

London 2012 Olympics CAS(T) Proposal

Stakeholder Consultation Feedback Report

14th July 2011

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1. Executive Summary - The London 2012 Olympics CAS(T) Proposal

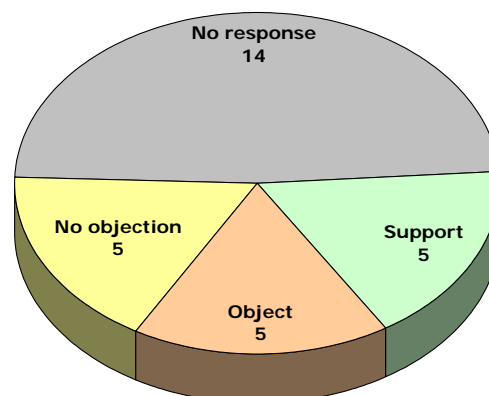
The London 2012 Olympics take place from 27th July to 12th August, and are forecast to generate exceptionally high levels of air traffic.

In order to ensure the safe and smooth operation of air traffic control during this period, it is proposed that temporary changes are made to the controlled airspace (CAS(T)) in the south east of England, from eleven days before the opening ceremony until three days after the closing ceremony¹.

It has been forecast that the level of traffic over the period of the Paralympic Games (29th August to 9th September) would not require CAS(T).

During late March, April and May 2011, NATS² conducted an 8-week consultation³ with members of the National Air Traffic Management Advisory Committee (NATMAC)⁴ to elicit feedback on this proposal. The Ministry of Defence (MoD) has also been engaged, and is discussed separately below.

Of the original 29 stakeholders consulted, 15 responded. Of these 15 respondees, five supported, five had no objection, and five objected. The five objections were primarily concerned with a perceived lack of access by General Aviation (GA), supported by knock-on financial implications for their businesses. NATS/Stobart Air has considered these objections in the ongoing design of the proposal. Following these objections and the validation simulation, one modification to the original CAS(T) proposal (the removal of "Area 6" in the vicinity of Oxford) has been made.



MoD not included in this chart (see paragraph below)

At the time of writing this report, the MoD's major issue is the proposed implementation date of 16th July, changed by NATS shortly prior to consultation to benefit controller familiarity and training in advance of the expected build-up of traffic. 21st July was the NATS-MoD internally-negotiated original date - NATS recognises the difficult position in which it has placed the MoD and is working with their representatives to negotiate a mutually acceptable outcome.

Additionally, 14 non-NATMAC organisations responded, as did 8 members of the public.

Many respondees confused this CAS(T) consultation with the UK Government's Department for Transport (DfT) security restriction announcement on 7th March 2011. There were several objections to these security restrictions via the NATS consultation, which are not related and hence those responses were outside the scope. Once this was clarified, some respondees amended their response and were able to be included in the results.

¹ To be implemented 0800 local time (BST) Monday 16th July, and disestablished 2000 local time Wednesday 15th August 2012.

² NATS En Route Ltd (NERL) coordinated this consultation on behalf of itself, NATS Services Ltd (NSL, the air traffic providers at both Farnborough Airport and Southampton Airport), and Stobart Air Southend Airport.

³ As promulgated in CAA Information Notice number IN-2011/02 paragraph 2.2.

⁴ See Appendix A of the consultation document for a list of those formally consulted.

2. Introduction

This document provides feedback to all stakeholders who participated in the consultation undertaken by NATS and Stobart Air for the proposed London 2012 Olympics temporary controlled airspace (CAS(T)).

Guidance was received from the Civil Aviation Authority's Directorate of Airspace Policy (DAP) that the temporary nature of this proposed change precluded consultation with environmental stakeholders and also allowed for a reduced period of consultation. These exceptions from the normal consultation process were agreed with DAP at the framework briefing of 29th November 2010. The process nonetheless requires a formal ACP submission. This consultation commenced 28th March and closed on 26th May 2011, a period of 8 weeks.

This document should be read in conjunction with the stakeholder consultation document - all acronyms and technical terms are explained therein. For reference, the stakeholder consultation document is available from www.consultation.nats.co.uk.

See also Appendix A: Maps referred to in this Report.

All times are local BST (UTC+1hr).

The consultation was distributed to a total of 29 stakeholders on the National Air Traffic Management Advisory Committee (NATMAC). The Ministry of Defence (MoD) was engaged prior to the consultation, via the Defence Airspace and Air Traffic Management (DAATM) contacts. The NATS GA Partnership⁵ was invited to meetings to discuss the proposal in advance of this consultation. Additional publicity was provided by the Airspace & Safety Initiative (ASI) website – an Olympics sub-site is devoted to the restricted and prohibited zones announced by the Department for Transport, and brief information on this separate NATS consultation was found on an information tab⁶.

Nothing in this proposal supersedes the responsibility of pilots to comply with the requirements of the Home Office Restricted and Prohibited Zones.

3. Newly-Proposed Operating Hours Change post-Consultation

Design change due to additional radar resource availability: Farnborough CTR/CTA(T)/Area 7/Area 8 to open one hour earlier than originally proposed, i.e. 0700.

Due to resourcing, the original core hours of operation for the Farnborough CTR/CTA(T)/Area 7/Area 8 was consulted upon as 0800-2000, seven days a week.

Farnborough Airport's opening hours are 0700-2200 weekdays, 0800-2000 weekends, and this would not change for the Olympics period. Therefore there is a weekday "disconnect" of one hour in the morning and two hours in the evening, as the main CAS(T) in that area is proposed to operate 0700-2200 as per the consultation document.

Discussions took place with the Olympics airspace leads regarding Network Management concerns about capacity and service provision between 0700-0800 weekdays. Farnborough was approached to elicit support for additional radar availability during this time. This has been acceded to. This now mitigates the situation for Farnborough Group movements that could, potentially, occur weekdays, 0700-0800, without the protection of radar and would require complex and restrictive practices to manage safely.

As these two elements (airspace and radar manning) are newly proposed, Farnborough management requests that the CTR/CTA(T) and Areas 7 & 8 are established concurrently with the NATS En Route Ltd (NERL) / Southampton airspace from 0700 weekdays. There remains

⁵ See Appendix B: GA Engagement Records

⁶ <http://olympics.airspacesafety.com/nats-airspace-changes>, correct as per the date on the front of this report.

no requirement for this airspace after 2000 therefore the evening “disconnect” of 2000-2200 is not an issue, and it is not proposed to change the timings for weekends, which remain 0800-2000.

Overall GA traffic numbers in this timeframe are likely to be lower than at peak times. The uncertainty regarding the Home Office Restricted Zone may increase movements in the vicinity. The provision of extra radar staff and associated ability to afford transit of CAS(T) would mitigate the impact on GA of the newly-proposed 0700 opening of the CTR/CTA(T)/Area 7/Area 8.

The overall benefit for Farnborough (and Group) will be a consistency of approach to the CAS(T) interfaces. Therefore, the service is consistent especially for the expected large numbers of first time visitors and consistent for the GA community.

For full information see Appendix A Figure 7 Finalised Proposed CAS(T) for NATS En Route, Solent, Farnborough. Additionally, Figure 8 and Figure 9 show the complete information for the south Essex/north Kent CAS(T), including Manston/Southend, and East Anglian CAS(T) respectively.

4. Analysis of Responses

NATS/Stobart Air conducted this consultation with the National Air Traffic Management Advisory Committee (NATMAC) as per the DAP guidance above.

The overview of responses will be divided into these NATMAC Stakeholders (including our Ministry of Defence colleagues), and non-NATMAC respondents.

The entire process was conducted via email. A postal response service was available, but no such paper feedback was received.

The list of stakeholders identified as primary recipients of the Consultation material, NATMAC and the MoD, was agreed in accordance with CAA guidance and at the framework briefing on 29th November 2010.

Of the 29 NATMAC (non-MoD) organisations originally consulted, a total of 15 responses were received from 4 airlines, 1 airport operator (on behalf of several airports), 6 GA organisations and 4 other industry associations. There were five objections, five neutral positions and five supporting the proposal. 14 NATMAC Stakeholders did not respond.

The MoD response is discussed separately within this report, hence they are not reflected in these numbers or charts.

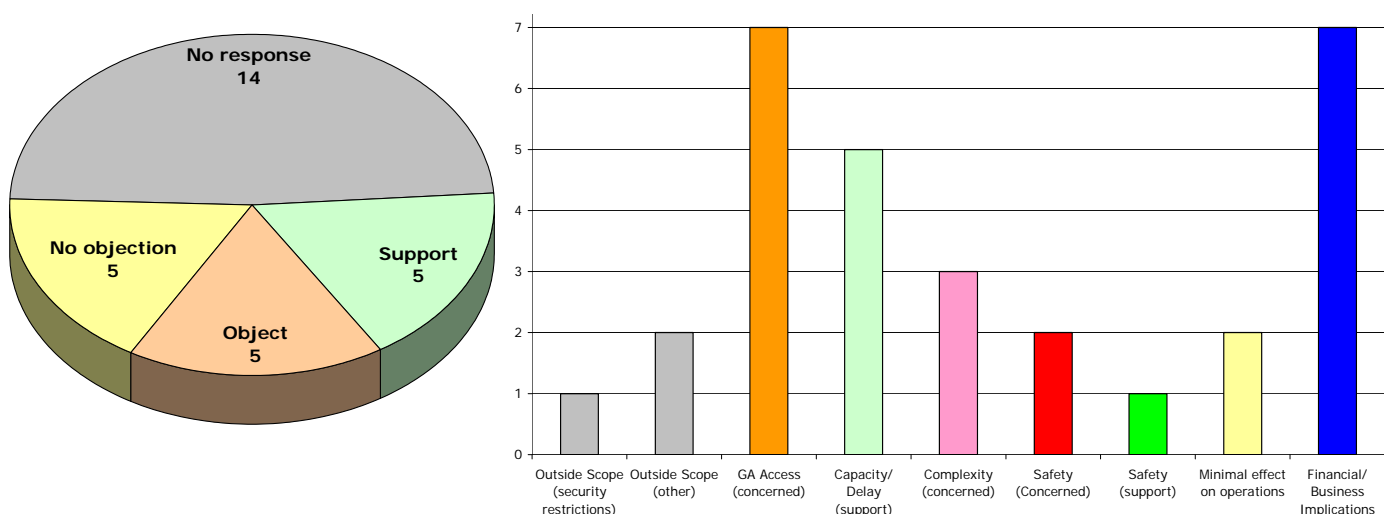


Figure 1 NATMAC Response Overview, and Figure 2 NATMAC Response Themes

The main themes identified from these responses are shown in Figure 2 above.

Comments were made by NATMAC stakeholders that lay outside the scope of this consultation; for completeness they are also shown above.

The themes are discussed in the following pages, and are numbered as below. Each Theme is considered from the NATMAC Stakeholder point of view, and then from the MoD point of view.

Theme number:

1. Concern regarding GA access
2. Positive effect on capacity/delay
3. Minimal effect on operations
4. Concern regarding complexity
5. Concern regarding safety
6. Positive effect on safety
7. Financial or business implications

4.1 Issues under the "GA Access" theme

Theme 1: Concern regarding GA access, and suggested design modifications

NATMAC Stakeholders

Of the NATMAC respondents, only the GA groups provided a response primarily regarding GA access.

- **Issue 1: Concerns that the proposal would limit access to the proposed CAS(T). Several design modifications were suggested such as allowing corridors within Farnborough and Southend CTRs (or modifying the shapes of these CTRs), the aim of which would be to minimise the need for transit traffic to acquire an ATC clearance, and to change/remove parts of the proposed CAS(T).**

Pre-consultation planning with GA groups was carried out through the NATS General Aviation Partnership (see Appendix B: GA Engagement Records). Local agreements are being considered and engagement is continuing to progress LoAs where this is a practical solution.

Early designs for the CAS(T) were more extensive in scope (see Appendix A: Maps referred to in this Report, Figure 10); this was reduced prior to launching the consultation⁷. Immediately after consultation concluded, a validation simulation took place (early June 2011). Following these GA access objections, part of the remit of this simulation was to look at the bases of the proposed CAS(T), and see where airspace might be released back to Class G for GA use.

Design change due to Issue 1: Area 6 has been successfully released from this CAS(T) proposal in its entirety.

Oxford Airport have also withdrawn their CAS(T) proposal, which is in the same vicinity. NATS has engaged with Oxford Airport to ensure a practical solution to their traffic needs over the Olympics period.

The proposal has been developed to enable as much access as possible, given the requirement to ensure that the known air traffic environment is adequate to handle the volume of expected traffic over the period of the main Games. The majority of lower-level

⁷ Framework Briefing, 29th November 2010 (as per minutes).

CAS(T) is proposed as Class D, suitable for VFR flight. CAS(T) areas which are proposed as Class A do not preclude IFR entry provided the pilot and aircraft are correctly equipped. Best endeavours will be made not to refuse reasonable CAS(T) entry requests to any user. The special circumstances of the Games mean that there will be occasions of very high traffic volumes. This means that, like current CTR/CTA entry requests, it is not possible to accept all of them without delay or modification.

See Figure 7, Figure 8 and Figure 9 in Appendix A for maps of the finalised proposed CAS(T).

The request for a corridor between the Farnborough CTR and London CTR is not practical due to the best-practice for radar-controlled traffic operating within CAS to get no closer than 2nm from the edge of that CAS; the proposed CTR is already at its minimum size. This CTR has been well practised in the past as it is the same as used for the biennial Farnborough Air Show, and as such it is the only practical solution. An exemption has been requested to the Rules of the Air Regulations (2007) Rule 18 (Flight in Class A Airspace), as per the biennial Airshow and as stated in the consultation document, however this remains within the Prohibited Zone (Home Office security restrictions) and as such is subject to Ministerial review by the Home Office. Therefore, requests from the BHA and HCGB for a non-prohibited area cutting the corner of the London CTR between OCK and WOD are outside the scope of this consultation.

Requests were received for danger areas to be closed. The MoD is being significantly affected by the Olympics CAS(T), and some of their activity areas are being directly affected also. It is not reasonable to ask for additional individual (or blanket) closures of their activity areas during this period. The proposed CAS(T) has been designed assuming that these areas are operating as agreed between NATS, the MoD and the relevant agency in charge.

The Restricted Zone, as per the Prohibited Zone (above) is subject to the same Ministerial control by the Home Office, and is therefore outside the scope of this consultation.

The proposed temporary Southend CTR/CTAs were carefully designed to be of minimum size required to wholly contain the types of aircraft expected to use them between Southend and the proposed NATS CAS(T), taking into account the local airspace and terrain situation. Therefore it is not practical to make more modifications to these CTR/CTA(T)s.

- **Issue 2: Concerns that the proposed CAS(T) would remain in place permanently.**

The proposed Olympics CAS(T) will be disestablished at 2000 (local) on Wednesday 15th August 2012.

- **Issue 3: The BGA's response makes several requests to consider alternative designs of procedures and bases of CAS(T) to accommodate their activities.**

Meetings between NATS and the BGA took place on 12th May and 24th June 2011.

The 12th of May's meeting minutes (embedded below) form both the substance of the BGA's objections and NATS' responses to those objections (additional text below). A formal email response received from the BGA covered the same points:



NATS BGA 12th May

The vertical and lateral dimensions of CAS(T) for the benefit of the Farnborough Group / Solent Group (Areas 7 and 12), are designed to remove Farnborough and Southampton traffic from the main London TMA flow. Therefore, raising these bases would remove the advantage they were designed to create. A simulation of these raised bases took place early June 2011 (see Appendix C: NATS Southampton and Farnborough joint paper regarding CAS(T) bases in the vicinity of Lasham, for a full analysis).

It is therefore not possible to raise these CAS(T) bases as requested without a significant impact on the LTMA flows, and so the modifications suggested by the BGA cannot be progressed.

On the 24th of June 2011, a meeting was convened between NATS and the BGA with the DAP case officer attending. At this meeting, an agreement was made for an airspace sharing arrangement. The minutes of the meeting, and the details of the agreed sharing arrangement, are embedded below:



The specific details of the access management of this sharing arrangement are being discussed with the BGA and will be agreed in due course.

NATS would like to reiterate that Area 6 has been removed from the proposal, releasing additional Class G in that area.

- **Issue 4: Queries re the alignment of proposed Manston and Oxford CAS(T) with NATS/Southend CAS(T)**

Design change due to Issue 4, and newly-proposed design change:

Manston and Oxford were both engaged in summer 2010 regarding CAS(T) proposals. At the time of writing this report (July 2011), Manston Airport has completed its consultation exercise for CAS(T) to aid its operation. Oxford Airport has withdrawn its CAS(T) proposal, discussed above.

NATS has studied Manston's consultation document and has no objection to the proposal (response attached):



A modification to the NATS/Stobart Air proposed CAS(T) has been made to accommodate Manston's proposed CTR(T) (***Design change***, see Appendix A: Maps referred to in this Report, Figure 8 below). NATS and Manston have worked together to ensure that our respective CAS(T) plans for the Olympics are aligned. Stobart Air have also responded with a "no objection" reply to Manston, commenting that they will work with Manston on a revised LoA between their Units for the duration of the Olympics CAS(T).

Newly-proposed Design change (see Appendix A: Maps referred to in this Report, Figure 8 below) There is a technical requirement to move the OLLEY hold approximately 3.2nm to the south west. This is due to a B-RNAV protected area confliction with the LOGAN hold which would be solved by this newly-proposed move. The OLLEY holding pattern remains entirely over the sea and the required CAS(T) dimensions are unaffected by this move. There were no objections to the OLLEY hold, therefore NATS/Stobart Air submits that this minor change has minimal effect. Manston Airport has been engaged and has no objection to the move (as per an email exchange between Manston SATCO and NATS Olympics Airspace Lead, 30th June 2011). The MoD have concerns regarding the CAS(T) operating hours (see **Issue 9** below), but not the position of the hold itself.

- **Issue 5: Letters of Agreement (LoAs) or other local procedures should be negotiated to allow maximum access with minimum coordination time for locally based traffic.**

NATS and Southend Airport (Stobart Air) have contacted local airfields and organisations, and

are in the early stages of negotiating local agreements as far as practical, based on the proposed CAS(T).

NATS Farnborough will be signing Olympic-specific LoAs with Blackbushe, Fairoaks, RAF Odiham, Lasham, Dunsfold, Oxford, Southampton and OAMC (Military) to create an environment where access is maximised with minimum coordination.

NATMAC-specific

- **Issue 6a: Concern that the proposed implementation date of 16th July is too early.**

The 16th of July is what was consulted upon with NATMAC. The BGA suggested a later date of 23rd or 24th July, the NATS response to which is covered in **Issue 6b** below.

MoD-specific

- **Issue 6b: The proposed date of implementation was changed to 16th July a few weeks before this Consultation was launched.**

NATS and the MoD were originally internally negotiating an implementation date of July 21st.

However, a few weeks before consultation was launched, a NATS internal review highlighted the requirement for each of the five Air Traffic Control Watches to have experience of the airspace.

Controllers need to familiarise themselves with new airspace and procedures. They will have received comprehensive training in the simulator previous to this date, but it is acknowledged that, despite being highly realistic, simulated traffic is always slightly different from a “live” operational environment. As such, controllers need a period of stable traffic levels in order to safely transition into new procedures and airspace.

NATS’ requirement is to bring the temporary civilian airspace online a minimum of 8 days before the **increase** in traffic that is forecast as part of the Games. Historically, this increase occurs about 3 days before the opening ceremony, thus making the total requirement 11 days. Counting back 11 days from the morning of the ceremony day (27th) brought NATS to the 16th of July. This incorporates an analysis of the Watch rosters, and so the 16th of July is the latest, best possible date for all five Watches to gain experience with the CAS(T) on a “core shift” (i.e. morning, day or afternoon shift) before the forecast increase in traffic. There would not be any flow management restrictions imposed specifically due to the transition to the Olympics CAS(T).

Whilst the NATS internal review process was successful in identifying a significant issue in advance of the Consultation launch, it meant a change in negotiation between NATS and the MoD, who have already made significant sacrifices to their operations based on the original 21st July date.

The tri-service military aircraft Testing and Evaluation Unit at Boscombe Down (Salisbury Plain, Wiltshire) would be able to achieve its aircrew currency requirements with the original 21st July date. The revised date of 16th July presents significant problems and will impact on the MoD’s safety position at this Unit.

NATS recognises that it has put the MoD in a difficult position, appreciates that further joint work is required to minimise the impact on these operations and is continuing to negotiate mutually acceptable protocols to accommodate the Boscombe Down requirement.

Issue 6c: There is a need for Flexible Use of Airspace (FUA) agreements that allow the classification of airspace to change from Class A to a lower Class when the airspace is returned to the MoD outside core hours.

Flexible Use of Airspace (FUA) arrangements would be agreed such that the classification of those areas proposed as Class A would reduce from Class A to Class C or D when under military control. If there is little or no civilian demand for periods within the published hours of any proposed CAS(T), under the FUA terms they would be handed back to the military.

The decision to agree Class C or D depends on the NATS/MoD FUA agreement which is yet to be finalised.

- **Issue 7: Challenge to hours of operation: LESHY⁸ Area.**

See also Section 3 above. The hours of operation around the LESHY area enable controllers to handle not only traffic into and out of the Farnborough clutch, but also Oxford Airport. By establishing CAS(T) until 2200 hrs local, NATS can safely work the traffic through this piece of airspace on an established procedure with a published hold. This reduces the complexity within other TC South sectors that will be busy managing other LTMA traffic.

- **Issue 8: Challenge to hours of operation: HORAM⁸ Areas A and B.**

See Appendix A: Maps referred to in this Report, Figure 9.

HORAM Area B is required H24 because this deconflicts the Luton/Cambridge/Cranfield/Duxford flow from the major Stansted flow from the east. However, the FUA point also applies here (with an associated change in classification as per **Issue 6c** above), and the area would be handed back to MoD control during periods of little or no civilian demand.

HORAM Area A is for contingency purposes as stated in the consultation document. It would likewise be available for MoD use provided that (in the event that a contingency hold is required) it can be returned to civilian use within a short time period (to be agreed under LoA).

- **Issue 9: Query re: hours of operation: OLLEY⁸ Area.**

Southend is an H24 operation, therefore OLLEY is proposed to be H24 to support that operation. NATS notes that the MoD does not object to the H24 operation. See also **Issue 4** above.

- **Issue 10: Query re: classification of airspace: Class A vs Classes C or D.**

When handed back to the MoD, the CAS(T) Class A would become a reduced class of CAS(T) under the terms of the yet-to-be finalised NATS/MoD FUA agreement (see **Issue 6c** above). DAP have agreed this is an appropriate method for allowing MoD to operate when they take over control of an area. The method of promulgation of these classification changes will be agreed as part of the FUA discussion.

- **Issue 11: Challenge re: triangle of airspace south of LESHY Hold Area 5 (see Appendix A: Maps referred to in this Report, Figure 11).**

This suggested piece of CAS(T) would change an extant boundary and could lead to GA pilot confusion, thus increasing the likelihood of an infringement. Therefore NATS has considered and rejected this triangle.

- **Issue 12: Query re: TRA002 and Q41 suspension.**

Please refer to FUA discussions under **Issue 6c** above, which apply here.

⁸ The five-letter name codes for the proposed holds have now been finalised via the ICARD database. All three of the final names are different from the draft names originally consulted upon. For consistency, the names within this report will remain the same as the consultation document. For reference: LESHY is now LEMVI, HORAM is now ORVOM, OLLEY is now OLPOT.

- **Issue 13: Query re: Netheravon parachute centre operations.**

Access for this operation has been agreed with the Chief Pilot APA/JSPC where civilian traffic levels permit. This was also discussed with the MoD DAATM representative. An LoA will be drafted in due course.

- **Issue 14: Query re: Area 6 access for Abingdon and Benson gliding operations.**

See **Issue 1** above. Area 6 has been successfully released from this CAS(T) proposal.

4.2 Issues under the “Effects on Operations” themes

Theme 2: Positive effect on capacity/delay

Theme 3: Minimal effect on operations

NATMAC Stakeholders

The major airlines and airport operator that responded took the view that the proposal would minimise the impact of the additional traffic on the regular, scheduled traffic during the period of the Games. Two GA stakeholders also wrote to express understanding for the reasons behind the CAS(T).

- **Issue 15: Concern about expected Paralympic Games traffic levels, and the disestablishment of the CAS(T) before the Paralympic Games start.**

NATS is confident that the expected Paralympic Games traffic levels are able to be handled without the need for the CAS(T) proposed for the main Games (see the Executive Summary on page 3). The Beijing Olympics indicated that peak Paralympic traffic levels, whilst busy, were significantly lower and less sustained than the main Games.

MoD

The MoD wrote that they understand the need for additional airspace, and that it would have an impact on their activities. The MoD's concerns are primarily about GA access and the proposed timings, which are discussed under **Theme 1** above.

4.3 Issues under the “Safety” themes

Theme 4: Concern regarding complexity

Theme 5: Concern regarding safety

Theme 6: Positive effect on safety

NATMAC Stakeholders

Two GA stakeholders expressed concern about the complexity of the airspace base divisions, with BALPA also expressing the same concern on behalf of its members who may be affected by any GA infringement due to confusion. However, BALPA also recorded a positive effect on safety due to the expanded airspace available for the increase in airways movements.

- **Issue 16: Concern that the proposed CAS(T) is complex and may cause confusion for GA pilots.**

NATS has attempted to minimise the amount of proposed CAS(T) to only that which is absolutely required. Area 6 has been successfully released from the proposal, following this consultation and the validation simulation. An attempt to further simplify the CAS(T) bases and divisions would most likely involve an increase in the requested "take" from Class G. In addition, the temporary Farnborough CTR/CTA match those used every two years for the air show, and would be familiar to airspace users. CAS(T) follows extant boundaries wherever practical (see also **Issue 11** above).

NATS contends that studying the Olympics VFR charts, special Aeronautical Information Publication (AIP) supplement (both to be published via AIS in good time for the Games), a comprehensive pre-flight briefing, good airmanship and the use of all available tools such as air traffic services outside controlled airspace (ATSOCAS) would minimise the likelihood of infringement.

Additionally, the AWARE airspace warning device and Sky Demon VFR planning tool will both be updated with Olympics-specific information.

- **Issue 17: Concern regarding GA that is unable to join, or wishes to avoid, CAS(T), which must route into narrow, headroom-limited bands between/below CAS(T) or permanent CAS/CTRs. This may cause possible choke-points and an increase in the density of GA, with commensurate increase in the likelihood of a Class G airprox.**

Specific locations were mentioned: **Challock** gliding site in Kent; **Lasham** gliding site in Hampshire; and the **Didcot/Benson/Abingdon** "triangle" in Oxfordshire.

As discussed in **Theme 1** above, the CAS(T) proposal has been developed to enable as much access as possible. However, those that cannot enter, do not wish to request entry, or are being delayed entry due to busy airways traffic must remain outside CAS(T).

Design change due to Issue 17 (prior to consultation): Challock gliding issues were partially resolved by NATS offering a compromise following GA Partnership meetings where this was discussed (see Appendix B: GA Engagement Records). The CAS(T) boundary lines in the southern part of OLLEY Area 4 were shifted northwards, releasing additional Class G for GA use over, and north of, the Challock site (see Appendix A: Maps referred to in this Report, Figure 8).

The CAS(T) in the vicinity of Lasham is discussed in **Theme 1 Issue 3** above.

In the event that VFR access to the proposed temporary Class D airspace is significantly delayed due to airways traffic, the density of GA traffic outside CAS(T) would increase. Similar situations occur today between delayed-entry GA traffic and existing busy CAS.

See also **Theme 1 Issue 1** Design Change above - Area 6 (Oxfordshire) has been entirely released back to Class G and will not feature in the formal airspace change proposal.

MoD

- **Issue 18: Comment regarding proposed helicopter route via live danger area.**

The MoD pointed out that one of the helicopter routes to Weymouth appears to pass through the northern edge of an active danger area, namely EGD026 (15.0 OCNL 20.0) Lulworth.

Design change due to Issue 18: A suggested route would be from VRP Sandbanks westwards towards Wareham (at or below 1,900ft to avoid the Bournemouth western CTA stub, or avoid it laterally), pick up the railway line tracking west towards Wool then turn south west towards the coastline on reaching the eastern village boundary of Wool. If the helicopter was at or above altitude 1,100ft then it could overfly P047 (1.0) without an infraction.

Likewise the return journey would reverse the above route. An assumption is made regarding

extensive pre-flight briefing and good airmanship. *Note that these heli routes are not enforceable, they are merely to clarify to the GA community where they might expect higher densities of rotary traffic routing to/from the Olympics sailing centre at Weymouth.*

See Appendix A: Maps referred to in this Report, Figure 13.

4.4 Issues under the “Financial” theme

Theme 7: Financial or business implications

NATMAC Stakeholders

This theme covers two slightly different points of view.

- **Issue 19: GA users – Concern about loss of revenue due to lack of access to CAS(T), and possible compensation.**

The fundamental issue of the financial concerns recorded by GA stakeholders is predicated upon the assumption of lack of access. Therefore please refer to **Theme 1** above.

- **Issue 20: Airlines, airports – Seeking reassurance that this proposal is the best option to ensure their business operations continue with minimal impact and associated loss of revenue. Particular mention was made of staffing resource, minimising delay, and “business as usual”.**

Plans for staffing resource are underway and will comprehensively cover the proposed period.

NATS is confident that all the regularly scheduled traffic, and the additional Olympics traffic, will be handled in a “business as usual” manner with minimal delay due to this proposal.

The airspace proposal has been planned to cater as well as possible for the increased levels of demand during the period of the Games. It will be complemented by employing Network Management techniques on the day to minimise the overall impact on the network.

MoD

The MoD understands the requirement for additional airspace, however there will be a significant impact on military training, which is classed here as the “business implication”.

Thus, the MoD will tailor their activities accordingly during the Olympics period. In particular, the MoD expect FUA access when traffic levels permit, in order to minimise this impact. The FUA agreements are being discussed and will be agreed in due course (**Theme 1 Issue 6c** above).

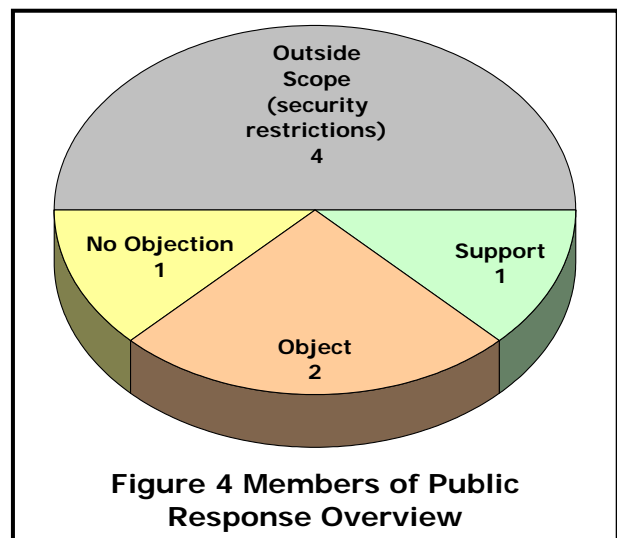
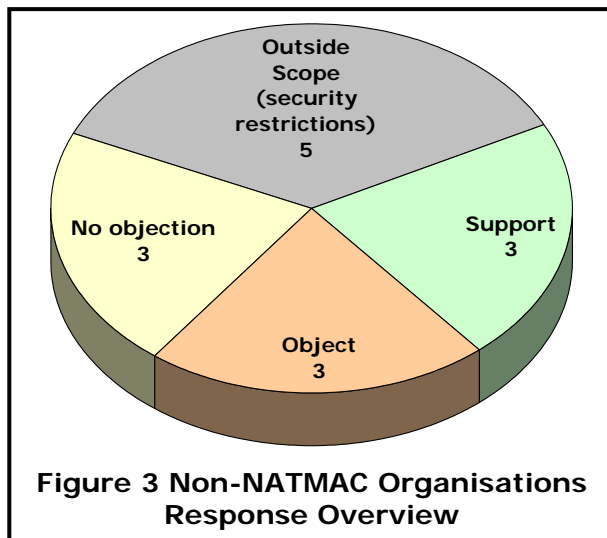
4.5 Non-NATMAC Organisations and Members of the Public

4.5.1 Overview

14 non-NATMAC organisations responded, as did 8 members of the public, totalling 22 non-NATMAC responses.

Of the non-NATMAC organisations and members of the public that responded, several confused the CAS(T) consultation with the UK Government's Department for Transport (DfT)'s security restriction announcement. There were several objections to these security restrictions via the NATS consultation, which are not related and hence those responses were outside the scope. Once this was clarified, some respondents amended their response and were able to be included in the results.

The figures below illustrate the responses:



The main themes identified from the non-NATMAC Organisations' responses are shown in Figure 5 below:

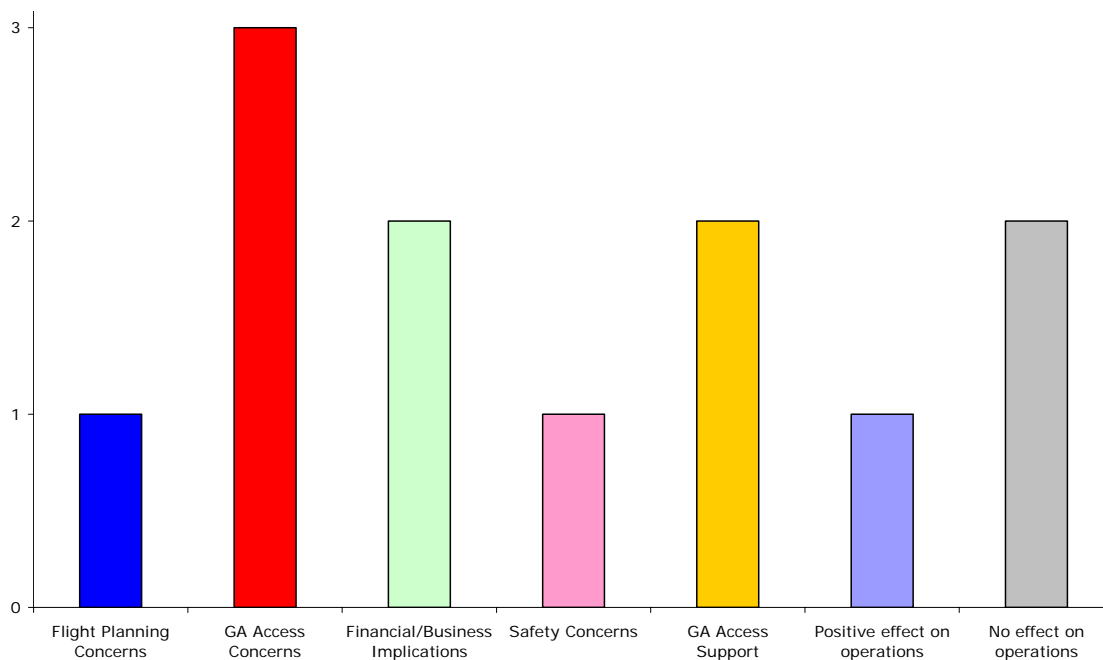


Figure 5 Non-NATMAC Organisations Themes

The main themes identified from the Members of Public's responses are shown in Figure 6 below:

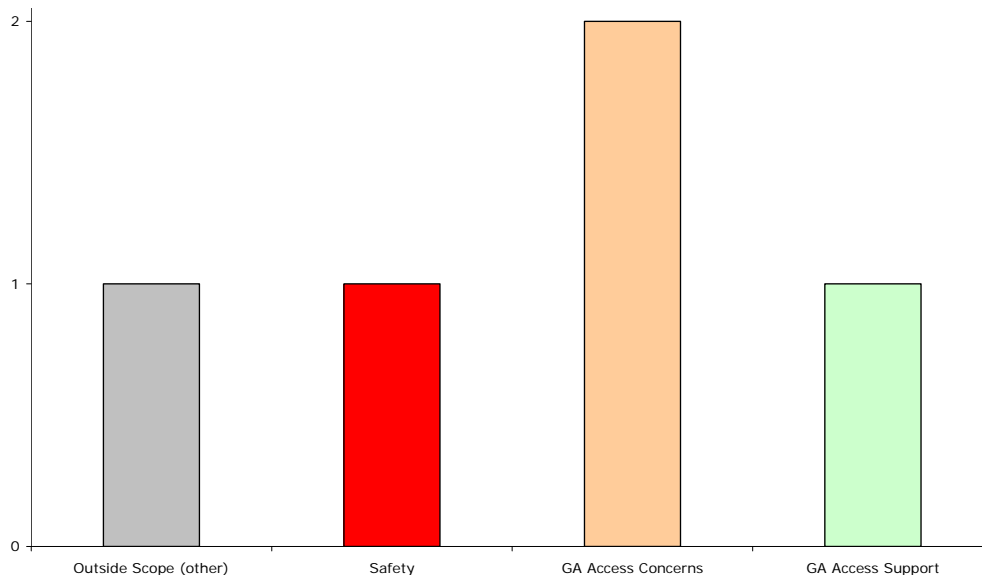


Figure 6 Members of Public Themes

4.5.2 Suggestions from non-NATMAC organisations and members of public

The suggestions below are those that have **not** already been discussed earlier. Non-NATMAC organisations that have requested additional engagement for local agreements will be contacted to discuss arrangements.

Headcorn Parachuting

Headcorn's parachuting requirement essentially involve gaining an airways clearance, climbing out of their airfield into Class A airspace, executing the drop onto their airfield, then descending out of Class A. The location of Headcorn is outside all the NATS/Stobart Air CAS(T) consulted upon, but is within the Restricted Zone. Therefore Headcorn is to comply with the requirements of the Restricted Zone, which is outside the scope of this CAS(T) consultation, and their existing LoA is fit for purpose subject to those Restricted Zone requirements.

Southdown Gliders (Parham)

See BGA discussion under **Issue 3** above

Fyfield Flying Club at Willingale

The original Southend assessment of the effect of the Southend CAS(T) proposals on Willingale operations was as being minimal. Aircraft flying to and from Willingale would be able to fly to the south west of the Southend CTR(T), which would extend 8 miles south west from the airport, at or below 2,400ft. A straight-line route from Willingale to Farthing Corner airstrip would be outside the proposed CTR(T), which removes the assumption that Willingale-Farthing Corner aircraft need to route out to sea to the east of Southend (see Appendix A, Figure 12). Aircraft wanting to transit the Southend CTR/CTA may ask for clearance on an opportunity basis from Southend Radar, and Southend will respond according to the traffic situation at that time.

Southend has opened a dialogue with Willingale to assess how the CAS(T) would impact their activities. Willingale accepts that the Restricted Zone security requirements for equipment carriage (outside the scope of this consultation) are likely to have a larger impact on their operations than the Southend proposed CAS(T).

Helicopter Routes

The VRP at the junction of the M25/M23 is suggested as one of the points to be used for the helicopter routes (pages 23-25 of the consultation document). Redhill's SATCO notes that this VRP is used by Redhill traffic entering/exiting their ATZ, generally at altitudes of 1,500ft-2,000ft. Redhill's local procedures (MATS Part 2) refers. Note that other VRPs suggested for other helicopter routes are also associated with airport VFR entry/exit routes (e.g. Sandbanks VRP for Bournemouth), therefore this situation is not extraordinary.

VFR traffic regularly routes east/west along that approximate M25 track today, and Redhill's SATCO suggests that it would be good general airmanship for traffic using this route to contact Redhill in good time to acquire local traffic information. See Appendix A, Figure 14.

The overarching consideration, however, is that this portion of the route is within the Home Office Restricted Zone. The requirements of this, whilst outside the remit of this consultation, must be met (flight plan filed, authorisation number received, remain under the positive control of an approved ATSU). Therefore all traffic will be known.

Note that these routes are not enforceable (when outside the Home Office Restricted Zone), they are merely to clarify to the GA community where they might expect higher densities of rotary traffic routing to/from the Olympics sailing centre at Weymouth.

An additional point received is that the south coast has some popular paragliding sites, adjacent to some of the proposed helicopter routes. Apart from the possible proximity issues, downdraft from a low flying helicopter may cause a paraglider canopy collapse. The British Helicopter Association, the Helicopter Club of Great Britain and the British Hang Gliding and Paragliding Association will be notified of the publication of this feedback report.

Charts, data

As discussed previously in this report: A dedicated set of aeronautical data will be published in good time for the Olympics. This will include VFR charts and AIP references that are specifically relevant for the Olympics period.

Technology

The AWARE airspace warning device and Sky Demon VFR planning tool will both be updated with Olympics-specific information.

5. Summary of Intended Airspace Change Proposal

Two changes have been identified that are different from the originally consulted-upon information. These newly proposed changes are:

- The operating hours of a portion of the CAS(T). This is discussed in **Section 3**.
- The precise position of the OLLEY hold. This is discussed in **Issue 4**.

The issues raised through consultation feedback have been given careful consideration as far as practical, given the need to balance all stakeholder needs including provision of safe and efficient services for the expected volumes of air traffic during this temporary period.

As a result of this consideration, NATS/Stobart Air has identified three further design changes:

- The removal of Area 6;
- The alignment of a portion of CAS(T) with Manston's proposed CAS(T); and
- A modification to one portion of the suggested helicopter routes.

Another proposed design change (in the vicinity of Challock gliding site) had already been negotiated prior to consultation.

No additional issues have been identified that justify further amendments to this proposal: airspace sharing arrangements with the gliding community have been agreed in the vicinity of Lasham, but the CAS(T) remains unchanged.

Hence, NATS/Stobart Air will be proceeding with the modified airspace design, described here and in the original consultation document, to the CAA for their consideration.

The details of the feedback and modifications are outlined in the main body of this report.

The DfT/Home Office security restrictions are outside the scope of this consultation – regrettably, some respondents confused this CAS(T) consultation with that Home Office announcement, and were thus excluded from the results.

5.1 What happens next?

This report is published on the Olympics CAS(T) sub-page of the NATS airspace consultations website www.consultation.nats.co.uk.

The consultation document, combined with the superseding comments and conclusions from this report, will form the basis of an Airspace Change Proposal (ACP).

This will be drafted by NATS & our co-sponsor Stobart Air, and submitted to the CAA's Director of Airspace Policy (likely to be in late August 2011).

Appendix A: Maps referred to in this Report

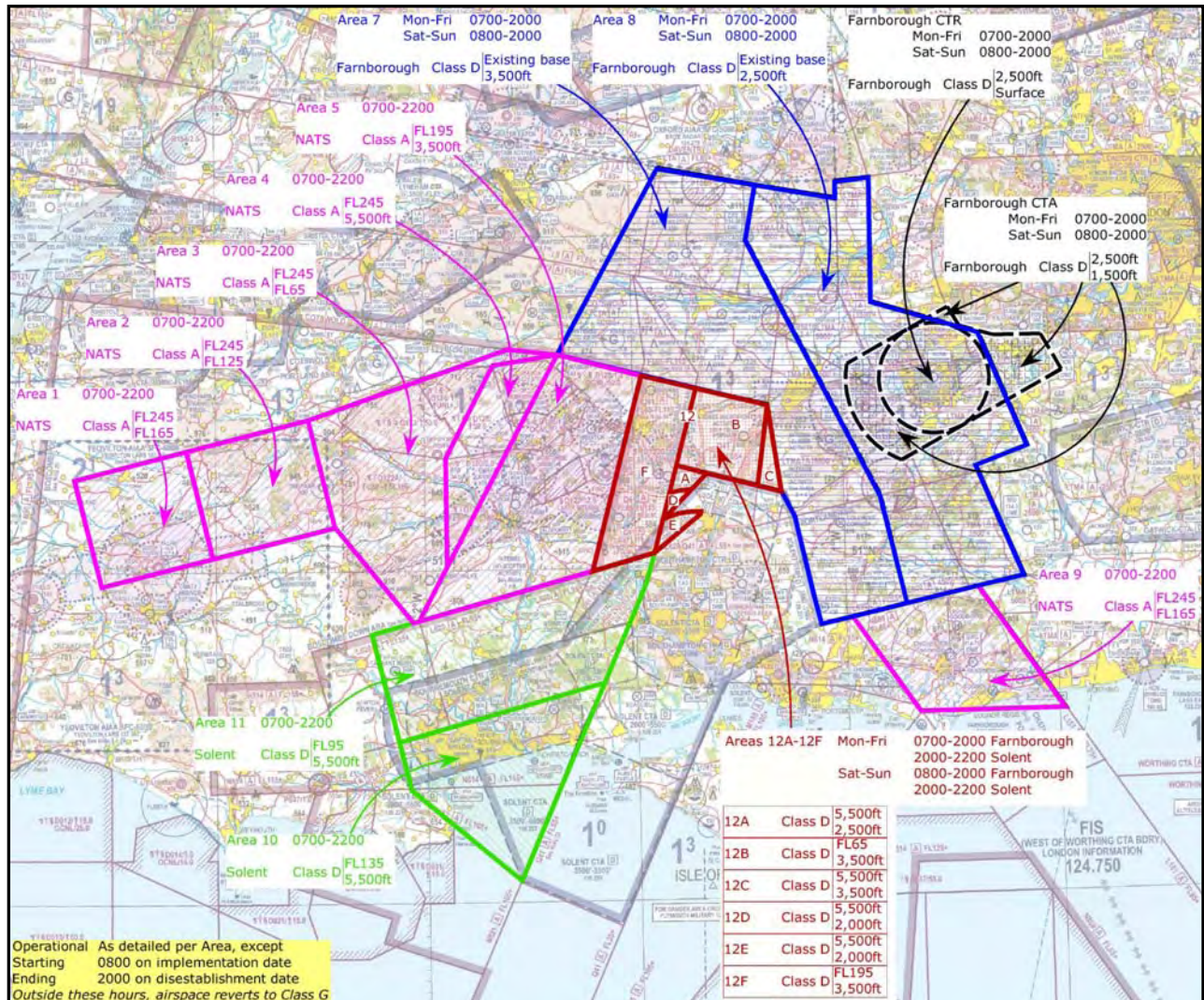


Figure 7 Finalised Proposed CAS(T) for NATS En Route, Solent, Farnborough

Area 6 (in the vicinity of Abingdon, not shown above) has been removed from this proposal following feedback and a successful validation simulation.

Note that all areas designated Class A will be subject to FUA agreements with the MoD.

See **Theme 1** on page 7.

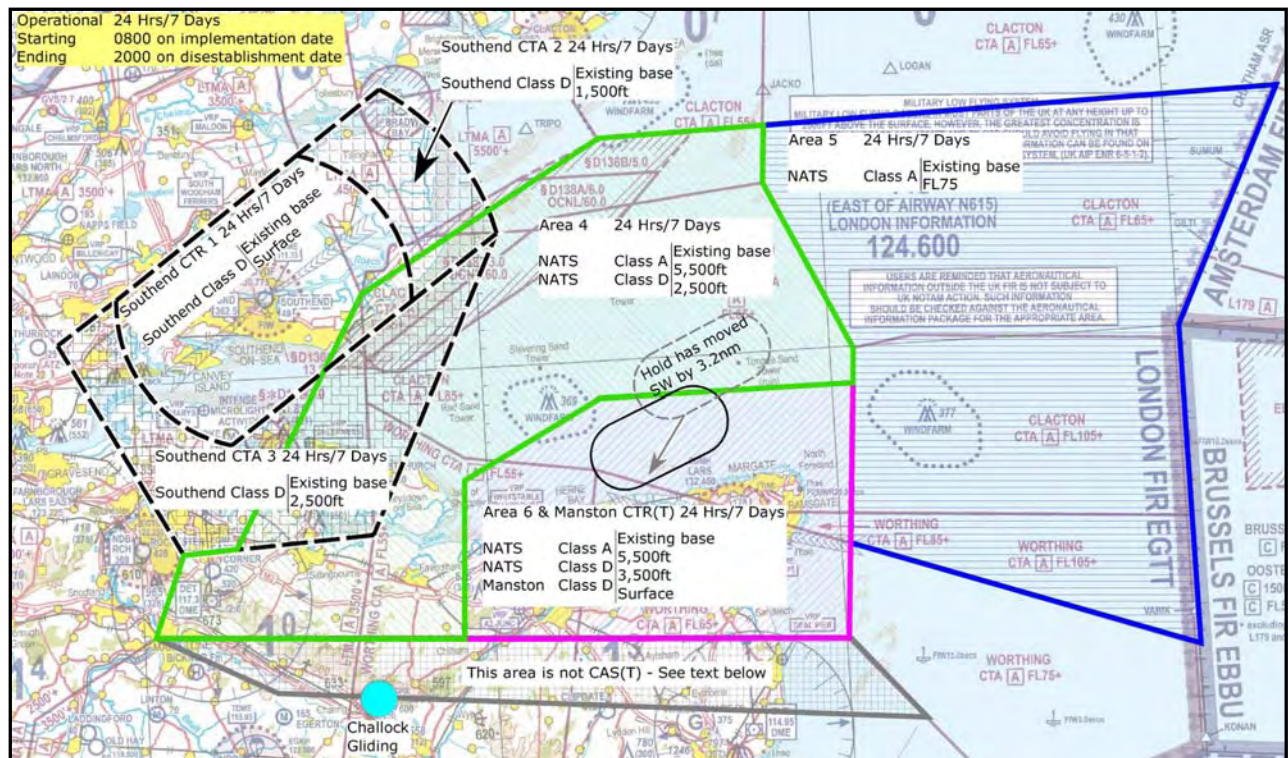


Figure 8 Finalised Proposed CAS(T) for NATS En Route OLLEY, Southend, Manston

Note that all areas designated Class A will be subject to FUA agreements with the MoD.

The grey area is the extent of an original requirement that has subsequently been reduced by NATS/Stobart Air to assist GA operations. This area was removed **prior** to consultation, during the GA engagement process (see Appendix B: GA Engagement Records).

See also **Issue 4** on page 9, **Issue 17** on page 12 and Figure 10 below.

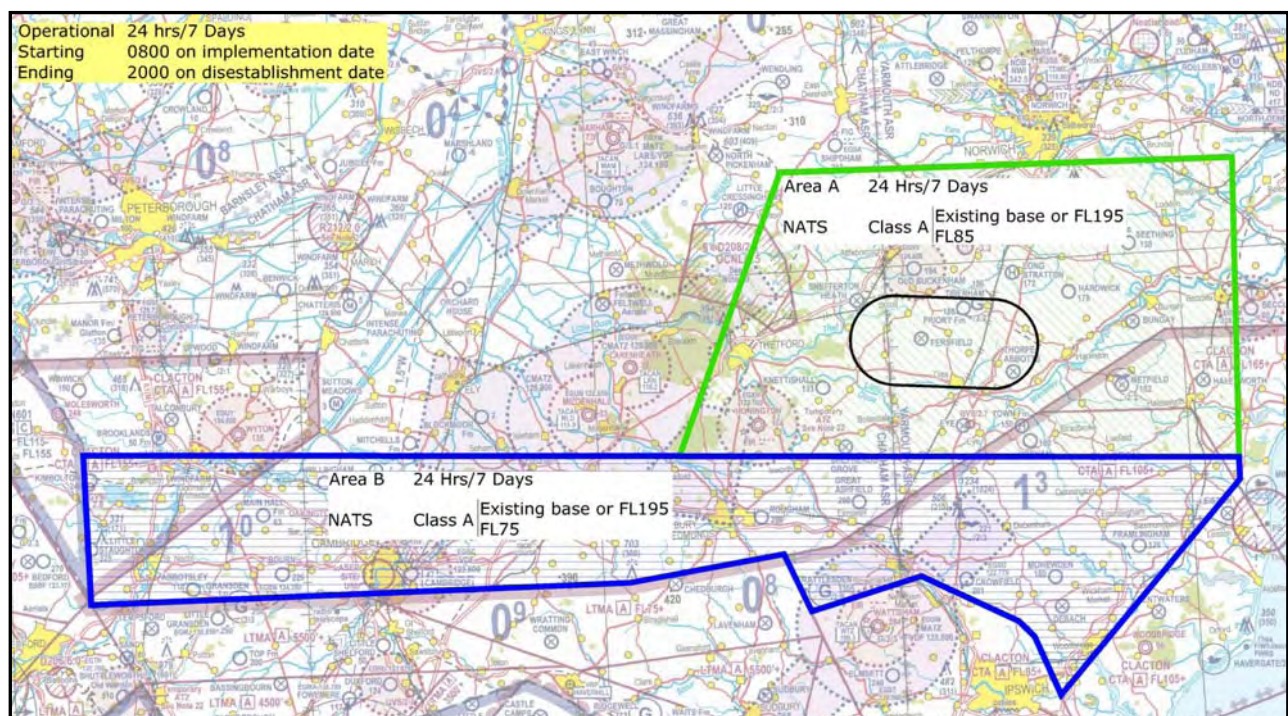


Figure 9 Finalised Proposed CAS(T) for NATS En Route HORAM

Note that all areas designated Class A will be subject to FUA agreements with the MoD.

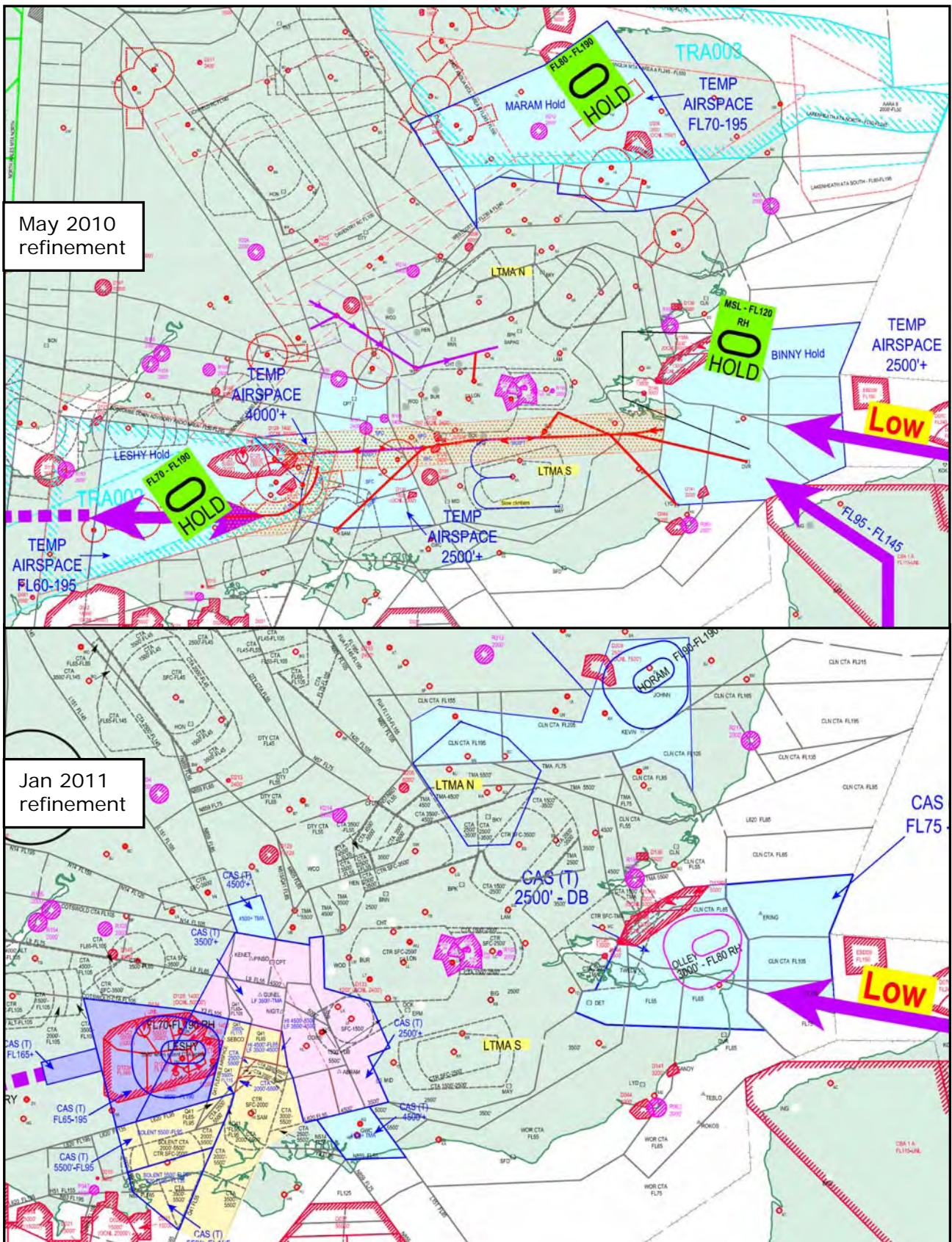
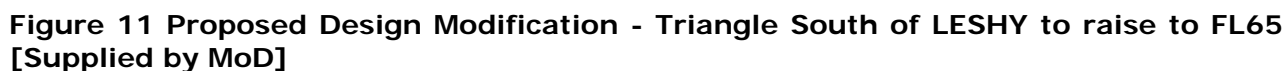


Figure 10 Extracts from CAS(T) Design Developments (May 2010, Jan 2011)

Larger CAS(T) areas with lower base levels were originally considered prior to Consultation. Note changes over Kent.



The map displays the Farthing Corner area in Kent, UK, with a green line connecting Willingale to Farthing Corner. Key features include:

- Flight Paths and Zones:** Dashed lines delineate various flight zones: CTR SFC-TMA, CTA 1500'-TMA, CTA 2500'-TMA / CLN CTA, and CTA 1500'-TMA.
- Navigation Aids:** Various navigation aids are marked, including VOR (VHF Omnidirectional Range) and VORTAC (VHF Omnidirectional Range / TACAN) stations.
- Terrain and Elevation:** The map shows elevation contours and specific terrain features, such as the Shivering Sand Tones and the Isle of Sheppey.
- Place Names:** Numerous place names are visible, including Willingale, Farthing Corner, Gravesend, and Maidstone.
- Technical Data:** The map includes technical data points for various navigation aids and terrain features, such as frequencies, power, and elevation.

Note that a direct route between Willingale and Farthing Corner is possible at or below 2,400ft (avoiding temporary CTA 3), subject to Restricted Zone requirements (see page 15).

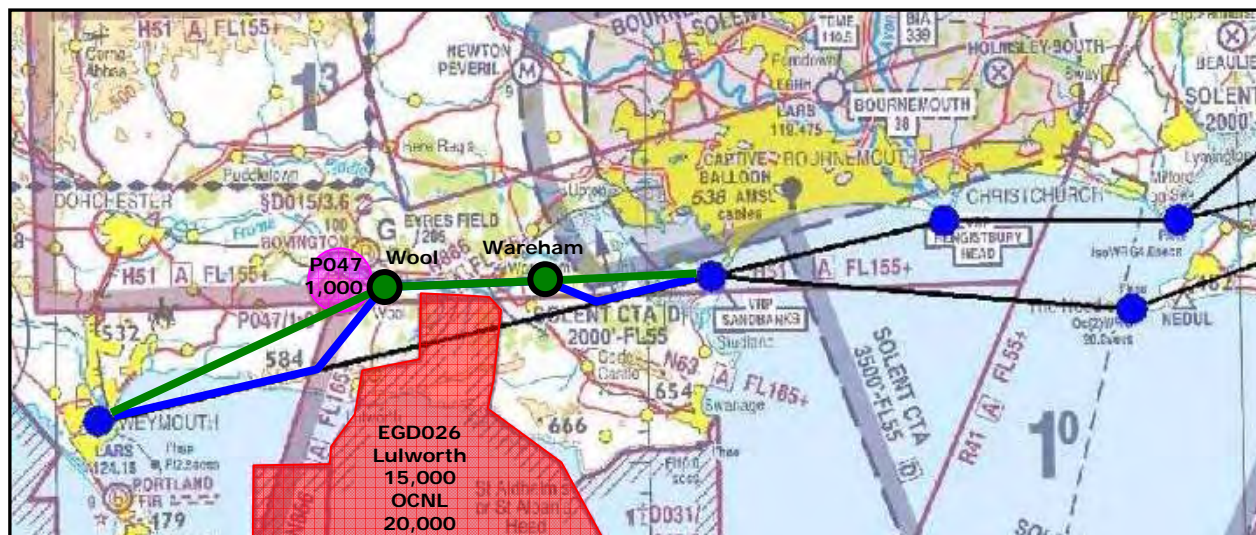


Figure 13 Proposed Heli Route Segment via EGD026 and Proposed Modifications - [Modified extract from Figure 7 of Consultation Document]

The **route in green** is the shortest route but has altitude restrictions (at or below 1,900ft to avoid the Bournemouth western CTA, at or above 1,100ft to avoid P047).

The **route in blue** has no altitude restrictions but is longer and needs more turns.

See **Issue 18** on page 12 for additional information.

Note that these helicopter routes are not enforceable outside the Home Office Restricted Zone, they are merely to clarify to the GA community where they might expect higher densities of rotary traffic routing to/from the Olympics sailing centre at Weymouth.

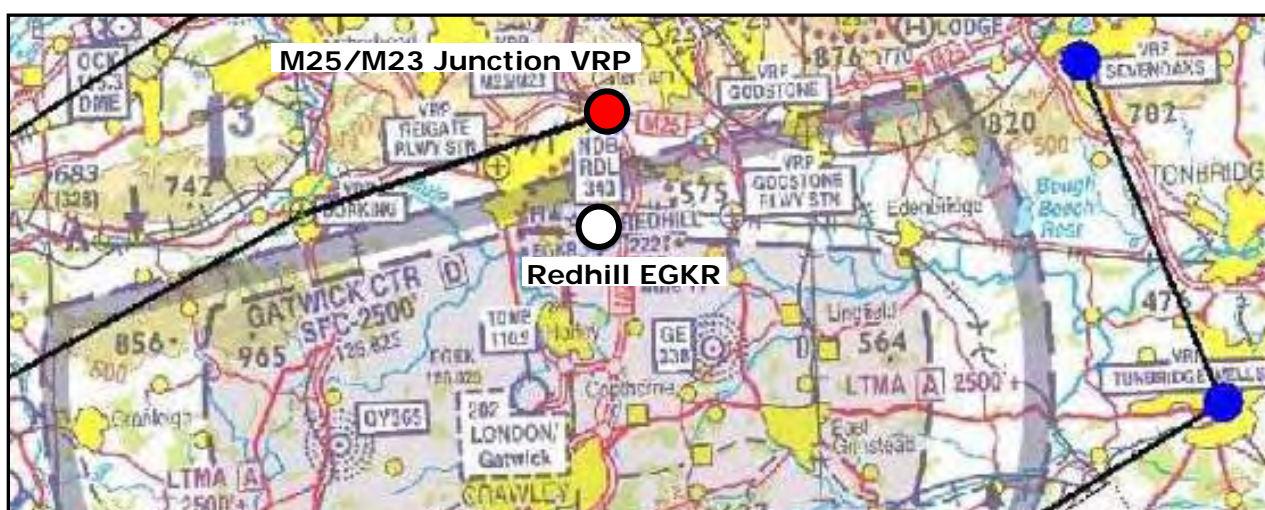


Figure 14 Proposed Helicopter Routes VRP at M25/M23 Junction

This VRP is regularly used by Redhill (EGKR) traffic for entry/exit of their ATZ (see page 16). The area covered by this map is entirely within the Home Office Restricted Zone, which has additional rules.

Appendix B: GA Engagement Records

NATS GA Partnership Meetings held 10th Dec 2010 at NATS Heathrow House, 24th January 2011 at NATS Whiteley, 23rd March 2011 at NATS Whiteley.

The following GA representatives either attended, or were engaged, and given the output from all three meetings:

Kieran Brady, Mike Westwood, Paul Hollow (Parachute clubs & British Parachute Association)

David Earle (PPL IR)

Geoff Weighell (BMAA)

Mike O'Donoghue, Gerald Hackemer (GASCo)

Gordon MacDonald (BGA)

Ian Seager (Flyer magazine)

Irv Lee (Fly On Track and ASI)

Jeremy James (HCGB)

John Brady, Roger Hopkinson (LAA)

Martin Robinson (AOPA)

Pauline Vahey (BWPA)

Peter Norton (BHA)

Rick Gifford (West London Aero Club)

Tom Hardie (BHPA)

Barry Tempest (Aerobatics association)

An additional meeting between NATS, the BGA and DAP was convened on 24th June 2011. The details of this are discussed under **Theme 1 Issue 3** in the main body of this report.

Appendix C: NATS Southampton and Farnborough joint paper regarding CAS(T) bases in the vicinity of Lasham

Before the final Olympic validation simulation, it was suggested by the BGA that the proposed CAS(T) base in the shared areas between Southampton and Farnborough be raised from 3,500ft to 4,500ft (Areas 12B and 12C, see Figures 17 and 18 below).

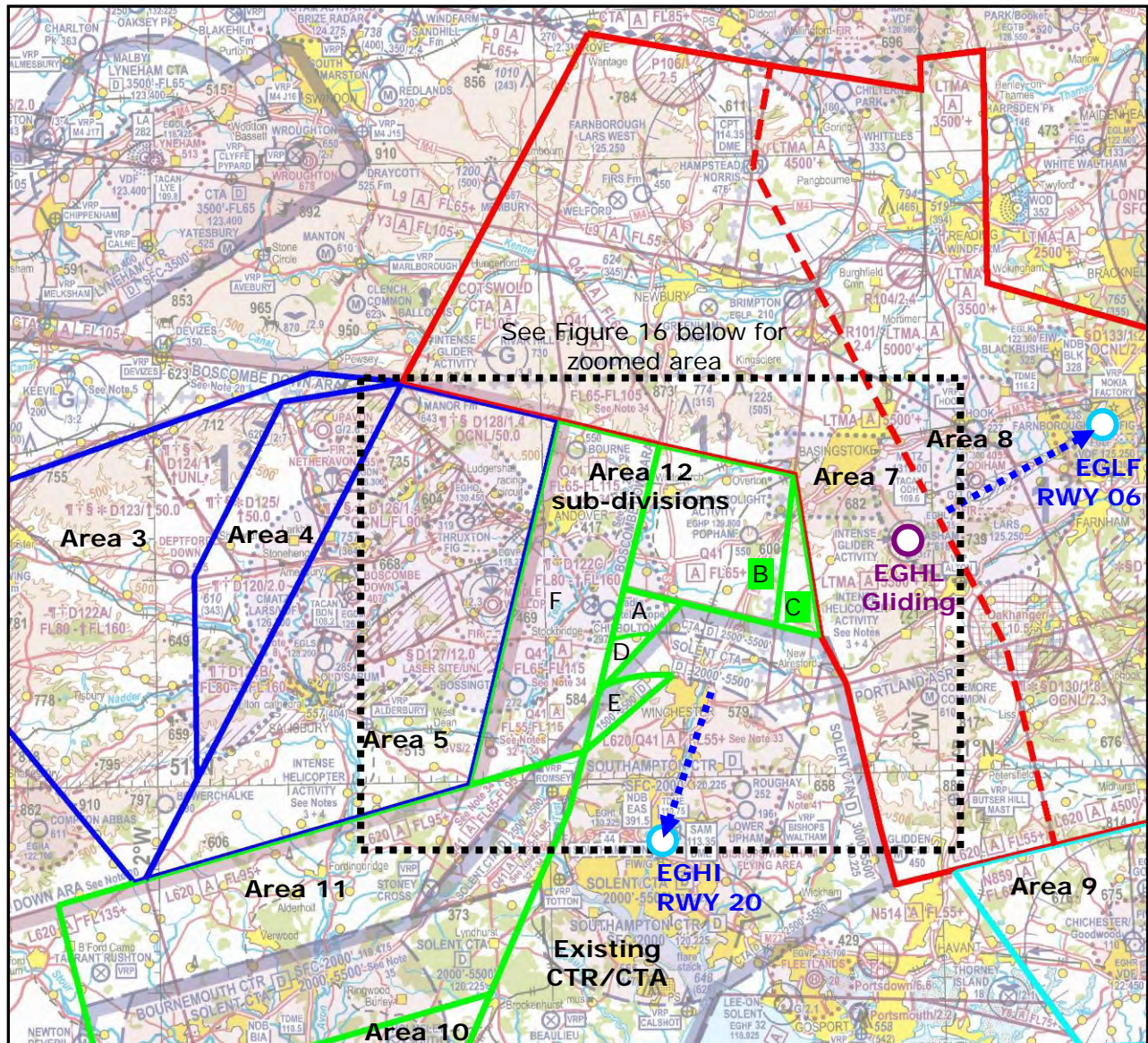


Figure 15 Areas Under Discussion: 12B, 12C (Overview)

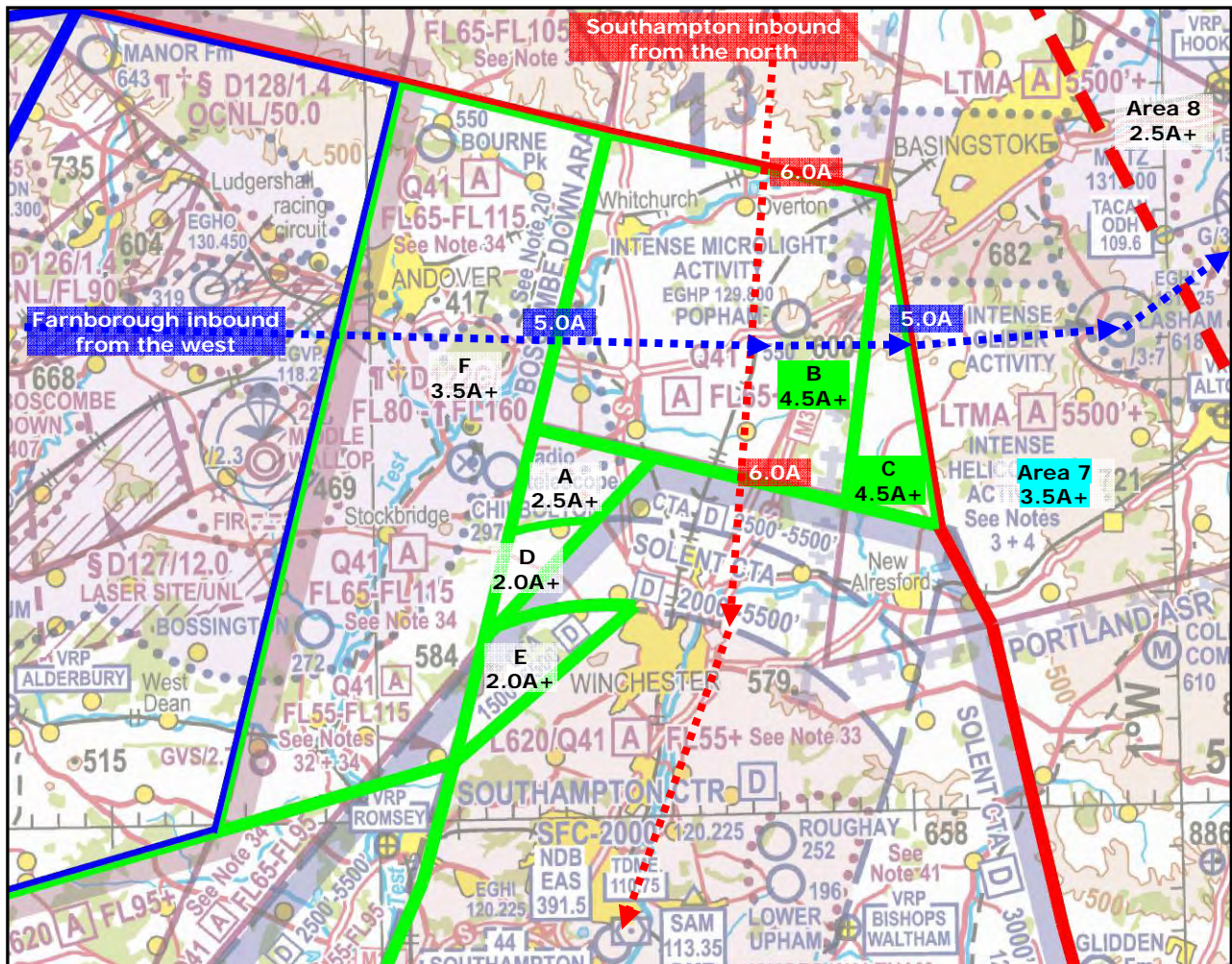


Figure 16 Areas Under Discussion: 12B, 12C (BGA Proposed Bases, Zoomed)

A scenario was trialed as part of the larger validation simulations that took place on the 4th/5th/6th of June 2011.

Scenario

A Southampton inbound from the north maintained 6,000ft, which was 1,000ft above a conflicting Farnborough inbound from the west.

This Farnborough inbound was at the lowest available altitude of 5,000ft (constrained due to the BGA-proposed base of 4,500ft within Areas 12B and 12C). When the eastbound Farnborough traffic reached Area 7, it was then descended to 4,000ft (Area 7 base 3,500ft, as per the original proposal).

Result for Southampton inbound

The approach to runway 20 was not achievable without applying an extensive “dog-leg” to lose altitude, which totally negated the advantages of the CAS(T) airspace.

There was a significant increase in workload which the Solent Radar controllers classified as “high”.

Conclusion: Solent Radar

This scenario would likely lead to:

- Congestion within Solent's area;
- Knock-on congestion further back, within the adjacent and overlying feed-in sectors of TC South West;
- Confliction with some westbound slow-climbing Gatwick departures; and
- A drop in capacity available for the expected additional Olympics traffic that would use the Solent airports.

If the bases were to remain at the NATS-proposed 3,500ft, Solent Radar would use 5,000ft as their lowest level (1,000ft above Farnborough at 4,000ft). Solent Radar would stream inbound traffic more effectively and descend traffic earlier, thereby easing congestion within the feed-in sectors and for Gatwick westbound departures, as described in the bullet points above. Vectored orbits or dog-legs within CAS would most likely be virtually eliminated, thus increasing capacity.

Result for Farnborough inbound

The Farnborough controller's workload within this scenario was classified as "unmanageable", particularly when conflicting departure/arrival flows were taken into account.

The arrival sequence needed to be set up much earlier and in a stable manner prior to entering this region, whilst avoiding the London TMA (which itself is expected to be very busy).

Conclusion: Farnborough Radar

If this BGA-proposed 4,500ft base was progressed:

- A stabilised approach to runway 06 from 5,000ft would be extremely difficult to achieve due to the need for harsh manoeuvres, i.e. losing 3,000ft within 6 nautical miles. [A further sub-scenario was attempted, of keeping this inbound at 5,000ft until Area 8 was reached. This led to the need to lose 3,000ft in an unachievable 2 nautical miles.]
- There would be an unacceptable reduction in spare capacity to offer GA transits, potentially to the extent of denying requests; and
- Denying these GA requests would, in turn, increase the "funnelling" effect for GA traffic due to the Home Office Restricted Zone.

Farnborough's stated objective is to provide GA transits where workload permits – one of the reasons for the relatively small size of its well-practised CTR/CTA(T) is to minimise the impact on GA activities.

Note that the current proposal of 3,500ft for Areas 12B and 12C is already a compromise for Farnborough IFR operations. Ideally the bases of Areas 12B, 12C and 7 would be 2,500ft as per early designs, see Figure 10 in Appendix A.

However, an additional burden on Farnborough resource has been agreed by NATS management in order to reduce impact on GA activities in Class G.

Report ends.