CONVERTING FROM POWERED FLIGHT TO GLIDING – A GUIDE FOR GLIDING INSTRUCTORS

The BGA is promoting gliding to aeroplane pilots as an opportunity to increase experience and develop handling skills. It is hoped that some will subsequently take up our fantastic sport; perhaps in addition to whatever other flying they do.

Instructors who could potentially fly with an aeroplane pilot who wants to experience gliding may find the following detail helpful.

General

Most aeroplane pilots will be able to handle the glider more or less immediately. They will normally be aware that they must learn to coordinate rudder and aileron, and there is a different circuit and a launch to master. Briefing these key points in detail before starting gliding conversion training will save time.

When dealing with aeroplane pilots, it will be a balancing act to ensure you're not 'talking down' to someone who may already be an experienced pilot vs. covering what will be needed. Our advice is to take each part of the training syllabus and think about the differences between the experience of the powered pilot and the exercise in hand. So, as an example, the powered pilot may have done some formation flying. There are parallels with aerotowing. For example, they will be used to lining up visual markers in the same way as we use when teaching the aerotow.

Specific advice

It sounds obvious, but after the initial shock of having no engine, aeroplane pilots converting to gliders really do seem to forget that they cannot open the throttle at any time! This isn't surprising of course, as it's ingrained in aeroplane training to use the throttle. This can lead to converting aeroplane pilots being distracted enough to get too low to return to the airfield, for example if their workload happens to be high. The solution is to try to tie into their normal scan an element of situational awareness; where am I and can I easily return to the airfield? This can be tied into the normal gliding scan cycle (eg lookout, attitude, instruments). Most aeroplane pilot are used to periodically completing a FREDA check (fuel, radio, engine, direction and altitude) that keeps them focussed on managing the aeroplane when flying outside the circuit.

Aeroplane pilots generally fly aircraft that, when sat on their wheels, are higher off the ground than a glider. This can lead to rounding out too high in a glider. Solution: show them the seated attitude with the glider on the ground (lower the tail of a K21/K13/Twin Astir and show them etc).

Some aeroplane pilots are in the habit of 'dumping the flaps' (retracting them) as soon as they are on the ground. This may translate into retracting the airbrakes once they have touched down, which, obviously, has the opposite effect!

Aeroplanes normally land at airfields with known elevations and fixed circuit heights around fixed features, so flying a circuit by judgement only (not using the altimeter) will be a challenge. Remind them that this is being done so that they can land anywhere without reference to the altimeter. The elevation of a farmer's field is usually unknown.

Most aeroplane pilots will not have experienced spinning. Stall/spin training is an important part of a gliding conversion.

Most aeroplane pilots are not used to flying as close to others as we do in thermals, etc. Soaring will be very new and probably very appealing to aeroplane pilots who are getting the gliding bug! An early briefing on soaring protocols will be helpful.

An aeroplane pilot can fly solo in a glider as soon as the instructor is satisfied the pilot meets the normal required standard of flying and judgement as set out in the syllabus. Completing the Bronze gliding experience, theoretical knowledge and skilltest requirements should be reasonably straightforward. Encouraging progress is important.

Finally

These are some general points that are worth bearing in mind:

Culturally, there will be differences for powered aeroplane pilots. They may not be used to hanging around and socialising so much while on the airfield. You may have to manage their expectations in this respect.

Gliding training is competency-based. Whilst the skills needed to convert from aeroplane flying to gliding can be picked up quite quickly, it takes a while to build the experience needed to be competent and safe as a gliding cross-country pilot and to take care of passengers. Use Threat and Error Management to think ahead.

Powered flight is not better or worse than gliding. It's just a different form of recreational flying.

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