



Managing Straight-in Finishes

Mike Codling.

Straight in competition finishes are a fast and safe way to end a competition flight. Performed well, they serve to keep the active runway clear of parked gliders whilst not compromising your task speed. The concept is simple, descend towards the threshold past the finish line, managing your energy so that you arrive at the far end of the strip having landed at an appropriately low speed.

Importantly, this is not a simple task and should not be attempted (or asked of) by low hour pilots. For a start you'll need a low-level finish endorsement. Be familiar with your glider's placarded speeds for airbrake and flap operation. You should be comfortable that you can confidently perform a ground effect run the length of an airfield. Grab an instructor, get briefed and take a 2-seater for a circuit or two. You should have practised straight in finishes before arriving at a competition, ask your coach for assistance and inform the duty instructor of your intention prior to your flight/s.

The plan is to cross the finish line and/or airfield boundary at around 100 knots and 50 – 100ft above ground. Your final glide should be executed with this in mind. At 10km make your inbound call, stating a straight in as your option. A brief 2km call is not a bad idea either “QM 2k”. You will have been eyeballing the airfield and judging your glide from at least the 10km mark. At or just before the finish line lower your undercarriage. This will dirty the air and start the process of losing energy. As well it gets the most embarrassing mistake of a wheel's up dealt with early. In a flapped glider you should start lowering your flaps in accordance with placarded limits. From this point maintain your height and when your speed has decreased to an acceptable level, barely crack your airbrakes. (Avoid pulling up to lose speed). You'll need to brace your elbow against your thigh particularly in gliders that have airbrakes that suck out. From this point the task is to manage your airbrakes and attitude to maintain a path to an aiming point at the far end of the runway. You should reach it at the correct speed to settle onto the ground. As always keep flying the glider until it has come to a rest. Get that tailwheel on the ground too, last thing you need is a ground loop. Avoid taxi-ing across the path of other aircraft. You now need to exit the glider and get it pushed to the side. Your crew will be near as everyone knows where to go to find gliders that have landed (the far end of the strip).1074

Options. Not everything goes to plan. Firstly, if you've overcooked your final glide and will have

way too much energy for a straight in you should call a circuit early and position yourself correctly to avoid conflicting with the straight-in gliders. In the case of low energy, make an appropriate radio call to the effect and plan to land short to one side of the strip. If it looks like you'll be unable to make the airfield, decide early, select an appropriate field and land there (you should have them picked out during the practise period).

