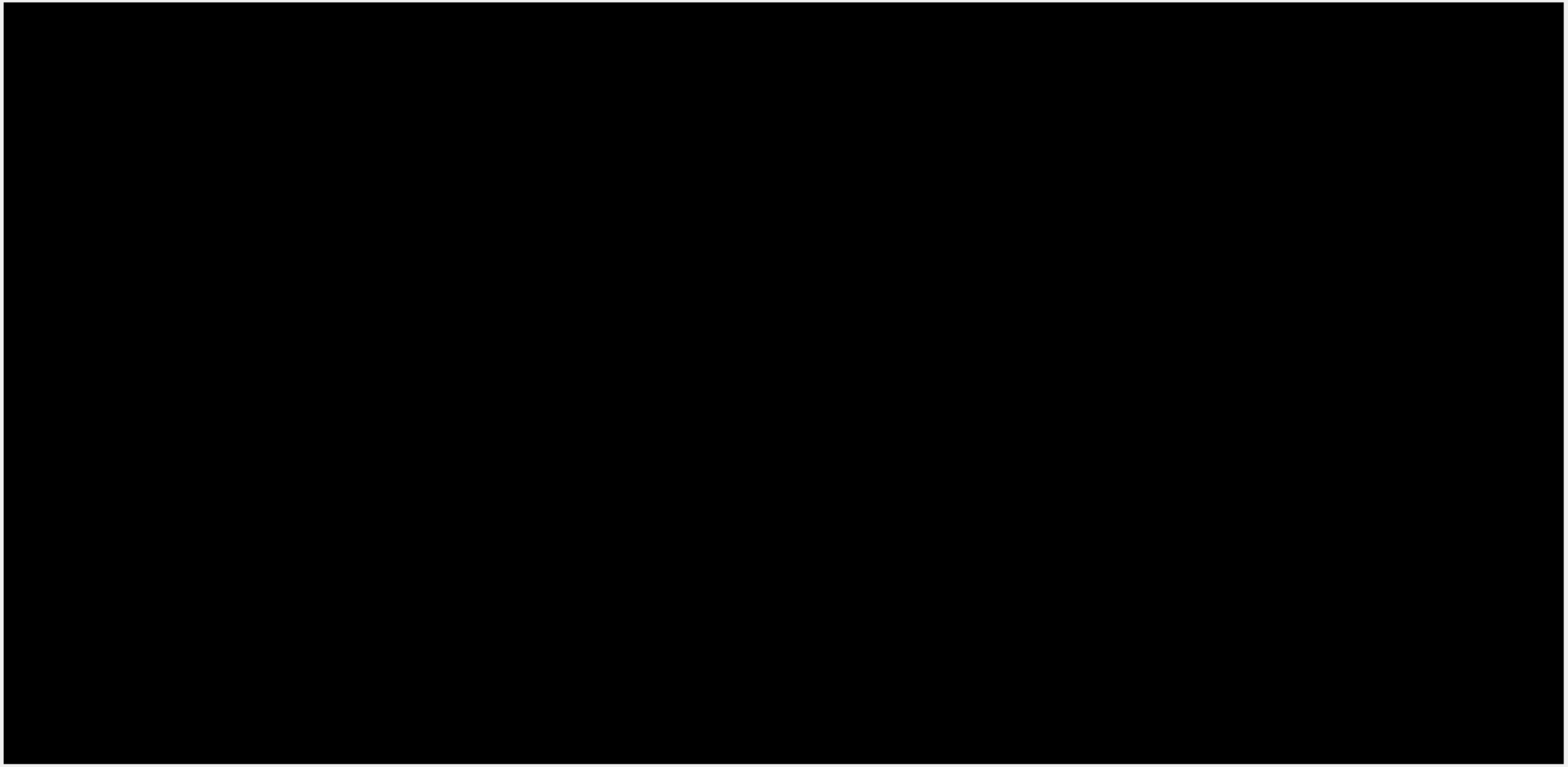
CAPABILITY OVERVIEW

SAR/GMTI



SENSORS OVERVIEW

SAR – AMPLITUDE CHANGE DETECTION



WHY KEEVIL?

TRAINING LOCATIONS

Keevil Airfield
(1x sub-unit)

- *Live integration (access to SPTA)*
- *Support to other agencies*
- *Conversion To Role (CTR)*
- *Sub-unit deployment*
- *Maintenance of currency*
- Force Optimisation
- Live and virtual experimentation

RAF Akrotiri
(1x sub-unit)

Increase flying rates
- *Airspace availability*
- *Weather conditions*

Ind Trg – FGen of SQEP
- *Watchkeeper Pilot Course*
- *Groundcrew courses*
- *REME Aviation Technicians*
- *Support elements (J2/3/4/6)*

c. 800 hours flown since Sep 19.

More flying activity
=
more trg throughput

ARMY
BE THE BEST

WHY KEEVIL?

OPTIMISE TRAINING

Over 52 hours flown.
In 7 weeks, 50% more hours flown than in BDN over a 8 month period (34 hours).

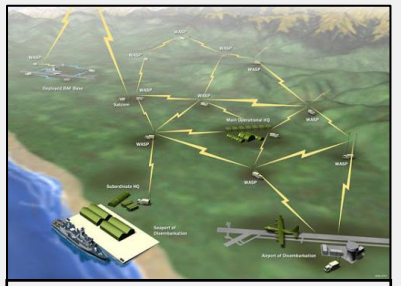
Prove Keevil

Ground Sense & Warn

Defence Electronics & Components Agency

Whole Force

Full deployment



FALCON network

Collective trg

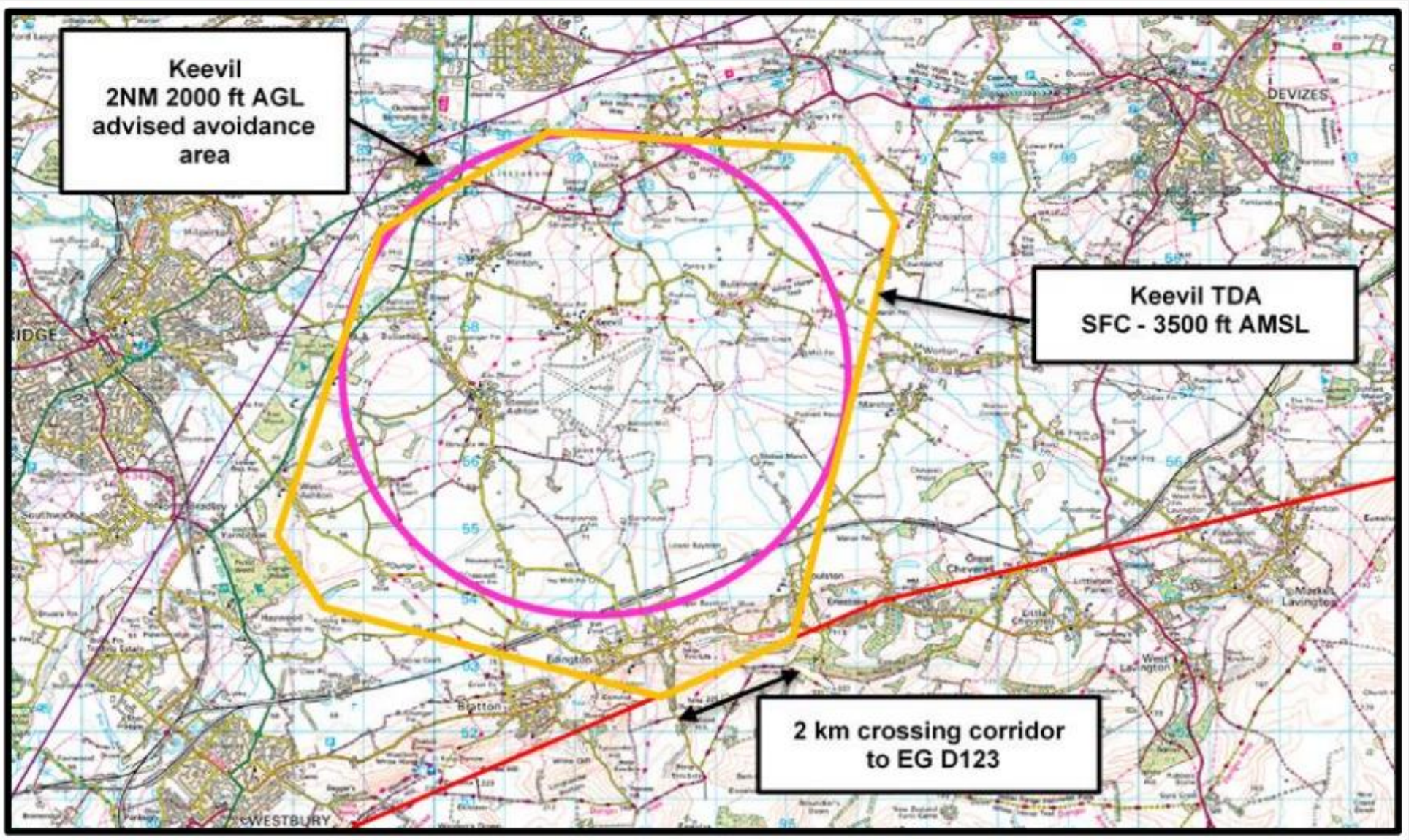
Strike integration

ISTAR integration

ARMY BE THE BEST

WHY KEEVIL?

TDA

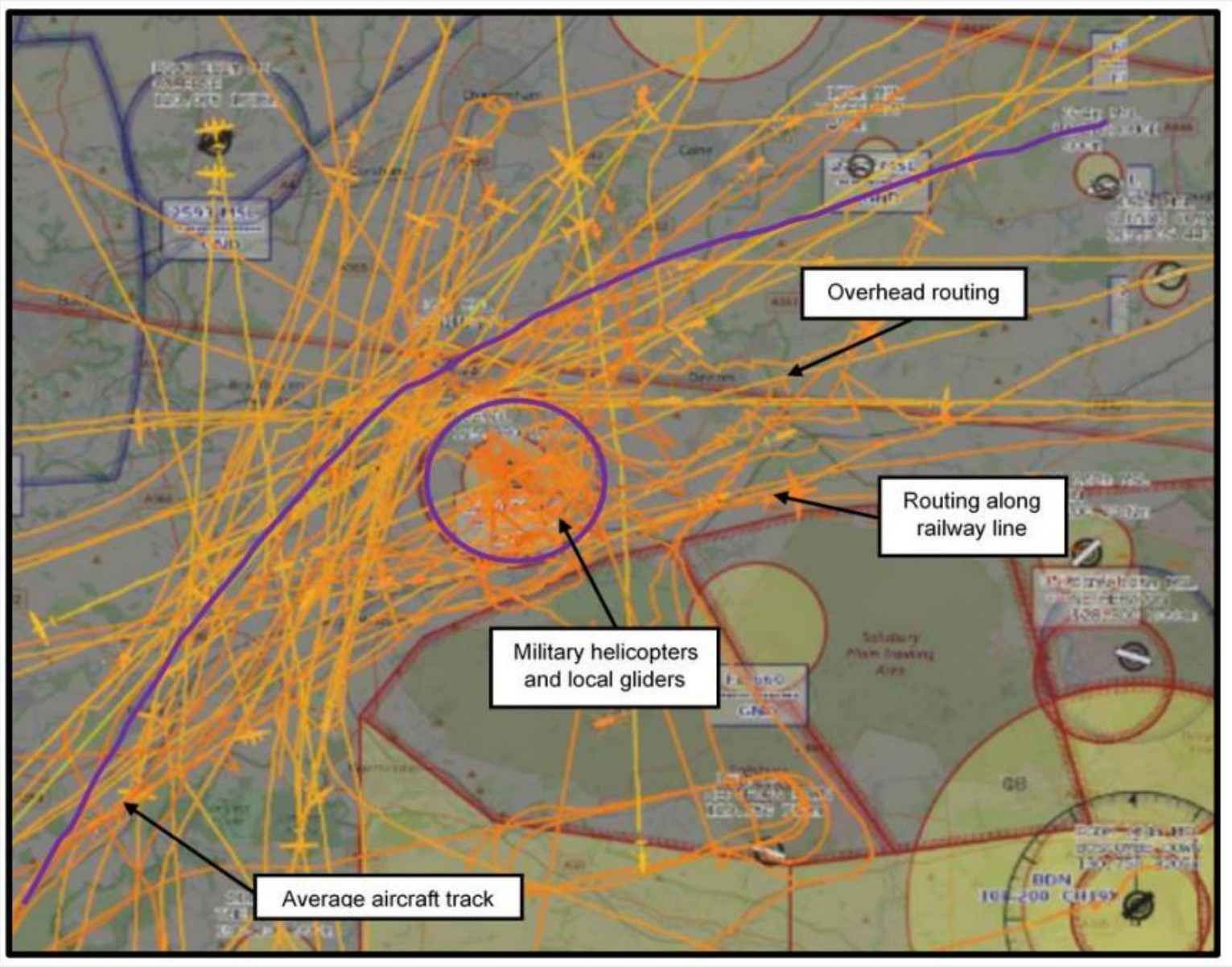


DESIGN PRINCIPLES

DP	Design Principle	Priority
A	Provide a safe environment for all airspace users	1
B	Provide sufficient airspace to meet all reasonable technical requirements for the Watchkeeper RPAS platform that are required to facilitate safe access to and from SPTA and usage of Keevil Airfield.	2
C	Minimise the impact to other airspace users, both in terms of activation and volume of airspace required.	3
D	Make the airspace as accessible as possible to all types of air user.	4
E	Use standard airspace structure where possible (conformity, simplicity and safety).	5
F	Minimise the impact of operating noise to local residents	6

AIRSPACE DESIGN OPTIONS

IMPACT MITIGATION

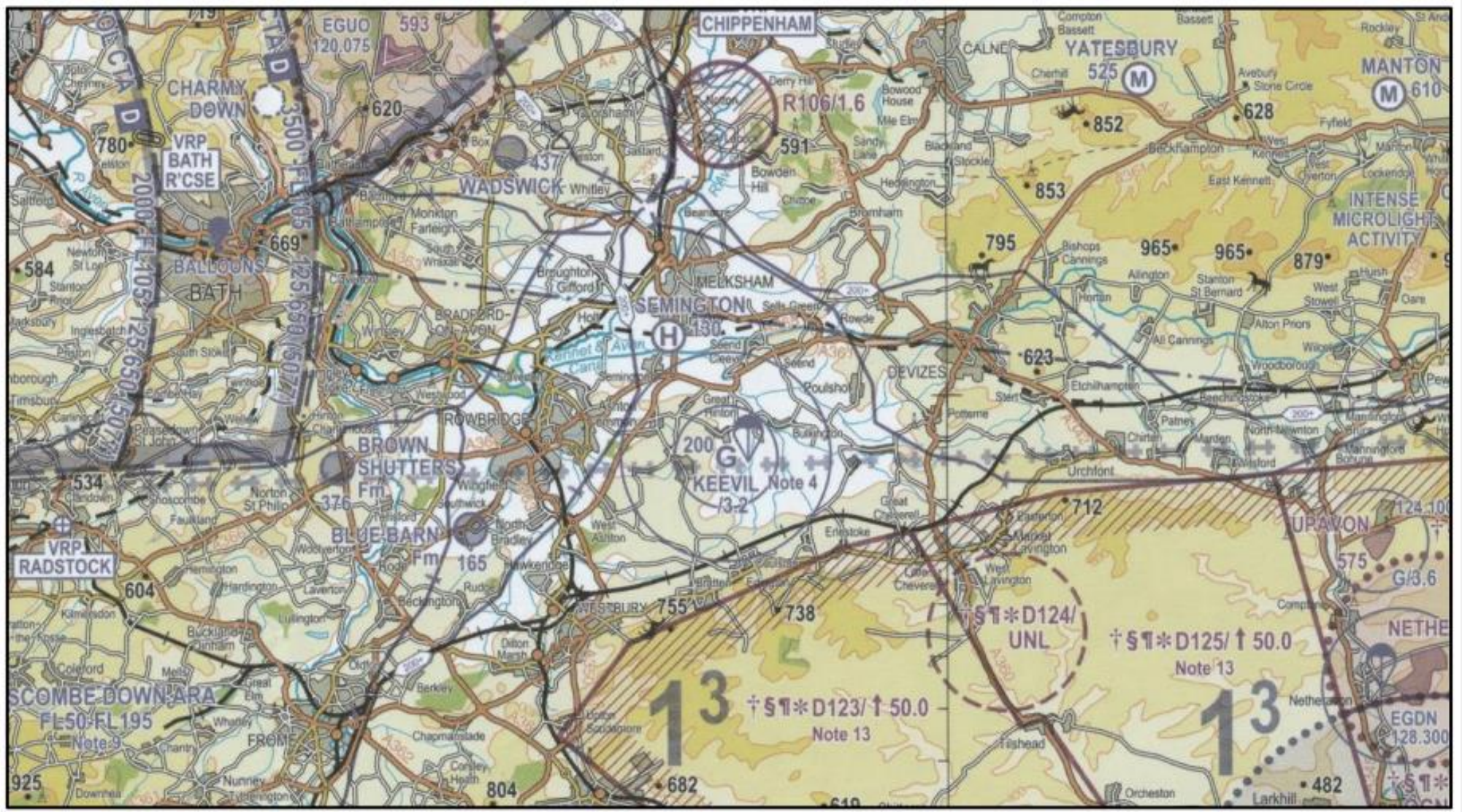


ENVIRONMENTAL ASSESSMENT

- Noise impact
- Fuel burn / CO2 emissions
- Air traffic forecasting
- Biodiversity and tranquillity

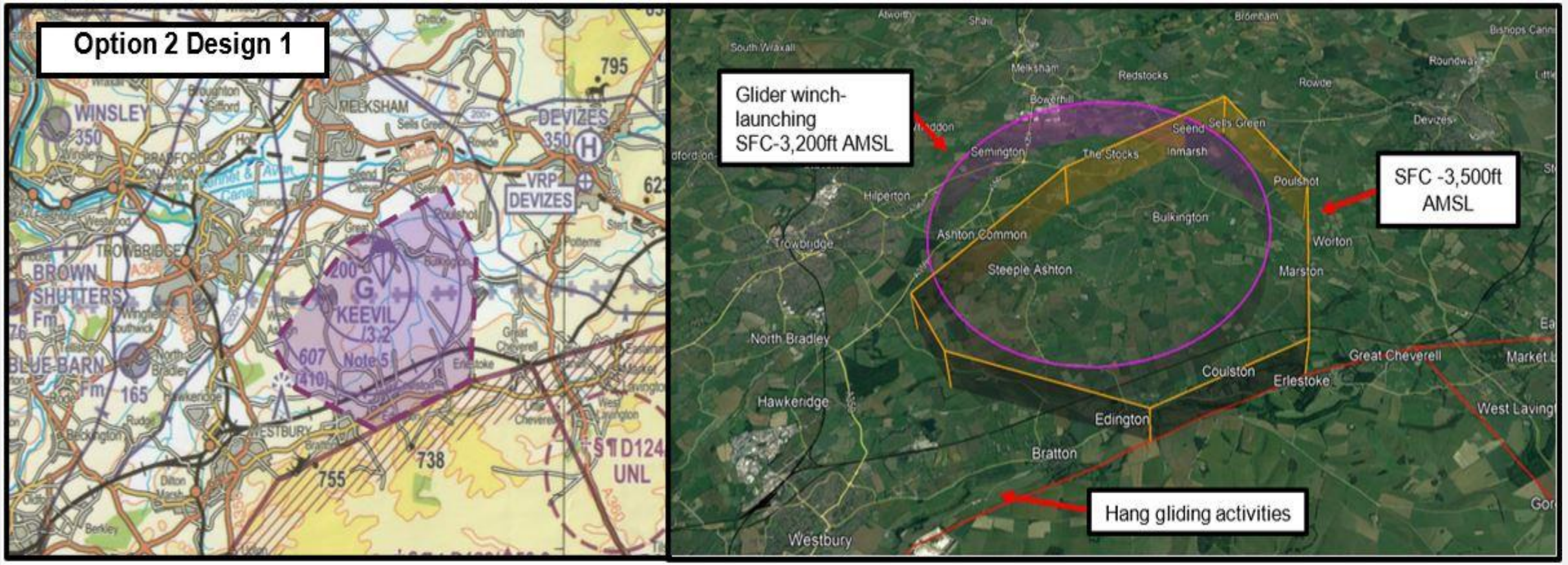
AIRSPACE DESIGN OPTIONS

DESIGN 1



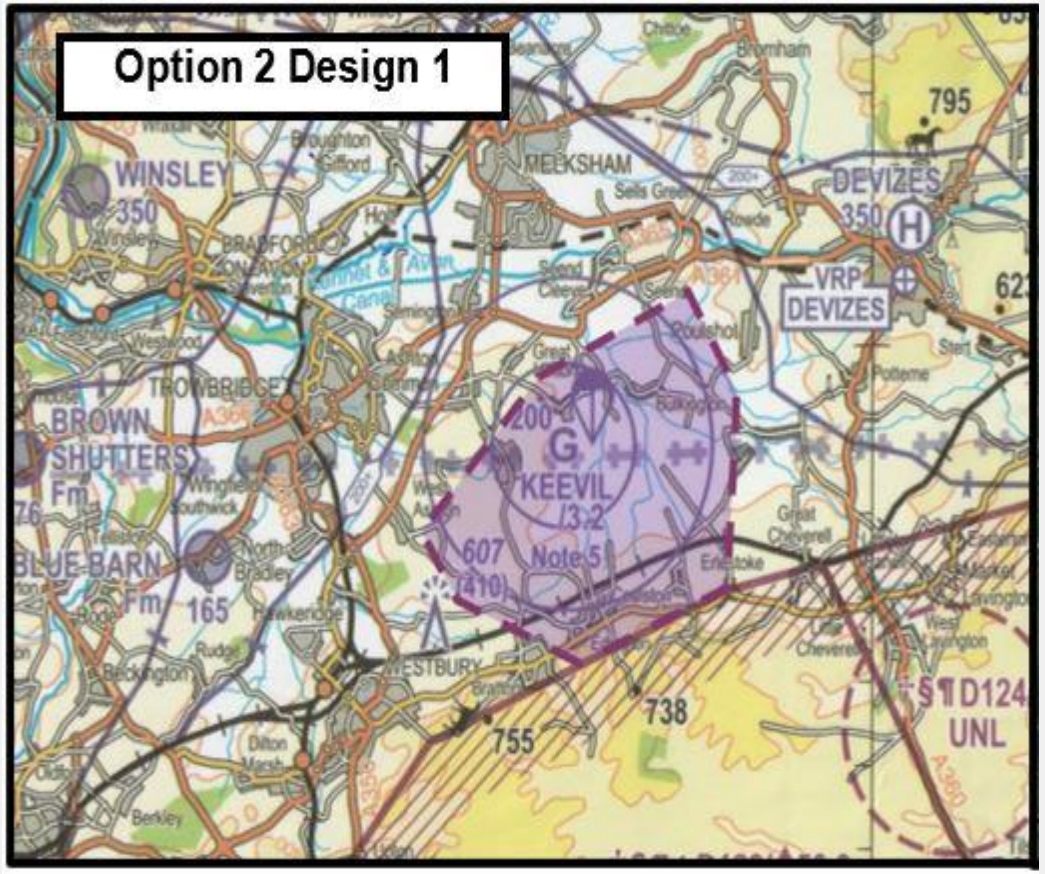
AIRSPACE DESIGN OPTIONS

OPTION 2 DESIGN 1



AIRSPACE DESIGN OPTIONS

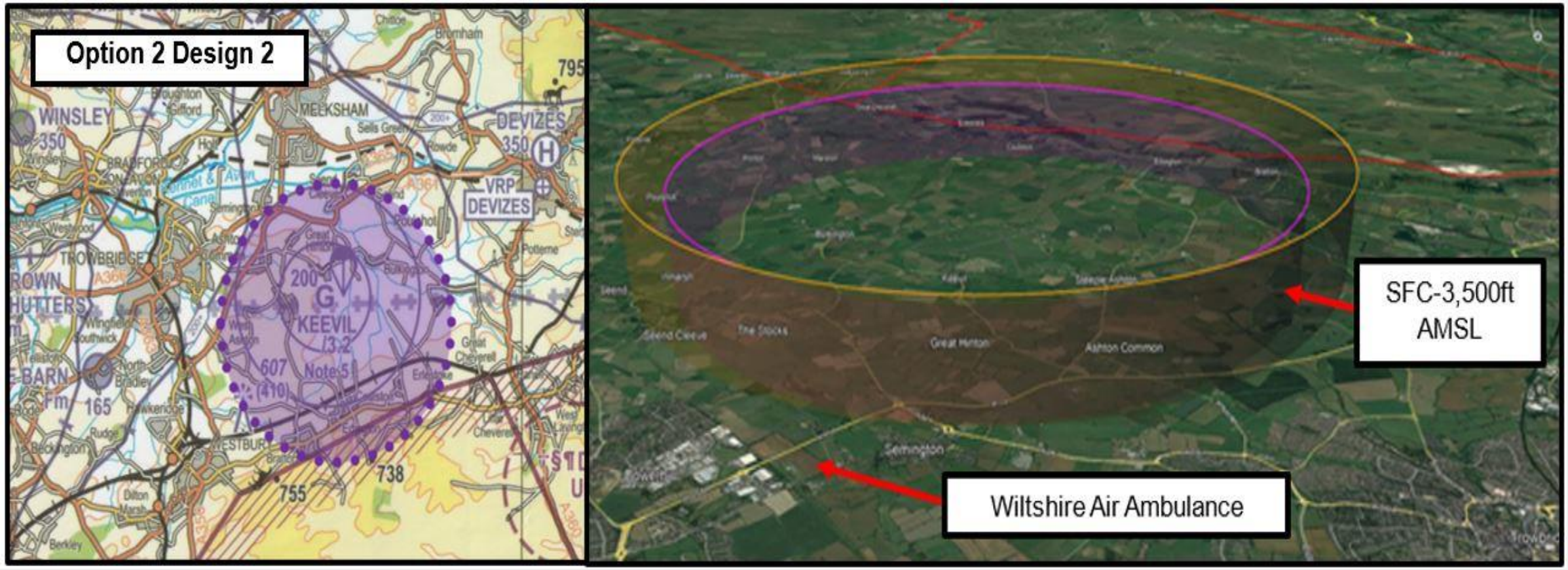
OPTION 2 – DESIGN 1



Pros	Cons
Allows the shape to be as small as possible to the North to mitigate against funnelling	Wider (East-West) than the current DZ, (approximately 9 km from the most eastern to the most western edge)
Allows aircraft routing around to utilise surface navigation features such as roads (A350) and towns (Trowbridge and Melksham)	Does not facilitate VFR navigation using railway line between Keevil and D123 if air users are unable to obtain a crossing service
Reduced impact on hang gliders operating from Westbury White Horse	
Minimises effect on Wiltshire Air Ambulance operations North, East or West	
Only marginally (300ft) higher than current Glider Site winch launch altitude	
Wide 'entry point' into SPTA to facilitate noise abatement procedures for the villages of Coulston, Edington and Erlestoke	
Allows for RPAS recoveries in all operating circumstances	

AIRSPACE DESIGN OPTIONS

OPTION 2 – DESIGN 2



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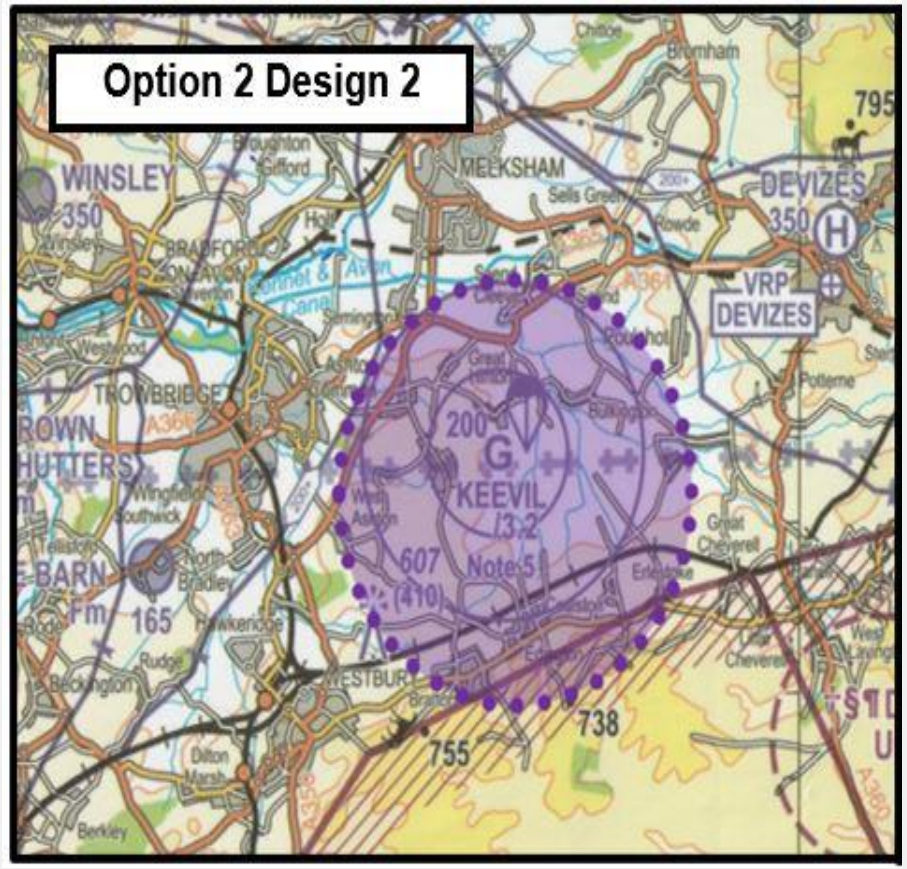
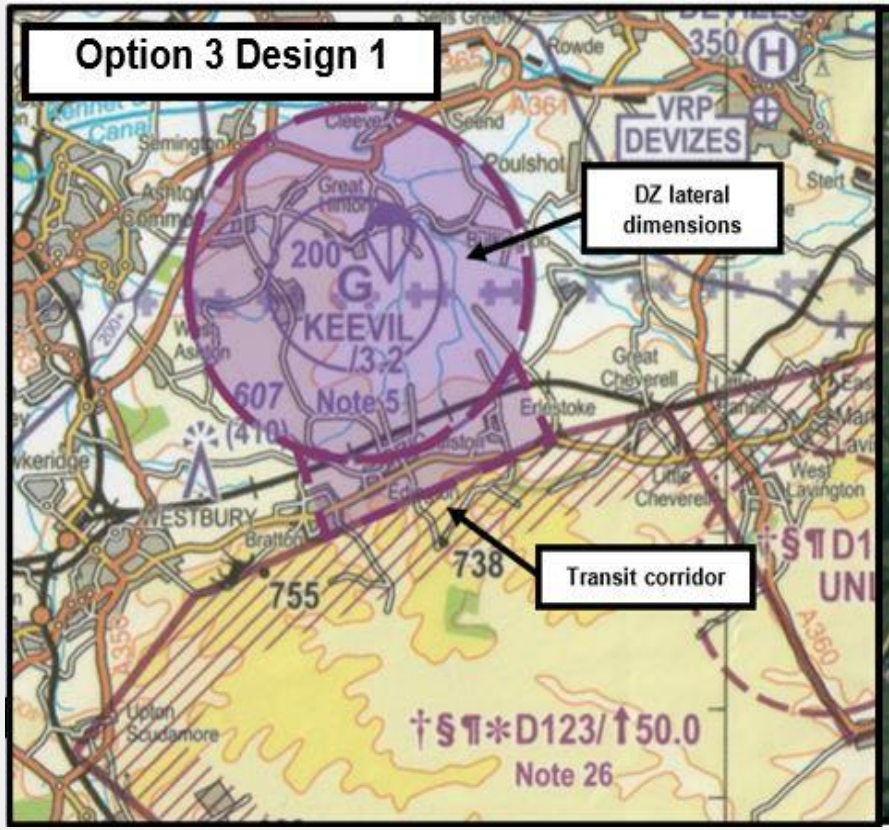
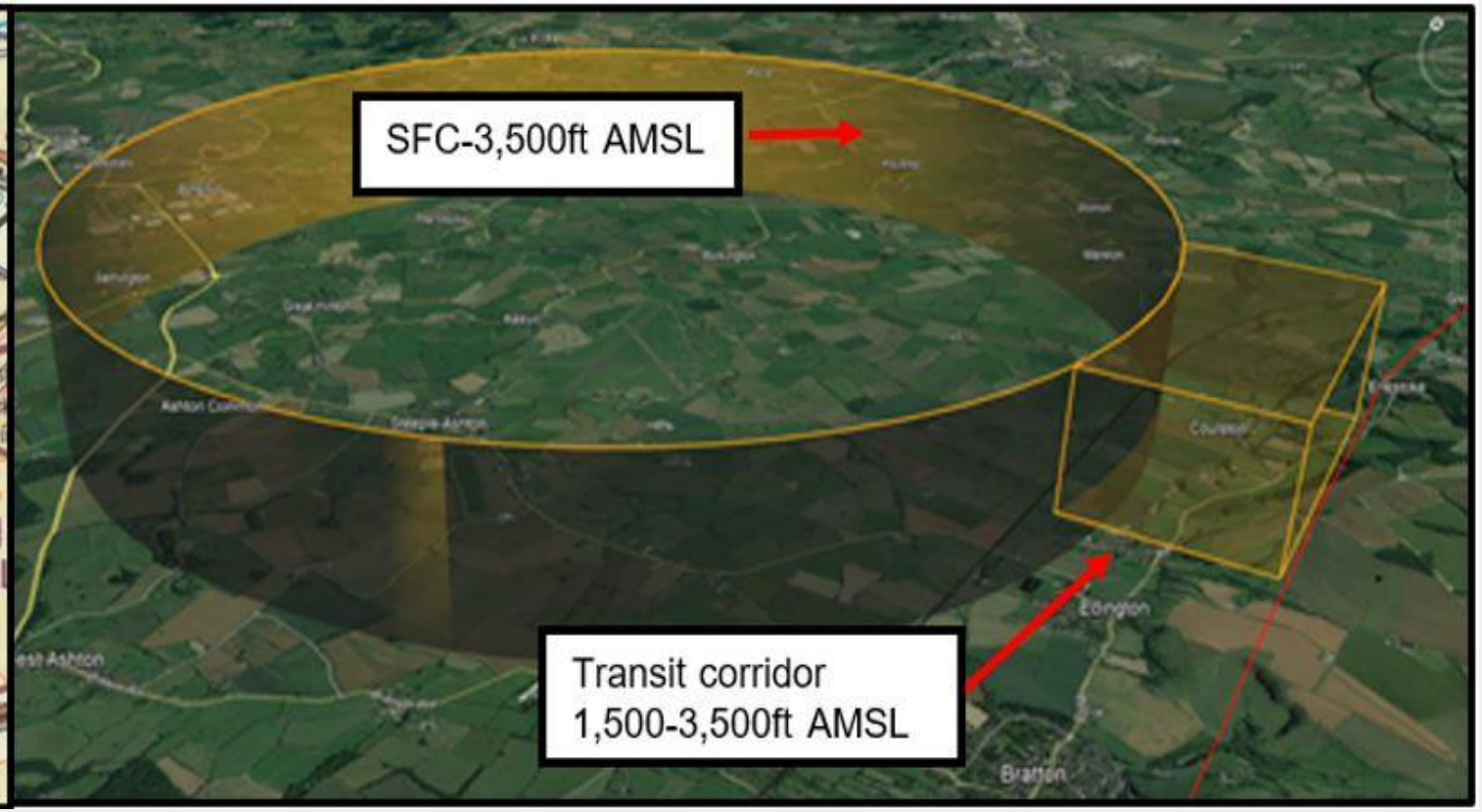


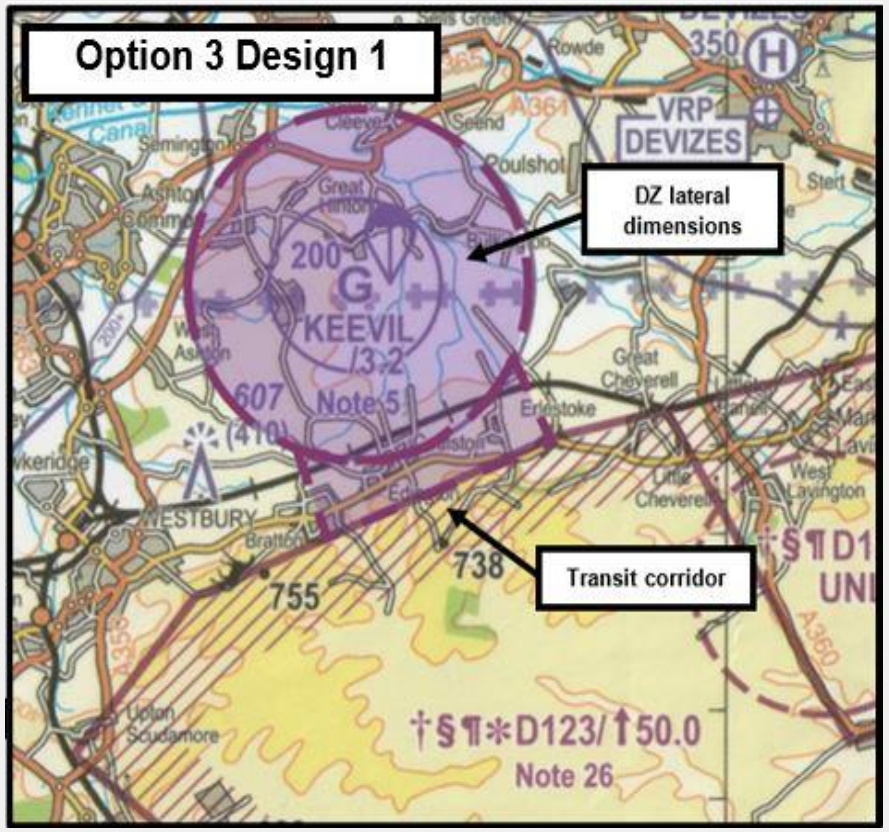
Pros	Cons
Simple design, easy to plot manually if air users do not utilise electronic flight planning software	Does not facilitate VFR navigation using railway line between Keevil and D123 if air users are unable to obtain a crossing service
Only marginally (300ft) higher than current Glider Site winch launch altitude	Greater encroachment on hang glider activities from Westbury White Horse
Airspace to the North is no different to the current DZ.	Does not allow VFR navigation using A350
Wide 'entry point' into SPTA to facilitate noise abatement procedures for the villages of Coulston, Edington and Erlestoke	

OPTION 3 – DESIGN 1



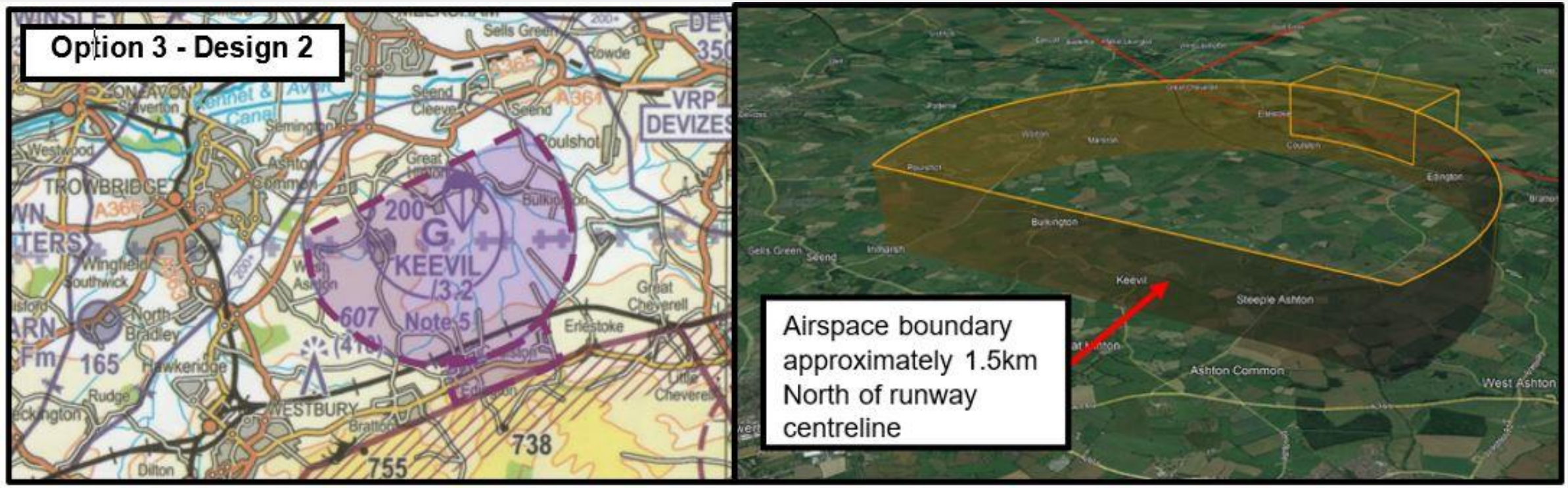


OPTION 3 – DESIGN 1



Pros	Cons
Facilitates transit between Keevil and SPTA for low-flying aircraft using the railway line 1,500-3,500ft AMSL	More complex design, requiring two separate airspace structures (and two NOTAMs to activate)
Only marginally (300ft) higher than current Glider Site winch launch altitude	Potential to increase risk of airspace infringement
Airspace to the North is no different to the current DZ.	Potential to increase risk of airprox if the majority of aircraft choose to use the gap underneath the DA "STUB"
Wide 'entry point' into SPTA to facilitate noise abatement procedures for the villages of Coulston, Edington and Erlestoke	Does not provide full system capability of RPAS in some emergency scenarios

OPTION 3 – DESIGN 2



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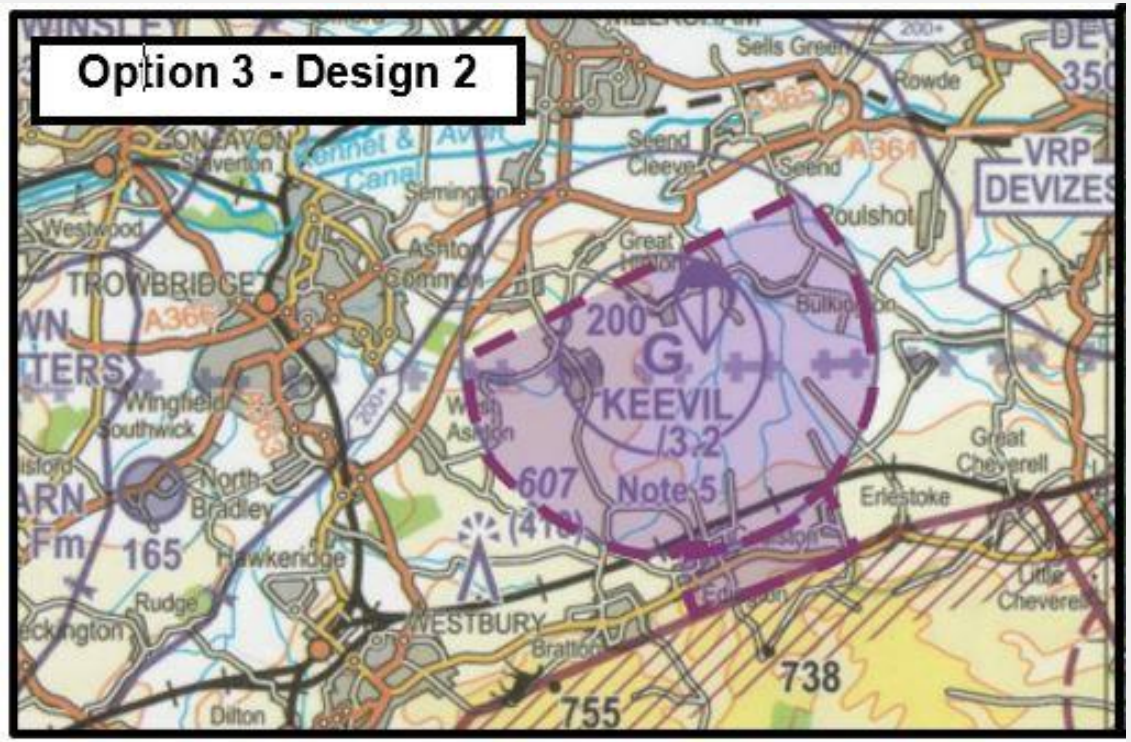

Pros	Cons
Facilitates transit between Keevil and SPTA for low-flying aircraft using the railway line 1,500-3,500ft AMSL	More complex design, requiring two separate airspace structures (and two NOTAMs to activate)
Only marginally (300ft) higher than current Glider Site winch launch altitude	Potential to increase risk of airspace infringement
Airspace to the North is currently less than the current DZ	Potential to increase risk of airprox if the majority of aircraft choose to use the gap underneath the DA “STUB”
Wide ‘entry point’ into SPTA to facilitate noise abatement procedures for the villages of Coulston, Edington and Erlestoke	Does not provide full system capability of RPAS in some emergency scenarios

OPERATING PROCEDURES

- Operating hours
- Airspace activation period
- Crossing services
- Use of SAFETYCOM
- HEMS access

IMPACT MITIGATION

- Activation timings
- Primarily using extant airspace for operations
- Crossing services
- Early NOTAM submission to aid flight planning
- Letters of Agreement (WAA, gliding clubs, paragliders, model flying club)

QUESTIONS

FREQUENTLY ASKED QUESTIONS

1. How often will the airfield be used?
2. How loud is your aircraft?
3. What developments will there be at the airfield?
4. Why has Keevil been chosen as the location for operating RPAS?
5. How safe are RPAS?
6. Will this increase traffic in nearby villages?

FREQUENTLY ASKED QUESTIONS

7. What will your payload/camera be looking at?
8. Why can the MOD not operate RPAS from other airfields such as Netheravon, Middle Wallop or Boscombe Down?
9. I am concerned that the airspace sought for this activity will deny air users use of valuable Class G airspace.

QUESTIONS

CONSULTATION FEEDBACK

KEEVIL ACP BRIEF

QUESTIONS

ARMY
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