

HOW TO (DE)-REGULATE GLIDING IN EUROPE ?

1. Introduction

The European gliding movement numbers approximately 80,000 pilots flying 22,000 gliders. Gliding is a well-structured sporting activity which is organised primarily in clubs. At the national level, clubs are grouped into gliding federations, associations or gliding sections of National Aero Clubs, generally referred to as *National Gliding Bodies* (NGB). In Europe, these NGBs are represented, with regard to regulatory matters, by the European Gliding Union (EGU), which counts 19 members.

So far, except in a few countries (UK and Ireland), gliding has been state-regulated. The common feeling among glider pilots is that they are over-regulated, mainly because they are subjected to regulations derived from those established for commercial aviation. This over-regulation is generally considered as one of the reasons for the slight decline in membership observed during recent years. Glider pilots also have the strong impression that the European regulation currently being set up will reinforce this tendency and will result in an increase in both the bureaucratic and financial burdens. It is pointed out that the financial aspects are particularly important for air sports because leisure pilots pay their own flying costs out of taxed income and any rules that increase the costs are likely to result in pilots flying less, which is likely, in fact, to have an adverse effect on safety, or giving up flying, which will be detrimental to our sport and to personal freedom and choice.

The gliding movement therefore welcomes the initiative taken by EASA to set up the MDM 032 drafting group in charge of rethinking the regulation of non-complex aircraft used in non-commercial activities. The gliding movement appreciates the pragmatic, “bottom up”, approach proposed by the EASA.

European glider pilots feel that regulation should be more proportionate to the type of activity, which is mainly a sporting activity, to the complexity of the aircraft used, and to the risk to third parties. Any unnecessary regulation should be avoided, and regulation should only be considered where there is a clear safety imperative, compared to the historic and present situation. The primary objective of the rule-makers should be to protect third parties and not to unduly protect individuals against themselves. Regulation should, therefore, be kept to the minimum necessary to minimise risks to third parties.

The examples coming from UK, where the BGA has self-regulated gliding for nearly 60 years, or from countries like USA, NZ and Australia where gliding is completely deregulated, show that this is possible without compromising safety. In some countries (Switzerland, Sweden etc), the gliding federations benefit from a very liberal interpretation of the existing rules which results, de facto, in a self-management of their activity. This pragmatic approach has also proved to be safe.

Nevertheless, gliding wants to continue to remain part of the international system in aviation and our rights of access to airspace should not be restricted by the fact that our activity is of a recreational and sporting nature. None of the relaxation of the regulations which may be obtained should be associated with airspace restrictions. In other words, glider pilots do not want to become second-class aviators!

The existing regulations in the various fields can be reviewed critically (certification, maintenance, licensing and operations) and alternatives proposed for each of them.

2. Certification (initial airworthiness)

2.1 Type certification

Before the creation of EASA, all sailplanes and powered sailplanes in Europe were type-certified by National Aviation Authorities (mainly in the country of design and / or manufacture – especially Germany – and on which other NAAs placed varying degrees of reliance). Except for some older gliders, the certification specification used was JAR 22. It is interesting to note, that this airworthiness

code originated from the gliding movement itself, having been proposed some decades ago by OSTIV (Organisation Scientifique et Technique Internationale du Vol à Voile).

This has worked satisfactorily for decades. With the advent of EASA and the issuing of Regulations 1592 and 1702, the certification became pan-European (supported by JAR22 becoming CS 22). This was welcomed because it prevented each NAA having to retest a newly certified aircraft and eliminated unnecessary delays and costs.

However, at the same time, according to the glider manufacturers, the certification procedures, as defined in Part 21, are even more stringent on some points than they were before. Some examples are:

- the regulations regarding approval of design organisations have changed from former national rules with the result that several companies have lost their former approval as (national certified) design organisations.
- the option for simplified procedures for a company producing simple products, which was still included in JAR 21, have been deleted in Part 21.
- EASA offers official translations of Part 21 which are sometimes not translated correctly and the important additional information material (AMC & GM) is available in only the English language; this poses a significant problem for small companies with limited resources.
- the opportunity for cost-effective development by certification of new propellers and engines together with the motor glider is no longer available in Part 21.

The gliding community feels that these problems are mainly due to EASA applying the same regulatory framework to light and sport aircraft (including gliders and gliding) as to commercial aviation. We therefore believe that a Part 21 “light”, more adapted to light and sport aviation, should be written. Such a regulation should be proportionate, i.e. adapted, to the relative simplicity of gliders and the sporting nature of this activity.

2.2 Industry standards: an alternative solution?

Instead of requiring manufacturers to build gliders to type standards developed by the authorities alone, EASA could call for the industry to develop industry standards. This approach has been pioneered in the USA, where the FAA has encouraged the light aircraft industry to develop, and reach a consensus on, an airworthiness standard that would govern light sport aircraft (LSA). The goal of the FAA was “to increase productivity and efficiency in Government and industry, expand opportunities for international trade, conserve resources, improve health and safety, and protect the environment”. Such a standard has indeed been set up by the American Society of Testing and Materials Int’l (ASTM) under standard F 37.

(See www.astm.org/cgi-bin/SoftCart.exe/COMMIT/COMMITTEE/F37.htm?E+mystore).

A similar approach could be followed for gliders. However, all the implications (financial, liability, flexibility) of such a change should be carefully considered. Furthermore, as already stated, the CS 22 is in fact a consensus standard since it was first established in close collaboration with OSTIV and the gliding movement. Finally, the manufacturers, who are primarily concerned by this issue, seem to be perfectly happy with CS 22. For all these reasons, the development of a consensus standard for gliders by the industry / the stakeholders is not a real priority. Nevertheless, this could become an interesting option for a new light sailplane and powered sailplane class (see below).

2.3 The issue of ultra-light sailplanes

In recent years, ultra-light sailplanes (and powered sailplanes), not certified under CS 22, have been designed, developed and manufactured. This has resulted in the emergence of a light glider movement similar to the microlight movement which has become very popular in several countries (France, UK, Italy, Czech Republic etc) mainly because this activity is regulated lightly in terms of airworthiness, pilot licensing, airfields etc.

Unfortunately, this development is now blocked by the new European regulations since in Annex II of Regulation 1592, these gliders are exempted from regulations only if their structural (now empty) mass is below 80kg (single seat) or 100kg (two seat).

As a consequence, only foot-launched, hang- and para-gliders are exempted. Light and ultra-light gliders above the 80/100 kg structural mass, but not certified according to CS 22, are no longer allowed to fly in Europe because they no longer have any legal existence. This has had a very damaging effect on technical and economic development, as well as pilots' choice, without any justification.

In comparison, we note that microlight aeroplanes, weighing a maximum of either 300 kg (single seat) or 450 kg (two seat), are exempted from EU regulation. There seems no logical reason, in terms of risk assessment (particularly the risk to unconnected third parties), as to why microlight gliders, which have a significantly lower (structural mass) weight limit (80 / 100 kg), should be treated differently."

This discrimination is unacceptable because the EU regulation has inadvertently created a distortion in the marketplace for gliders by forcing manufacturers of non-CS 22 compliant gliders into either stopping design and production, or introducing engines for self-launching of these aircraft, thus allowing them to be treated as exempt from EU regulation by being classified as microlight aeroplanes.

Additionally, there are some sporting consequences. The FAI, officially-recognised sporting category of ultra-light sailplanes (up to 220 kg MTOM) is being compromised by the anomalies created by the new regulations outlined above, thus threatening an existing world-wide sporting class and creating a distortion of sporting competition. The effect will be for non-European countries to be able to compete in a class denied to European countries.

The future EASA regulations for light aviation should address this issue by exempting light sailplanes and powered sailplanes from the common regulation at the same MTOM as powered aircraft.

An alternative could be to create a light sailplane and powered sailplane class under common regulation (provided these regulations were flexible enough to allow a development similar to the development of powered microlights). A European industry standard should then be established for these aircraft which could be something like a CS 22 "light". The OSTIV could provide a base for such a standard.

3. Maintenance (Continuing airworthiness)

The European Gliding movement considers that the current Part M proposal is a major threat to gliding and has expressed their worries in their answers to the RIA and the NPA 7/2005.

The main problem is that Part M measures do not take into account the situation which has existed very satisfactorily in a large majority of European countries for more than 50 years, where the national policies have encouraged a de-regulation or delegation from National Airworthiness Authorities to the National gliding bodies. In these countries, gliders, motor gliders and tow planes are maintained within the framework of clubs, generally by inspectors trained and licensed by the NGBs. Additionally, where national policies allow, the issue and revalidation of sailplane certificates of airworthiness are managed by the NGBs. A description of how continuing airworthiness in gliding is managed in several European countries can be found on the EGU web-site:

www.egu-info.org/dwnl/Howit'sdone.pdf

NAA scrutiny has invariably found that NGBs are fully capable of ensuring safe airworthiness, demonstrated by relevant accident/incident rates which compare favourably with, and indeed are often marked improvements on, those where tighter legislation is applied. Additionally, this maintenance

framework is generally not bureaucratic and is cost effective, since most of the inspectors at the club level work on a voluntary basis.

In principle, the NGBs could continue to work, but with significant difficulty, in the same way within the framework of the proposed Part M. However, forcing the gliding movement to enter into the controlled environment mould of Part M, and to comply with the stringent formalisation of Subpart F and G organisations, will dramatically increase the administrative burden and the costs of maintenance without any foreseeable safety benefit.

The gliding movement therefore asks EASA to consider and draft a more appropriate continuing airworthiness regime for gliding, or at least adequate AMC material specific to gliding within a Part M 'light', in order to allow the NGBs to continue to manage maintenance and to revalidate the airworthiness certification of their fleets in the pragmatic and cost-effective way they have developed and used successfully for many years. The concept of an assessment body may, perhaps, be extended to maintenance. In this case, a NGB could apply to become an assessment body having full delegation to self-manage maintenance in compliance with the essential requirements for maintenance.

An additional relaxation could also be introduced by increasing the interval between the renewals of the airworthiness certificate to three years, even in the uncontrolled environment. This makes sense because modern gliders are simple and rugged aircraft, in general less complicated than micro-lights, for which no renewal of the airworthiness certificate is required in most countries. Of course, the inspections required in the manufacturer's maintenance programme should still have to be performed annually by the pilot-owner or by the clubs' technically qualified people.

4. Licensing (Pilot Proficiency)

In most countries, glider pilot licences are issued and controlled by the relevant National Aviation Authorities and comply with the ICAO Annex 1 requirements. However, in the UK, gliding is entirely self-regulated by the British Gliding Association, and UK glider pilots do not require a licence as such, though they are subject to training and supervision by BGA authorised instructors. A similar scenario applies in Ireland.

The common opinion among the glider pilot community is, that an 'official' licence is still the best way to demonstrate the proficiency of a pilot, and provides a recognised 'passport' for pilots moving between clubs and between countries. As mentioned in the introduction, the European gliding movement wants to remain part of the international aviation system and glider pilots do not want to see, for example, their rights of access to airspace restricted because their activity is of a sporting nature.

We therefore welcome EASA's proposal to create an EU Recreational PPL because we consider that the particular needs of gliding should be addressed without an in-built, or automatic, link or assumption that gliding / recreational and sporting aviation is a career step towards commercial aviation, something that has dogged the evolution of the regulatory framework in other forums such as JAA for many years. Taking part in Recreational and Sporting aviation is an end in itself for the vast majority of participants. The possibility to cross-credit the flight hours between various licences is also seen as very positive. However, the Implementing Rules should be segmented for each type of Recreational PPL (gliding, ballooning, power flying etc). A separate paper is being produced for the MDM.032 discussions on the appropriateness or otherwise of the term 'Recreational' – see also end of paragraph 4 below.

Furthermore, the gliding movement appreciates the EASA proposal to allow assessment bodies to issue such a recreational licence. However, the criteria set for applying to become an assessment body should be defined carefully in order to mitigate unnecessary competition between the various air sports organisations, which could result in major chaos.

Related to the distinction to be made between commercial and recreational aviation are also the medical standards and the methods used to demonstrate fitness to fly. The medical standards, in terms of disqualifying conditions, which are embodied in a JAR Class 2 and also in ICAO Class 2, have been established within the overall environment of commercial aviation, where the risks to third parties, both in the air and on the ground, are quite different from the risks associated with recreational and sporting aviation. Different medical standards should be acceptable for recreational aviation so as not to preclude people from enjoying the sport, whilst ensuring a very low level of risk (particularly to third parties) due to medical incapacitation of a pilot. In particular, for pilots who only ever fly solo, one could even envisage requesting only a simple self-declaration of fitness. The assessment of an individual's fitness to fly by periodic examinations by an AME is too burdensome and expensive for recreational flying and does not provide any greater assurance of fitness, or indemnity to third parties, than alternative methods.

Following these considerations, we propose a “dual system” for the regulation: The Essential Requirements for Pilot Proficiency should allow the flying of gliders either with an EASA Licence or with an ICAO Licence.

- The EU Recreational Licence should allow glider pilots to fly any glider certified under CS 22 or its predecessor codes (including TMG) anywhere in the EU / Europe. Within European airspace, no extra airspace restriction or operational restriction (e.g. operating in a limited radius from the base airfield such as is the case with the FAA's sport pilot licence) should be associated with the EASA Licence. Assessment bodies should be allowed to self-administer this licence based on its own Code of Practice, which should be compliant with the ERs. Compliance should be demonstrated either to EASA or to the NAAs. Medical requirements should be below the ICAO Class 2 medical. The licence should be valid life-long, provided it is accompanied by a valid, current medical and the experience necessary to remain current and to maintain piloting skills.
- The ICAO licence would be fully compliant with ICAO Annex 1 and allow, or facilitate, glider pilots to fly any glider certified under CS 22 or its predecessor codes (including TMG) anywhere in the world. The associated Implementing Rules should be no more detailed than the ICAO annex 1 requirements for gliding. Compliance should be demonstrated to EASA .

The skills required from the holders of both the ICAO Licence and the EASA licence should be the same in order to avoid two classes of pilots. The EU Recreational licence and the ICAO licence should differ only in the medical part, which should be class 2 compliant only for the ICAO licence. In practice, it should be possible to convert a recreational licence into an ICAO Licence simply by adding an ICAO class 2 medical.

One way to achieve this would be to have the same implementing rules for both the ICAO Licence and for the EASA Licence. These Implementing Rules should be not more detailed than the ICAO Annex 1 requirements for gliding. However, the various ratings should be clearly defined to facilitate the recognition of pilot proficiency between one country and another. These ratings should cover the launching method privileges, instructor privileges, flight with passengers, plus additional ratings (aerobatics, flight without sole reference to instruments, radio-telephony, touring motor glider). The EGU has started to work on such IRs for gliding and is ready to provide a first draft.

The Touring Motor Glider (TMG) is an important issue. Due to its low operational costs, it is being used more and more as an aeroplane for touring and training in general aviation schools. Therefore, the TMG has become a rating in the JAR FCL licence system for motor flying. However, since TMGs are certified under CS 22 as gliders/ powered sailplanes, and as they are a necessary and important asset for training glider pilots in gliding clubs (particularly, though not exclusively, for practice field landings which glider pilots will experience as their gliding career develops), we should like any new regulations to state clearly that it will still be possible to fly such a TMG with both the EU Recreational pilot licence and the ICAO glider pilot licence, with an appropriate rating.

Finally, as regards licensing, the 'label' for the RPPL should be considered carefully. Whilst we are content to have the licence associated with 'sport,' there is some concern that the label 'recreational' may place the holder at a disadvantage in that it could be seen as 'non-professional'. We are also aware that, because the proposals embodied in COM 579 before the Parliament are for the RPPL for aircraft up to 5,7 tonnes, some sectors of GA may be unhappy with the 'recreational' title. Therefore, we recommend that the title of the proposed licence be reconsidered. Maybe a 'European Private Pilot's Licence' would be suitable, and within the licence structure there can be various ratings according to the type or complexity of aircraft, with gliders being one rating category. The current JAR PPL, with several important modifications, could be slotted into an EU private pilot licence structure above the sporting and 'recreational' category.

5. Operations

Gliding has operated satisfactorily for many years under self-regulated or self-governed operational systems under the control of the NGBs. The NGBs are constantly studying and implementing relevant safety measures to reduce risk. Therefore, there are potential risks and disadvantages in attempting to harmonise or standardise operations below the level of minimal Essential Requirements. Each National gliding body should be allowed to continue to set up their own rules based on their own Code of Practice. The EGU is prepared to provide detailed recommendations, based on best practice, developed successfully over many years in EU countries. Again, the concept of an assessment body may perhaps be extended to operations. In this case, a NGB could apply to become an assessment body having full delegation to self manage operations in compliance with the essential requirements for operations.

An important issue is also the difference between commercial and recreational activities. The operation of gliding clubs, on which the gliding movement relies, should clearly be excluded from the scope of any rule concerning commercial operations by the adoption of an appropriate definition. Gliding clubs are definitely 'non-profit' associations, respecting the relevant laws in the Member States. The training, maintenance and supporting work is done by thousands of volunteers. In some places, larger training centres are set up to provide comprehensive training facilities, but despite the fact that they may employ some part-/full time staff, their goal is not to make any profit for redistribution to the members. In a similar way, aero-towing, as practised in gliding clubs, should be excluded from any aerial work regulation, as it is fundamentally not commercial in nature, being an adjunct to the club operations solely to enable club pilots to launch their gliders.

We understand that EASA is considering regulating fractional ownership to prevent hidden commercial operations. Care should be taken to prevent the proposed rule being interpreted as encompassing, inadvertently, the multiple ownership (known generally in gliding as syndicates and in most cases, arranged between private individuals for their own leisure use) of gliders used for sporting and recreational aviation pursuits or even the operation of gliding clubs.

6. Conclusion

These proposals are not very revolutionary but we think that instead of starting from zero, we should take examples from the self management and self regulation procedures which have been put in place for decades in some countries and which have proven to work satisfactorily. These procedures should allow the safety objectives of EASA to be achieved whilst keeping the administrative and cost burdens as low as possible for the glider pilots. The gliding movement in Europe is mature and well-organised and is ready to take over, or in some cases continue, this responsibility.

April 2006

Roland Stuck and David Roberts