Introduction

The British Microlight Aircraft Association (BMAA) represents the microlight flying interests of its membership, currently numbering above 3700. The members fly 2000 regulated microlights and another, estimated, 200 deregulated microlights.

All microlights are flown for the purpose of recreation with the exception of those used for flight training and testing. Flight training and testing is carried out by persons approved for the purpose by the UK Civil Aviation Authority (CAA).

Microlight pilots hold a licence issued by the CAA to fly their aircraft and are subject to both flight currency and medical requirements to maintain licence privileges.

Microlight aircraft come in many shapes and sizes. Some are very simple with low performance and limited flight instrumentation and equipment. Others are more complex with flight performance that rival many of the traditional "light aircraft" designs and are equipped with modern radio aids and navigation equipment.

All microlights are restricted to flying by day in VMC to comply with the VFR. Some changes to the Rules of the Air proposed for 2014 implementation will have a detrimental effect on the availability of controlled airspace to the pilots of microlight aircraft flying with a UK national licence.

The views expressed in this response to the consultation represent BMAA policy with regard to proposals to establish or extend controlled airspace. These policies are:

1. Controlled airspace should only be established when it has been demonstrated to be the most appropriate alternative to satisfy a requirement for a known traffic environment for the purposes of flight safety.

2. The establishment of controlled airspace should not lead to a potential decrease in flight safety due to a displacement of air traffic to another area.

3. The controlled airspace should not disadvantage or significantly affect other established aviation uses unless with the full agreement of those users.

4. The classification of a particular volume of controlled airspace should be the least restrictive, in terms of types of flight rules and aircraft able to operate within it, as necessary to achieve the flight safety standard sought.

5. The volume of controlled airspace should be the minimum needed to achieve the flight safety standard sought.

6. The Air Traffic Service provider must ensure that the airspace is managed so that transiting and local traffic wishing to penetrate the airspace is able to do so as a right when following normal procedures, and is not prevented from using the airspace, and so be disadvantaged, for the benefit of other aircraft operating from the aerodrome for which the airspace is established.

7. The Air Traffic Service provider must ensure that staffing levels are adequate to fulfil the responsibilities that the management of airspace puts upon them.
Consultation response

With respect to these policies we make the following observations:

1. **Controlled airspace should only be established when it has been demonstrated to be the most appropriate alternative to satisfy a requirement for a known traffic environment for the purposes of flight safety.**

We dispute that Farnborough have established a safety case for the establishment of controlled airspace.

The consultation document contains the following passages:

**A-8.21**

“GA aircraft, whether participating in LARS or not, mix with arriving and departing Farnborough air traffic in this outside-CAS environment. Farnborough ATC manages this to the highest safety standards, even though some of the GA traffic may not be speaking with them and may therefore only be seen as a radar target (often known as a ‘blip’) with unknown intentions (these are referred to as ‘unknown traffic’, as opposed to ‘known traffic’ which are flights that have made contact with ATC)”

**A-8.22**

“Avoiding these non-participating radar blips (or those unable to cooperate) is routine, and the ATC team does this daily. Whilst working around them is safe, it compromises the efficiency and predictability of Farnborough aircraft, other aircraft receiving an air traffic service from LARS, and neighbouring airports”

**A-8.28**

“Now that Farnborough has planning permission for more movements, it is important for all users that the airspace becomes more efficient and predictable whilst maintaining as much freedom for GA as possible, and retaining or enhancing the highest safety standards”

**B-3.4, C-3.4,**

“The more consistent and predictable the routes, the more efficient they can be, and the already-high safety standards can be further enhanced. The airspace management would be more efficient for all users as well as the airport itself”

These passages indicate that Farnborough believes that safety standards are currently acceptable and manageable by the ATC team. There is no suggestion that the predicted increased traffic levels in the future will lead to a degradation of safety, only a less efficient and less predictable, and therefore by implication less profitable, operating environment for Farnborough business traffic.

In the footnote on Page 4 of Part A Farnborough established that they consider that their traffic is not General Aviation as usually accepted throughout aviation. “Farnborough generally operates light to medium business jets for personal or corporate transport purposes, which technically is a type of GA. When we refer to GA in this consultation, we are not referring to our own operations – we are referring to these slower, lighter aircraft types.” Farnborough is obviously intending to grow the business sector for profit and this has been the prime driver for the ACP, not flight safety.

The Farnborough traffic predictions for the period 2011, 2012 and 2013 have proved to be substantially inaccurate with over estimates of 35%, 60% and 80% respectively. In fact over this period the actual movements have only maintained a level number at around half that predicted within the consultation for 2015 and less than half for 2019.

The prediction for traffic level growth is based upon the increased movements allowance that was granted under planning regulations in 2011. Three years after the increase was granted there has
been no increase in movements to support the predicted growth and so this prediction must be treated as unsubstantiated and irrelevant to the application.

The consultation document does not question the level of safety at current traffic levels and has provided no evidence that the increased movement allowance will be attainable although there has been the opportunity for growth for three years.

**Conclusion: Farnborough has not established a safety need for the ACP.**

2. *The establishment of controlled airspace should not lead to a potential decrease in flight safety due to a displacement of air traffic to another area.*

The Farnborough ACP undoubtedly will lead to degradation of flight safety for traffic flying within the surrounding areas outside the proposed airspace.

The Class G airspace surrounding Farnborough is used by a variety of General Aviation aircraft and is recognised as being a busy airspace area. As well as local airfields hosting intensive gliding, microlight flying and light aircraft and rotorcraft flying, it is a main route for aircraft wishing to transit from the north or south avoiding the London CTR. This north and south traffic will potentially increase if the current Southend ACP is approved in its consulted form as much of the traffic from the east of the London CTR will chose to route to the west of London to avoid the congestion that is expected to be created to the east as a result.

Farnborough will claim to allow flight within the proposed airspace in coordination with ATC. There is no evidence to support the assumption that ATC capacity will be sufficient to cope with the aircraft that will be required to make contact if they are not to be forced to reroute from today's normal flight paths.

Regulation to be introduced in December 2014 will significantly change the minimum weather criteria for VFR flight within Class D airspace. The effect will be that unless the cloud base is high enough to allow a flight to be safely made above ground level and stay at least 1000 feet vertically from cloud flight in accordance with the VFR the flight will be prohibited. These changes will require a cloud base of at least 3000 feet above mean sea level in some areas to give adequate terrain clearance. Predominantly the cloud base in the south of the UK is lower than 3000 amsl and so a VFR clearance through the airspace will be impossible on many days.

The establishment of the proposed controlled airspace will, in some circumstances, prevent flights that might otherwise have been safely made even if ATC capacity is available.

The actual effect of the proposed airspace will be to cause a displacement of current traffic and create choke points where the risk of collision is greatly increased.

Specifically the airspace to the west of Farnborough will create a choke point to the north east of the Solent CTA below the proposed CTA8 and to the west of CTA6. The corridor between CTA6 and the Solent CTA is less than five miles wide. Aircraft will tend to fly towards the centre of the corridor to reduce the risk of airspace infringement and so increase the traffic density in that volume of airspace significantly by comparison to the current levels. In addition to the horizontal displacement of traffic there will be a vertical compression. The proposed airspace base is at 4,500’ and the surface level reaches over 700’. For adequate terrain clearance aircraft will wish to fly above 2,200’ compressing traffic through the corridor between a level clear below airspace, or below cloud whichever is the lower, and this reasonable cruising level.
The effect of the proposal will be to displace traffic and then funnel that traffic through a very restrictive airspace corridor. The traffic density will increase alarmingly and with it the risk of airborne conflict. This brings an unacceptable detrimental effect on flight safety as a result of the proposal which cannot be justified for the economic convenience of the limited number of aircraft using Farnborough.

Conclusion: The ACP will lead to a decrease in flight safety by traffic displacement.

3. The controlled airspace should not disadvantage or significantly affect other established aviation uses unless with the full agreement of those users.

Without doubt the proposal will significantly affect the operation of General Aviation aircraft that currently operate within the proposed airspace volume. The establishment of the CTR and CTA2 will significantly block aircraft transiting around the London CTR forcing them to reroute to the west. We have already pointed out above the problem of congestion that this will cause added to which will be extended routing time for these aircraft.

The proposed RMZ at the south east of the proposed airspace appears to be established from the surface. There is no indication of an upper limit so we assume that it will be established to the base of existing and proposed airspace. The RMZ will prevent non-radio equipped traffic from routing between the London and Gatwick CTRs significantly affecting their operation. The introduction of the proposed controlled airspace will increase the need for radio contact for transit clearance and the RMZ will increase that need further. There is no evidence in the ACP to suggest that Farnborough have established the number of aircraft that will be required to make contact to route through the RMZ or how the frequency will be manned to ensure that all aircraft making a radio call will be handled within a reasonable time frame. It is well known that it can be difficult to establish radio contact with Farnborough now due to radio capacity. The proposal looks as if it will make the difficult, impossible.

Conclusion: We do not support the proposal on the basis that it will cause significant disadvantage to current airspace users without any resulting safety benefit.

4. The classification of a particular volume of controlled airspace should be the least restrictive, in terms of types of flight rules and aircraft able to operate within it, as necessary to achieve the flight safety standard sought.

The proposal seeks to establish a known traffic environment for improved efficiency for Farnborough based traffic. The ACP indicates that there is no threat to flight safety so there is no current safety case to address.

The establishment of controlled airspace may make separation simpler for ATC but the inconvenience and disruption to current traffic that it will cause is not justified on these grounds.

A known traffic environment can be achieved through the use of a RMZ or TMZ or combination of the two without the need to establish controlled airspace. RMZs and TMZs do not change the VMC minima for VFR flight and so will not have the same potential restrictive effects on VFR traffic that the proposed Class D airspace will have.

We do not consider that the ACP has justified the establishment of controlled airspace on the grounds of flight safety.
We consider that the disruption to other traffic resulting from the establishment of the proposed class of airspace is disproportionate to the benefit enjoyed by the very small number of people enjoying privileged advantage flying from Farnborough.

**Conclusion:** The proposed airspace is not the least restrictive way to achieve the aim of creating a known traffic environment with the least disruption to others and so we do not support the proposal on these grounds.

5. The volume of controlled airspace should be the minimum needed to achieve the flight safety standard sought.

The proposal seeks to establish a known traffic environment for improved efficiency for Farnborough based traffic. The ACP indicates that there is no threat to flight safety so there is no current safety case to address.

The justification for the proposal relies heavily on the Farnborough forecast for traffic growth. We have already questioned the basis for the forecast in this response. The current trend is for no growth of traffic during the three year period since Farnborough has been permitted to expand as a result of the increased allowance of movements within their planning conditions. There is no evidence to suggest that there will be a significant increase in traffic in the future.

With no growth and the current satisfactory safety status there is no justification on safety grounds to establish controlled airspace.

The volume of airspace proposed is totally disproportionate to the activity levels at Farnborough. More importantly the establishment of such a large volume of airspace will have a significant detrimental effect on flight safety for displaced traffic. This was explained earlier in this response.

We also question the proposal to establish controlled airspace in volumes of airspace that are not currently used by Farnborough traffic. The lower levels of the proposed airspace, down to 2,500' amsl, are significantly lower than current flight paths. If Farnborough traffic does intend to fly within these low level airspace blocks they will not be climbing or descending at optimum flight profiles for best performance and so will be inefficient and create higher noise and emission levels. This is contrary to the CAA FAS policy which is driven by more efficient use of airspace and more efficient use of aircraft.

In addition to being inefficient the low base of many of the proposed CTAs will create vertical choke points for traffic outside the CTA. The increased risk of collision that this causes is significant and is not justified by the limited advantage of timeliness to the few users of Farnborough.

**Conclusion:** We do not accept that the volume of airspace proposed is justified and do not support the application.

6. The Air Traffic Service provider must ensure that the airspace is managed so that transiting and local traffic wishing to penetrate the airspace is able to do so as a right when following normal procedures, and is not prevented from using the airspace, and so be disadvantaged, for the benefit of other aircraft operating from the aerodrome for which the airspace is established.

We are concerned that there is no mention in the ACP of measures taken by the sponsor to establish the number of aircraft that will require airspace transit or to address the staffing and spectrum demands. Without such a study and proposed management plan there is no credibility in any assurances that VFR traffic will be granted access to transit.
Unless Farnborough is able to manage the level of radio requests for CTR transit and entry to the RMZ both the CTR and RMZ will effectively become prohibited airspace. This is entirely unacceptable.

The managers of controlled airspace have a duty to provide access as stated in the CAA Airspace Change Process Guidance Document CAP 725:

“... demonstration of commitment to provide airspace users equitable access to the airspace as per the classification and where necessary indicate resources to be applied or a commitment to provide them in-line with forecast traffic growth. 'Management by exclusion' would not be acceptable;”

Conclusion: The sponsor has not demonstrated knowledge of the number of aircraft that will require cooperation to use the proposed airspace and we cannot support this approach to airspace management.

7. The Air Traffic Service provider must ensure that staffing levels are adequate to fulfil the responsibilities that the management of airspace puts upon them.

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Conclusion: The sponsor has not demonstrated that a staffing programme has been put in place to ensure that all local airspace users are able to obtain the services required to operate efficiently and safely and we cannot support this approach to airspace management.

Environmental concerns.

In addition to the impact on the availability of airspace for aircraft that now routinely operate within it the BMAA has other concerns regarding the environmental impact of the ACP.

Noise

The new routes designed within the ACP concentrate the Farnborough traffic into more defined flight paths at lower levels than those flown currently. Although the ACP claims to reduce the number of people overflown, and therefore aware of the traffic, those that will continue to be overflown will be far
more affected than they are today. Those who are no longer overflown are mainly those who have been subject to a very limited number of flights at high levels. The result of the proposal is that although less people will be overflown many of those will not have been substantially affected prior to the change and will therefore possibly notice very little difference, whereas those subject to the new flight paths will be subject to a significantly greater nuisance than those relieved.

**Track miles**

The new routes designed within the ACP may provide slightly shorter routings for Farnborough traffic; however the proposed airspace is likely to cause significant routing changes for non-Farnborough traffic. The resulting longer routings will result in more track miles, using more fuel and developing higher levels of emissions as well as increased noise. These effects of the ACP are entirely contrary to the CAA FAS which this ACP should attempt to comply with recognising the knock on effects of the ACP.

**Conclusion:** The ACP does not meet the environmental commitment required by CAA SARG as part of the FAS: “Safe efficient airspace, that has the capacity to meet reasonable demand, balances the needs of all users and mitigates the impact of aviation on the environment”,

**Summary**

The BMAA believes that:

- Farnborough has not established a safety need for the ACP.
- The ACP will lead to a decrease in flight safety by traffic displacement.
- The ACP will cause significant disadvantage to current airspace users without any resulting safety benefit.
- The proposed airspace is not the least restrictive way to achieve the aim of creating a known traffic environment with the least disruption to others.
- The volume of airspace proposed is not justified.
- The sponsor has not demonstrated knowledge of the number of aircraft that will require cooperation to use the proposed airspace.
- The sponsor has not demonstrated that a staffing programme has been put in place to ensure that all local airspace users are able to obtain the services required to operate efficiently and safely.
- The ACP does not meet the environmental requirements of the FAS: *Safe efficient airspace, that has the capacity to meet reasonable demand, balances the needs of all users and mitigates the impact of aviation on the environment*;

The ACP cannot be accepted by the CAA as it does not conform to the requirements of the CAA Airspace Charter:

*“The Directorate is to ensure that UK airspace is utilised in a safe and efficient manner.*

*This is to be achieved through the development, approval and enforcement of policies for the effective allocation and use of UK airspace and its supporting infrastructure, taking into account the needs of all stakeholders.”*

**Conclusion**

The BMAA does not support this ACP.