



BGA Engineering News

Published by the British Gliding Association

Number 37, July 2006.

Regional Technical Officer vacancies

We are holding the vacancies open for a little longer so if you were thinking of applying, now is the time.

The role of RTO is becoming very important and the CAA and EASA recognise the valuable role RTO's play in the glider airworthiness scene. As far as the BGA is concerned the RTO is as an important a role as the Regional Safety Officer or Examiner and a strong team will help us maintain our relative freedom from state regulation of the sport.

The RTO's involvement can be as much or little as can reasonably be expected from a person with a busy family life and full time job or someone who is perhaps retired with more time on their hands. Possibly you have been fixing gliders for many years and are looking to hand it on to new blood but are looking to stay involved and pass on some of your experience. Getting involved in the Quality and Regulatory side can be very rewarding.

Please call the office and ask Debbie for an information pack.

"G" registration gliders, C of A's and 30 day tickets

As post September 2003 gliders (new or used) need to have applied for their CAA registration before 28 September this year, a reminder about C of A's and 30 day tickets is due.

A new glider whilst it is being issued with a BGA C of A, can have a 30 day ticket applied once the acceptance check is completed and provided the glider is actually registered and is displaying the approved "G-XXXX" marks. **You must not issue a 30 day ticket if the glider is not fully registered with the CAA or is not displaying the G- marks.**

You can check if the glider is registered either by asking for sight of the registration document or checking on the CAA web site GINFO data base. The CAA database is updated every day.

<http://www.caa.co.uk/application.aspx?categoryid=60&pagetype=65&applicationid=1>

All Gliders imported after 28 September 2003 must be registered with the CAA before 28 September 2006 and carry the appropriate "G" marks. Ideally this should be done at the C of A renewal. The CAA have a list of all non registered gliders in this category totalling about 40 at last count. Failure to register will mean grounding, as it will be illegal to fly after the end date until registered.

Further information on registration and markings in BGA AMP leaflet 3-7

<http://www.gliding.co.uk/bgainfo/technical/ampmanual/3-7.pdf>

Glider repairs

Looking at the usual tide of glider accident reports this time of year, fortunately most being minor! it is worth remembering that if you are asked to carry out a repair to a post 28/9/03 glider, the repair scheme must be approved. If the repair is not in the glider repair manual or other approved literature the repair scheme must be approved by the aircraft manufacturer or a DOA (design company). Failure to carry out approved repairs will invalidate the Part 21 approval and may mean the repairs having to be redone before the EASA C of A can be issued.

This of course, could be a very costly and un-necessary exercise for want of carrying out an approved repair.

Human Factors in Engineering

Recent mishaps and incidents have highlighted the need for Human Factors (HF) awareness in aircraft maintenance. We must recognise that after all we are all human (yes its true!) and subject to human frailties.

Human factors must not be dismissed as something that happens to others and not me or I am immune (HF factors themselves) and it comes in many forms and usually when we are unaware that anything is wrong. It may cloud our judgement; cause us to take inappropriate actions, be a distraction, affect the quality of our work and so on and the result may at best be an embarrassment or at worst cost someone their life.....

A recent case of a rudder being cross connected is a very good case in point.

The maintenance error is understandable, as this particular aircraft has an unusual system where the cables are supposed to cross, but due to a sequence of unrelated events the error was only found on the first flight – fortunately no one was injured and only minor damage resulted. The story briefly:

- The aircraft maintenance was completed and control checks carried out, however the inspector had recently had a traumatic family event and was obviously very upset so it is possible his judgement was clouded.
- Pressure was being applied from the glider owners to complete the maintenance
- As a result the sense of operation check of the rudder was inadvertently omitted. (Just think about it, how many times have we all assumed something is OK and not actually checked!)
- The glider was then handed over to one of the syndicate owners with an instruction to check the controls once the glider was rigged. The glider returned to the operating airfield.
- As luck would have it, another syndicate member rigged the glider and carried out the pre-flight inspection. He was unaware of the specific requirement to check the controls. As a result the ailerons and elevator were checked for operation, connection and sense however the rudder was not. Presumably because the first can be done by standing next to the glider and the rudder requires someone to sit in and operate the pedals. Also the rudder is not normally disconnected and reconnected as part of the rigging procedure.
- The glider was launched and fortunately made a safe, if rather untidy landing, that resulted in a minor ground loop.

Several regulations and recommended practices introduced to prevent this type of occurrence were not followed, some on the part of the inspector and others by the pilots, The story illustrates the underlying problem that we need to be aware of Human Factors in aircraft maintenance where a completely unrelated event can have a snowball effect with dire consequences.

Human factors are to be given a higher profile in BGA engineering and we are considering introducing training for all inspectors.

New face at Leicester

As you may know, Colin decided to leave the BGA and develop his career in IT, we wish him well.

Terry Eato has joined us as Technical Administrator and is learning the ropes as he takes over the C of A renewal responsibilities. Terry comes from an industry and automotive background and is a keen aero modeller and his business skills will greatly assist us in the ever changing EASA environment. I trust you will join me in welcoming Terry to the BGA.

Jim Hammerton
Chief Technical Officer