BGA GLIDING OPERATIONS 2016-2019

CONTENTS

INTRODUCTION

BGA strategy is evolving. This makes sense during an extended period of externally driven change in a number of areas. EASA requirements are impacting on BGA gliding operations. The BGA's safety management process is becoming more defined and bound in legally binding responsibilities. Delegated responsibilities are reliant on BGA demonstrating effective control and risk management. And BGA representatives are engaged across a number of UK and European regulatory development forums.

This document, which follows on from the BGA gliding operations 2012-2015 publication, specifically considers gliding operations and aims to brief the Executive Committee, to provide a platform for the development of BGA gliding operations and to inform BGA representatives of current BGA operations priorities and objectives.

Following EASA's interest in the UK's emerging risk-based approach to the regulation of GA, in 2015 the European Gliding Union met with EASA to discuss a new approach to the European regulation of gliding. At the time of publication, two constructive meetings have been held between the EGU board and the EASA Executive Director which indicate agreement in principle to develop a bespoke regulatory structure for gliding. The BGA should continue to influence and support the development of 'Part-Gliding'. This document also supports that approach.

Thanks to the following individuals who have contributed to the content of this updated publication;

Hugh Browning – Safety sub-Committee
Neil Goudie – Executive Committee
Don Irving – Instructors sub-Committee
Peter Moorehead – Flight Operations sub-Committee
Howard Torode – Technical sub-Committee
John Williams – Airspace sub-Committee

1. ADAPTING TO EASA PILOT LICENSING, MEDICAL, TRAINING AND OPERATIONS REQUIREMENTS

1.1 Context & Key Factors

UK glider pilot certification, training & operations have historically operated by consent under BGA operational regulations and guidance material. EASA regulation is changing that.

In September 2012, the UK rolled out the EASA pilot licensing, training & operations requirements. Gliding (among other activities) is exempted until April 2018, at which point gliding has to be compliant. Standardisation and enforcement is the responsibility of the CAA, who will be empowered to issue the pre-requisite approvals and certificates subject to demonstrated organisational compliance and competence.

Although much of the EASA required detail is a development of the existing requirements, there is a significant amount of detail that, at best, will be perceived within the BGA as nugatory and at worst could be damaging to gliding.

The challenges of making the change between current BGA process and future EASA requirements, and the changing relationship between the clubs and the formal elements of the BGA that are legally responsible for oversight, should not be underestimated.

The way these changes are approached and delivered in concert with the CAA is critical to the on-going success of clubs and the BGA.

The following headings are intended to set down the key issues.

EASA Approved Training Organisation

Flight training for a glider pilot licence or any other rating or qualification (eg instructor, towing, Touring Motor Glider (TMG), aerobatic etc) must take place within an Approved Training Organisation (ATO). Each ATO must comply with a significant number of process requirements and is subject to CAA audit and of course CAA approval fees, including for each type of course it intends to deliver. Individual licences & ratings are subject to CAA fees.

The CAA currently has no competence in gliding flight training or examining.

The BGA has expressed concerns to UK and European regulators that the EASA ATO requirements need to be replaced with a proportionate approach. EASA is responding to that. With the existing requirement to establish an ATO by April 2018, the CAA has agreed to the development of a BGA-wide single ATO of 84 clubs. The BGA is holding back from doing so pending developments towards an EASA developed ATO replacement.

It is the intention that the BGA-wide, single training organisation model which has been extensively discussed with BGA clubs should remain the BGA's regulated training model.

To facilitate renewal of EASA instructor certificates and examiner authorisations held by those who have converted and hold a licence, the BGA has established a limited scope ATO approval to provide in-house EASA instructor and examiner refresher seminars.

EASA Pilot Licensing

EASA Flight Crew Licensing (FCL) rules require that by 8th April 2018 glider pilots who fly EASA gliders must hold a glider pilots licence (issued by the CAA). The licence is issued following training at an ATO and successful test by a CAA authorised examiner. It follows obviously that all the other gliding ratings and qualifications are issued either by the CAA or under CAA oversight.

Licences and ratings can lapse if certain validity requirements are not met. To help to ensure that its members remain legally compliant under EASA requirements (the airworthiness situation has similarities) the BGA should support clubs and individuals in respect of pilot licences, ratings and qualifications.

There are two EASA glider pilots licences; either the EU Member State and ICAO compliant Sailplane Pilots Licence where an EASA Class 1 or 2 medical certificate is held, or the EU Member State compliant Light Aircraft Pilot Licence (Sailplanes) - where a GP medical is held.

Transition to EASA Pilot Licensing

To ensure that all glider pilots hold the correct licence by April 2018, there is a need to 'transition' some 6000 pilots from BGA pilot certification to EASA pilot licensing. To limit cost and to support BGA pilots, the CAA has approved the BGA as a qualified entity to recommend the issue of a pilot licence, aiming to complete the conversion process by early April 2018. By 2015, some 1000 gliders pilots had converted.

A 'conversion report' supplied by CAA to EASA describes existing BGA pilot certification, compares it with the requirements of EASA FCL and identifies any corrective action necessary to convert from one to the other. The BGA Bronze with Cross Country Endorsement (or Silver distance) is the basis for transition. In summary, the transition requirement for pilots and instructors as follows;

Pilots - BGA Bronze with cross country endorsement = EASA LAPLS or SPL

Instructors - BGA Assistant or Full Rated instructor = EASA Flying Instructor (Sailplanes)

Examiners – BGA examiner (FE or FIE) = EASA equivalent examiner (Sailplanes)

Note that examining under EASA – for example an SPL skills test - is not a BGA or a BGA ATO privilege. The BGA's role is to *recommend* potential examiners to the CAA. A number of BGA examiners have been authorised by the CAA as EASA sailplane examiners, including a number of Senior Examiners who are effectively managing sailplane examining standards and appointments for the CAA.

Refreshing the Message

There remains a need to ensure that glider pilots are prepared for their part in a gradual transition process. The delay from 2015 to 2018 has resulted in a view that 'EASA is going away'. It would be excellent if EASA would go away. However, there are no indicators to suggest EASA licensing will not apply later this decade, and as such effective

communication will be required to ensure all pilots are aware of the need and the conversion process in good time. The messages that were rolled out in 2013 will be reinforced.

Fees and Charges

EASA instructors revalidate with no fee payable to CAA. Examiners renew authorisations every three years. A senior examiner renewal fee is £1300.

The BGA will urge the CAA to review the validity of the sailplane examiner fee structure in light of BGA oversight and effort in developing and maintaining the UK's sailplane examining standards, with the aim of arriving at a reasonable fee in light of BGA oversight and effort in developing and maintaining the UK's sailplane examining standards.

Medical

The BGA requires glider pilots to comply with the EU driving licence medical standard, or hold an alternative & recognised medical certificate. EASA has published the Acceptable Means of Compliance and Guidance material to Part-MED, the EASA medical requirements that apply to EASA pilot licence holders.

Given latitude in interpretation there are minimal differences between the ICAO Class 1, the UK National Private Pilot Licence (NPPL) based upon the DVLA Group 2 medical standard and the EASA LAPL. Where major differences do exist is in the management of individuals who do not meet these standards.

Basic aviation law (EU 216/2008) provides that when individuals do not meet the full fitness standard, they may be permitted to fly provided that mitigating limitations are applied. ICAO is solely concerned with international flights and so has no provision for mitigating measures or limitations. However ICAO does not discourage the development of sub-ICAO standards within nations, indeed without such variation no evolution of international standards would ever be possible.

The UK NPPL exists at two levels, an unrestricted level which permits the carriage of passengers and inexperienced pupils and for which the standard is comparable to ICAO Class 2, and a lower level which permits solo flight or flight with another pilot and is comparable to a private driver licence. This lower level would correspond to a LAPL with an Operating Pilot Limitation. The LAPL permits an AMC or AME (but not a GP) to issue an LAPL with a limitation but with few exceptions the lower limits of fitness that can be accepted are not defined.

For epilepsy the DVLA rules used by the NPPL are both defined and well known to GPs, but the LAPL requires that these pilots be referred for specialist neurological examination without a definition of standards or advice on appropriate limitations (AMC13 MED.B.096 Neurology). For those limitations that are defined, the restrictions are all more severe than those applied to the DVLA Group 1 (private driver), for example all diabetic patients on insulin will be either grounded or required to fly with a safety pilot (AMC5 MED.B.095 Metabolic and endocrine systems). With the NPPL they are permitted as restricted pilots and some have been safely flying solo for very many years.

In 2015, the UK CAA consulted on proposals to revise the minimum medical standard for private pilots, ie to a self-declaration to driving licence standards without GP endorsement.

Unlike the current NPPL GP endorsed self-declaration requirement, the self-declaration should be legally possible in member states where medical records are kept secret and/or GP's don't exist.

The medical procedural differences between the NPPL and the LAPL are major. The NPPL validated pilot fitness by ensuring that their past medical records contained no disqualifying disease, or if disease existed, that the pilot was appropriately restricted. The GP was not required to conduct an examination or certify future fitness so the medical time expended and subsequent cost is minimal. The LAPL requires a medical examination conducted by either a GP or AME.

The fee recommended by the British Medical Association for an uncomplicated case is £15.50 rising to £55.00 in complex cases. For a comprehensive clinical examination and certificate, the BMA recommended fee is £175.50. The BMA are not planning to recommend a fee for the LAPL medical. The CAA will not be charging GP's to register with the CAA. In cases of partial unfitness, a GP will now be unable to issue a certificate with a limitation and must refer to an AME who will probably require a further fee; therefore any pilot with a medical problem would be advised to attend an AME in the first instance.

The record is that there is no difference in the accident rates from medical causes between NPPL and JAA Class 2 private pilots. Therefore the LAPL is unlikely to make any difference to this rate.

The BGA will continue to press EASA to accept self-declaration for solo flying and flight with another pilot. The support of the UK CAA is critically important.

<u>Operations</u>

EASA Operations requirements are broken down into a number of categories including 'commercial' and 'non-commercial' (as well as 'special', 'non-complex', 'complex', etc). High level European regulation identifies that 'commercial operation' shall mean any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator.

- Remuneration - Compensation/payment
- Valuable consideration - Some defined benefit, such as money or performance that is promised as part of an agreement.
- Control over the operator – this is generally perceived to mean that the customer as a member has voting rights

The cost of applying commercial rules to gliding clubs and individuals is prohibitive. EASA regulation developed in 2013 now recognises that not for profit gliding club operations are non-commercial. While the UK opts out of EASA Operations rules, an exemption to the UK ANO aligns the UK requirement with the EASA requirement. The 2016 update to the ANO should normalise the UK requirement with the EASA requirement.

The BGA will continue to monitor and if required influence EASA Operations and UK ANO requirements as both come into force.

2. DEVELOPING OUR APPROACH TO SAFETY

2.1 Context

The British Gliding Association, which includes all member clubs, is committed to safe practices with the objective of facilitating a sport gliding environment where the levels of risk are as low as reasonably practicable.

The BGA safety management system was published in January 2014. It combines and documents BGA policy on the safety of aviation in gliders and associated operations.

The SMS will monitor operational standards and procedures through a structured audit and reporting schedule to ensure compliance where required with BGA and legislative requirements.

The overall responsibility for the policy guidelines in respect of the BGA SMS rests with the BGA Executive Committee. The responsibility for implementing the Safety Management System is delegated to the BGA Accountable Manager and the Nominated Post Holders, who include club chairmen.

The Accountable Manager has the responsibility to provide adequate resources to ensure that the BGA organisation can support and assist clubs and members to comply with all applicable legislation and procedural requirements to satisfy this policy.

The BGA gives priority to not harming any third parties, to reducing the fatal accident rate, and to avoiding airspace infringements.

Since the advent of EASA, the BGA has found itself increasingly subject to EASA regulations which were designed for commercial aviation but were allowed to embrace gliding and other recreational aviation. In 2014 EASA belatedly realised Commercial Air Transport regulation is not appropriate for recreational aviation. The CAA has recently become committed to providing recreational aviation with proportionate regulation. The BGA is actively engaged with the CAA on this task.

The CAA, by its own admission, has no competency in respect of gliding specific safety management. The BGA will remain for the foreseeable future as the UK's expert gliding body and as such continues to have significant responsibilities in maintaining and developing safety in gliding.

2.2 Data

The BGA maintains an accident and incident database which contains summaries of the 6500 reports made to the BGA since 1974. Much effort has been devoted to ensuring the data is accurate. The database is searchable in more than 100 ways. All the original reports have been scanned and are instantly retrievable. A successor to the database manager has been nominated.

2.3 Safety Priorities

3rd party accidents
Avoiding serious 3rd party accidents is the BGA top safety priority. The accident data indicates the control measures are effective. Gliders have fatally injured two 3rd parties on or near the ground since 1974. In 1998 a glider hit a person walking across the runway, and in the 2005 a glider hit a photographer on a vehicle. Actions were immediately taken to avoid a repetition. Table 1 identifies all fatal and serious injuries to 3rd parties since 1974.

Fatalities to club members
Avoiding such accidents is the second highest BGA priority. Chart 1 shows that from 1974 to 2007 there were about 40 fatalities in each 8-year period, equivalent to 5 per year, but only 10 fatalities in the 8 years from 2008-2015. These 10 fatalities were all from solo/mutual flying, with none instructing, in TMGs, or in tugs.

The main sources of the decline in solo/mutual fatalities from a previous 8-year average of 27 to 10 were fewer winch accidents and a marked increase in successfully bailing out from collisions above 1300ft. Fatalities from stall/spin continued and accounted for 5 of the 10 fatalities from 2008-2015 (chart 2).

Chart 3 indicates the contributions from each category to all fatal accidents from 1976-2015. Priorities for avoiding future fatalities are to avoid inadvertent stall/spin, winch accidents, collision, to prepare gliders correctly for flight, and to avoid tug upsets. BGA safety briefings have been published recently on these and other topics as indicated in table 2.

An initiative on reducing field landing accidents in competitions and generally is underway. A solution has yet to be found for the problem of too many gliders being damaged in landing accidents at the home airfield.

2.4 Safety Management in Practice

Club chairmen are responsible for the safety of operations at their club site. The same kinds of gliding accidents occur again and again. Unless the conditions for a particular kind of accident are eliminated, a similar accident may recur. Accordingly, clubs are encouraged to identify their own significant hazards and to introduce measures for mitigation. Support is provided by the regional instructing team and the BGA safety committee.

In 2014 a survey was conducted to establish the best means of communicating BGA safety material to club members and instructors. The survey clearly showed that there is a hunger for safety material but it must have its own identity and it is best communicated via the club CFI. These recommendations have been implemented.

The approach of the BGA safety committee to reducing a particular category of accident is as follows:

- establish comprehensive and reliable accident data
- use this accident data to identify hazards
- fill gaps in theory

- generate guidance for keeping safe
- educate all instructors and pilots
- measure results
- feedback results to everyone

The most successful example of this approach to data is safe winch launching. From 1974 to 2005 winch launches accounted for 36 of 167 fatalities and 72 of 240 serious injuries. Examination of winch accident reports identified four main hazards. These were a wing drop and cartwheel, a launch failure below 100ft, an accelerated stall and flick roll during rotation, and a spin after a launch failure above 100ft. The combinations of climb angle, airspeed, reaction time, push over g, and recovery dive angle that were unrecoverable after launch failure below 100ft were determined by calculation and computer modelling. Corresponding theoretical work showed the stall speed during rotation was controlled by the rotation rate. Advice for conducting a winch launch safely and dealing with an emergency was summarised on one page of A5 and published in October 2005. This advice with reports of progress has been continually reinforced in the succeeding 10 years with 5 editions of the safe launch booklet, a quiz, video simulations, a DVD to all instructors, more than 100 presentations, and annual posters. Chart 4 shows the results. In the 10 years from 2006-2015 there were 6 fatal of serious injury winch accidents. The totals in previous 10-year periods were between 28 and 40.

Table 1 - Fatal and serious injuries to 3rd parties

Summary	Year
Glider hit trial lesson visitor	1998
Glider hit photographer	2005
Collision glider-parachutist	2002
Collisions glider-light aircraft	1996, 2009, 2012
Winch cable fractured walker' ankle	2015
Winch cable fell outside airfield	1978, 1981
Light aircraft hit winch cable	1977

Table 2

BGA safety briefing	**BGA poster**	**BGA video**	**Links**
Safe winch launching summary	Thermal soaring protocol	Simulated winch accidents	Mountain flying safety (FFVV)
Safe winch launching booklet	Mounting cameras for use in the air	Simulated tug upsets	Human factors for glider pilots (New Zealand)
Safe aerotowing	Cable hang ups	Field landing tutorial	Front electric sustainer ground safety
Parachuting after a mid-air collision	Tug upsets	Compounding risks	
Is your glider fit for flight?	Don't get in a spin		
Rigging, DI and pre-flight checks	Currency barometer		
Control confusion	Ballast weights		
Cross country and airspace guidance			
Passenger carrying guidance			
Safety foam			

Chart 1

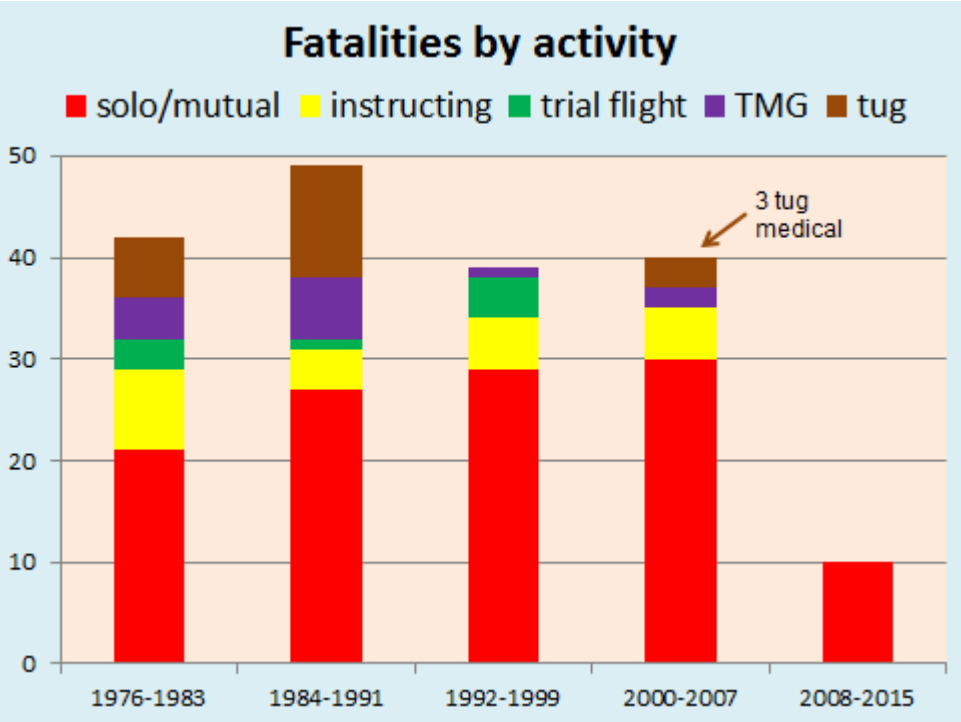


Chart 2

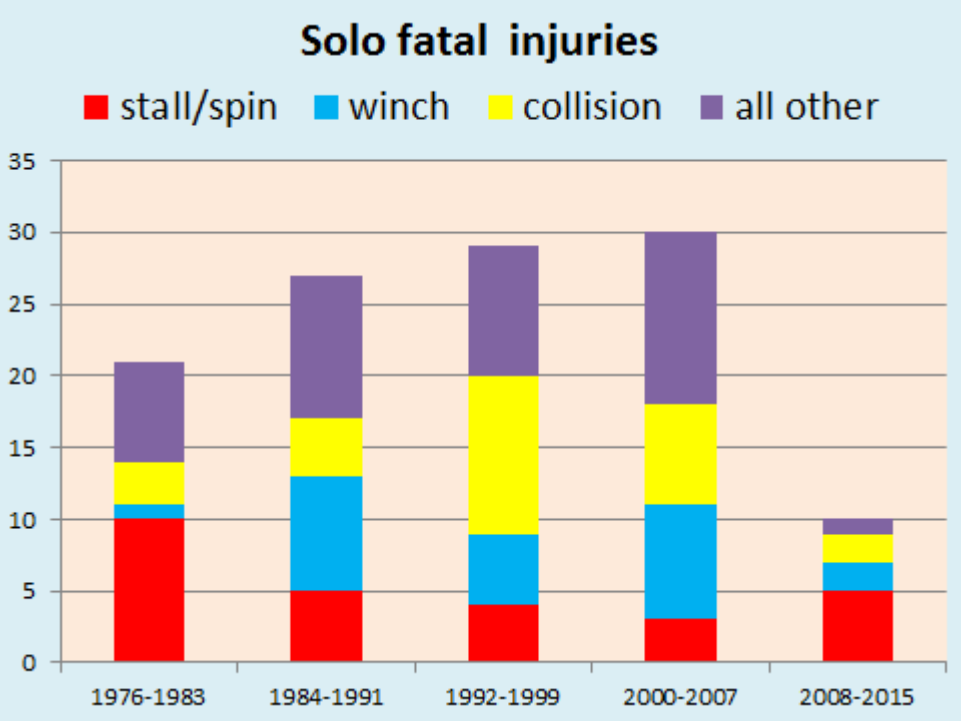


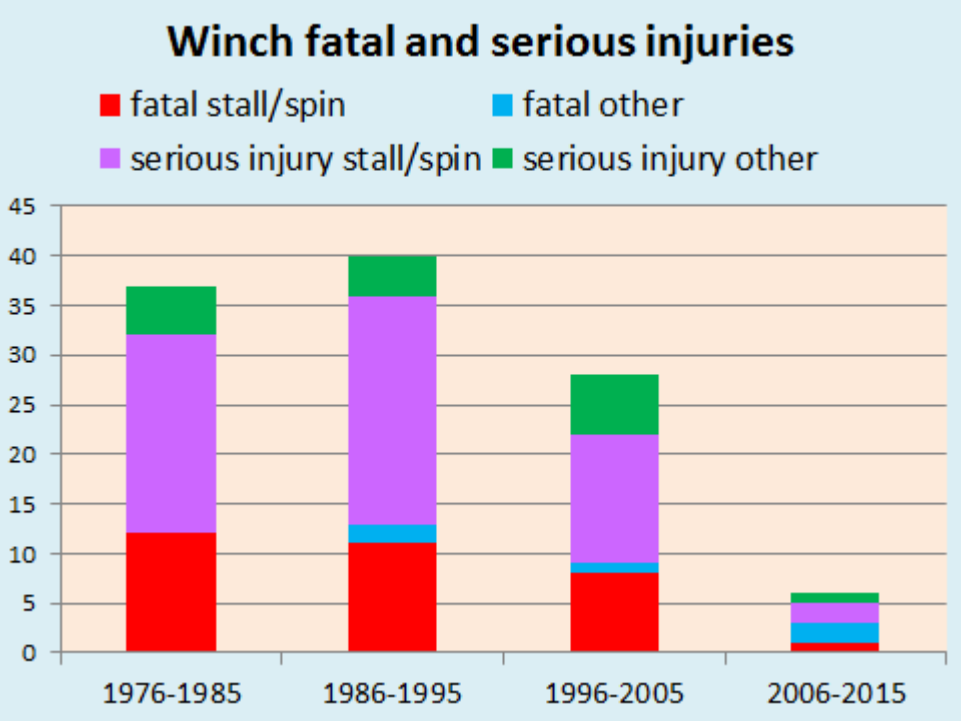
Chart 3

Fatal & serious injuries1976-2015

	Fatal	Serious injury		Fatal	Serious injury
winch	37	74	aerotow tug	8	3
stall/spin	45	79	aerotow glider	2	5
collision	38	6	glider integrity	11	13
field	3	38	medical	7	1
technical	4	4	other cause	8	9
u/o shoot	1	16	unexplained	6	
landing	1	20	ground		7
hit hill	5	8			
tmg/tug	4	5	TOTAL	180	288

Stall/spin includes 11 fatalities and 31 serious injuries from field landing. tmg/tug is accidents unique to powered aircraft, not stall/spin, landing etc

Chart 4



3. PROTECTING OUR AIRSPACE FREEDOMS

3.1 Context & Key Factors

This subject is a broad one and the pressure on the 'free' (un-controlled) airspace that is our lifeblood will continue. The following headings are intended to set down some of the key factors:

Our Reputation

For many years the BGA has battled against increasing demands for controlled airspace. Successes enjoyed by capable and hard-working volunteers can easily go un-noticed, partly because a success is often "no-change". Success is usually the avoidance or delay to something that would otherwise have restricted our existing freedoms. However, the hard work of the past and the rigorous application of logic and integrity have given us a deservedly good reputation with the CAA as the regulator. That credibility means that we can be heard, and do often successfully influence the issues that are critical to us. *Our reputation is easily undermined by the careless actions of individuals*. See 'Glider Pilot Awareness' below.

Economics

The current economic slowdown has slowed predicted rates of traditional Commercial Air Transport (CAT) growth. However the use of business jets increases. Government policy on a third runway at Heathrow has been deferred to 2016. Low cost airlines continue to seek cheaper bases. The net result is more CAT operating from smaller regional airports which do not yet have joined-up Controlled Air Space (CAS). Their determination to get CAS and the CAA evolving view re the need to link all regional airports to the airways through CAS will create many problems and much work for the BGA.

Military

Economic restrictions are also impacting military flying. The opening of Lyneham airspace has been a boon but other announced closures (eg. Leuchars) do not have significantly important CAS. Some restricted area and danger areas may see less activity and be ripe for easier access. However the advent of Unmanned Air Vehicles (UAV) will undoubtedly create pressure for more dedicated areas and create further pressure for a change in class G rules\equipage. In 2015, the military tabled a suggestion to the CAA that their airfields should be 'protected' with class D airspace.

Real v Societal Risk

We choose to participate in recreational aviation. We know about (and are by nature good at managing) our own risks and have an abhorrence of any remote authority deciding what is best for us. We do however understand that risks should managed and regulated - where our activities might threaten others. Commercial airliners fly with large numbers of people, fly fast under Instrument Flight Rules (IFR) and any collision between airliners would undoubtedly be catastrophic - simply socially unacceptable. Rules designed to prevent such disasters do however govern regulatory mind-sets and the rules rightly applicable to CAT can ever so easily be applied to all flight. Here we see that emotion and perceived public acceptability often overcome logic. The reality is that a glider, even if it were deliberately

flown by a suicidal pilot determined to do maximum damage to an airliner, would probably find it impossible to bring the airliner down. History has no examples.

Nonetheless the risk assessment criteria applied in the assessment of airspace changes assumes that any collision is completely unacceptable and therefore errs grossly on the side of conservatism. Privately, regulatory individuals agree with this analysis but while public and media perceptions remain we should not stake our futures on significant policy changes however logically justifiable they might be.

Collision Prevention

The CAT relevant policy of controllers keeping individual airliners apart and efficiently scheduled has however given all aviation a paradigm which is hard to dispel from situations where it logically has little or no relevance. Hundreds of gliders between surface and cloud base, each choosing their own energy line from moment to moment, successfully avoid each other in relatively busy areas every suitable summer weekend. It is simply impossible to conceive of a centrally directed system which could achieve this. The biology of mutual avoidance is just different, and effective and efficient. And the effectiveness of seeing other aircraft which underpins this is being further enhanced by appropriate training and electronic awareness systems like FLARM.

Choke-points and unintended consequences

The technology used in our sport (good moving maps) and the engrained culture of no tolerance of airspace infringements means that gliders fly only where allowed. The hassle factor of getting clearances into CAS also means that the overwhelming majority of our flights are in class G. The history of airport and hence airspace development in the UK is haphazard. So gliding has inherited an unplanned matrix of population, soarable territory and airspace that makes some areas (eg N Scotland) very sparsely flown while others (eg between Brize and LTMA) are serious choke points where all traffic is effectively funnelled through narrow gaps. Analysis of our extensive data-base of cross-country flights graphically shows this phenomenon.

So the creation of new CAS at say Oxford might give added protection to a very few commercial flights, but severely increase an already high traffic density beside it. Thus we have a situation where new CAS may well decrease overall flight safety. This concept is fundamentally important and its understanding and acceptance is growing.

Transition Altitudes and Updating\Reducing existing CAS

Our existing Terminal Manoeuvring Areas (TMA) etc are designed around assumptions of aircraft performance which may no longer be valid, old energy inefficient descent practices, and must cater for the wide discrepancies created by QNH ranging from 950 to 1040hPa (+\-1000') at the point where airways using Flight Levels (FL) meet altitude based control Zones (CTR). The BGA supports the raising of the Transition Altitude (TA) because it will enable a reduction in controlled airspace by limiting this variation - but the effort to encourage re-designs is essential if we are to avoid a simple translation of FLs to altitude without the associated rethink of CAS.

Transponder Carriage

The BGA won earlier battles, but the CAA view that widespread mode S transponder equipage is necessary remains. The BGA continues to successfully negotiate an exemption above FL100 in our key wave areas, but maintaining the freedom is another challenge.

Major Redesigns of Airspace

London is underway, Manchester is about to start and Scotland to follow later (2017). Without careful input from the BGA, we will get what we're given.

Equipment Strategy Choices

If a cheap low power transponder becomes available have our previous arguments largely evaporated? If we all fitted Power Flarm, for example, could we successfully argue for less CAS? The CAA led Conspicuity Working Group which includes BGA representation is developing views around ADS-B and other technology.

There is a need for ongoing review and development of the BGA's position around technology in support of effective lookout.

Busy versus Legal Strategy Choices

The BGA knows of CAS which is hardly used, as well as Class G which is really busy. Do we act on that knowledge? Do we back ourselves into a corner and encourage more CAS if we do? Or is our voluntary avoidance or warning of busy airspace a masterstroke in arguing against more CAS from, eg, regional airports. We should start by looking at how to put Instrument Landing Systems on our moving maps as warning sectors.

Organisation and Workload

Faced with all of the above how does the BGA react\cope? The document just sets out some of the forthcoming workload - "events" will undoubtedly produce plenty more.

The BGA does have many excellent people (airline pilots, controllers, committed amateurs etc.) who are prepared to help. The issue is knowing who they are, enrolling them and co-ordinating their efforts across appropriate regional and functional territories.

There is a need to reduce fire-fighting so that a more structured approach can be laid out in order to make future fires easier to fight. The current Airspace Committee Chairman is determined to set up an accessible matrix of our existing resources, local, regional and functional expertise.

In 2015, the Future Airspace Strategy VFR Implementation Group formed and received funding. The FASVIG addresses the needs of all class G stakeholders and is under its current leadership culturally engaged with air sport and recognises the emerging and over the horizon issues that impact on gliding.

The BGA should continue to work closely with FASVIG to help establish our strategic airspace objectives.

Glider Pilot Airspace Awareness & Knowledge

Glider pilot training, like PPL training, has struggled over the years to match the increase in complexity of the operating environment and the associated risks. Infringement and airprox data suggests that all categories of recreational pilots, including glider pilots, need better knowledge and awareness of today's airspace environment. In addition, it is clear from conversation and airprox reporting that professional operators in class G need to be made aware of gliding activity.

In 2015 the BGA engaged on an education campaign with glider pilots, airfield and other class G operators. That was partly successful and will require continued effort in 2016 and beyond.

Resources

Even with more structure the nature of the role of Airspace Committee chairman demands a considerable time commitment just to have an overview of the critical issues. The BGA should consider whether it will always have a volunteer prepared to do this.

The BGA will engage with other air sport organisations to identify how best to provide the necessary resource and then establish that resource under volunteer direction.

4. AIRWORTHINESS & MAINTENANCE CONSIDERATIONS

4.1 Airworthiness and Maintenance

Harmonisation with European regulation re airworthiness and maintenance is more advanced than in other areas of EASA rule making. Indeed the European regulations have been made law since April 2009. The BGA has been largely successful in reconfiguring its airworthiness practices to accommodate these new rules. However it must be recognised that various freedoms and privileges have been ceded from BGA to either the UK CAA or to EASA, to the detriment of the autonomy of the BGA. Notably:

All recognised aircraft types in Europe are now issued with European Certificates of Airworthiness demanding conformity to the manufacturer's Type Certificate. Thus the BGA no longer holds any remit to certificate or modify the design status of any such aircraft. Only so-called 'Annex II' aircraft (mostly vintage, experimental and homebuilt airframes) remain under direct BGA jurisdiction, via the Technical Committee, for both initial certification and continuing airworthiness and maintenance support.

EASA Certificates of Airworthiness are annually validated with an Airworthiness Renewal Certificate (ARC) via the CAA. This results in additional paperwork and increased workload for inspectors, Chief Engineers and Head Office with no measurable safety advantage. Even so, these new functions of 'maintenance management', including quality audit, have been integrated into our existing airworthiness system with minimum impact of the membership community.

To recommend the issue of ARC's, it has been necessary for the BGA to qualify as a Continuing Airworthiness Management Organisation (CAMO) with an attendant, new Quality system. These functions, mostly at Head Office, are separate from that of the Technical Committee, although interfaced with it via the Chief Technical Officer (CTO). Considerable efforts have been made to maintain the cohesion across the operational functions, to facilitate our holistic approach to safety management and occurrence reporting.

Most known extant commercial maintenance enterprises continue to operate under our approvals, but we can no longer claim to hold a monopoly under CAA delegation as was the case in the past via the UK ANO.

Although the transition to the basic EASA rules has been completed to the general satisfaction of the CAA, there are numerous hanging issues which cause inconvenience and cost and might be considered to hinder convenient and/or safe operations:

Major modification and repair of EASA airframes remains a very laborious process requiring, in principle, a modification application or the approval of the manufacturer. However, lighter regulation known as CS STAN now applies to numerous minor installations of instrumentation, soaring equipment, transponders and collision warning equipment. It is expected that CS STAN may broaden its scope in future including with standardised simple repairs.

The ability to grasp new developments, such as ballistic recovery systems, jet or electric power-plants are also inhibited as these are classed as 'complex' in EASA terminology.

The availability of ‘major’ modification schemes such as those that, in the past, have been devised for disabled pilots now require Design Approved Organisation (DOA) approval, which is currently beyond the BGA remit.

The appropriateness of manufacturer's schemes for the overhaul, and proper sourcing of spare parts is a further concern.

These considerations assume even greater important for the future, should the EASA restrictions drive members towards deregulated, ultralight gliders and motor-gliders, which appears to be a developing trend. BGA need to look at the broader issues arising from the introduction of an ultra-light category in respect of sailplanes, motor sailplanes and tugs.

The BGA currently risks losing the underpinning ability to provide from its own resources the design expertise needed to maintain and support for all airframes (with different emphasis and application in EASA and Annex II), and to provide advice on technical aspects of operation and safety. The Technical Committee needs to evolve to address those concerns.

4.2 Inspectors

Gliding needs a continuing supply of new inspectors and the issue of cost and complexity of inspector training must be considered. Further there is a need to reinforce and augment our training and currency support for inspectors and Chief Engineers. The BGA CTO is already introducing engineering biased Human Factors training into the continuation training programme.

European regulators will issue new rules on the future status of our engineer (inspector) force during 2016. New regulations are expected to enable BGA to continue with its present force of inspectors via ‘grandfather rights’ for existing operatives. Regardless of the regulatory approach taken, training will need to be an aspect of other expanding enhancements to BGA support.

4.3 Developments in Existing Legislation

Finally, it must be recognised that while EASA certification and maintenance legislation is now the law, this is still in a state of flux. The implementation of these rules in 26 separate nations has raised significant issues particularly when airframes are sold or operate across borders. There is a rising body of opinion across not only sport aviation, but the entire GA sector, that these rules are over intrusive, and prejudicial to aeronautical development in general, without bringing any measurable safety benefit. Developments are on-going and new proposals can be expected by the end of this year.

Continuing vigilance will be required to ensure that future developments remain supportive of sport aviation and specifically the interests of the BGA as the operational core of UK gliding.

4.4 Microlight Sailplanes

The Basic Regulation defines the MTOM of various Annex II aircraft. Annex II sailplanes are limited to 100kg while Annex II aeroplanes are limited by a much higher MTOM of 450 kgs.

A result is the development of self-launching, lightweight sailplanes that comply with the Annex II aeroplane MTOM limitation. There are two key issues;

a. There is no development of unpowered sailplanes outside of EASA certification requirements ie CS22
b. Any microlight sailplanes (ie self-launching sailplanes developed outside CS22) operating outside the UK need to comply with the historic British Civil Airworthiness Requirements (BCAR) 'section S'. This prevents microlight sailplanes which are adequately certified elsewhere in Europe from operating in the UK.

The BGA with the support of UK CAA and the EGU has pressed for a change to the EU Basic Regulation to align the Annex II sailplane and aeroplane MTOM limits.

Following the UK GA Red Tape Challenge and a move towards risk based regulation, the CAA is willing to review the UK requirements for microlight aircraft, subject to resource being available.

The BGA will continue to challenge the Basic Regulation Annex II sailplane MTOM limit.

The BGA will continue to challenge the CAA to permit the operation in the UK of microlight sailplanes certified outside the UK.

5. SUPPORTING VOLUNTEERS

Gliding is dependent on volunteers. All sporting organisations require volunteers whether at national, regional and club level. At one level volunteers help to ensure our freedoms, governance and organisational capabilities. But equally importantly they represent and support all aspects of gliding operations, including aircraft maintenance, instructing and examining. Vitally, club volunteers encourage and support new participants and ensure that existing pilots can have fun in a rewarding and safely managed air sport.

Emerging societal attitudes towards volunteering, the increasing age of volunteers in all sports, and the complications and costs related to the regulated environment are potentially significant threats. And potentially more so to gliding than in most other sports due to the reliance we have placed on volunteers in a historically unregulated environment.

It is recognised that instructor availability may decrease in the long term. The BGA is committed to ensuring the availability, quality and effectiveness of instructing. There is a need to assess and track impacts, and develop potential solutions as we move towards implementation of EASA regulation, in whatever form that emerges following GA Roadmap activity. Similarly, action is required in support of inspectors, as described at 4.2 above.

Encouraging participants to become volunteer maintainers, inspectors, instructors, coaches and mentors is fundamental to ensuring gliding remains enthused, fresh and vibrant.

The Instructor sub-Committee remains responsible for ensuring that standards and coaching/examining resources are maintained, and the Technical sub-Committee remains responsible for supporting airworthiness standards and regional technical resources. These sub-Committees cannot be expected to resolve the issues in isolation; societal attitudes, the increasing age of volunteers, and the complications and costs related to the regulated environment need to be considered in all aspects of BGA development. It should be recognised that the development of effective, trained and motivated volunteers requires engagement across the entire Association.

The BGA will;

Identify and where possible develop common tools and management structures that could be used by all member clubs who choose to, allowing for greater standardisation and shared, managed, costs

Identify and centrally develop additional standardised maintenance and flight instruction training resources with the aim of making those available to member clubs and individuals

Identify how an on-line presence could be developed and managed so that instructing and maintenance requirements on member clubs could be centralised through cost effective on-line platforms that can be used by all participants

Identify where further collaboration with partner organisations can facilitate our volunteer support objectives

6. INFORMATION

It is inevitable that in a regulated, technically advanced, inherently hazardous and fundamentally volunteer led sport where most participants are involved infrequently, it is necessary to provide clear direction and guidance. It is entirely understandable that in taking that approach, it can lead to a surplus of information. At best that becomes irksome or the information is ignored. At worst, it negatively impacts on participant's aspirations and fun. And there are other considerations. Getting the balance right is not easy.

In 2014, the BGA reviewed, updated and formally approved its Operational Regulations. The associated BGA guidance, which provides the detail of the currently acceptable method of complying with those Operational Regulations, was also reviewed in 2014. In 2014/15 the BGA website was overhauled. The published documents were reduced by a third.

In 2015, the BGA Executive agreed that the long-established BGA Recommended Practices should be reviewed with the aim of providing a way forward at the end of 2016. It is possible that the output of that work will result in absorbing Recommended Practice topics into wider BGA guidance material.

On an ongoing basis, BGA guidance material should be reviewed to ensure that it meets the basic requirements of assisting participants to remain reasonably safe and compliant with regulations.

In doing so, the guidance material should use plain English and standard formats, assume a low level of prior knowledge, and as in all issues of good governance, consider the associated implications.

Pete Stratten
Chief Executive Officer
BGA