

## BGA RESPONSE - MODE S PHASE 2 CONSULTATION

### Introduction

The BGA welcomes the fact that the CAA is not proposing that all aircraft in all UK airspace should carry mode S transponder secondary surveillance radar (SSR) equipment.

The BGA notes that option 1 applies to gliding if option 3 is adopted. The BGA is extremely concerned that options 1, 2 and 3 represent a disproportionate approach not justified by safety-related statistics. The BGA believes that the approach described in options 1, 2 and 3 will also give rise to significant economic and other burdens for small businesses and individuals. Options 1, 2 and 3 have the potential to threaten the fundamental viability of the sport of gliding in many parts of the UK.

Option 4 regarding crossing of international boundaries primarily impacts on SLMGs, and is more relevant to aeroplane pilots.

In addition, the BGA has a number of overarching concerns within the following three areas;

**Segregation** - The CAA has stated that improved levels of interoperability will reduce the need for segregation i.e. reduce the need for more controlled airspace (CAS). However, the BGA is disappointed that there are no commitments to reverting some areas of CAS to uncontrolled airspace or to lower categories of CAS.

**Access to CAS and above FL100 by non-Transponder Aircraft** - The consultation suggests that there might be some opportunity for non-transponder equipped aircraft in controlled airspace and above FL100. However, these suggestions are expressed in the form of vague possibilities. On the CAA's own statistics, general and sporting aircraft make up some 96% of UK registered aircraft. Many are not transponder equipped. The BGA believes that the CAA must remain open to changing the detail of its proposals in order to give general and sporting aviation greater confidence that its interests are being equitably considered and in a way proportional to potential risk.

**The Safety Case** – The phrase ‘the CAA considers’ is used in the document 9 times in support of the contention that mode S is necessary for safety, but in no instance is any supporting evidence provided. Regulatory development of this sort must be underpinned by a robust safety case supported by evidence based analysis. As has been previously stated by the BGA, there is a need to identify the documentary evidence that the CAA used to reach its conclusions as stakeholders cannot be expected to be convinced by assertions with no supporting evidence.

The word safety is used in the consultation document 59 times, but not once is there any specification of currently achieved levels of safety, or target levels. Quantified estimates are essential to identify and reduce the larger risks, and to avoid disproportionate regulation where the risk is low. The consultation claims that mode S is required to protect CAT aircraft in the face of traffic growth. Airprox Board report number 17 tells us the number of risk A or B airprox involving CAT has declined from 29 in 1997 to 6 in 2006 while traffic has grown by 36%. In the face of this evidence, it is not clear to the BGA why the CAA claim that traffic growth results in reduced safety.

There are 724 airprox incidents in Airprox Board reports 11 to 18. We have examined all of them to identify those in class F/G airspace between FL 100 and FL 195. It is highly significant that military aircraft were involved in no less than 49 of the 51 airprox (96%) in this height band. Of the 49, 32 (65%) involved conflicts between CAT and military aircraft. Five of these were class A/B and 27 were class C. The hazard both generally and to CAT in class F/G airspace from FL 100 to FL 195 is military aircraft, not gliders. The CAA has stated on a number of occasions that this consultation is not related to greater use of class F and G airspace by commercial air transport. The BGA believe that if it is proposed to make transponders mandatory in this height band, it should be on the basis of defined areas that can be shown to have higher CAT density. Also, the normal consultative procedures for a TMZ should apply so that all aspects can be taken into account before transponder carriage becomes mandatory.

Airprox Board report number 17 for Jan-Jun 2007 says that in all airspace classes there were no risk A and only 6 risk B airprox involving CAT aircraft in 2006, and that this total of 6 is the lowest in the dataset. Speaking of the 6 events the Airprox Board notes ‘there is nothing to suggest a common thread’ and ‘such wide variability does not point to the need for concerted action in a particular area of operations’. The Airprox Board has therefore identified that the collision hazard for CAT is reducing, and there is no need for concerted action. The BGA would like to know how these Airprox Board findings are reflected in DAP's current proposals.

## **Option 1 Questions**

### **Q1: What other advantages and disadvantages could there be under Option 1 if all aircraft operating within controlled airspace used SSR?**

This question will apply to gliding in the event of option 3 being adopted.

In terms of identifying 'other advantages' under Option 1, the consultation makes a sweeping suggestion that does not reflect traffic densities nor past statistics. Not all controlled airspace has the same traffic density, mix of traffic or operating procedures and therefore the collision risk varies significantly. We believe that where gliders currently are permitted to operate in controlled airspace, collision mitigation process other than SSR has been effective (zero CAT/glider collisions and zero CAT/glider fatalities). There are clearly advantages to *some* aircraft if all aircraft operating within *certain* high density controlled airspace used SSR. Stating that if all aircraft operating in controlled airspace used SSR 'this will improve safety levels' is unconditional – it will in fact do nothing to improve the safety levels with respect to gliders because the level of risk is already extremely low (zero CAT/glider collisions and zero CAT/glider fatalities).

Non-transponder-equipped aircraft have been able to gain access to Class D airspace for many years perfectly safely when the traffic situation permits. They have, as a consequence, created a known-traffic environment as required by the CAA. The BGA knows of no airprox in controlled airspace involving a glider with permission but no transponder. If the argument for change from the status quo is based on changes in CAT traffic density then the forecast growth is not uniform and there are many parts of the country that are unlikely to see much change or even a reduction. As a consequence, the BGA believes very strongly that it is disproportionate to force this option on all areas of controlled airspace in the UK. The BGA accepts that gliders may not always receive clearance to enter controlled airspace when circumstances would not allow so safely.

Option 1 mandates mode S in airspace of classification A to E. Future plans for increasing the extent of each of classes A, B, C, D, E are not described in the consultation. Class E is hardly used. The BGA would like to understand whether or not CAA intend to introduce greater use of class E, and if so, where. Without such disclosure, option 1 could be employed to mandate mode S everywhere.

The words around the proposal suggest that this option will "contribute towards improved access to controlled airspace for all users". The experience of many air sport pilots is that, even with transponders, access is denied and not always for obvious traffic-related reasons. The BGA is concerned that aircraft owners could equip with mode S at a cost of some £30M but subsequently be deprived of what should be equitable access rights to controlled airspace.

The CAA has stated on many occasions that they firmly believe that Letters of Agreements (LOA) are proven to be highly effective, safe and practical means to allow for gliding to operate in proximity to CAT operations. The BGA concurs with that approach. The greatest issue with option 1, in the event of option 3 being adopted, is that it does not deliver any commitment that gliders without SSR that currently have permitted access to controlled airspace under local arrangements and letters of agreement can continue to do so. The BGA believes that it is more appropriate to exploit the practical success of LOAs rather than introduce new, unproven (in this context) and expensive technology.

It is not clear how the quoted air traffic efficiencies can be delivered as existing controller capacity seems to be inadequate to meet current user needs. It is accepted that option 1 could contribute towards improved access to controlled airspace for all users if resourced and managed properly. However, the small numbers of gliders in the UK equipped with SSR are already being refused access to controlled airspace. BGA experience to date is that access to controlled airspace by transponder equipped gliders flown by current, licensed pilots has been declining as a consequence.

This option and the rest of the consultation document are based on the management of predicted growth in CAT. That growth is only identified within option 1 as a benefit. There are many people in the UK who believe that the growth of CAT is a threat. Therefore, the growth of CAT can also be viewed as a disadvantage to some stakeholders and interest groups.

Glider pilots are at considerable disadvantage as a glider will only be able to access controlled airspace with a functioning SSR, regardless of other mitigation or traffic density (or indeed use at all by CAT or military).

The economic and operational impact of option 1, in the event of option 3 being adopted, will result in reduced participation in air sport because pilots with limited disposable income will not be able to absorb the increases in cost associated with SSR. It is difficult to quantify this economic impact other than to state that when participation levels drop to a certain level, gliding clubs cannot continue to operate.

To re-emphasise, a very important point relating to option 1 is that the BGA believes that LOA's **must** continue to ensure access to associated CAS by non-transponder equipped gliders and that Air Traffic Services should not be discouraged from facilitating ad-hoc non-transponder access to CAS where controllers deem it safe to do so.

Turning to how a major increase in transponder usage will affect existing systems, there is a concern that controllers may not be able to deal with a large increase in transponder returns. In addition, there may be a significant risk of overloading the TCAS system. We understand that even with Mode S, for many years the TCAS system will operate in a Mode C manner and could be saturated by the addition of many new transponders into the airspace. There is evidence from existing areas of high activity (e.g. the Los Angeles Terminal Area) of frequent TCAS overload. This concern should be studied with both computer modelling and realistic flight trials.

**Q2: Has the cost impact of Option 1 been accurately estimated? When considering your response, please provide supporting data where available.**

This question will apply to gliding in the event of option 3 being adopted.

The costs of retro-fitting a transponder to an existing instrument panel will vary case-by-case and this is one aspect of cost that is likely to have been understated for gliders. In addition to capital purchase, the cost of a new panel to allow for transponder mounting, aerial installation and for installation certification is significant. The BGA believes that the ongoing cost of annual certification has not been researched by CAA.

The impact of the additional initial and ongoing cost burden can only be put into proper context by looking at individual air sports. The given cost estimates of SSR equipage can very easily represent 20-100% of the value of a glider. At these levels, many glider owners will have to seriously consider the fundamental justification and affordability of fitting a transponder at all, or simply cease flying altogether.

A significant number of gliders are owned by gliding clubs (compared to private owners and syndicates). They will, in almost all instances, be seriously impacted because most are not-for-profit organizations and generate very modest surpluses or manage just to break even.

**Q3: What would be the impact of Option 1 on small businesses? When considering your response, please provide supporting data where available.**

This question will apply to gliding in the event of option 3 being adopted.

Option 1 makes no commitment that indicates existing freedoms to apply proportionate regulation to CAS access by gliders without SSR will remain or will apply in future.

All 90+ UK gliding clubs are small businesses which fundamentally operate as participant-managed sporting clubs with modest economic margins. It is not uncommon for a medium sized gliding club to make an annual surplus of less than £10K.

If sport gliding clubs want to continue to facilitate cross country flying - the fundamental element of the sport - glider owners and clubs would be forced to equip with SSR to operate in the margins of unutilized controlled airspace where currently they have permitted access under letters of agreement (LOA's) and controller discretion. Details of existing LOAs are at <http://www.gliding.co.uk/bgainfo/airspace/loas.htm>

The ultimately damaging economic effect on small businesses, i.e. low participation levels resulting in closure, is difficult to quantify. However, if these proposals were to be implemented without change, it is inevitable that some of the smaller gliding clubs would have to close and quite a number of older and less costly gliders would become uneconomic to operate. We believe that these clubs and gliders currently operate without significant hazard to other airspace users.

In terms of the types of soaring, many clubs throughout the United Kingdom have access to lee-wave cross-country flying and commonly above FL100. This is a significant selling point not only for their own members but for many visitors from other clubs, some of whom visit on a regular basis with their gliders.

Generally, CAT does not operate in most wave soaring areas, or if it does it is at a low density. Clubs in Scotland, for example at Aboyne, Feshiebridge and Portmoak have had considerable success in exploring wave soaring potential in Scottish airspace including setting several records in distance, altitude and speed.

The economic impact in terms of equipage is stated within option 1. For the clubs that would need to equip with SSR under option 1, the impact is considerable and probably underestimated. For example, a recent quote obtained by a club member for transponder work was for an ex-VAT cost of £55.00 per man hour and £1.00 per mile travel, the hourly rate also applying to travel time. A one hour check would cost £467 based on 150 mls at £1 per mile, 3.5 hrs travel, 1 hr for the check, all plus VAT. For a 4 hr installation or repair, the cost would be £661. Further, not all installations of checks will go smoothly and many BGA clubs are at sites remote from aviation avionics services.

### **Option 2 Questions**

#### **Q4: What other issues should be taken into account within a mechanism to process and consider applications for TMZs?**

Option 2 is limited to seeking views as to whether or not a formal process should be used to support – note support, not consider - the establishment of TMZs.

Although TMZ's have been previously established in UK airspace as an emergency measure, widespread normalization of use represents, to all intents and purposes, a new category of airspace for the UK. The BGA is concerned that the CAA has opened consultation on this issue from the perspective of process rather than to seek views on the broader aspects of TMZ usage and their impact on general and sporting aviation.

It is unclear from the consultation how widespread the use of TMZs might be, or indeed how a TMZ might be structured. Recent comments by DAP staff have suggested that they would like to have TMZs in place as soon as possible in certain "critical areas". The BGA would find it helpful to understand where these areas are and whether a recent CAA document that includes a diagram showing that TMZs will be used to provide buffers around Terminal Areas is indicative of a broad intent.

The consultation identifies that a proposal to establish a TMZ is a proposal for an Airspace Change and suggests that such a proposal should be required to follow the process set out in CAP 725, which includes a full assessment of the safety, operational, and economic impact on all affected parties. The BGA is content that CAP 725 procedures should apply to any TMZ proposal. The consultation, however, states that the elements of the ACP relevant to TMZ establishment would need to be "scaleable" to ensure that the burden on applicants is not disproportionate.

The BGA believes that it is wrong to specially favour TMZ applicants over other interest groups. Such a position is contrary to CAA CAP 724 and 725 procedures, is un-democratic, and should be withdrawn. Any change in the process to allow it to be "scaleable" should be one that must operate in the common interests of *all* parties concerned – not, as is clearly indicated in the consultation document, in the interests of the applicant alone. To allow this aspect of the Option to persist would permit bias in the process. At best this would result in an increase the costs of the other stakeholders. At worst, it could deny stakeholders their ability to exercise their due rights and lead to possible legal challenges if additional restrictions were imposed after a process that did not allow full consultation of all interested parties.

The BGA concern will remain until the CAA has clearly explained how any abbreviated process would not be biased towards the interests of the TMZ applicant, who has no particular remit to take into account wider aspects such as the effect on a proposed TMZ on other airspace users.

In terms of timescale, when a TMZ is finally agreed after CAP 725 procedures have been followed, we believe that at least a year's notice should be given so that aircraft owners can fit transponders in a competent way. The amount of work to fit a transponder may be substantial and in many cases, the whole instrument panel must be redesigned, best done during the aircraft's annual check.

The BGA believes that when new TMZs and controlled airspace are proposed, an assessment of the effect on surrounding airspace must always be included, not just the effect within the proposed new zone or near to the proposer's circuit or pattern. This must include the assessment of "choke points", concentrating non-transponder traffic outside the proposed TMZ, and proper allowance for other traffic (including gliding clubs) operating within of close to the proposed TMZ.

The CAA case for TMZs appears to rely heavily on a concern to reduce infringement risk.

In the 10 years from March 1997 to March 2007 there were 185 Mandatory Occurrence Reports (MOR) of potential conflicts between gliders and other aircraft. Many of these were light aircraft over-flying gliding sites. 26 were airspace infringements by gliders. 11 of the 26 were at the London gliding club near Luton airport and where improvements in liaison and communications have now solved any issues. As a result, there have been no infringements by gliders in this area since 2003. That leaves 15 in the rest of the UK in 10 years or 1.5 per year.

The consultation document refers to 300 infringements per year by GA. Gliding therefore represents 0.5% of the total GA infringements, with the figure falling to zero in the period 2005-2007. The CAA have stated that it considers the use of moving maps to be an effective tool in reducing the risk of airspace infringement and have sanctioned more flexible procedures for gliders that are appropriately equipped. Indeed, the use of moving maps to aid situational awareness is an important factor in reducing airspace infringements by gliders down to zero in the period 2005-2007. Most cross country gliders now have moving map displays using either cockpit displays or PDAs driven by GPS, and all competition gliders now carry GPS-based flight recorders capable of driving a moving map display.

Given that data clearly shows that the infringement risk associated with gliders is extremely low, the BGA is concerned that the CAA apparently believe it necessary to mandate transponder carriage by gliders in TMZs that have been established to reduce infringement risk. It is clear that appropriate exemption for certain classes of aircraft in such circumstances should be included within any TMZ process.

***Q5: What could be the cost to businesses and General Aviation representative associations of participating in a process for considering the establishment of a TMZ? When considering your response, please provide supporting data where available.***

Gliding clubs and the BGA itself rely heavily on enthusiastic volunteers and do not have large numbers of paid staff. The administrative load of responding to several TMZ applications will be considerable both on local clubs and the BGA. This will result in human resource and economic issues associated with responding to the consultations which will follow applications by commercial airport operators. These airfield operators can each fund and resource professional support for their single application among many to which the BGA and its clubs will need to respond so that rights to airspace access are maintained in a reasonable manner.

### ***Option 3 Questions***

***Q6: What other advantages and disadvantages could arise if gliders were brought within the SSR transponder carriage regulations?***

As the effect of bringing gliders within the SSR transponder carriage regulations will result in gliders being mandated to equip with Mode S transponders for flight above FL100 and in controlled airspace, the advantages and disadvantages emerge from questions relating to option 1.

Option 3 and the wider consultation document are based on the management of predicted growth in CAT. That growth is only identified as a benefit. There are many people in the UK who identify CAT growth as a threat. The growth of CAT can also be viewed as a disadvantage to some stakeholders and interest groups.

Radical changes have taken place since the publication of the 2003 white paper "The Future of Air Transport". One assumption in the paper was that aviation fuel would cost about US\$25 per barrel. The white paper also suggested that a doubling in fuel prices would increase air fares by about 10% and reduce demand by 10%. Fuel prices are now over 6 times the assumption used in 2003 and may increase further. Air fares are now rising and some low-cost airlines have gone out of business. In addition, there is much more public sensitivity to carbon and aircraft noise-related environmental issues, even transit of CAT over populated areas. Finally, improvements in electronic communication reduce the need for constant business travel for face-to-face meetings. Therefore, it is likely that growth in CAT will be less than originally thought, reducing the validity of the arguments for universal electronic conspicuity.

As previously stated, not all airspace has the same traffic density, mix of traffic or operating procedures and therefore any collision risk must vary significantly. We believe that where gliders currently are permitted to operate above FL100, collision mitigation process other than SSR is effective and it is unclear what risk the CAA is trying to mitigate by applying a blanket requirement to gliders. Requiring gliders to equip with SSR above FL100 will do nothing to improve safety levels as the level of risk in areas above

FL100 utilized by gliders for lee wave soaring is extremely low (zero CAT/glider collisions and zero CAT/glider fatalities).

As covered earlier, 724 airprox incidents are in Airprox Board reports 11 to 18. In class F/G airspace between FL 100 and FL 195, military aircraft were involved in 49 of the 51 airprox (96%) in this height band and not a single one of these was with a glider. Turning to CAT, 32 out of the 49 (65%) involved conflicts between CAT and military aircraft. On that basis, it would be reasonable to conclude that gliders should not be required to have transponders in any airspace from FL100 to FL195. Yet the consultation proposes a blanket requirement for mode S above FL100, with only limited access to portions of that airspace by gliders without transponders.

There are many areas of the country where gliders fly above FL100 but below FL195 and where there is currently little or no CAT. The CAA have clearly judged there to be areas where there is sufficient risk to warrant the mandatory carriage of transponders. The BGA believe that it would be equitable to limit the areas above FL100 that require transponder fitment to those where it can be shown that CAT density poses a statistically significant hazard.

It is inaccurate to state within option 3 that 'gliders are non-interoperable with air traffic safety systems'. Where required, gliders communicate with ATC and operate within national and local LOAs. Paragraph 14.3.3 specifically identifies within option 3 regarding flight above FL100 that the main collision risk for gliders in the UK is with other gliders. Although glider to glider collision is a serious issue that is being addressed by BGA working with others including CAA, those collisions do not represent actual or perceived risk to the public or third parties. Most UK glider collisions occur in the circuit or in during soaring activity below 4000 feet agl. No glider-to-glider collisions have occurred in the UK above FL100. The statement regarding glider to glider collisions has been erroneously included within the option 3 text to infer that gliders present a specific collision risk above FL100 when this is not the case.

Given the disproportionate impact it would have on gliding, the BGA believes option 3 is unnecessary and unacceptable as currently stated. The BGA believes that a far better approach would be to identify those areas of airspace above FL100 where a demonstrable risk actually exists – or might reasonably be expected to exist in the future – and to establish the appropriate risk mitigation measures for these areas specifically.

***Q7: Has the cost impact of Option 3 been accurately estimated? When considering your response, please provide supporting data where available.***

The costs of retro-fitting a transponder to an existing instrument panel will vary case-by-case and this is one aspect of cost that is likely to have been understated for gliders. In addition to capital purchase, the cost of a new panel to allow for transponder mounting, aerial installation and for installation certification is significant. The ongoing cost of annual certification has not been adequately researched by CAA.

The impact of the additional initial and ongoing cost burden can only be put into proper context by looking at individual air sports. The given cost estimates of SSR equipage can very easily represent 20-100% of the value of a glider. At these levels, many glider owners will have to seriously consider the fundamental justification and affordability of fitting a transponder at all, or simply cease flying altogether.

A significant number of gliders are owned by gliding clubs (compared to private owners and syndicates). They will, in almost all instances, be seriously impacted because most are not-for-profit organizations and generate very modest surpluses or manage just to break even.

***Q8: What would be the impact of Option 3 on small businesses? When considering your response, please provide supporting data where available.***

All 90+ UK gliding clubs are small businesses which fundamentally operate as participant-managed sporting clubs with modest economic margins. It is not uncommon for a medium sized gliding club to make an annual surplus of less than £10K.

If sport gliding clubs want to continue to facilitate cross country flying - the fundamental element of the sport - glider owners and clubs would be forced to equip with SSR to operate in the margins of unutilized controlled airspace where currently they have permitted access under letters of agreement (LOA's) and controller discretion. Details of existing LOAs are at <http://www.gliding.co.uk/bgainfo/airspace/loas.htm>

The ultimately damaging economic effect on small businesses, i.e. low participation levels resulting in closure, is difficult to quantify. However, if these proposals were to be implemented without change, it is

inevitable that some of the smaller gliding clubs would have to close and quite a number of older and less costly gliders would become uneconomic to operate. We believe that these clubs and gliders currently operate without significant hazard to other airspace users.

In terms of the types of soaring, many clubs throughout the United Kingdom have access to lee-wave cross-country flying and commonly above FL100. This is a significant selling point not only for their own members but for many visitors from other clubs, some of whom visit on a regular basis with their gliders. Generally, CAT does not operate in most wave soaring areas, or if it does it is at a low density. Clubs in Scotland, for example at Aboyne, Feshiebridge and Portmoak have had considerable success in exploring wave soaring potential in Scottish airspace including setting several records in distance, altitude and speed.

The economic impact in terms of equipage is stated within option 1. For the clubs that would need to equip with SSR under option 1, the impact is considerable and probably underestimated. For example, a recent quote obtained by a club member for transponder work was for an ex-VAT cost of £55.00 per man hour and £1.00 per mile travel, the hourly rate also applying to travel time. A one hour check would cost £467 based on 150 mls at £1 per mile, 3.5 hrs travel, 1 hr for the check, all plus VAT. For a 4 hr installation or repair, the cost would be £661. Further, not all installations of checks will go smoothly and many BGA clubs are at sites remote from aviation avionics services.

For the small businesses (gliding clubs) that would need to equip with SSR under option 3, the impact is considerable and presents a disproportionate approach.

#### **Option 4 Questions**

**Q9: Would the cost impact of Option 4 fall within the estimates for Option 1?**

**Q10: Has the number of UK aircraft affected by Option 4 been accurately estimated?**

**Q11: What other issues should be taken into account by the CAA when considering whether or not to continue to notify a 'Difference' with the ICAO Annex 6 international obligations?**

We note that aircraft without transponders would be able to fly in class G airspace within the UK FIR or within the FIR of our neighbours right up to the boundary but would not be able to actually cross it. Such aircraft from Europe could fly legally within the UK but will not be able to cross the FIR boundary to get here. We understand that the ICAO recommendation is designed to increase safety in parts of the world where adjacent countries' ATC systems do not speak to each other and commercial flights have to arrange their own handover and separation. A light aircraft or SLMG flying VFR to or from France does not appear to be relevant to this scenario. We note that the CAA has currently filed 603 differences to ICAO recommendations but it is now proposing to remove one. The BGA believes that there is no safety case for removing this particular difference.

**Q12: What would be the impact of maintaining the current status quo on your main activity?**

By status quo we assume that the CAA means the continuing development of airspace and continued use of operating protocols for gliders in all UK airspace, controlled or uncontrolled, above and below FL100, and within the exemptions granted to gliding by the ANO.

If this interpretation is correct then:

The BGA would expect that safety would continue to be managed effectively and efficiently with stakeholder engagement

Gliding clubs and the BGA would continue to exercise their rights as stakeholders in all relevant airspace change requests within the current procedural framework. Aside from the effort required to deal with individual applications, we regard the current process as equitable and, therefore, appropriate

Glider pilots would continue to enjoy access to controlled airspace under current arrangements:

Fully recognising that access may not be permitted if there are practical reasons

The CAA will continue to endeavour to ensure that access is not denied for matters of pure convenience

Glider pilots would be able to continue to operate outside controlled airspace between FL100 and FL195 without the need to carry a transponder

Clearly there would be no adverse economic impact under this version of the status quo. The BGA's safety analysis also shows that there would be no material change in infringement, airprox or collision risks. We are very open to reviewing any data the CAA has that would suggest the contrary.

The CAA has discussed with the gliding community the need to maintain rights of access and to adopt a proportional approach to mode S. The BGA firmly believe that this consultation does not indicate commitment by the CAA to adopt a proportional approach to regulating the extremely low level of glider to CAT collision risk. The BGA remains committed to ensuring that gliding operates safely and responsibly within the UK airspace environment, and with due care for public safety and the needs of other airspace users.

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