



**BGA Full Rating Instructor
Preparation Guidance**

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Section 1 – Introduction

The BGA Full Instructor rating is a key element of BGA instructing and pilot assessment.

The Full Rating is also a gateway for instructors to become an instructor coach, a CFI and a Regional Examiner.

Scope

This publication offers training guidance for a prospective Full Rated instructor ahead of a Full Rating assessment and those conducting that training.

Every candidate has a different set of skills and / or previous experience so this training is not mandatory. If you are an Assistant Instructor with no other experience, the training guidance in this document comes strongly recommended! If you are a CFI or Senior Instructor conducting Full Rating preparation, then you are advised to follow the guidance regarding the required standards.

Prerequisites

Entry requirements for the Full rating assessment are listed in 'Instructor Requirements' in Laws and Rules. The Full rating privileges are also described.

Please note that experience shows that if candidates are not in current solo and to a lesser extent instructing practice, it is likely they will find the suggested training and assessment hard going.

Training in preparation for a Full Rating assessment

This document includes schedule of suggested training. There is no requirement to attend a course.

Arranging the Full Rating Assessment

Prospective full rating candidates should arrange an assessment via their CFI.

Section 2 – Suggested preparation

To prepare for the assessment with a Regional Examiner, it is useful to split up this preparation in the same way as the assessment can be structured.

A – Ground activity

Ground based teaching could be said to fit into four basic camps:

Briefing / Teach Type	When	Where	What	How Long
Theory long briefing	Anytime that fits with syllabus	Classroom	Theory	20 mins maximum 30 mins
Exercise	Just before the flight or set of flights for the day	Classroom / Bus - anywhere that works, but away from distractions	The air exercise, what they will see in air and briefly recap any relevant theory	5 - 20 mins
Pre-flight	Just before you get in the glider	Bus or beside glider	Recap very brief exercise points and who does what when	2 mins max.
De-brief	After the flight	Bus or somewhere away from distractions	Coaching, praise, log-book, progress card, what next; what to read up before next week / flights etc	Depends! Might lead to further theory or pre-flight briefs

It is likely that at least part of all the above briefing types will be encountered during a Full Rating assessment, so it's important to practice with a knowledgeable person beforehand. An example of a pre-flight brief is shown below.

Let's say it has been decided to teach the pupil a land-ahead launch failure:

Briefing

Let's keep things simple and assume that the student has never seen this demonstration before. We will use a simple 3-point brief. Aim, TEM, Exercise.

Aim

The Aim addresses what we want to get out of the exercise and the reasons we might be carrying it out. If it's a turn, it's obvious why we might want to make the glider turn. If it's our example launch failure, the reasons we are doing it might not be obvious to the student – so they will need to be explained. In this case the safety issues around handling launch failures correctly are the obvious teaching points.

TEM

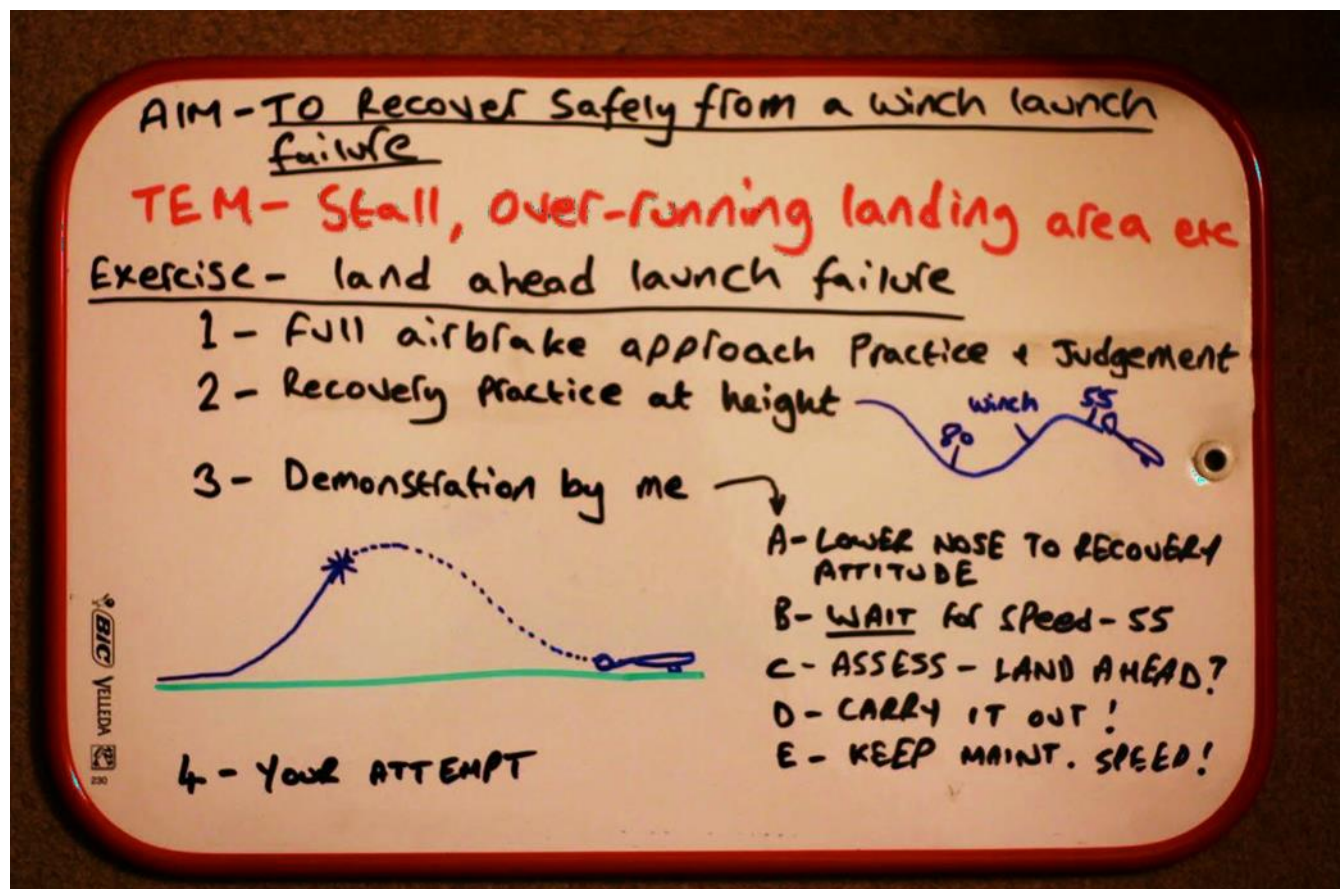
What we often call airmanship has some structure to its teaching – Threat and Error Management. This is simply an assessment of what might leap up and bite us while we are flying this exercise. Specifically, the threats are external to our operation. An example that we could nearly always cite is collision, for instance. Errors are perhaps common errors that students (or even instructors) might make that will need tackling. There is a good CASA (Australian CAA) document that might inform if you are interested: google for CAAP 5.59. The section on TEM starts on page 36. It actually makes quite a lot of sense if this is incorporated into the brief rather than it being picked up ad hoc by the student.

Exercise

The exercise can then be developed with very simple diagrams along with the stages of training. So, for a land ahead launch failure, you might want to do an approach with full airbrake (after a normal circuit) to allow the student to judge how far the glider will go in today's wind conditions. You might want to demonstrate and have the student try a recovery at height. You could then demonstrate the failure and recovery before letting the student try. This sounds to me like a good 3x winch launch lesson and hopefully a lot of fun for the student and instructor alike.

Example

Below is an example of the land ahead launch failure exercise briefing on a portable white board. Obviously, it's good to do these briefings where there are no distractions, but one of these boards can make a formal brief convenient even on the back of the bus out on the airfield. It's not perfect – just an example!



Theoretical briefings

Theory briefings that you are likely to be asked to perform include any of the subjects in the BGA instructors' theoretical manual. This means that this manual is essential reading for the prospective Full Rated instructor. During theoretical briefings, you could use the same basic structure as the pre – flight briefing mentioned above. So, if you were to brief how a wing works, for instance, the aim would be that the student understands how a wing produces lift. You could then split the briefing up into manageable chunks – dealing perhaps with how the air flows round the shape of the wing, how the difference in pressure creates lift, and how the angle of attack and airspeed effects the lift produced. You could then move on to the two principle causes of drag created by the wing. While mentioning all of this, it's important to keep referring to the real world and how the theory effects things in real life.

A note on theoretical knowledge

It isn't possible to retain all the theoretical knowledge required to be a good instructor. That's why we have books and other resources. However, your assessor will expect that you have a good basic knowledge of theory in areas like principals of flight, meteorology and air law. Unfortunately, the only way to gain this knowledge is to read the theory books. Without wishing to dwell on the negative, it is possible to fail a full rating test due to lack of theoretical knowledge. If you don't know the answer, don't guess – find out. This will impress the assessor much more.

Fortunately, there is an existing measure for the depth of theoretical understanding instructors require. The BGA manual, 'GLIDING – Theory of Flight', includes a 'Star Rating' system. Items are marked "Really ought to know", "Items you should know something about" and "Of interest."

Full Rated instructors must be knowledgeable and therefore should have read this publication (or equivalent) and be at least at the "Items you should know something about" standard.

B – Flying

Personal flying skills and airmanship

This part addresses your ability to handle the glider while you are engaged with another task, such as demonstrating an air exercise. This is one of the items of preparation that is quite hard to coach for – it comes with experience. However, it is useful to fly with another experienced instructor (ideally your CFI or deputy) to get an independent view of your flying. For example, you can practice by patterning through an approach control demonstration while asking your experienced instructor to monitor your speed control, approach safety and coordination. To pass your assessment, you will need to be very accurate while patterning the exercise coherently. Please see Appendix 1 for a more detailed description of the required flying standard and some commonly experienced problems.

In addition to the above, you must make good airmanship decisions while teaching. Again, this comes with experience, but some self-criticism and analysis goes a long way to improving in this respect. You must fly in a manner that you would wish your students to emulate. So, you should never be in a position where you need to carry out a low final turn or scrape back onto a straight in approach after getting caught out downwind.

Teaching skills

Good teaching which allows the student to learn as efficiently as possible, while keeping the fun factor alive is one of the main attributes of a good instructor. You must be able to demonstrate that you can not only perform demonstrations of selected exercises, but also engage with the student in a way that is likely to get the message across to that individual. Can you get a flying subject across to a student in a clear and concise manner – as briefed? Can you use the glider to demonstrate the things that you want to demonstrate?

C – Supervising

During your assessment, there will be a discussion about airfield setup, supervision, and safety cultures within your club. It is appropriate during your training to get involved with some of these issues within your club. Discuss with the club senior instructor issues like:

- Why the airfield is set up the way it is
- Morning briefings and what items are important to cover
- How trial lessons and other visitors get from the clubhouse or car park to the launch point
- How powered flying interacts with any winching that goes on
- How the pilots below Bronze and cross-country endorsement level are developed as pilots
- How the pilots below Bronze and cross-country endorsement level are supervised
- What elements might form a brief for someone setting off on a first cross-country

D - Assessing

As a fully rated instructor, you will be able to assess pilots for the Bronze and Cross-Country Endorsements, which together are the equivalent of a glider pilot licence. You should discuss these assessments with your mentors. It is important to be familiar with the gliding syllabus, BGA Laws and Rules, and the BGA Examiner Standards document.

As a Full Rated instructor, you will be expected by other instructors and pilots to be able to offer an opinion on all sorts of go / no go decisions relating to diverse subjects like the

suitability of pilots to carry out various aspects of flying. You should discuss examples with your mentors at your club.

E – Check Flights

A Fully Rated instructor must have developed the skills to design, construct and conduct the full range of check flights. The examiner will provide a check flight scenario, such as a visiting pilot wishing to fly a club single seater, an out of practice pilot or similar. The candidate must obtain sufficient information from the 'pupil' to conduct an appropriate check flight. Whatever the scenario, the examiner (pupil) will attempt to simulate a marginal pass/fail flight, including a requirement for some fault finding.

F - Common Faults

Instructors sometimes fail to ask sufficient questions to enable them to design an appropriate check flight. Sometimes the 'pupil' is allowed to sail gently around a circuit without really 'checking' anything. Instructors commonly under-plan check flights, although they must be flexible enough to re-plan in the air if the pupil proves significantly different from what could have been reasonably expected.

No prompting, overt or covert, should take place regarding where and when to start the circuit or regarding the conduct of the circuit, despite the 'pupils' invitation to prompt.

The candidate should never require a 'Running Commentary' from the 'pupil'.

Control interference is *unacceptable*. It sometimes occurs when the pupil is not responding sufficiently to prompts.

Section 3 - Instructional Flying Standards

Preparation for a Full Rating Test must focus on safe flying / good handling ability and good airmanship. Good handling is essential. The candidate will be expected to demonstrate at least the following standards. The sub-headings provide some specific advice and are followed by some of the problems encountered on Full Rating assessments.

Lookout and Airmanship The candidate's head should be constantly on the move, scanning the horizon, checking instruments and monitoring the position of the aircraft in relation to the landing area. When exercises are flown, they should be with due consideration to height loss and position with respect to entering a normal circuit.

Speed Control The candidate should maintain safe and appropriate control over airspeed and attitude (consistent with the prevailing conditions) in all phases of flight. This will be monitored throughout the test. Whilst turning steeply, 50-60°, the speed should remain within ± 5 Knots. Approach speed should **never** be below any pre-declared minimum and not more than reasonable and appropriate for the conditions. The candidate must maintain a safe speed (no matter the circumstances) on the winch launch.

Lack of Slip and Skid All turns should be well coordinated, ie in balance. If mistakes in coordination occur, the candidate must recognise when the glider is beginning to yaw and take prompt action to smoothly remedy the error. Tardiness in correcting coordination errors is unacceptable. There must be **no** tendency to over rudder turns - especially final turns.

Circuit Planning Circuits must be planned such that the final turn is completed at a safe height (normally above 300') and positioned to allow a stable 2/3rds airbrake approach. If a normal circuit cannot be flown, the glider must be positioned to achieve a safe landing with as high a final turn as safely possible in the circumstances.

Winch launching Winch launches must follow the advice of the safe winch launching initiative.

Winch Launch Failures The candidate must be able to demonstrate the *correct recovery* procedure. Recovery speed should **never** stray below the minimum discussed in eventualities, and not more than reasonable. Turns should **never** be over ruddered. The emphasis should be on getting safely back on the ground, disregarding convenience – even when practising.

Stalling and Spinning Candidates should be able to demonstrate all of the stall exercises and the individual symptoms. They must be able to recover using minimum-height-loss techniques. They must be able to demonstrate the differences between spins and spiral dives and use the appropriate recovery. **Full** opposite rudder must be used on the recovery from a spin.

Landings Landings made by the candidate must be fully held off and stop within a few metres of a pre-arranged spot when it is safe to do so. The approach should be planned to ensure spare energy is available should sink be encountered in the latter part. i.e. a half to two thirds airbrake approach.

Section 4 – Commonly Observed Issues During Full Rating Tests

- Failure to fly well enough to give an effective demonstration. Sometimes a candidate gives a poorly coordinated demonstration and then criticises the 'student pilot' for flying to a similar standard!
- Spinning and stalling exercises are sometimes accompanied by inadequate or rushed HASSELL checks. Often the clearing turns are insufficient to cover 360° and are not repeated sufficiently frequently throughout an exercise sequence to maintain safety.
- Spin recovery action is sometimes continued after the glider has stopped spinning.
- Instructors must exhibit appropriate confidence when spin training to promote confidence in their pupils.
- Demonstration aerotows are sometimes inadequate. Insufficient attention is paid to the limits of movement allowed behind the tug, sometimes they are not demonstrated at all.
- Demonstrations of circuits are sometimes poor circuit and/or with inadequate reference to the judgement cues or adequate lookout.
- Approach control is occasionally inaccurate. As this is an area of importance due to accident rates, it's important that safe approaches are carried out.
- Control interference is unacceptable and will be watched for very carefully. It sometimes occurs when the pupil is not responding sufficiently to prompts.
- Occasionally, even for good instructors, exercises go wrong. However, this is acceptable if the candidate recognises it, accepts it, and re-demonstrates correctly without prompting from the examiner.

Exercises must not be rushed, but time should not be wasted.

End.

