

[REDACTED]

From: [REDACTED]
Sent: 25 June 2015 11:31
To: [REDACTED]
Subject: FW: Response to suggestion of using Tel Aviv procedure

For info.

From: [REDACTED]@lasham.org.uk]
Sent: 25 June 2015 11:27
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Response to suggestion of using Tel Aviv procedure

[REDACTED]

Your rebuttal is based on an alleged lack of defined visual features. Farnborough has much better visual features than visual manoeuvring using prescribed track procedures used in other EU countries. Your response is therefore poorly researched and unsound.

Regards,

[REDACTED]

[REDACTED]

Lasham Gliding Society
<http://www.lashamgliding.com/>

From: [REDACTED]@nats.co.uk]
Sent: 23 June 2015 12:58
To: [REDACTED]
Cc: [REDACTED]
Subject: Response to suggestion of using Tel Aviv procedure

[REDACTED]

Last of three responses.

Many thanks for taking the time to research the possibility of applying the Tel Aviv type of procedure to Farnborough. We understand your desire to come up with alternative options which would, in theory, reduce the impact on Lasham gliding operations.

We considered the Tel Aviv operations early in the design phase of this project (I think it was [REDACTED] who suggested this at one of our early meetings).

Since your email of 1st June, I have asked our team to consider again what you have put forward.

Unfortunately, I have been advised by our CAA approved procedure design team that what you propose is not suitable for the concept of operations being developed for Farnborough.

The procedure at Tel Aviv has been designed under a different regulatory approval regime than applies in the UK – the Tel Aviv procedure was designed to FAA TERPS criteria whereas the UK procedures would need to be designed to ICAO DOC 8168 PANS OPS criteria.

PANS-OPS criteria for a 'visual manoeuvring using prescribed track,' the nearest PANS-OPS equivalent is only permitted in locations where 'clearly defined visual features permit' and can only be 'complemented with radio fixes'. It would not be possible to meet this criteria in the vicinity of Farnborough due to lack of significant geographical features to define such a pattern.

We appreciate that you and your colleagues have researched this matter in detail but for the reasons outlined above, it seems clear that transposing the Tel Aviv approach to Farnborough operations is not something that can be considered further.

Kind regards

[Redacted signature]

NATS Services
Heathrow House
East Wing 2nd Floor
Bath Road
Hounslow
Middlesex
TW5 9AT

[Redacted line]

[Redacted line]

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[REDACTED]

From: [REDACTED]
Sent: 25 June 2015 11:32
To: [REDACTED]
Subject: FW: Response in respect of request to reduce airspace

For info

From: [REDACTED]@lasham.org.uk]
Sent: 25 June 2015 11:31
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Response in respect of request to reduce airspace

Dear [REDACTED]

My comments/observations on your response in red below.

Regards,

[REDACTED]

[REDACTED]

Lasham Gliding Society
<http://www.lashamgliding.com/>

From: [REDACTED]@nats.co.uk]
Sent: 23 June 2015 12:52
To: [REDACTED]
Cc: [REDACTED]
Subject: Response in respect of request to reduce airspace

Dear [REDACTED]

We have been considering the various points that you have asked us about in recent weeks and months and I will be sending you three emails to keep those responses separate for clarity.

This relates to your request for the removal of a portion of the proposed airspace near Lasham.

We discussed at length the option of removing the western-most edge of the CTA abeam the CTR as requested and worked through the ramifications that come out of such a move.

There are three main concerns:

- a) Workload

The workload for pilot and controller in a critical phase of flight during the brief transition from CAS to OCAS to CAS in terms of RT communications, change of service etc for aircraft requiring use of the ILS would be significant.

Some of these workload issues could be addressed by AIP and STAR plate entries/ notes and pilot pre-briefs before arrival at TAG through a compulsory website requirement similar to Cannes, but the residual RT requirement would remain particularly where there are any other contacts outside CAS.

We understand that in weather conditions where an ILS is required, then it is less likely that there will be interaction with other users of the airspace. Although such interaction is less likely, it does remain a real possibility.

Your response is an exaggeration and without merit.

b) Complexity – Odiham/Farnborough

The complexity introduced into the operation for RAF Odiham/Farnborough interactions would significantly increase. Discussions indicate that this would be unacceptable in safety terms for both organisations.

Your reply is invalid as, compared with the present situation, there is no increase in complexity.

c) Complexity – North/South operations outside CAS

If the volume of airspace mooted for removal were to be removed from the design, the 2500 base of CAS to the south would require modification to allow visual approaches. The resulting airspace shape would be an encouragement to transit North/South at 2400' over the Odiham ATZ which, although allowable under the rules, would not be prudent airmanship given the nature of Odiham's operation. The ATZ is also partly obfuscated by the airspace.

We have noted this surprising reasoning.

We therefore thank you for your suggestions but regrettably we feel that for the reasons above, we are unable to progress this any further.


NATS Services
Heathrow House
East Wing 2nd Floor
Bath Road
Hounslow
Middlesex
TW5 9AT



[REDACTED]

From: [REDACTED]
Sent: 26 June 2015 13:28
To: [REDACTED]
Subject: FW: Response to request for update on [REDACTED] actions

For info

From: [REDACTED] [mailto:[REDACTED]]
Sent: 26 June 2015 13:14
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Response to request for update on [REDACTED] actions

[REDACTED]

My comments/observations on your email are shown below in red.

Regards,

[REDACTED]
[REDACTED]
[REDACTED]
Lasham Gliding Society
<http://www.lashamgliding.com/>

From: [REDACTED]
Sent: 23 June 2015 12:56
To: [REDACTED]
Cc: [REDACTED]
Subject: Response to request for update on [REDACTED] actions

[REDACTED] – second of three email responses.

Please see below our responses to the outstanding actions that were on [REDACTED] after our last engagement meeting.

Our responses are in blue.

7. [REDACTED] asked for clarification of CTA's 11, 12, 13, with a base of 4500' amsl. [REDACTED] stated that it was to get the FAB traffic below the LGW departures. [REDACTED] queried how this would be possible as there were LGW southerly departures every 3 minutes. [REDACTED] noted that these CTA's were shown as Farnborough being the controlling authority, so how was the transit through the TMA north of this managed given the LGW departures. [REDACTED] stated that it had all been simulated. [REDACTED] was sceptical and [REDACTED] undertook to discuss this further with TC. **Action** [REDACTED]

We have discussed this at length with TC and were only able to modify some elements of two of the three CTAs.

On examination of simulation data, the use of the Southernmost CTA (CTA 13) was procedural only and therefore the decision was taken to remove it.

The logic behind this confusing explanation applies to other parts of your proposed airspace and raises more questions than it answers. The explanation is therefore far from complete.

9. [REDACTED] stated that they must get the FAB traffic below the LGW departures otherwise, they would have to hold traffic waiting for a gap in the LGW departures. [REDACTED] stated that holding FAB inbounds was something that he had never experienced. [REDACTED] asked for quantification of holding delays. **Action** [REDACTED]

TC do not keep records of ad hoc holding and therefore this data is not available.

This logically means that there are no efficiency gains to be achieved as there is no data.

Other points in the minutes to which you are replying remain outstanding.

Kind regards

[REDACTED]
Senior Consultant

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Heathrow House
East Wing 2nd Floor
Bath Road
Hounslow
Middlesex
TW5 9AT

[REDACTED]
NATS - Private

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Cc: [REDACTED]
Subject: RE: Response to request for update on [REDACTED] actions

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[REDACTED]

[REDACTED]

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Kind regards

[REDACTED]

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[REDACTED]

[REDACTED]

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Farnborough ACP response for MOD consideration

TAG Farnborough (the Sponsor) is grateful to the MOD for allowing continued dialogue before the final post-engagement submission response to SARG.

The following has been requested to be provided for the MOD internal meeting of the 30th March 2015 to aid their deliberations.

The MOD concerns are extracted from the 20150306 – DRAFT MOD response to FBO ACP.

It should be noted that the MOD took part in further large scale simulations held at the CTC during February 2015.

MOD concerns:

- 1. Traffic Funnelling.** It is still the MOD's opinion that overall safety within the airspace outside of the proposed Class D would be considerably reduced and the risk to life would be increased owing to funnelling of traffic looking to avoid CAS and the subsequent increased likelihood in the potential for a Mid-Air Collision (MAC). This would create a more constricted and funnelled area of Class G airspace to the west of RAF Odiham, which would increase the density of traffic in an area where JHC helicopters and RAF gliders would normally conduct their operations; specifically, in the RAF Odiham area, the airspace in question would become more congested. While contested by Farnborough, it is still felt that aircraft are likely to be held outside of CAS or route in the gap between Southampton and RAF Odiham. As a result, this could increase movements of GA traffic through the portion of the MATZ that sits outside of the new CAS making the controlling of IFR approaches and departures particularly challenging in particular in relation to achieving Deconfliction minima.

1.1 Response for Consideration:

The zone has been kept to the minimum dimensions that afford protection for IFR traffic.

- a) The Farnborough ATC system will be re-structured to ensure sufficient capability is always available to handle transit traffic:
 - a frequency dedicated to a zone controller,
 - **additional** controlling staff provided to ATC for coordinator position
 - a coordinator position available during core VFR hours
 - continuation of LARS West and Approach as separate frequencies
 - a review of LARS areas to help equalise workload (LARS East is the least busy sector having approximately half the traffic of LARS North and LARS West
 - use of 'an intention to request crossing' transponder code to be used by aircraft within 20nm of LF to alert controllers and help prioritisation,
 - the use of the 'sharks fin' airspace delegation to relieve the pressure from Fair Oaks,
 - rostered over manning of key VFR days (as happens today for Goodwood, Royal Ascot and four other events per year).
- b) Education programme working with the GA community using computer based training, presentation evenings, sponsored fly-ins at certain key

Farnborough ACP response for MOD consideration

aerodromes (Goodwood have already asked for this – fly in and then discuss your experience), one-to-one controller/FI meetings.

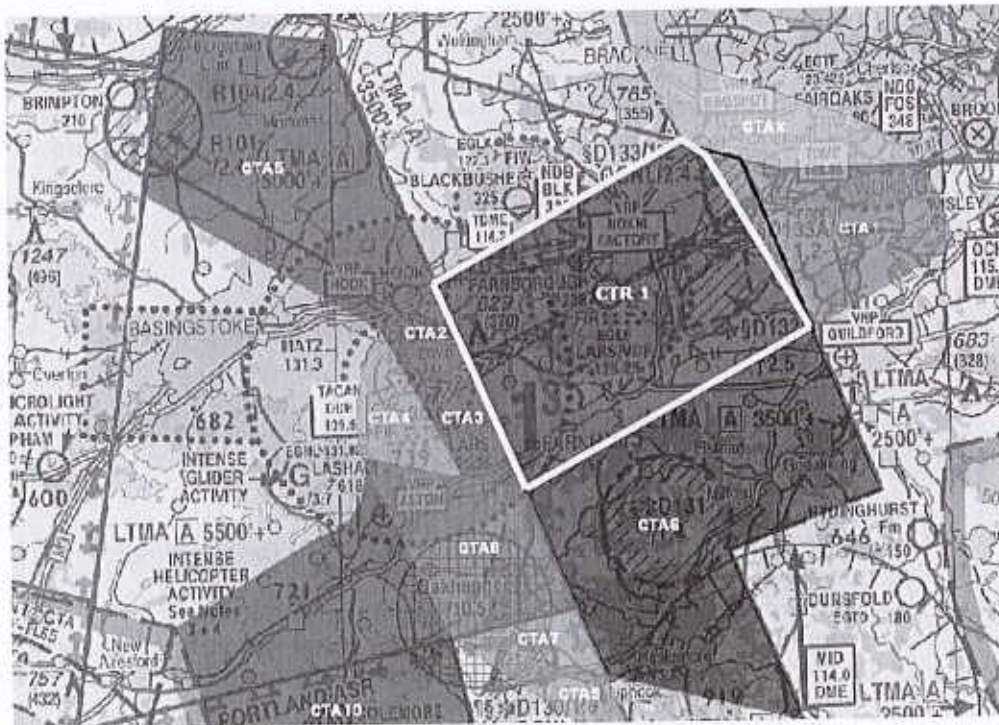
- c) Controller training: The ATC team are already fully conversant with GA traffic and their requirements servicing over 120,000 LARS movements per year (a third of all LARS movements in the UK per year). They will continue to be trained to the highest standard including using the state of the art simulator based at Farnborough (run from the Corporate and Technical Centre using specialist NATS training College input to simulate large numbers of aircraft well beyond that of normal simulations outside NERL).
- d) To establish VFR levels accurately a review of the airspace proposed was conducted:

The project used June 2014 - a period of extended good weather with largest number of LARS W aircraft seen during the year.

CTR 1 - Region of interest

Proposed airspace limits

CTR1: 0ft – 3,500ft



The CTR was then analysed for LARS traffic entering the area combined with 7000 transponder codes (including 7010).

1.2 The following data set describes the numbers of aircraft transiting the proposed CTR:

Farnborough ACP response for MOD consideration

	Hour (UTC)																						Total	Max	Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
01/06/2014																							162	25	13
Farnborough IARS																							47	10	4
02/06/2014																							115	18	10
Farnborough IARS																							53	8	5
03/06/2014																							23	5	3
Farnborough IARS																							30	5	3
04/06/2014																							50	12	5
Farnborough IARS																							20	5	2
05/06/2014																							30	8	3
Farnborough IARS																							27	7	3
06/06/2014																							20	5	2
Farnborough IARS																							189	23	13
07/06/2014																							68	13	6
Farnborough IARS																							121	17	10
08/06/2014																							139	22	13
Farnborough IARS																							40	12	4
09/06/2014																							99	13	6
Farnborough IARS																							61	10	5
10/06/2014																							18	6	2
Farnborough IARS																							43	6	4
11/06/2014																							174	31	14
Farnborough IARS																							62	14	5
12/06/2014																							112	17	10
Farnborough IARS																							65	12	3
13/06/2014																							24	6	3
Farnborough IARS																							41	9	4
14/06/2014																							101	11	6
Farnborough IARS																							32	5	2
15/06/2014																							69	8	5
Farnborough IARS																							143	22	13
16/06/2014																							43	7	4
Farnborough IARS																							100	17	8
17/06/2014																							157	26	13
Farnborough IARS																							61	12	7
18/06/2014																							96	17	10
Farnborough IARS																							125	20	10
19/06/2014																							40	10	4
Farnborough IARS																							85	11	7
20/06/2014																							118	17	10
Farnborough IARS																							41	7	4
21/06/2014																							77	10	6
Farnborough IARS																							130	26	13
22/06/2014																							49	9	4
Farnborough IARS																							81	17	7
23/06/2014																							91	13	7
Farnborough IARS																							27	6	3
24/06/2014																							64	9	5
Farnborough IARS																							81	12	7
25/06/2014																							34	8	4
Farnborough IARS																							47	8	4
26/06/2014																							65	10	6
Farnborough IARS																							22	5	2
27/06/2014																							43	7	4
Farnborough IARS																							111	16	9
28/06/2014																							45	9	4
Farnborough IARS																							66	10	6
29/06/2014																							103	15	8
Farnborough IARS																							32	7	5
30/06/2014																							71	9	9
Farnborough IARS																							207	42	17
01/07/2014																							78	23	8
Farnborough IARS																							129	24	14
02/07/2014																							135	21	11
Farnborough IARS																							41	10	4
03/07/2014																							94	13	8
Farnborough IARS																							104	15	8
04/07/2014																							32	4	3
Farnborough IARS																							72	11	6
05/07/2014																							37	11	4
Farnborough IARS																							53	9	5
06/07/2014																							141	17	11
Farnborough IARS																							50	9	4
07/07/2014																							91	13	7
Farnborough IARS																							177	25	14
08/07/2014																							58	14	6
Farnborough IARS																							119	15	9
09/07/2014																							105	17	9
Farnborough IARS																							20	4	2
10/07/2014																							85	13	7
Farnborough IARS																							186	29	15
11/07/2014																							64	13	6
Farnborough IARS																							122	23	10
12/07/2014																							111	16	9
Farnborough IARS																							30	7	3
13/07/2014																							81	11	7
Max	1	1	10	108	189	311	398	290	292	331	352	387	373	171	99	54	14	1	1	1	1	1			
7000	1	1	4	5	6	10	23	9	12	13	8	11	14	4	4	4	3	1	1	1	1	1			
Farnborough IARS	0	0	8	13	14	24	33	32	32	17	15	18	17	13	8	5	1	0	0	0	0	0			
Average	1	1	2	2	3	4	5	4	4	5	4	5	4	5	4	3	2	2	1	1	1	1			
Farnborough IARS	1	1	2	2	3	4	5	4	4	5	4	5	4	5	4	3	2	2	1	1	1	1			

Total Aircraft: 3401

From practical experience of traffic patterns it should further be noted that:

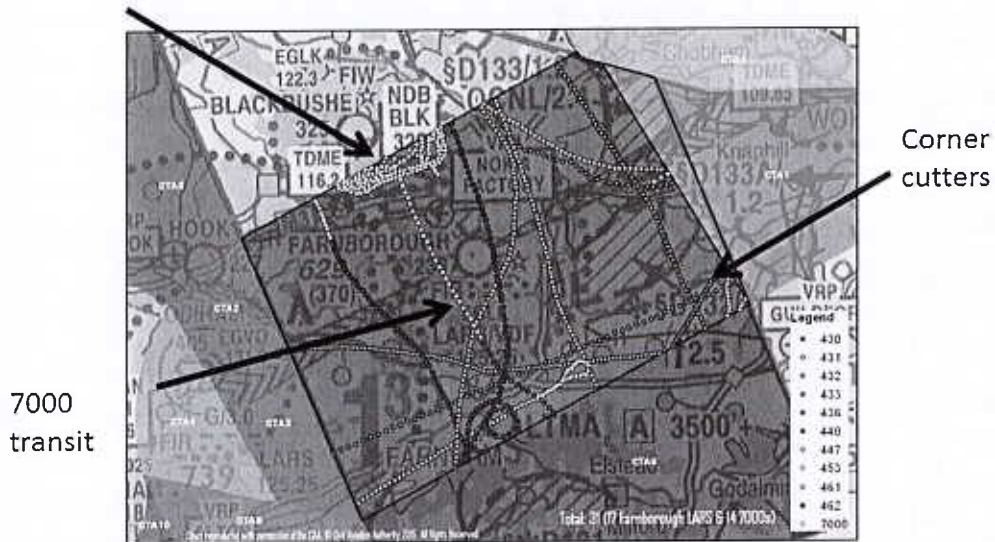
- The majority of 7000 aircraft operate in the Blackbushe. A reasonable assumption is that between 0 and 5 7000 codes would transit the airspace in an hour with an average 10 per day. A weekend will probably see this double to 20 per day.

Farnborough ACP response for MOD consideration

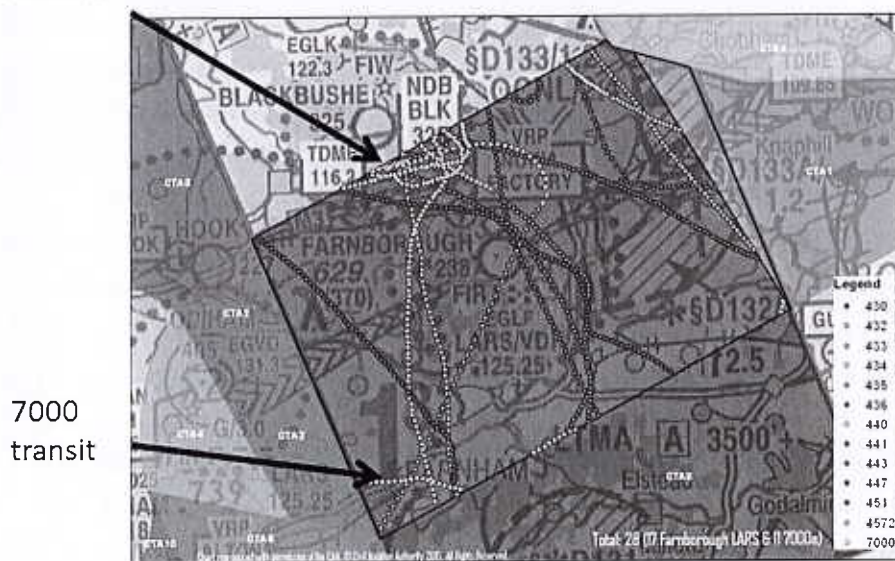
The ACP team analysed representative samples of the hourly data including the two busiest hours:

Two examples are illustrated below -

Blackbushe Circuit



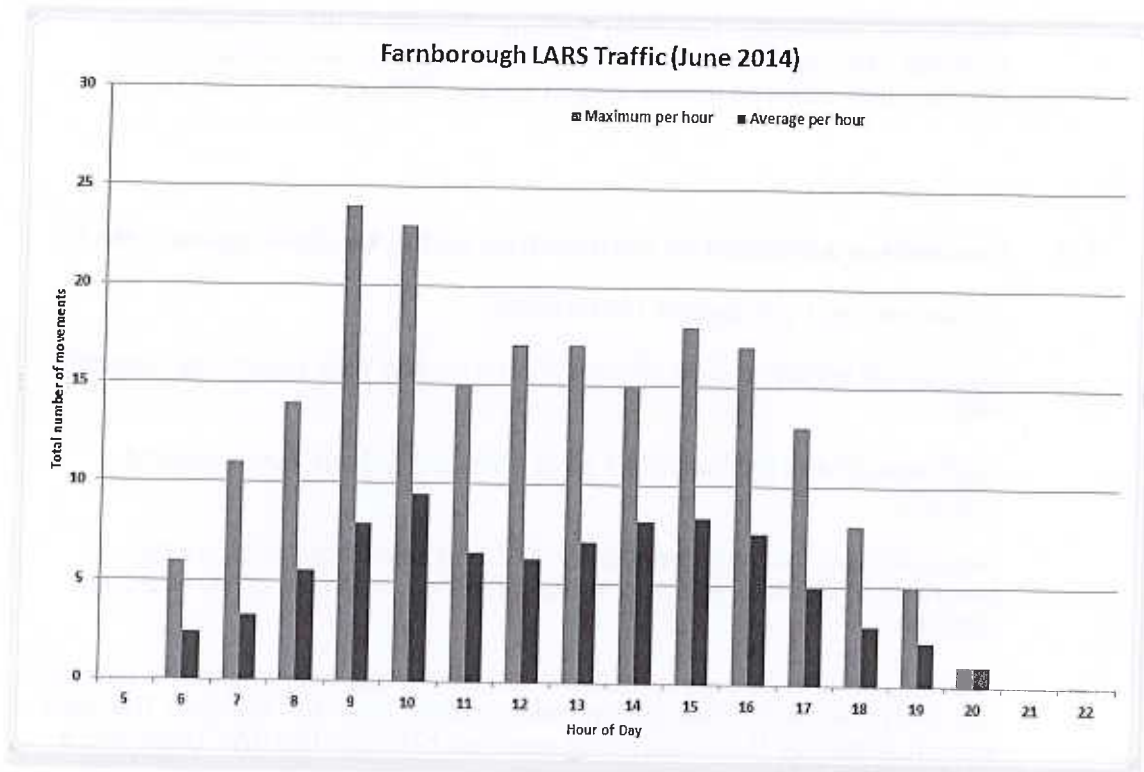
Blackbushe Circuit



- There will be some LARS aircraft that are cutting the corner of the 'airspace block' and these are likely to route around. This is only in the SW/SE portions as illustrated above. It is reasonable to assume that 1-2 aircraft per hour will fall into this category.

Farnborough ACP response for MOD consideration

The conclusion is that the following is likely to be an **accurate estimate of VFR GA aircraft** that are likely to operate in transit through the zone:



This includes the 7000 codes that are likely to request transit as LARS Aircraft.

Weekends are likely to be at the high end of the average. Farnborough already rosters two day shifts (0930 and 1100 starts) to cover the beginning of the traffic increase)

The **average per day is 77 LARS and 10 Conspicuity 7000 codes equivalent.**

3400 aircraft were included in the sample.

The average per hour is **4.7 LARS and 1.8 LARS** 7000 equivalent.

The unit took the worst case scenario - the **average of the maximum** between the hours of 0800 and 2000 UTC which is **13.7** and then rounded up to 15 per hour.

- 1.3** This was taken to the large scale simulation. During simulation, with Farnborough operating as a maximum (20 per hour split, 15/5 or 10/10 to give approximately 50,000 – 72,000 movements per year; the maximum allowed is 50,000). The simulation team took advice from SARG on handling transits VFR in Class D CTR and benefited from the advice given. The scenarios were gradually built from 6 per hour eq: to 15 per hour eq: as the team learnt how to handle the requests and worked on techniques for safe integration and efficient ways to divide workload. **NO** VFR transit aircraft were refused access to the CTR.

Farnborough ACP response for MOD consideration

During simulation the ATC team comfortably achieved 15 ph This is anticipated to increase as training, techniques, and experience builds to accommodate the worst case maximum of 24 ph +

Finally the 'sharks fin' has been designed to relieve the pressure from Fair Oaks wishing to fly towards the North: this will help Fair Oaks and Farnborough with the transit aircraft routing through the D133/132 area.

1.4 Funnelling: Alresford to Lasham Gap and in the RAF Odiham MATZ

a) Establishing the current traffic pattern:

The current airspace is totally dominated by one user during the summer; LGS.

Farnborough and Odiham both have a voluntary 3nm 'avoid' around Lasham.

LGS members fly throughout the MATZ and associated stub, in the overhead of Odiham ATZ and in the published 'feathers' of Farnborough R06 IAP.

The volume of traffic generated by LGS can totally overwhelm the airspace and will increase the risk for whichever region they are flying in. This was demonstrated by the fatality that occurred between the RAF Tutor and a glider near Benson:

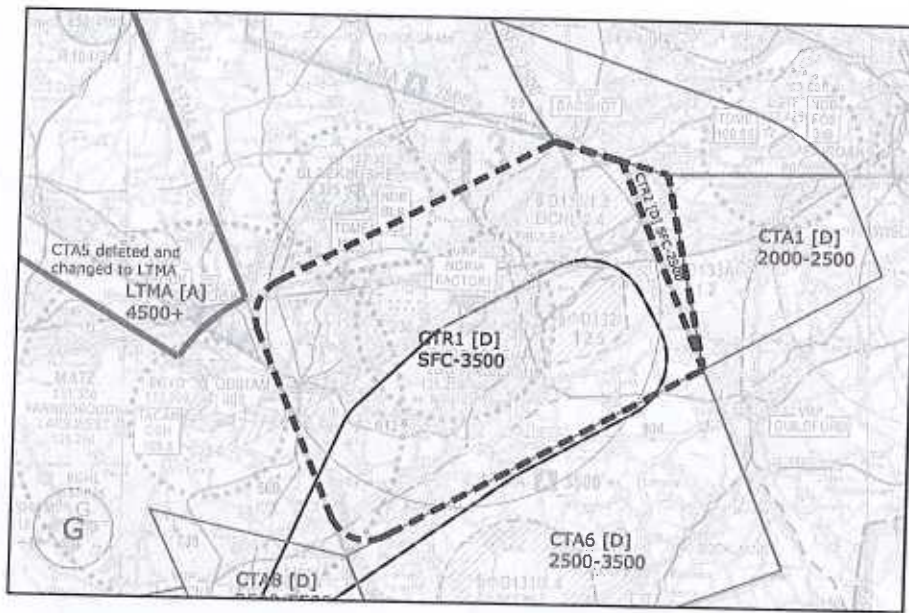
The report noted that: The club from which the glider departed was conducting a routine busy summer days flying with 128 gliders launched at a peak rate of 70-80 gliders an hour during the morning.

This level of activity gives other users few options with regard planning of where they might fly in accordance with their own risk profile as was demonstrated by the MAC and the GROB activity. The GROB would not have been permitted to fly if an accurate update of traffic levels in the vicinity had been available.

Regardless of the outcome of this submission, the ACP team recommend that RAF Odiham and Farnborough ATC approach the CAA SARG GA and regulation section to seek advice that could lead towards an LGS adopting a self regulation in terms of numbers launched within a time period to reduce the risk to other users in vicinity

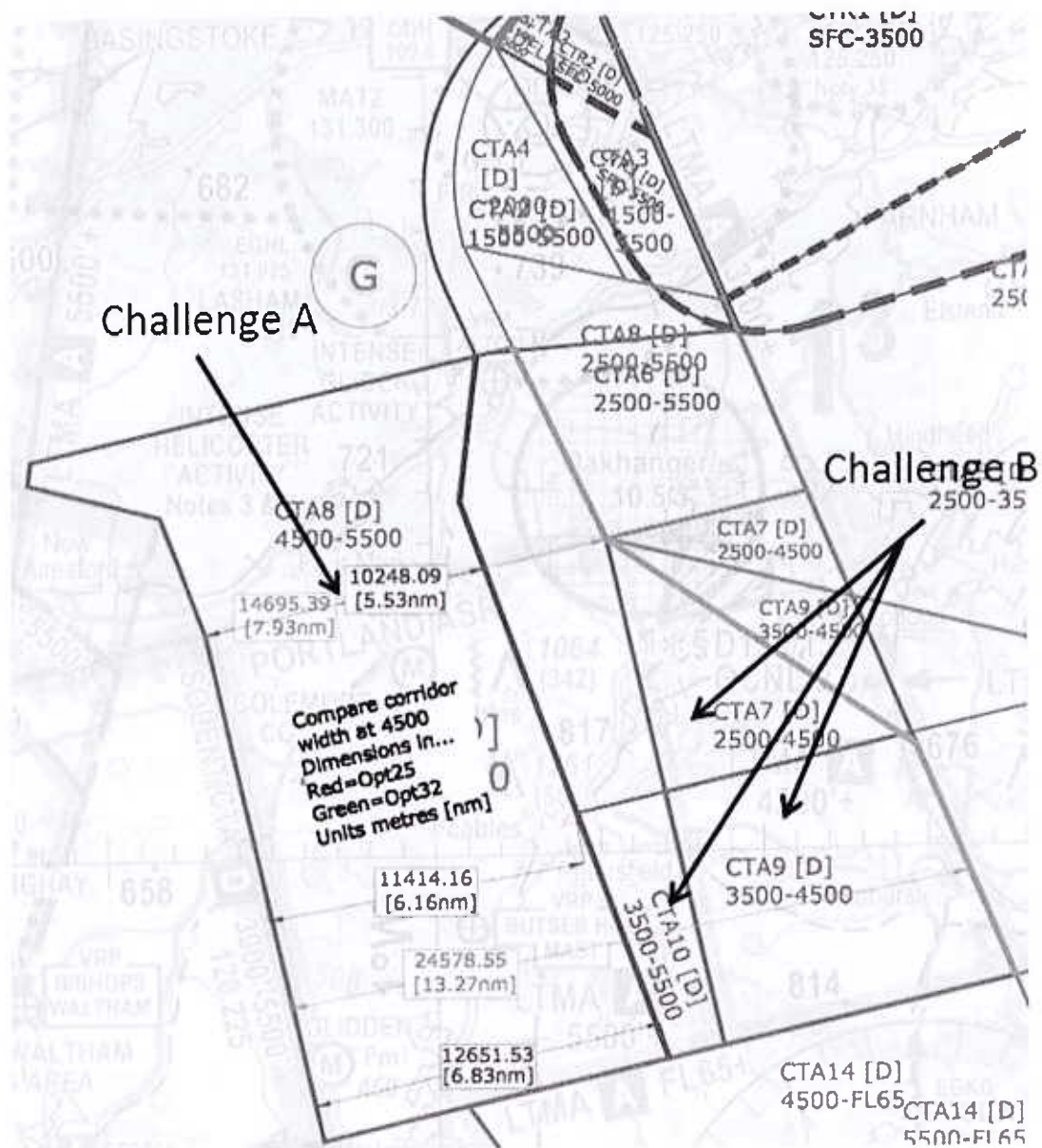
Finally when reading this section, it is important to acknowledge that LGS has stated in their consultation response that they would not object to a 5nm radius CTR centred on the aerodrome reference point. This should be considered in the light of the 'funnelling' conundrum highlighted by LGS.

Farnborough ACP response for MOD consideration



LGS CTR (green circle)

Farnborough ACP response for MOD consideration

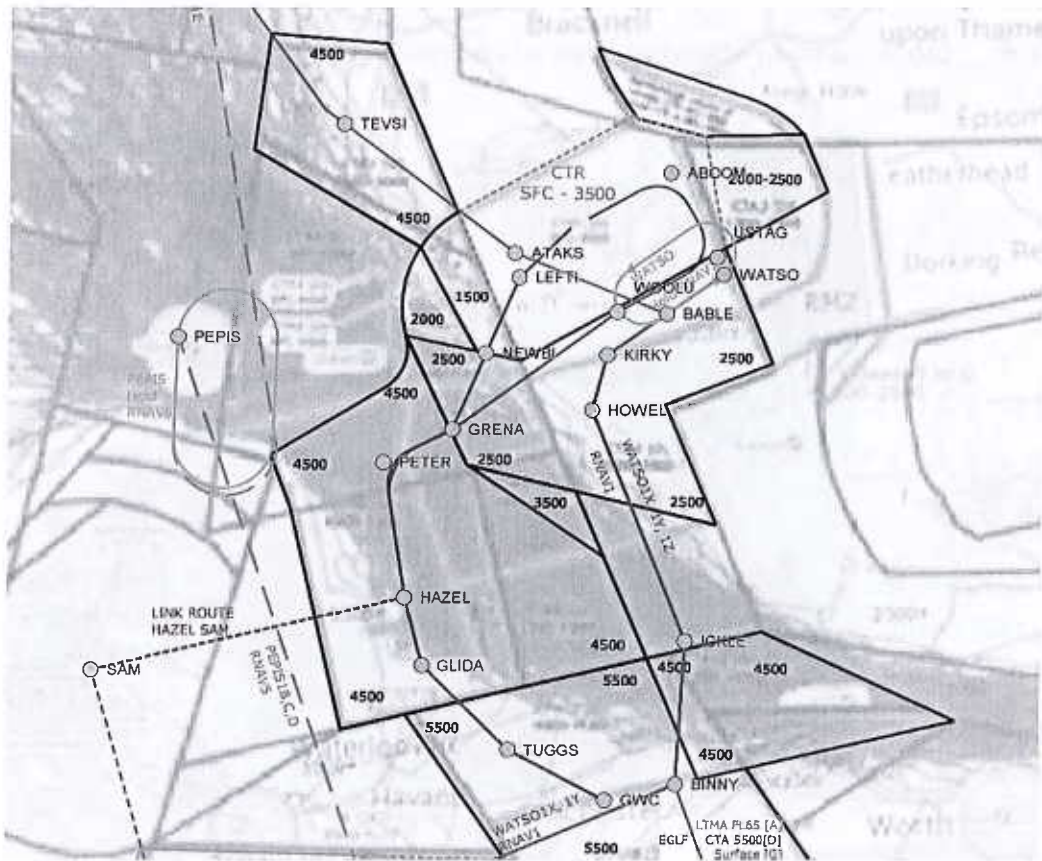


1.5 Challenge A:

By changing the outbound SIDs and associated procedures the Sponsor was able to begin to address the issue of funnelling through the 5.53nm constriction. The new CTA 10 is 7.93nm in width (43% increase on that consulted) at its closest point and 13.27nm at the widest (same as today).

The ACP team then looked at gliding /micro-lights/hang-glider tracks and compared them to the new airspace to ascertain how closely the airspace mirrored (horizontally) these tracks. The team wanted to ensure that these communities who do not normally call ATC would be able to continue operating in this way.

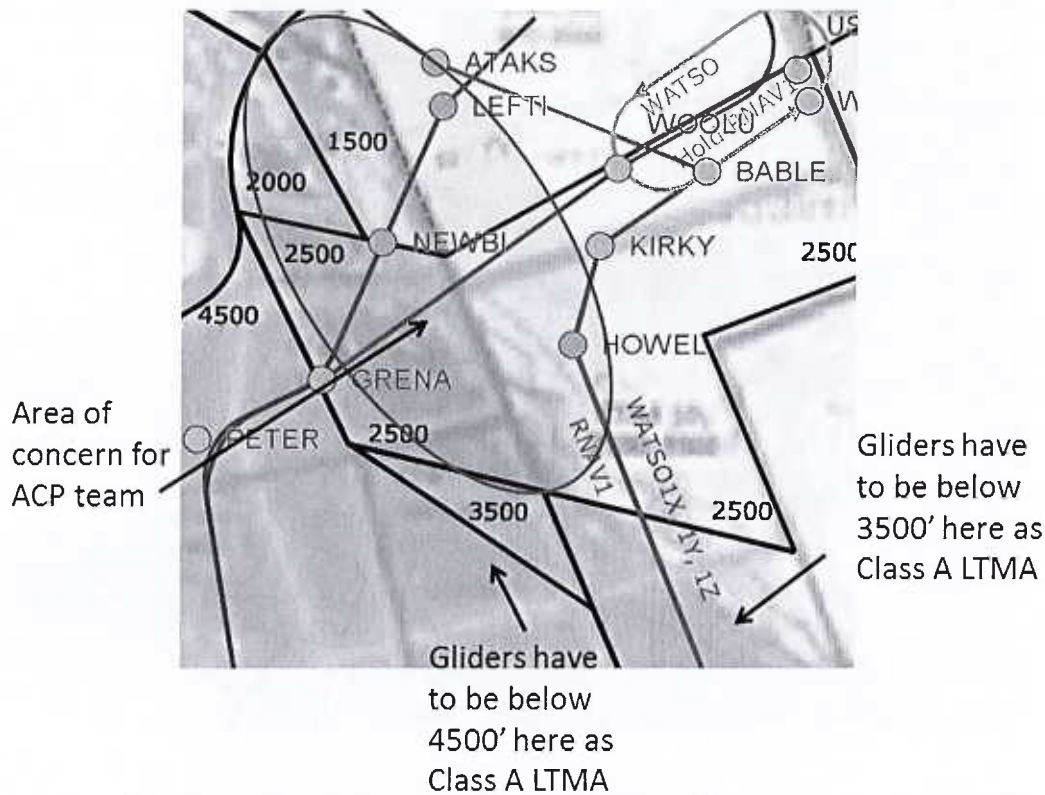
Farnborough ACP response for MOD consideration



Gliding cross country tracks with Option 25 Consultation airspace in Green and proposed airspace in black (a years traffic [BGA sourced])

Farnborough ACP response for MOD consideration

1.6 Close up view showing area of concern:

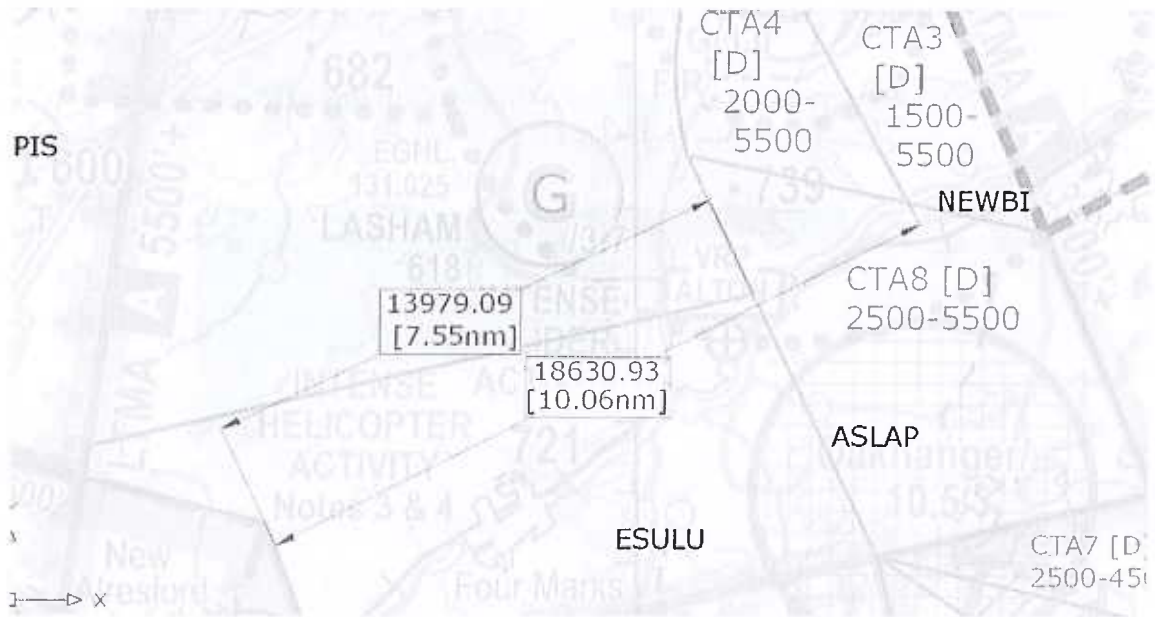


The ACP design team acknowledge that there may be a small percentage of gliders that will have to alter their flight path to avoid the GRENA area above.

The next question is 'what is the reduction in airspace that would be commonly used in the Alresford – Lasham gap?' Using the BGA information it can be shown that the cross country gliders rarely go further east than the eastern edge of CTA4 – so the current gap for gliders is 10.06nm approximately. If CTA8 +CTA4 were in place, the reduction would be 25% of useable gap, being reduced from 10nm to 7.55nm. The majority of this reduction in gap is above the VO ATZ or on final approach for R06 LF in CTA4, the use of which has the potential to severely compromise operations at both airfields.

This reduction does not equate to an increase of 25% of gliders in the 'gap'. The best estimate of the ACP team using information observed that 10% of gliders might be affected.

Farnborough ACP response for MOD consideration



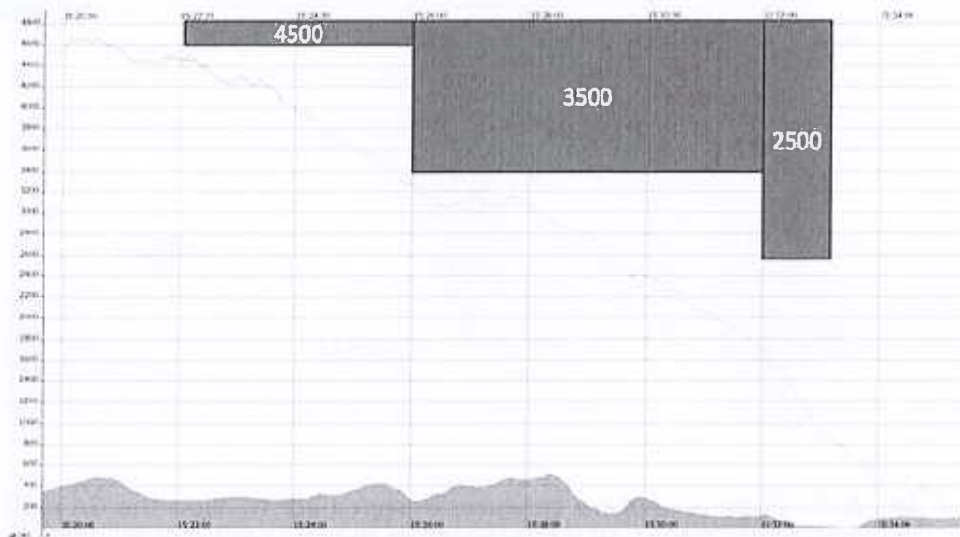
The ACP design team have designed this airspace to allow the GA gliding community the opportunity to operate as they do now with a minimum of RT contact with ATC. This is specifically not designing for exclusion but designing for incorporation of the current arrangements: it is unlikely that ATC would be able to manage significant calls for access in these key areas by gliders.

1.7 Challenge B

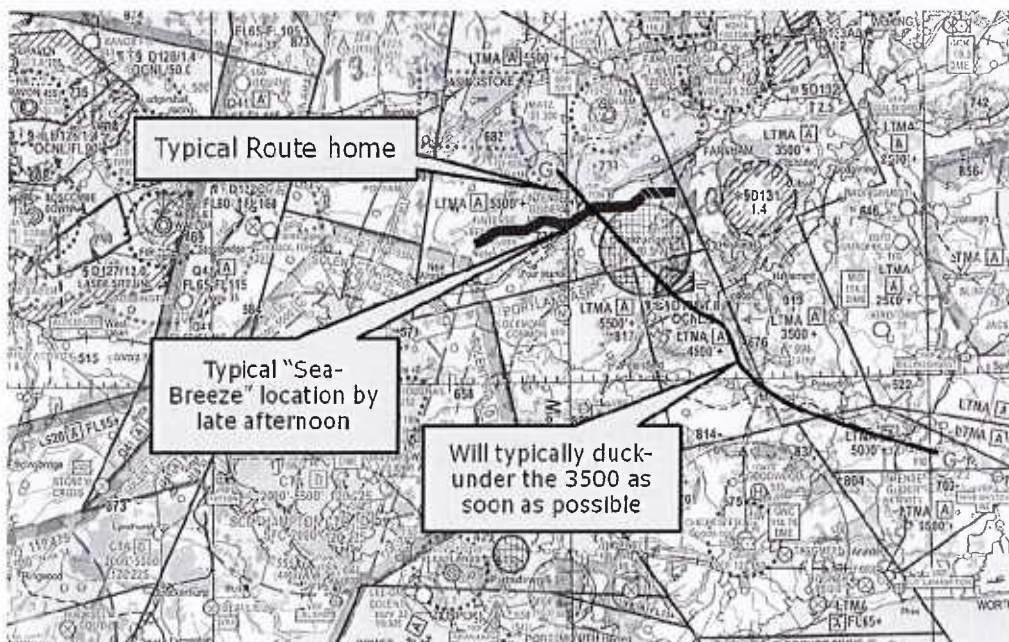
The vertical challenge for the gliding community is crucial – height enables more track miles to be gained with a lower risk of off-field landings. The ACP worked closely with the Gliding Clubs locally to better understand the critical infrastructure needed, and following the consultation, more knowledge was gained and used.

Farnborough ACP response for MOD consideration

Return route to Southdown Gliding Club through Sea Air Typical Glider Descent .vs. Existing Airspace



The Challenges of gliding back to Parham Airfield



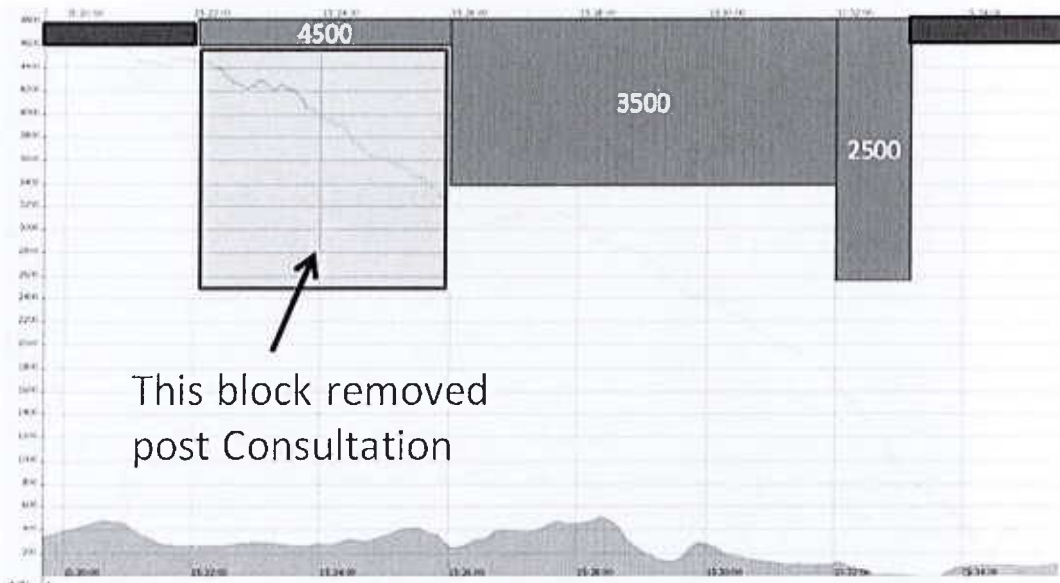
These depictions eloquently describe the altitudes required for transiting to and from the three major gliding sites on the South Coast and the ACP has attempted to replicate these where possible. The biggest issue is to ensure that as high an altitude as possible is available mid-transit. Farnborough worked from the existing Class A 4500 in the vicinity of Petersfield as the minimum, hence the use of CTA10. The Sponsor was very conscious that the Hang-gliding and para-

Farnborough ACP response for MOD consideration

gliding community need as high a ceiling as possible and that the removal of CTA11 may give an opportunity (in certain weather conditions – sea breeze location) for a top up of altitude.

Return route to Southdown Gliding Club through Sea Air

Typical Glider Descent .vs. Existing Airspace



The RED bars indicate post-consultation proposed CAS

By modifying the airspace it can be demonstrated that the majority of non-powered users will be able to replicate their current traffic patterns in a similar sized airspace with the only significant reduction and compression being in the vicinity of RAF Odiham ATZ.

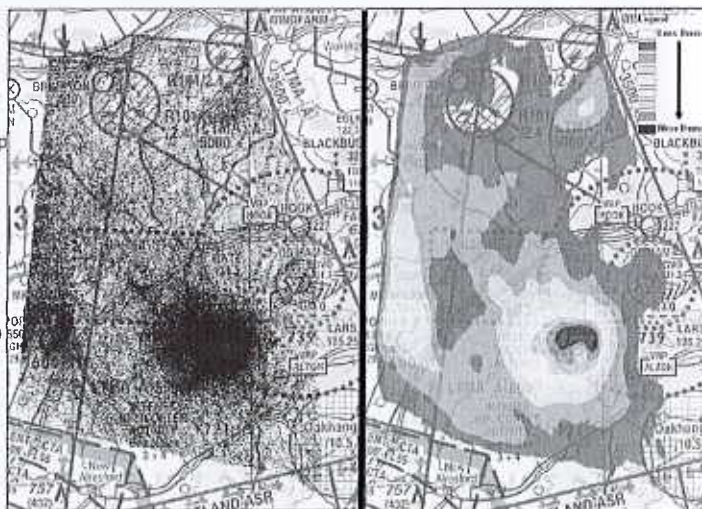
NATS

Region 1
Primary only
traffic

The analysis covers
the time period
7-13 and 21-27 Sep
(14 days in total)

The 2 maps to the
right illustrate the
radar returns of the
primary traffic (left
image), as well as
the densities of the
tracks (right image)

The intense activity
to the south
western region of
RAF Odiham
encapsulates the
**Lasham Glider
Activity**



Farnborough ACP response for MOD consideration

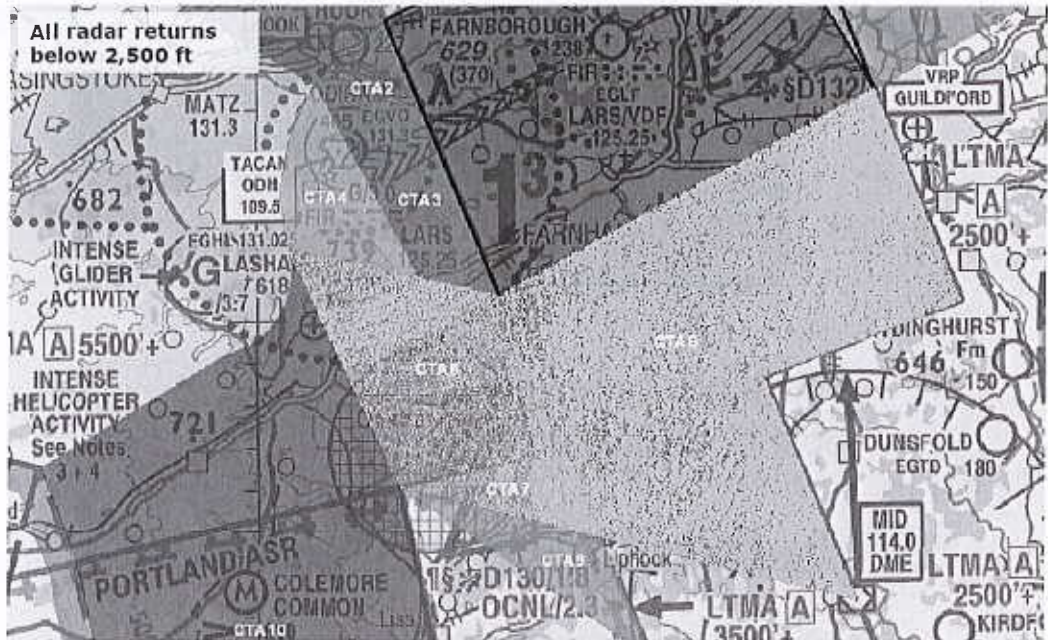
1.8 Powered Flight:

In terms of powered flight, the ACP team investigated usage and altitudes for aircraft flying through the Lasham Gap: (Sample June 14)

CTA 6,7,8 – QNH Adjusted altitude plots (<2,500ft)

Proposed airspace limits

CTA6: 2,500ft – 3,500ft CTA7: 2,500ft – 4,500ft CTA8: 2,500ft – 5,500ft



From CTA 8 - a flow can be seen along the A31 road with a definite diminishing of traffic SE of Lasham other than that flow.

CTA 6,7,8 – QNH Adjusted altitude plots (2,500 – 3,500ft)

Proposed airspace limits

CTA6: 2,500ft – 3,500ft CTA7: 2,500ft – 4,500ft CTA8: 2,500ft – 5,500ft

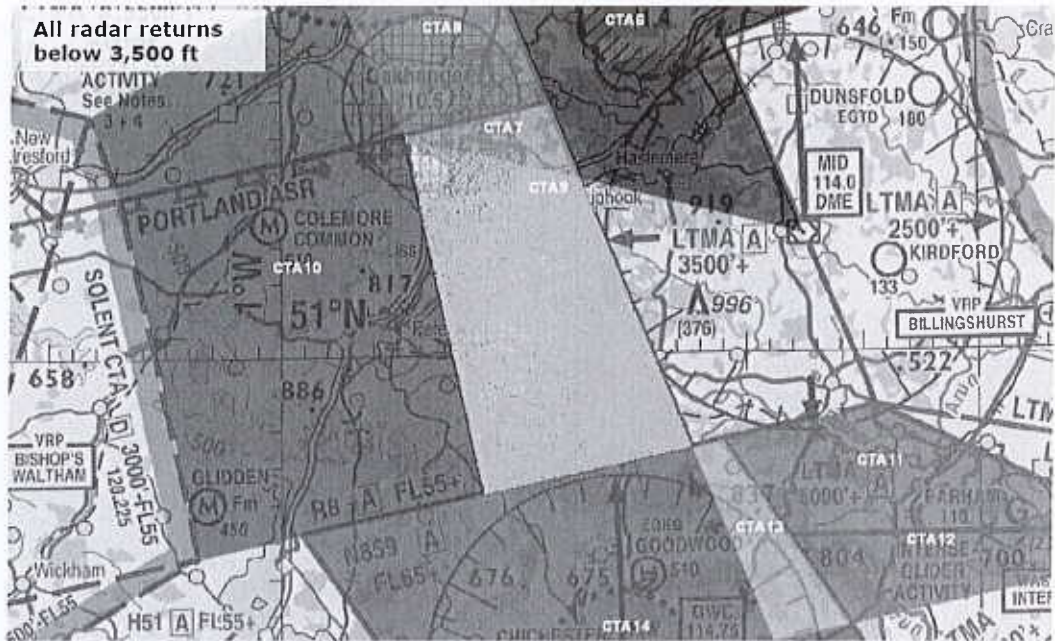


Farnborough ACP response for MOD consideration

CTA 9 & trapezoid – QNH Adjusted altitude plots (<3,500ft)

Proposed airspace limits

CTA9: 3,500ft – 4,500ft Base of LTMA above trapezoid – 4,500ft

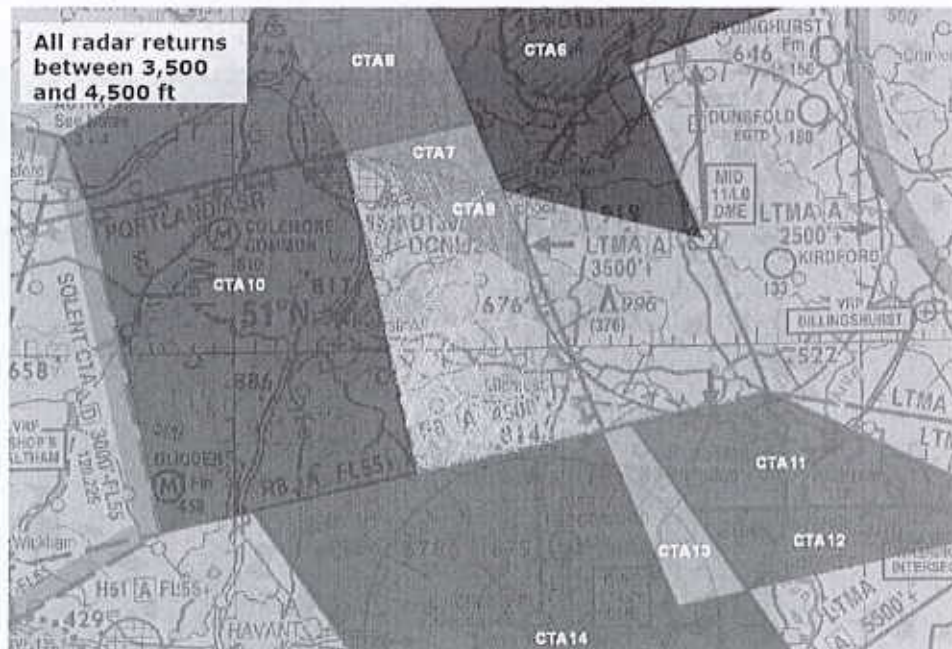


This shows the majority of traffic operating below 3500' (analysis shows this to be 80% below 2500')

CTA 9 & trapezoid – QNH Adjusted altitude plots (3,500 – 4,500ft)

Proposed airspace limits

CTA9: 3,500ft – 4,500ft Base of LTMA above trapezoid – 4,500ft



Farnborough ACP response for MOD consideration

CTA 10 trapezoid – QNH Adjusted altitude plots (<2,500ft)

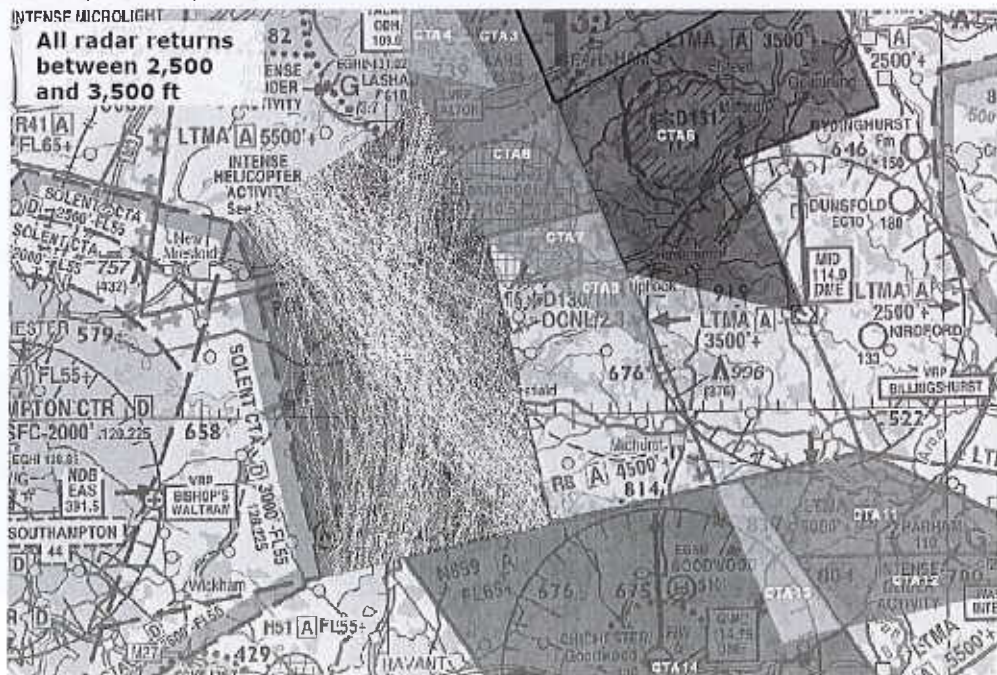
Proposed airspace limits
CTA10: 4,500ft – 5,500ft



Definite flow from NW to SE avoiding Lasham.

CTA 10 trapezoid – QNH Adjusted altitude plots (2,500 – 3,500ft)

Proposed airspace limits
CTA10: 4,500ft – 5,500ft



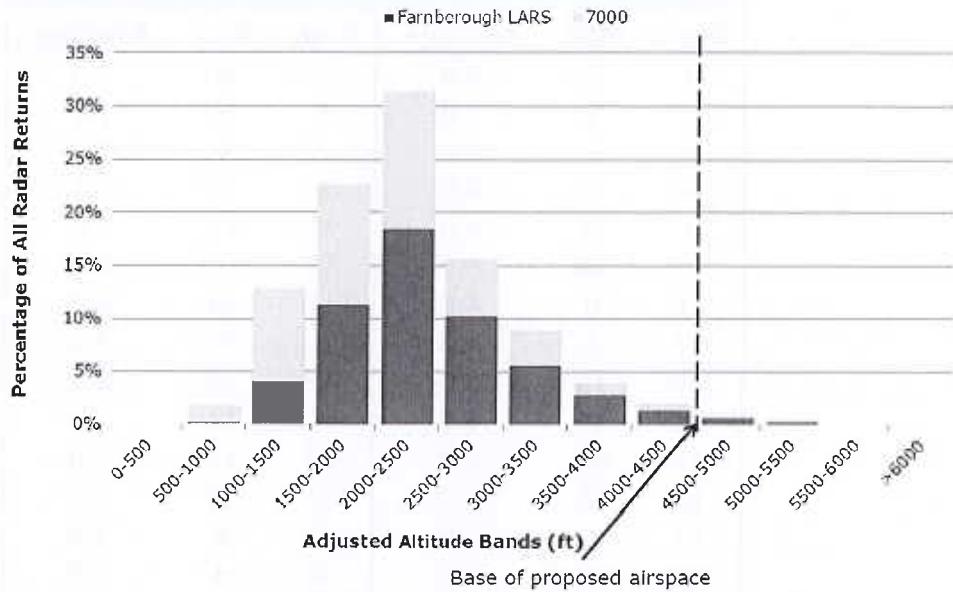
Two flows above 2500'

Farnborough ACP response for MOD consideration

CTA 10 trapezoid- QNH Adjusted altitudes **Total radar returns: 144,668**

Proposed airspace limits
CTA10: 4,500ft - 5,500ft

QNH Adjusted Altitude Distribution



It should be noted that the aircraft operating in the band 2500 – 3500 have a tendency to route NE or NW and the latter might be displaced further west by the airspace in the vicinity of RAF Odiham – this is approximately 6% of the traffic at these levels and are probably en-route the Channel Islands and are usually 7000 codes who wouldn't talk to LF or Solent.

Farnborough ACP response for MOD consideration

In terms of numbers: over the busiest month powered flight in the region showed:

Farnborough LARS			7000		
Hour	Max	Average	Hour	Max	Average
5	0	0.0	5	0	0.0
6	2	1.0	6	3	1.0
7	9	2.0	7	9	2.0
8	9	4.0	8	10	3.0
9	11	4.0	9	14	4.0
10	26	6.0	10	12	6.0
11	8	4.0	11	14	4.0
12	8	4.0	12	10	4.0
13	10	5.0	13	12	4.0
14	11	5.0	14	11	5.0
15	22	6.0	15	15	5.0
16	15	4.0	16	12	4.0
17	5	3.0	17	6	2.0
18	6	2.0	18	4	2.0
19	2	1.0	19	3	1.0
20	0	1.0	20	0	1.0
21	0	0.0	21	0	1.0
22	0	0.0	22	0	2.0

There will be some duplication where the same flight enters a leaves the region multiple times (circling, aerobatics etc), but the ATC team confirm that this is what they would expect on a busy summers day – excluding gliders. **(Note: the 26 and 22 and 15 maximums are likely to be anomalous and 10-14 would be more likely).**

These aircraft are generally below the gliders in cross country mode or are avoiding the Lasham area if below 2500' and the numbers are small in comparison to the gliding community.

The highest average number of powered aircraft transiting through the 'gap ^is 12 per hour (busiest hour in the busiest summer month) and an average in the core gliding hours (1000 – 1900) of 8 per hour:

To establish the full picture another 2 per hour should be added for A31 transit traffic and 3000'+ traffic tracking N/S above the VO ATZ.

The airspace would restrict the routing of some gliders on cross country exercises and would restrict to the east some Lasham local activities (although this has been mitigated as far as possible). At the busiest times LGS can launch 70-80 gliders per hour into this airspace.

JHC have concerns as to the funnelling effect on traffic – the ACP team contends that by mimicking the gliders current operation and replicating all but a fraction of the powered community routings the basal premise of funnelling is mitigated.

Farnborough ACP response for MOD consideration

This mitigated airspace would then have to support a potential extra funnelling effect of traffic diverting around Farnborough CTR.

In terms of numbers, if 15 VFR aircraft per hour (see 1.2 – maximum average in core hours) would have crossed the CTR before ACP, the assumption post-ACP is that 30% would still request a clearance. Of the remaining 10-11 aircraft, a percentage would change their routes and train/fly elsewhere rather than fly through the Lasham Gap. During a presentation evening at White Waltham, the instructors present offered 30- 50% would follow this plan due to the difficulties of flying through the Lasham Gap.

The final 5-7 per hour would divert through the Lasham Gap. Approximately 50% would work Farnborough LARS W (historical data) and would be provided with some traffic information even if only a generic warning of glider activity/JHC activity).

The Sponsor does not believe that the addition of 5-7 aircraft an hour to airspace that is currently supporting 70-90+ aircraft per hour adds to the risk burden significantly. The risk is already very significant in itself due to the presence of very large numbers of gliders.

The main risk for the GA Community is, in the opinion of the Sponsor, that as Farnborough traffic increases (or the numbers of aircraft using the airspace increases) and/or LGS traffic numbers increase, then GA aircraft might be displaced and are decide not fly north or south of Lasham-Odiham-Farnborough. These would then mix with Odiham traffic to the North and Odiham/Farnborough traffic to the south.

The efficiency of a CTR Class D if managed well extends the life of the airspace as a whole and keeps the status quo, by ensuring safe transit is possible.

1.9 Summary:

The ACP design team believes that the amendments to design have resulted in a significant reduction to funnelling for the gliding community and other very light/non-powered aircraft that traditionally fly through the Alresford –Lasham gap.

Provided that the gliding community continues to operate as they do now, the risk of a MAC will remain high regardless of whether the airspace is implemented. The airspace has been designed to replicate the current flight patterns of these communities.

Each of these users of this airspace has their own acceptable level of risk individually, within a group, and as a group. For example the two main radar units (TAG Farnborough Airport and RAF Odiham) are conservative with risk being very tightly defined and being acceptable at a very low level. For TAG Farnborough and NATS this is no-Safety Significant Events where possible. This sits next to LGS which has stated that the tolerably safe level of risk for their operation is one mid air collision (MAC) in the Lasham overhead per four years and one death every ten years. Other user groups will have other acceptable risk levels.

Farnborough ACP response for MOD consideration

By reducing the compression of the Gliders, the ACP Design team believe that the risk of MAC is also significantly mitigated to levels similar to those today for the powered community if they choose to operate in the Gliding areas.

If the education programme for pilots and training for controllers is successful, then the project believes that the region will become much more efficient for all users with enhanced safety benefits for RAF Odiham, Farnborough and the GA community.

SARG will also monitor access through the Post-Implementation Review and the Sponsor expects to be held to account for access especially to the CTR.

1.10 Question for JHC – how often is your operation compromised by primary only contacts in the ATZ overhead: what is the effect on your operation?

It should be noted that the GM LF and SATCO VO approached LGS in 2010 to request that gliders do not fly in the ATZ overhead at VO: the LGS Chairman agreed that it was a sensible safety request but could not be mandated at the Society.

If the airspace is not available for transit or all of the pilot community which traditionally cooperate with Farnborough will not request transit and alter their patterns of behaviour, then the project believes that the following patterns might occur:

- a) Lasham airspace will remain similar in usage as today: due to the perceived risk of transit for those who do not already move through the area remaining high.
- b) An increase (albeit small) of powered aircraft routing further west abeam Odiham at 3000'+
- c) A possibility of aircraft 'hugging' the Odiham ATZ and CTA in the vicinity. This is similar to the behaviour exhibited today as they avoid Lasham.
- d) A change in usage for the airfields based north of Farnborough where training and general handling might occur abeam Benson and further North. The ACP acknowledges that there might be an increased risk for JHC but does not believe that it is a significant risk increase.

Farnborough ACP response for MOD consideration

2. MOD Concerns:

Flying Complaints due to Noise. JHC raised concerns that the re-routing or excessive holding of their aircraft will certainly increase noise pollution in areas that would now be subjected to higher density of overflying traffic. Any change in operating procedures requiring differing routes from current arrangement is likely to increase flying noise complaints which would have a detrimental effect on RAF Odiham's reputation amongst the local population.

The Sponsor acknowledges the hard work and dedication that RAF Odiham conducts with the local communities to engage with and attempt to mitigate the Chinook noise profile. The Sponsor commits to continue working with the MOD to aid this mitigation.

3. MOD Concerns:

Farnborough Controller Workload. While assurances were given that Farnborough Airport and LARS would be able to deal with the expected increase in traffic loading associated with aircraft in transit requiring CAS crossings, due to the more efficient procedures for dealing with Farnborough arrivals and departures, there is still a concern that the capability/capacity would at times be insufficient. Although the ACP Simulations did include LARS tracks, MOD participants were concerned that insufficient LARS movements were included and that the traffic levels dealt with by the Farnborough controllers did not reflect reality.

The ACP team believe that the simulations were appropriate and reflected the level of traffic that might be experienced; see 1.3 contains more background.

Also consider the commitment to increase controller numbers, LARS West commitment, zone frequency and intention transponder code.

4. MOD Concerns:

Predicted Increase in Movements at Farnborough. The ACP Simulation was predicated on an estimated 16 -27,000 movements per year at Farnborough, however, it is noted that there is a desire to increase this to 50,000 per year. From the simulations, it was evident that any increase in movements at Farnborough would have a detrimental effect on RAF Odiham operations. While Farnborough's willingness to agree priorities was appreciated, regardless of any agreed LOA and the procedures adopted, aircraft operators remain concerned that as movements at Farnborough increase, RAF Odiham would be subject to increasingly restrictive access to the proposed shared airspace, purely by virtue of the increased traffic levels. This could therefore have a significant impact on future operational training.

Farnborough ACP response for MOD consideration

The ACP simulations were conducted with an average of 10 inbound/10 outbound per hour or variation of – this equates to 50 – 70k movements per annum. The Sponsor hopes that this provides re-assurance to JHC. The Sponsor would also like provide assurance that the LOA proposed in terms of access is extremely important to the Company and forms the basis of a long term relationship (with appropriate arbitration in the event of dispute).

Purpose of the Agreement

The purpose of this agreement is to ensure equitable access for both Parties to Class D airspace in the vicinity of Farnborough.

General Oversight Arrangements

The Air Navigation Service Provider (ANSP) at Farnborough (currently NATS Services contracted to TAG Farnborough) will manage controlled airspace to allow joint and equitable access. Standard Operating Procedures will allow MOD aircraft access the airspace.

Both Parties will cooperate on air traffic management, in order to; ensure safe operations, optimise the efficient use of the airspace, reduce cost, minimise environmental impacts, and communicate with other airspace users.

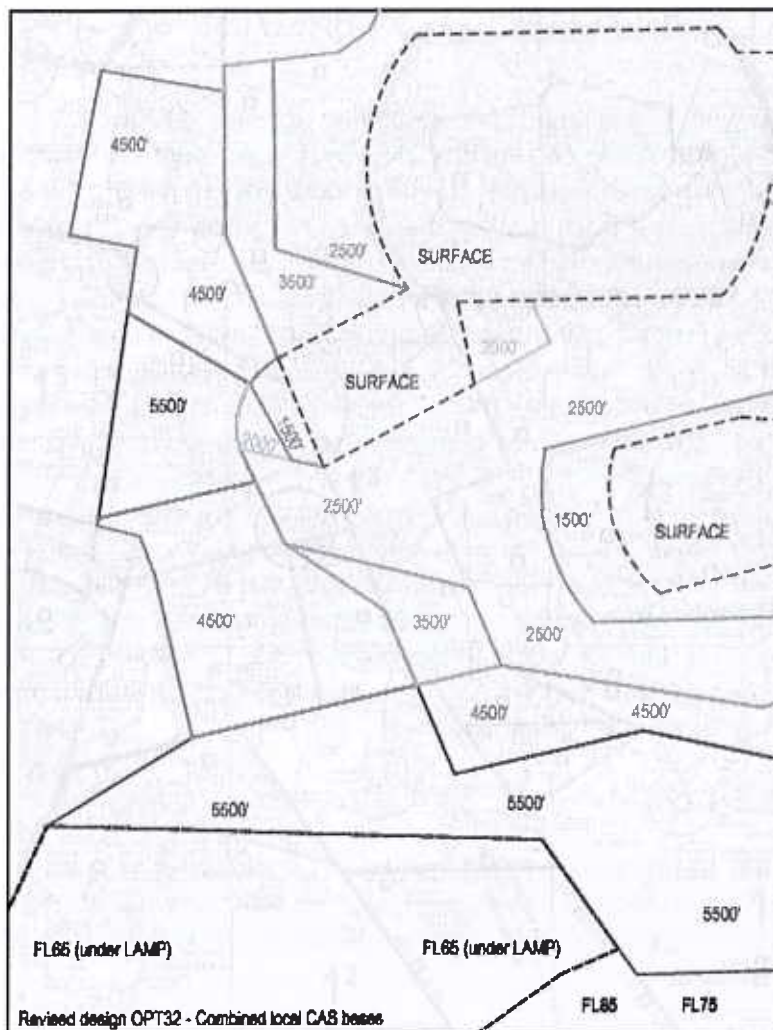
(CONTINUES)

5. MOD Concerns

Complicated Dimensions. RAF Odiham commented that the current proposed dimensions of the Farnborough CTR/CTAs are overly complicated and could lead to confusion. Any simplification of the current proposal would therefore be welcomed.

The Sponsor acknowledges the complexity and has endeavoured to reduce it where possible; the different demands of the various stakeholders have, inevitably, led to some complexity. The ACP design team have attempted to reduce some complexity by harmonising base levels where possible with those of the London TMA.

Farnborough ACP response for MOD consideration



6. MOD Concerns

Financial Implications. The ACP Simulations highlighted that RAF Odiham would be required to amend their Radar Training Circuit, resulting in an increased track distance of approximately 4-6nm. As stipulated in the initial MOD response this would have a financial impact for Odiham operations.

ILS Availability. The most significant operational concern remains the provision of an ILS approach to RAF Odiham, a key training and currency requirement for all RAF Odiham based Rotary Wing pilots. Use of other airfields to accommodate this requirement is unsustainable owing to the number of ILS approaches required, travelling time to other airfields and lack of prioritisation at those airfields. While mention was made of utilising the Farnborough ILS, at no extra cost to the MOD, it is understood that the noise issues associated with the Chinook could make any such proposal untenable for TAG. Inability to guarantee the use of the ILS at RAF Odiham also has an impact on the diversion fuel requirements for JHC assets operating out of RAF Odiham; this in turn could result in increased financial penalties and reduced sortie times

Farnborough ACP response for MOD consideration

The Sponsor and ACP design team would like to thank JHC for participating in the small and large scale simulations and hope that these have gone a considerable way to ameliorating these concerns. The original estimate of increased track mileage has been reduced from 20nm to 4-6nm. As the controllers worked together it became clear that techniques and changes to procedure could further facilitate air traffic movements for both parties to reduce delay, extended track miles and holding for both parties. For example, R27 ILS for VO with LF operating R06 proved to be difficult (as today) but became more manageable throughout the sessions (scheduling by JHC and TAG, as suggested by Squadrons, would also ease this – this was endorsed by the SATCO/GM as a very powerful tool for the future). Coordination expertise and timing was greatly improved during the simulations even above the high level experienced today. The Sponsor would like to reiterate the offer to JHC and RAF Odiham to utilise the Farnborough Simulator for joint initial training to continue this excellent relationship. The Sponsor would like to explore use of the R06 ILS, at no extra cost to the RAF, on an ad-hoc basis where delays for both parties would become untenable otherwise.

7. MOD Concerns

RAF Odiham South East STAR. The SE STAR procedure would be affected by traffic inbound to Farnborough; the MOD would wish this procedure to be maintained and accommodated as part of the final ACP.

Agreed.

8. MOD Concerns

Radar and VFR Separation Standards- Mil Controller Issues. Should this ACP be approved, there are several differences between Military Air Traffic Control (ATC) regulations and rules within CAP493 that would have to be resolved to enable procedures to be operated to the same standards within the proposed Class D. These issues would have to be discussed and resolved with the Military Aviation Authority (MAA) and the CAA before operations could begin. Of particular concern are the radar and VFR separation standard within CAS.

SMAC Chart/Use of QNH. Use of a QNH SMAC chart at RAF Odiham could resolve discrepancies in height separation requirements and this will be investigated further by the MOD.

Agreed: The SATCO/GM for both units are currently liaising to formulate a way forward through engagement of the MAA or another strategy as appropriate. This is of the utmost importance.

The Sponsor has provided a draft ATSMAC to VO to further discussions.

Farnborough ACP response for MOD consideration

9. MOD Concerns

Standing Military Tasks- LOA Requirement. RAF Odiham hold Standing Military Tasks that demand the freedom to respond to no-notice tasking; it is understood that Farnborough would include this requirement within the LOA between both Units to ensure that these essential operations can be carried out as a priority and without any delay, irrespective of Farnborough's traffic situation at the time .

Agreed:



Ministry
of Defence

Defence Airspace Air Traffic Management
6th Floor
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WC2B 6TE

Telephone: [REDACTED]

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Responses
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4 Jun 15

FINAL MOD RESPONSE TO THE REVISED FARNBOROUGH AIRSPACE CHANGE PROPOSAL (ACP)

1. Thank you for the opportunity to comment on the revised Farnborough ACP and for accommodating MOD representatives at the ACP Simulations held at Farnborough on 11 - 12 Feb 15. Additional data provided by Farnborough since these simulations has also proven extremely useful and has allayed the majority of outstanding MOD concerns.
2. The ACP Simulations and additional data clearly demonstrated that from an ATS provision perspective, the ACP in its current form is workable. Farnborough's agreement to cede CTAs 2 & 3 to RAF Odiham has addressed several of the MOD's initial concerns. Procedures relating to this agreement have been developed and the MOD was grateful for sight of the draft Letter of Agreement (LOA) between RAF Odiham and Farnborough.
3. Overall, the MOD has no objection to this ACP, however, as there are several elements which may impact on military flying operations, the MOD would ask Farnborough to address these when finalising their proposal. These are outlined in paragraphs 4 to 7 below and are grouped as follows:
 - a. Outstanding concerns.
 - b. LOA Considerations - RAF Odiham and 618 VGS
 - c. Policy and Regulatory Issues.

OUTSTANDING CONCERNS

4. Despite the efforts made by Farnborough to accommodate military requirements, there are 2 outstanding concerns which have proven difficult to fully address. These are as follows:
 - a. **Traffic Funnelling.** Comprehensive data analysis provided by Farnborough¹ has suggested that any increase in traffic transiting close to or through the RAF Odiham MATZ would be negligible compared to current figures. Farnborough's analysis concluded the following:

¹ Email [REDACTED] comments on draft revised Farnborough ACP comments dated 25 Mar 15 and additional Traffic Sampling and Analysis provided by email on 15 May 15

"The worst case scenario is that 5-7 aircraft per hour (powered and transponder equipped) might operate in the area west of Odiham over and above the current traffic on the busiest summer weekend days"

And:

"The Farnborough team believe that a reasonable assumption is the [that] 1-2 aircraft per hour during the week during the summer would operate in the area west of Odiham as a result of the CAS if significant numbers of powered aircraft choose not to transit Farnborough as they do now. These aircraft are likely to be operating outside the main glider areas"

The MOD are of the opinion that the analysis conducted and data collected does not provide a comprehensive picture of the prevailing traffic situation in this geographical area, particularly with respect to non-transpondering traffic and gliders not FLARM equipped. It is the opinion of the MOD that even the slight increase in movements predicted by Farnborough within this already congested and contested airspace will have a noticeable impact. The MOD are still of the opinion that should traffic choose to route around the proposed CAS, be that for ease or due to a lack of suitable radio/navigation equipment, this may increase the likelihood of Mid-Air Collision (MAC) to other airspace users. In addition, avoidance of the proposed CAS by transiting traffic could increase movement through the portion of the RAF Odiham MATZ that sits outside of the proposed CAS, making the controlling of IFR approaches and departures particularly challenging.

b. **Flying Complaints due to Noise.** Negotiations between RAF Odiham and Farnborough regarding the ceding of CTAs 2 & 3 have resulted in some positive progress towards alleviating the issue of significant extensions to the current Radar Training Circuit at RAF Odiham. Although it has been ascertained that the majority of RAF Odiham operations will be able to continue as per the current day, the MOD envisage that there will be occasions when RAF Odiham will still need to re-route aircraft, particularly when ceding is not possible. Any change to the current ground tracks, heights or positioning of RAF Odiham traffic may increase noise pollution in areas that have previously been immune to this activity and this could have a detrimental effect on RAF Odiham's reputation amongst the local population.

5. Ultimately, the issues of traffic funnelling and noise pollution are difficult to predict ahead of any ACP implementation, despite the analysis and mitigations proffered by Farnborough. Should the Farnborough ACP be implemented in its current form, the MOD would actively monitor the ACP's impact on all aspects of our operations, with particular emphasis on funnelling and noise pollution. DAATM would raise significant concerns to the CAA as a matter of urgency and would not wish to be constrained by standard post-implementation review timelines.

LOA CONSIDERATIONS

6. In order to allay concerns over the continuation of military flying activity in the vicinity of the proposed CAS, robust LOAs must be drawn up with RAF Odiham and 618 Volunteer Gliding Squadron (VGS). Farnborough has provided² a draft LOA with RAF Odiham which details airspace sharing and ceding protocols, and which covers the majority of the considerations the MOD would wish to see included below. However, there is still work to be done to facilitate 618 VGS requirements and the MOD would wish Farnborough to remain cognisant of these when drawing up the LOA.

a. **ILS Approaches at RAF Odiham.** The most significant operational concern remains the provision of an ILS approach to RAF Odiham, a key training and currency requirement for all RAF Odiham based Rotary Wing pilots. Use of other airfields to accommodate this

² Email [REDACTED] not yet reviewed by Odiham ATC dated 14 May 15

requirement is unsustainable owing to the number of ILS approaches required, transit time and lack of prioritisation at those airfields. Any restriction on the use of the ILS at RAF Odiham, particularly for against the stream approaches, combined with the increased track distance envisaged for all IFR approaches due to the airspace design, equates to a decrease in the number of IFR approaches JHC are able to complete per sortie³. This in turn will have a significant negative impact on aircrew training and currency requirements. Ceding of CTA 2 & 3 to RAF Odiham will permit aircraft to conduct ILS approaches at RAF Odiham relatively unrestricted. The draft LOA also details procedures which will accommodate running landings into RAF Odiham which the MOD fully supports.

b. **Standing Military Tasks.** RAF Odiham hold Standing Military Tasks that demand the freedom to respond to no-notice tasking and it is clear from the draft LOA that Farnborough fully support this requirement.

c. **Complicated Dimensions.** The MOD highlighted to Farnborough that the boundaries for each CTA do not seem to follow any geographical features which could complicate navigation for those airspace users that are not GPS equipped. Farnborough took this on board and have designed VRPs to assist with navigation. However, it is still the opinion of the MOD that the boundaries of the VFR delegated area, the 'Farnborough Eye', would not be easily recognised from the air. The MOD would therefore support the inclusion of additional VRPs to assist aircrew operating within this VFR area.

d. **618 VGS Operations - RAF Odiham ATC Closed.** Although Farnborough had agreed to discuss the feasibility of covering costs for Radio Operators Certificate of Competence (ROCC) for 618 VGS, staff turnover means that an alternative solution may be for aircraft to warn out with Farnborough, depart not above an agreed height wearing the 'intention transponder code' and contact Farnborough for clearance into CAS as soon as practicable. This procedure would need to be clearly articulated in the LOA. Better communication between Farnborough and the VGS could also facilitate sharing of movement predictions to allow the VGS to plan their flying day to avoid congested periods at Farnborough and the MOD would support further discussion on the practicalities of facilitating this.

e. **ILS Inbound to Farnborough vs. 618 VGS Traffic.** During the ACP Simulations, 618 VGS were given the impression that any claw-back of the Farnborough CTAs delegated for gliding operations would be immediate, with all gliders instructed to remain clear by holding off or landing; Farnborough have confirmed that there would be no change to the current LOA procedure where a minimum of 15 minutes notice is provided. Although the MOD is content to retain the current procedure, 618 VGS would welcome further discussions regarding amending the procedure to better suit their operations during the LOA discussions.

f. **Air Cadet Pilots.** The proposed change raises issues for air cadet pilots to maintain Safe Gliding Range (SGR) outside of the RAF Odiham ATZ, which increases the risk profile to these sorties. 22(Trg) Gp have confirmed that similar issues encountered at other VGS units mean that the precedence has already been set with respect to training requirements. This change will have an additional training burden on 618 VGS; however, this issue is not insurmountable.

g. **Equipment.** The Vigilant is not currently equipped with Mode C or Mode S; all 618 VGS aircraft are due to be equipped with Mode S by 2017/18. Additionally, both 618 VGS and RAFGSA Kestrel GC occasionally swap airframes with other military gliding organisations; this would become more complex owing to different equipment carriage requirements. These equipment restrictions would need to be considered when finalising procedures as agreed in the LOA.

³ Estimate that additional track distance could result in a loss of 1 out of every 4 IFR approaches.

h. **Impact on Flying Rates and Relocation costs.** Following the ACP Simulations, 618 VGS has estimated that the current ACP would result in a minimum 20% reduction in flying output. The MOD will monitor this and should the impact become overly restrictive then a further review of the LOA may be required to address this issue.

i. **Class D SERA Implications.** 618 VGS have raised concerns regarding the impact of SERA Regulations regarding cloud separation standards on gliding operations from RAF Odiham should the ACP be approved. Depending on the prevailing cloudbase at Farnborough, SERA regulations may prevent all gliding from RAF Odiham on occasions when previously regulations would have permitted it. The MOD would recommend that these regulatory implications should be considered as part of any procedures detailed in the LOA.

POLICY AND REGULATORY CHANGES REQUIRED

7. Following a meeting with the CAA and MAA on 27 May 15, it is clear that the policy and regulatory issues below are not insurmountable, subject to the publication of a recently drafted policy which would allow Military Terminal controllers to provide an ATS within another unit's CTA/CTR⁴. The publication of that policy is a fundamental requirement before the ACP could be implemented. Separation standards and use of QNH are other regulatory changes which, although not integral to this ACP, would optimise FUA and airspace sharing.

a. **Policy Change.** A policy change to allow Military Terminal controllers (ie. RAF Odiham) to operate within another Units CTA/CTR (ie. Farnborough) is currently being reviewed by CAA SARG. Timelines to completion are unknown at this stage and are very much dependant on CAA capacity. This regulatory approval is vital to enable the ceding of CTAs 2 & 3 which will allow RAF Odiham to operate as freely as possible; the MOD would therefore wish to include the approval of this policy as a caveat to their approval of this ACP.

b. **Radar and VFR Separation Standards - Mil Controller Issues.** MAA regulation regarding lateral separation both within and outside controlled airspace (Class A-E) would currently preclude RAF Odiham from providing 3nm separation within the proposed CAS. The MAA confirmed on 20 May that the MOD can anticipate a rule change to remove the current 'military to military' caveat which should resolve this issue. Other proposals by Farnborough and RAF Odiham to maximise their airspace sharing procedures were deemed to be sound, provided both parties provide robust Safety Assessments and, if applicable, alternative means of compliance to current regulations.

c. **SMAC Chart/Use of QNH.** Use of a QNH SMAC chart at RAF Odiham could resolve discrepancies in height separation requirements. The MOD can confirm that a MOD-wide adoption of SMAC charts is under consideration; precedence has already been set at other Military units for the use of SMAC therefore this would not be an issue for RAF Odiham. If the use of QNH was deemed appropriate and supported by RAF Odiham's Duty Holder chain, the MOD would support the use of QNH vs. QFE.

c. **Training.** Training will be required for all RAF Odiham controllers to ensure that they are suitably qualified and experienced (SQEP) to provide an ATS within the proposed CTA/CTR. Training requirements will be determined by the ATM FHQ once the CAA has agreed the policy change outlined in paragraph 7a above, however, training timelines are such that there may be a delay in training RAF Odiham personnel. The MOD would therefore require any ACP implementation date to accommodate MOD training requirements and timelines. The MOD also appreciates Farnborough's offer to use their simulator to facilitate this training.

⁴ "Service provision within CAS by Units not designated as the Controlling Authority"

CONCLUSION

8. The MOD has no objection to this ACP, with the caveat that the policy change to allow Military Terminal controllers (ie. RAF Odiham) to operate within another Units CTA/CTR (ie. Farnborough) is integral to this approval and to the ACP's success. It is clear that concerns regarding traffic funnelling and noise pollution are unlikely to be resolved ahead of the proposed airspace change, and that these would be closely monitored by the MOD post-implementation. The draft LOA provided by Farnborough includes several robust procedures which will allow RAF Odiham operations to continue as per the current day for the majority of the time, however, it is clear that more work is required to include 618 VGS requirements. Finally, the MOD would wish to be included in the ongoing development of the LOA to ensure that fair and equitable access to the proposed CAS is agreed to ensure minimal impact on MOD operations.

9. Please contact the undersigned should you require any additional information.

[Signed electornically]

A large black rectangular redaction box covering the signature and name of the undersigned.

[REDACTED]
NATS Services
Heathrow House
East Wing 2nd Floor
Bath Road
HOUNSLOW
Middlesex TW5 9AT

18th
February 2015

[REDACTED]

TAG FARNBOROUGH – AIRSPACE CHANGE PROPOSAL

We have courteously requested on two occasions to send an observer to your simulation, being aware that you had already agreed to invite other aviation stakeholders to attend. It is therefore of the utmost regret that you have decided that we might not attend. Your airspace proposal has profound implications for the safety of our operation and we represent some 64,000 of the 250,000 GA movements in the area. It was manifestly not unreasonable to expect that we witness this simulation.

Lasham's observer, a retired LATCC controller, attended your original simulation without the benefit of summary and collation, and made meaningful observations. Lasham was also promised the output report of that simulation; this was never provided.

You are required¹ to conduct your airspace change Consultation in such a manner as to increase the level of transparency and engagement with interested parties to improve the quality of decision-making by bringing to bear expertise and alternative perspectives, and identifying unintended effects and practical problems. Your refusals are incompatible with such.

It is with great regret that we find ourselves having to make such an observation.

Yours sincerely,

[REDACTED]

¹ *In respect of Airspace Change(s), under Sections 70(2), 66(1) and 104(2) of the Transport Act 2000, and the legislation and Directions pursuant, the CAA should ensure that adequate consultation is accordingly carried out, either by ensuring that the promoter of the change(s) undertakes the consultation, or by undertaking the consultation itself. In the case of the former, the CAA cannot abrogate its responsibilities. Promoters are required to consult in such a manner as to increase the level of transparency and increasing engagement with interested parties to improve the quality of decision-making by bringing to bear expertise and alternative perspectives, and identifying unintended effects and practical problems.*

Minutes – PPL/IR – 2nd April 2015

These are summary minutes written to capture the main points raised. They are not a definitive record of the meeting but have been agreed by all parties as correct and representative.

Present were;

[REDACTED] – ACP

[REDACTED] – PPL/IR

Farnborough – [REDACTED]

[REDACTED] began by explaining where we were on the ACP timeline post-consultation and specifically that we were clarifying certain points of responses and seeking further expert guidance on certain matters.

[REDACTED] thanked [REDACTED] for his response.

[REDACTED] had three questions for PPL/IR concerning their submission and one request for guidance.

The questions were:

- a) Given a statement that PPL/IR considers that LF would be under-resourced to provide transits, we requested that [REDACTED] give an overview of his current exposure to VFR transits of CAS especially with SVFR/Thames to see what lesson-learning was available.

[REDACTED] suggested ATC should be consistent in both manning and technique to give pilots assurance that a transit was likely and how it would be managed.

We discussed the idea of a transit code (transponder code to indicate CAS crossing was requested) so ATC could prioritise calls.

We also discussed zone management and the proposed zone frequency.

- b) We discussed Fair Oaks and Blackbushe traffic management: Fair Oaks concerns were about holding point delays, but Blackbushe concerns were more serious in the opinion of [REDACTED] due to the interaction with BizJets/Turboprops waiting in the CCT for onward clearance. We discussed the current situation and [REDACTED] assured [REDACTED] that this concern would be taken forward with the LOA with Blackbushe to mitigate this as far as practical. Two possible ideas

was to further separate the Blackbushe cct patterns (800, 1000, 1400) and to provide clearances on the ground as we do for CAS(T) for certain 'fast' movements.

- c) Final question concerned the transit of the Fair Oaks corridor and why this was of particular concern to PPL/IR as a choke point. [REDACTED] explained that this was of concern to the project as well and the corridor is likely to be limited to Fair Oaks traffic only.

[REDACTED] then sought guidance on transit levels for Turboprops etc currently and what might be expected following any CAS implementation. [REDACTED] explained that the relative expertise of the pilots means that transit will be a standard request and that in general altitudes flown are likely to be higher than the less well equipped GA aircraft (staying out of the way of them). For example a regular LF transit might be conducted at 3400' rather than below 2500'. This explained some of the data from the analysis conducted by LF for the project.

[REDACTED] thanked [REDACTED] for his help and guidance.

[REDACTED] offered [REDACTED] an opportunity to fly with him around the various CAS zones to see for himself the difficulties and lesson-learning that might be available from such a sojourn. [REDACTED] accepted and thanked [REDACTED]

Meeting concluded.

OPERATIONAL CONCERNS – 618 VGS

MOD Concerns::

- a. **RAF Odiham ATC Closed.** VGS Staff would require a CAA Radio Operators Certificate of Competence (ROCC) to relay clearances when RAF Odiham ATC was closed. There is a cost in the region of £1200 per head associated with the training and examinations to facilitate this requirement. The manpower and training cost to man RAF Odiham ATC simply for gliding operations is not a viable option for the MOD. The MOD would welcome further discussions regarding radio communications or suggested departure procedures which would negate this requirement.

Response for Consideration:

The Sponsor would be grateful for the opportunity to discuss this issue.

Reasonable costs for the ROCC if required would be covered by the sponsor.

- b. **ILS Inbound to Farnborough vs 618 VGS Traffic.** During the ACP Simulations, 618 VGS were given the impression that any claw-back of the Farnborough CTAs delegated for gliding operations would be immediate, with all gliders instructed to remain clear by holding off or landing. This is contrary to current procedures and would be impossible for 618 VGS to comply with. The MOD would suggest that this particular requirement is reviewed and consideration given to a 15 minute grace period for 618 VGS to vacate the Farnborough CTA before an ILS approach commences.

Response for Consideration:

The Sponsor would like to confirm that the procedure would remain unchanged from today. The current arrangement is to pass the estimate of the inbound when it passes the FIR boundary (usually 25minutes + notice to VGS operations) or when it taxis at a London Airport (usually 15 minutes +) or airborne from a non-London non-Scottish UK airfield (usually 20 minutes +). These are all in excess of the suggested 15 minute grace period. The Design team suggests that the 15 minutes could be the minimum period built into the LOA with VGS releasing the airspace back earlier if they are able to do so.

- c. **Air Cadet Pilots.** The proposed change raises issues for air cadet pilots to maintain Safe Gliding Range (SGR) outside of the RAF Odiham ATZ, which increases the risk profile to these sorties.

d. Response for Consideration:

The Sponsor would be grateful for the opportunity to discuss this issue. It is believed that the current arrangements whereby the VGS gliders can hold on left base for R06 at 2500' or above and within SGR are also not sustainable as this can compromise vectoring to the ILS sufficiently to make the approach non-viable.

e. Equipment. Robust communication between Farnborough and 618 VGS would be essential to ensure safe coordination of all traffic. Moreover, the Vigilant is not currently equipped with Mode C or Mode S. Whilst plans are in hand to procure Mode S, additional funding may be required if Mode S is required ahead of the planned timescales. Additionally, both 618 VGS and RAFGSA Kestrel GC occasionally swap airframes with other military gliding organisations; this would become more complex owing to different equipment carriage requirements. The MOD has noted that Farnborough has proposed to provide SSR Transponders to all RAFGSA Kestrel aircraft.

Response for Consideration:

The Sponsor would be grateful for the opportunity to discuss this issue.

The Sponsors has similar concerns over the current robustness of communication with VGS and would like to enter into discussions with MOD to resolve this outwith any outcome of the ACP submission.

Reasonable costs for VGS transponders if required could be covered by the sponsor.

f. Impact on Flying Rates and Relocation costs. Following the ACP Simulations, 618 VGS has estimated that the current ACP would result in a minimum 20% reduction in flying output; worst case they may need to consider the complete cessation of operations from RAF Odiham. Restriction to 618 VGS operations would deprive gliding opportunities to youth organisations across several counties. Relocation within the catchment area of the Regional Air Cadet Organisation has been considered; however, no suitable alternative site has been identified.

Response for Consideration:

The Sponsor would be grateful for the opportunity to discuss this issue. If the issues a-e can be resolved the Sponsor hopes that the possible relocation of VGS due to the ACP would no longer be an issue. The Sponsor is committed to support RAF Odiham operations in all formats.

Royal Aeronautical Society re-engagement meeting
4th March 2015
Farnborough Control Tower Building

Present



NATS
NATS
Royal Aeronautical Society

██████████ introduced the meeting and outlined the purpose and scope with a view that an ACP was going to be submitted to the CAA in summer 2015 but that we were still in the process of listening to key stakeholders to ensure that we captured all salient points. It was proposed that the meeting consider the changes to the design that had been made as a result of consultation responses and that we were interested in capturing the thoughts of those attending on how the design would now impact them or the groups that they represented.

██████████ distributed maps showing the old and new designs. The old design was that which was put forward during consultation.

It was requested of all present that the design details be kept confidential as further stakeholder meetings were to be held. This was agreed to by all present.

██████████ described the design changes that had been made. This generated a number of discussions – ██████████ commenced by outlining concerns about safety issues – initially in relation to the workload on controllers at Farnborough and the number of controllers that he felt would be required. ██████████ responded by advising that this had been considered and also simulated in recent full scale simulations. ██████████ advised that there would be no changes to helicopter routes in relation to Fair Oaks. ██████████ expressed an opinion that the ACP was being proposed as TAG/NATS "wanted to control everything and stop everybody" – this was refuted by ██████████.

There was a question about how often the proposed STAR routes would be used and the response was that they would be used all the time, but that there would be tactical interventions in order to provide the most efficient service which meant that aircraft would be taken off the published inbound routes as required.

A discussion about transits of the proposed control zone took place and ██████████ advised that he did not want to talk to ATC and did not believe that there was sufficient ATC capacity to facilitate zone crossing clearances. ██████████ responded by outlining that recent simulations had demonstrated controller techniques and flexible use of controllers would facilitate 20 or more transits in an hour.

A discussion took place about Odiham operations.

A discussion took place about LAMP timing and ██████████ talked about the possibility of post-LAMP airspace release wherever possible.

██████████ asked why the design had changed and was advised that this was in recognition of the stakeholder responses and impacts upon all stakeholders. The new design was seen by TAG and NATS as a proper balance between all stakeholder requirements.

██████████ asked whether the traffic forecasts for Farnborough had changed since the consultation and was advised that they had not, but that it was clearly difficult to forecast exactly the levels of traffic that could be anticipated in future years as this was not solely a factor of

demand but also of whether significant levels of traffic may choose to switch operations from another airport to TAG Farnborough.

There was a long discussion about safety and the safety analysis work which had been done by the project to date. [REDACTED] outlined the major risk perceptions around Lasham traffic. He outlined that one area that was identified in the safety work was that a major initiative to educate and change culture was required in order to encourage pilots to fly through the proposed Farnborough control zone or "Farnborough gap". [REDACTED] talked about the QinetiQ report which surmised that 70% of pilots would choose not to request a clearance for zone transit. [REDACTED] and [REDACTED] outlined their view that a major education programme and commitment by TAG to change perceptions in the pilot community would make a significant difference and that this commitment would be a key element of the ACP submission and therefore a key indicator to be measured in any post-implementation review period.

[REDACTED] was concerned about the rigour of the safety work carried out to date and asked if we could share, in confidence, the work carried out as their view was that without the proof, perhaps the work had not been done properly if at all. [REDACTED] expressed clearly that the project would be providing the CAA with all the appropriate safety analysis work to the appropriate degree of rigour required and that it was not appropriate or necessary to provide this work to any stakeholders.

A further discussion took place on the issue of zone transit and [REDACTED] suggested that the Royal Aeronautical Society could play a powerful role in an education and engagement programme to increase awareness, pilot confidence and skills and culture change to ensure that the option of zone transit and airspace access was widely accepted. [REDACTED] and [REDACTED] made a clear request for assistance should the ACP be successful but the response was not positive and that the overall view of those present still felt that the ACP was not justified and that we should be looking at alternatives to controlled airspace.

Safety conversations continued – specifically about the number of Airprox events recorded for Farnborough. [REDACTED] agreed the number was low but that this was the whole point – Farnborough controllers worked extremely hard to avoid safety events within an unknown and complex environment but that this led to the high workload and unpredictable service provision experienced today. [REDACTED] criticised the Farnborough controllers for their inability to handle large amounts of traffic and that "you are not as busy as you think you are" – this was refuted by [REDACTED].

[REDACTED] stated that the noise analysis sections of the consultation were not done properly.

At this point in the meeting, it was stated by [REDACTED] that we had reached an impasse on the subject of safety and that the meeting would be better served by focussing on the impacts upon stakeholders represented and how these could be best mitigated. It was suggested by [REDACTED] and [REDACTED] that the meeting consider a more holistic and balanced approach whereby the needs and requirements of all stakeholders including TAG Farnborough, be considered in the light of respect for each other. [REDACTED] opined that we were "trying to create scenarios to justify controlled airspace" – this was refuted by [REDACTED] who said that NATS had a very clear overall view and picture of how the airspace operates currently and that the issues that occur regularly now were not in any way being used to exaggerate any claims – they were simply statements of fact about how the stakeholders who use the airspace impact upon each other.

There was a discussion about why it was felt that NATS and TAG wanted to create a known environment - this discussion encompassed SERA implications as well as zone crossing requirements.

[REDACTED] and [REDACTED] asked again whether the stakeholders present would support any education and engagement programme should the airspace application be successful – the response was that they would not help with any such programme.

[REDACTED] stated that there was no evidence for the ACP approach being taken and that we were being "negligent" in our approach.

█ stated that glider operations were incompatible with controlled airspace and that they would route elsewhere.

Discussion ensued about some of the specific changes to the design and █ outlined that the removal of D131 was of major benefit to the design overall.

A question was asked about whether the outbound routings required us to reconsult – the response was that no reconsultation was required.

There was a discussion about tailwind tolerance and the possibility of pushing this as much as possible to ensure a higher proportion of Westerly versus Easterly operations.

A question was asked about PBN utilisation and aircraft equipage levels and how the design would deal with non-compliant aircraft. The radar vectoring options were explained and that this was not perceived as an issue which could not be easily managed.

There was a discussion about LARS – the service currently provided and how this could change in future in order to maximise capacity should the airspace be introduced.

At 1620, █ summarised that one key aim was to educate the GA community about how the design would work, particularly with respect to zone crossing clearances.

█ summarised his view of the situation in terms of the stakeholders present –

- Overall, the design was not significantly different
- Proportionality was questioned – large changes for a small number of users
- It was regrettable that NATS could not provide detailed safety analysis
- He stated that he was open to all solutions and that there was an offer to work together on alternatives to controlled airspace

█ closed the meeting by restating some examples of why controlled airspace was seen as the only option – examples such as a recent and not uncommon situation where a hot air balloon operated for an extended period on the Farnborough final approach.

The meeting closed at 1635

Re-engagement meeting with Lasham Gliding
March 4th
Farnborough Control Tower Building

Present

NATS



Lasham and associates



Meeting commenced with introductions.

██████████ outlined where we were in the ACP process and invited ██████████ to briefly describe the latest version of the design for the airspace.

██████████ distributed airspace maps and requested that they be kept confidential for the time-being as other stakeholders were due to be briefed soon. This was agreed by Lasham.

██████████ agreed to take notes of the meeting and distribute them.

First discussion was about justification and ██████████ asked whether the justification had changed. ██████████ advised that the justification had not changed and was as per the ACP consultation material.

██████████ indicated on the map the control zone suggestion which was given some time ago by Lasham and indicated that this was approximately what the design had adopted. There was a short discussion about whether Lasham had referred to this as a control zone or an RMZ.

There was a discussion about Gatwick outbounds versus Farnborough inbounds and numerous other discussions about interactions between Farnborough traffic and TC traffic and procedures. ██████████ expressed a number of opinions and views which ██████████ advised were perhaps considerably out of date and that things had changed since ██████████ was an operational controller.

██████████ asked if there was going to be any reconsultation on any of the proposed routes – he was told that there would not be any reconsultation and that this had been discussed and agreed with CAA.

There was a conversation around the request for Lasham to attend the latest full scale simulations at CTC. This request was considered twice by NATS and TAG but was refused on the grounds that meaningful access to controller work positions was not possible due to the number of other attendees such as SARG, safety assurance and HF personnel and Odiham. This was explained to the meeting and an example given that project team consultants and the ██████████ had to observe the simulations from a remote console on an opportunity basis such was the limitation on space. The TBS simulations were also being run on the same days and this contributed to the lack of space for observers. There was a discussion about whether NATS prioritised the observers at the simulations and ██████████ was insistent that the meeting was clear about the space limitations and the fact that essential personnel to ensure effective simulations led to the inability to invite additional stakeholder observers. A letter from ██████████ ██████████

Lasham, was sent to Kel Kirkland on 18th February summarising the disappointment that Lasham felt at not being invited to the latest simulations.

██████████ asked the Lasham attendees at the meeting why the conversation seemed to be so focussed on disagreement of design elements and that the purpose should be more geared to determining the actual impact of the proposed airspace on Lasham operations in order that further clarity and mitigation could be sought.

Discussions then took place around the potential for some mitigating changes to be made in the region of ██████████. ██████████ took note of these and other comments and suggestions and committed to investigating these further.

There was a conversation around glider towing and the altitudes required for aerotow release levels and climb upwind. This provided some additional new information for the ACP team.

██████████ accused the ACP team of not listening to the Lasham concerns and that the changes to the design from the original proposal at consultation was of minimal benefit to Lasham. Dan and Mike assured the meeting that the purpose of this re-engagement meeting was very much to listen to concerns and to make changes wherever this could be done. In particular, we were keen to hear of any new information which may not have been forthcoming in the formal ACP consultation response. We were also keen to ask a number of clarification questions of Lasham which ██████████ did in the course of the meeting.

On the topic of the HANKY box, ██████████ undertook to take away and examine some ideas that were presented at the meeting.

There was a question and discussion about Blackbushe and transiting aircraft from ██████████ ██████████

There was a discussion about workload and controller numbers and service provision. We assured Lasham that this was a consideration, options had been simulated and that these considerations were part of the ACP process.

██████████ left the meeting at 1215 for another appointment.

Dan asked Lasham about their grid activities and quantities of traffic. ██████████ advised that such activities could be every weekend and also on some mid-week days with significant levels of traffic with commonly used drop points.

██████████ advised that the biggest concern was that of funnelling of traffic caused by the proposed airspace volumes. ██████████ responded by saying that Farnborough wanted to encourage traffic to transit through the proposed control zone rather than flying around it or overhead Lasham.

██████████ asked that we consider releasing more airspace near Lasham. ██████████ undertook to investigate this request further. There was a discussion about a proposal for a "bent" SRA.

Discussion took place concerning IFPs, Odiham operations and visual approaches. ██████████ advised that there were 693 "stabilisation events" recorded in 3 months and Lasham asked if TAG could release those stats – this will be requested and Lasham will be advised. Discussion ensued about what could be done to mitigate the issues of gliders flying overhead Farnborough and operating on final approach/climbout – whilst it was legal to do so, ██████████ pointed out that it was disrespectful of other operators and that the Farnborough operation currently operated in a manner which respected and avoided the other airspace users. A discussion took place about what could be done to mitigate these problems - it was pointed out that the ACP was primarily being proposed as a mitigation (perhaps the only mitigation that would work) to these issues. An LOA or Local Flying Rules approach was discussed but Werner Stroud felt that this would not be enforceable.

We discussed at length, the issue of pilots not wishing to fly through a control zone and not wanting to contact an ATC unit for a clearance. NATS and TAG feel that the perception and experiences of pilots in being refused clearances, whilst real and examples were

quoted, that Farnborough would champion a new approach which relied on education and engagement in order to overcome the perceptions and also to overcome the lack of confidence that some pilots express. [REDACTED] asked if Lasham would support an extensive education programme and engagement initiative should the airspace be approved. The response from Lasham was not positive – indeed, they were reluctant to consider any scenario in which the airspace was approved and which would therefore need a culture-change initiative to succeed. [REDACTED] asked again, at the end of the meeting, whether Lasham would support such an initiative should the ACP be successful as the post-implementation review would capture whether or not we were successful and that key stakeholders such as Lasham could add a powerful voice to the education initiative. The response again was that such an initiative and culture change was “unachievable”. A discussion took place again about the issue of respect for airspace users and it was agreed that some individuals deliberately flew down final approach at Farnborough without communication with ATC – and that this was because a number of people were angry about the ACP proposal.

The meeting ended with a discussion about what could be done next. Lasham agreed to present some ideas in addition to those presented at the meeting and NATS agreed to consider those ideas as well as to consider the answers to a number of questions that [REDACTED] asked at the meeting which added some clarity to parts of the Lasham response to consultation.

Fairoaks re-engagement meeting
5th March 2015
Farnborough Control Tower Building

Present [REDACTED] NATS
[REDACTED] NATS
[REDACTED] Fairoaks/Gama

Meeting commenced at 1150 and ended at 1300

[REDACTED] introduced everybody and then summarised the main changes inherent to the latest design option for the Farnborough ACP – version V32.

[REDACTED] advised as an aside that Farnborough and other London airfields' operators were required to be RNAV1 capable by 2017.

Discussion about departures – IFR departures would get airborne into the Farnborough zone then leave controlled airspace and call London for a coordinated join into the airways structure.

VFR operations – the local flying area was not considered to be changing. Frensham – the restrictions here were not popular with Fairoaks pilots. There was a discussion about having boxes to manage the operators in this area but this was decided against. The requirement in this area was predominantly for spinning and stalling in 15 minute segments. It was appreciated that there was an advantage to having this operation within controlled airspace. [REDACTED] advised that he was happy to work with [REDACTED] on LOA procedures and that they were both confident that a positive outcome could be reached. [REDACTED] advised that Fairoaks were supportive of the concepts discussed.

There was a discussion about SERA and the current situation of uncertainty.

Sharkfin area was discussed in some detail – there were some reservations about operations in this area and the potential for it becoming a free-for-all. Further discussion is required to determine procedures in this area.

Discussion about VRPs and where the likely new VRPs would be situated – [REDACTED] is progressing this and there were no areas of concern here.

Discussion about educating pilots on the impact of the ACP on their operations – particularly for those pilots who were reluctant to call ATC for crossing clearances. Fairoaks promised their full support in any educational activities that TAG wished to undertake – these included developing CBT packages, online training and ATCO/pilot forums and workshops.

There was a discussion about ATCO resource at Farnborough in relation to how frequencies could be split and how the various ATC services would be delivered.

Fairoaks pointed out that they supported the ACP work and that there were benefits for both TAG and Fairoaks. There were not many disadvantages but [REDACTED] did acknowledge that some pilots would not be overjoyed about some of the changes which would be perceived as restrictions.

[REDACTED] advised the meeting that there was significant evidence that opposition to the ACP proposal was occurring in the form of misinformation in the press and other media – he gave an example of a community paper which had printed incorrect information about increased noise in their region as a result of the ACP.

The support of Fair Oaks was on the assumption that further work on procedures and LOA agreements happened.

[REDACTED] was keen to express his support for assisting Fair Oaks in a positive and cooperative manner.

Parham re-engagement meeting
17th February 2015
Parham flying clubhouse

Present



NATS
NATS

Meeting commenced at 1600 and ended at 1645

█ introduced himself and me. He talked the group through the consultation responses that we had received overall, and specifically from Parham. He outlined the changes that had been made in response to the feedback from the various stakeholders.

The initial response from Parham was positive and that significant change had been made and that they were encouraged that we had listened to them. █ did say that others in the club would need to be consulted for their views.

█ sought further information about Parham operations (Silvers – operating in the overhead) and it was agreed that it would be possible to work out an LOA to cover these operations.

Maps and documents were left with the group on the basis that they would be kept secure and confidential.

Southampton re-engagement meeting
17th February 2015
Control Tower Building Southampton


Present




NATS
NATS
NATS
NATS
Bournemouth Airport

Meeting commenced at 1350 and ended at 1409

A very short meeting to discuss impact of the ACP on Southampton and Bournemouth airports.

 introduced to the meeting a short summary of where the project had reached and what progress had been made with regard to those areas which may affect Southampton and Bournemouth. He explained about the transfer of the a part of the ACP post-consultation to the LAMP project.

We asked if Southampton or Bournemouth had any comments for us since the consultation responses were submitted – there were none.

 advised the meeting that he could not see “any downside” with regard to impact upon Bournemouth.

There was a discussion around LAMP timelines.

There was a discussion about LOAs and it was agreed that some small changes would be picked up during the implementation phase of the ACP.



Website: www.southdowngliding.co.uk

Email: [REDACTED]

Southdown Gliding Club Ltd
Parham Airfield
Pulborough Road
Cootham near Pulborough
West Sussex RH20 4HP

Office Number [REDACTED]

Dear [REDACTED]

We have not spoken since your visit to Southdown several months ago with [REDACTED] but a small group of us have been practically (during flights) assessing the impact of the revised / proposed Farnborough airspace. On the return journey to Parham, things are clearly more difficult than the situation we have today.

When testing the new airspace design, there are two areas where the latest design still makes things very difficult for us. I will take the most important one first.

When returning from Lasham the start of the 4500' airspace is encountered about 6.5 kilometers before it was. This basically removes 6.5 kilometers from the distance we can glide on the downhill run back to Parham airfield. If this area, highlighted by the oval south of Lasham, could be looked at with a view to raising it back to 5500' or moving its Northern boundary further South, this would really help.

Secondly, a number of our less experienced (and often local soaring restricted) pilots have achieved their Silver height claims in the vicinity of Parham airfield this year. With the proposed airspace these flights would not have been possible. With this area being so far from Farnborough, it is difficult to understand why this reduction in our overhead airspace is needed.

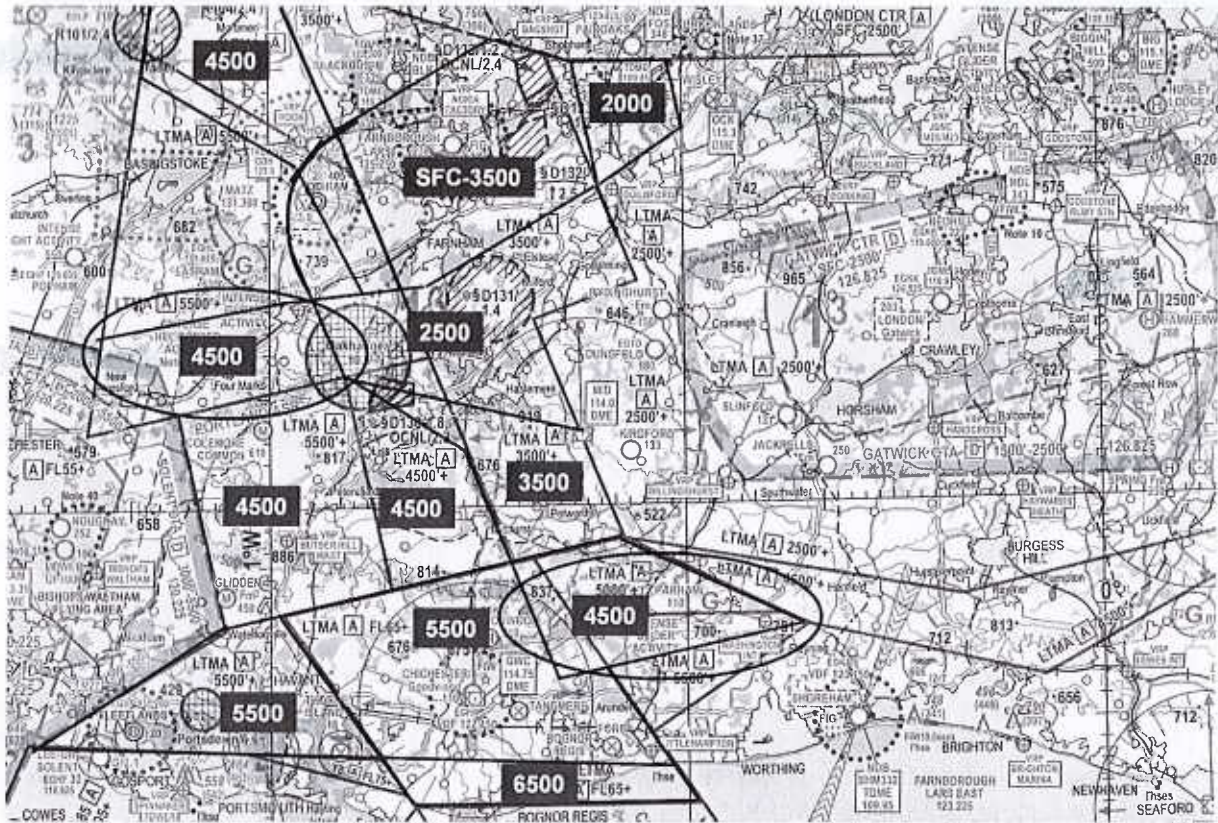
I would ask that you take a look at these two areas (shown on the attached map) and get back to me with any suggestions for improvement.

Best Regards

[REDACTED]

[REDACTED] Southdown Gliding Club

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Summary statement - request from Hampshire CC to answer query re: change of sponsorship

TAG, in their original consultation material, wrote that NATS LTC would be the controlling authority for these volumes of airspace over the south coast. TAG also wrote that TAG works closely with NATS under their infrastructure programme known as 'LAMP'.

It is not contrary to the relevant process for a Sponsor to apply for airspace changes on behalf of other entities, provided consultation has been undertaken.

Changes to Southampton Airport 'orbiting' flightpaths in the vicinity of Alresford are not part of this proposal. Any such change would require its own consultation.

Background information for Hampshire CC supporting the summary statement

Concerns regarding change of sponsorship:

The volumes transferred from TAG to NATS are over the south coast. The northernmost boundary of the northernmost transferred volume is south of the M27 motorway, some thirty kilometres south of Alresford and forty kilometres south of Lasham.

TAG Farnborough's Consultation Document Part A para 1.5 states that TAG is putting forward the proposal, and that we are working closely with NATS' London Airspace Management Programme ('LAMP').

TAG Farnborough's Consultation Document Part A para 8.5 describes the airspace arrangements with respect to the London Terminal Manoeuvring Area (LTMA) and London Terminal Control (LTC). That para also states that the LTMA and LTC are managed by NATS, therefore it is evident that NATS would be the controlling authority of these volumes of airspace.

We considered it unnecessary to repeat NATS' involvement at each subsequent mention of the terms 'LTMA' and 'LTC'.

TAG Farnborough's Consultation Document Part A para 9.3 of the same document describes some proposed changes to Class A airspace volumes. It specifically stated that they would become part of the LTMA under LTC's management.

TAG Farnborough's Consultation Document Part E para 5.31 also states that the controlling authority would be LTC.

It is not contrary to the airspace change process (defined by the CAA in document CAP725) for one entity (such as TAG) to sponsor the airspace change process on behalf of others (such as NATS) provided that consultation has been undertaken.

Concerns regarding the revised route vs revised airspace presented to Lasham Gliding Club earlier this month, including Southampton flights over Alresford

TAG notes that Alresford is beneath a piece of existing airspace controlled by Southampton Airport and that this was never planned to change under our proposal.

The post-consultation revised route design would not mean that the Southampton airspace volume is 'redundant'. A significant revision has been planned for TAG's proposed volume in the vicinity (designated CTA8 in the original consultation and now refined into new designation CTA10).

This is not for the benefit of Southampton Airport flights in the vicinity of Alresford, also known as the 'Winchester Orbit'. Any change to these flightpaths, should they be required, would be subject to its own consultation.

Finally, it is disappointing to note that the information regarding the revised routes and airspace was agreed by Lasham Gliders to remain strictly confidential, because (a) it is still in draft, and (b) TAG had yet to complete its re-engagement with other stakeholders at that time. It is also regrettable that there seems to have been a misinterpretation of the effects of the revision, which are designed to reduce the impacts on both Alresford and Lasham.

Also worthy of note is that any TAG flights in the vicinity of Alresford would typically be above 7,000ft (following redesign of the routes and three days of associated simulations). According to the Department for Transport's guidance, 7,000ft is the altitude above which the mitigation of the impact of noise is no longer a priority and the priority changes to promoting the most efficient use of airspace.

'Guidance to the CAA on environmental objectives relating to the exercise of its air navigation functions', published by DfT in January 2014, Chapter 4 'Specific Navigational Guidance', first section 'Altitude-based priorities', para 4.1, sub-item (d).