

### The Aim:

Fun and Friendly competition is still the driving factor for these events so we will continue to maintain a simple set of rules. For more information, please contact Guy at [mrp\\_guy@yahoo.co.uk](mailto:mrp_guy@yahoo.co.uk)

### The Competition:

Following a timed launch window and reaching a **maximum launch height of \*200m** for Electric classes, and for the Bungee class from the point you release from the bungee, you are to glide for as long as possible (target of **10 min** for **Electric**, and **5 min** for **Bungee**), then perform a spot landing. Scores will be awarded for both length of flight and spot landing. For Electric classes only, Flight scores will be normalised per heat to account for changing weather conditions.

*\*Depending on weather condition the Contest Director on the day could reduce the launch height to 150m or lower.*

### Glider Type and Classes:

There will be **Three** Classes competing in their own Championships and flying in their own rounds/heats

- **2m Electric Launch (\*2m Class)**, up to 2m wingspan (200cm).
- **4m Electric Launch (4m Class)**, From 2.01m and up to 4m wingspan (201cm to 400cm).
- **Bungee Launch (Bungee Class)**, up to 2m wingspan (200cm).
- **For 2025 Pilots can compete in one, or both Electric classes.**
- **You cannot fly the same model in both the 2m and 4m classes.**
- **You cannot fly more than 3 different gliders in each class at any event.**
- **For 2025 the Bungee class will run as a lunchtime 'self-scoring' competition. You can compete in the bungee class regardless of which electric classes you fly in.**
- With the '**Keep It Simple**' approach, **any** style and make of glider can be flown within the wingspan ranges above, and that can be hand launched either by the pilot or a helper.
- Any construction method/material is allowed from Foam to Balsa to Carbon Fibre, and there is no restriction on control surfaces so gliders with ailerons, flaps, spoilers, airbrakes, etc can be used.
- **For 2025 competing gliders in the 2m and 4m electric classes will need to be fitted with Height Limiters – please see a full explanation at the end of the rules.** The Height Limiter as a minimum function needs to cut power to the motor at an altitude of 200m. Most Height limiters will also cut power to the motor after 30secs if the altitude of 200m hasn't been reached.
- *\*For 2025 we will aim to run a sub-category/championship within the 2m Class for Pure RES Models. All 2m models will still fly together and the 2m RES will still compete for the overall 2m Championship. To be considered for the RES Championship, models need to meet the FAI F3L Construction rules which can be found here - [https://www.fai.org/sites/default/files/sc4\\_vol\\_f3\\_soaring\\_24.pdf](https://www.fai.org/sites/default/files/sc4_vol_f3_soaring_24.pdf) - on Page 51*

### 2m & 4m Electric Classes

**Launching (Electric)** - On Launch both the 2m & 4m classes will get a **30 second** motor run time to climb to a **maximum launch height of 200m**. All motors are to be switched-off at the end of the 30 second motor run time even if the height limiter has already cut power to the motor due to the 200m launch altitude having been reached. Motors are not to be used again for the remaining flight and landing. If you do start your motor, you will score '0' points for that heat. *(Safety is obviously a concern so if you get in trouble and you need the motor to rescue your model, please do so)*

- With the use of height limiters gliders should be powered up at the launch spot and thereby calibrating the altimeter to where the glider is to be launched from, and not a higher or lower point from say the pits.
- At the 30 second motor cut call, which will be made by the Timer, even if motors have been cut by Height Limiters, you must also ensure that your motor switch is physically moved to the off position, and where used, ideally any motor activation/kill switches should also be switched to the off position. This is to avoid accidental motor start-ups along with ensuring all motors have been cut.

**Heats (Electric)** - Each Pilot will fly in 4 \*Heats (per class) at each event with the worst scoring heat being dropped. Points will then be combined from your best 3 heats to give the overall score for each Pilot for that event. For each heat there is a possible 10pts for flight and 5pts for landing giving a maximum of 15pts available. This leads to a maximum of 45pts for each event after your worst score/heat has been dropped.

## **South West Thermal Gliding Competition 2025 – Rules 1.2** Feb '25

*\*For efficiency of time the scoring system generates all heats with the maximum number of pilots in all. Therefore you will fly in 4 heats but this isn't strictly divided in to 4 clear separate rounds.*

If 3 Heats have been flown by all Pilots and a 4<sup>th</sup> heat cannot be fully flown due to adverse weather conditions, then the results will stand and count towards the overall championship. If this is the case, there will be no dropped scores.

**Points For Length of Flight (Electric)** – Flight time for electric classes starts at the launch of the gliders at the start of the heat with the Target Flight time being 10min. For each heat your score will be normalised against the best flight time from that heat. This is to account for changing weather conditions and gives all Pilots a chance to score maximum flight time points in each heat (max 10pts). In essence though you score a point for each full minute flown up to the target flight time of 10 minutes (10pts Max)

If you fly-out the target flight time you then have 1 minute to complete your landing in. If you fly over this 1 minute landing slot **no** landing points will be awarded.

A score of '0' for flight time, and in essence the heat, will be recorded for the Pilot if:

- The motor is used after the 30 second motor cut time has been called following the launch phase.
- The Glider comes to land outside of the landing boundary specified by the organiser.
- The Glider has crashed through electrical or structural failure. *(Note - If gliders survive a mid-air collision and safely fly-out the heat then a score will still be awarded)*

**For 2025 we will have 2 Timers/Scorers for each round – we will be calling on help from all competitors to provide help with this. This is also to increase safety on the flight line.**

**Points For Spot Landing (Electric)** – Each pilot will have a designated landing spot as their 'own' landing target. This will also be classed as your \*launch spot. Points will be scored on the distance from the landing spot with the position being taken from where the glider comes to rest, not where it first touches down, and will be measured from the nose of the glider. Distances will be measured by a 'tape' with the end secured at the centre of the landing target. No landing aids such as hooks or barbs are allowed.

*\*For 2025 it has been discussed that the actual launch spot could be set approximately 10m upwind of the landing spot to increase safety. This will be tested at the first few events.*

Landing points awarded based on distance from the landing spot are;

- A Distance of **1m or less** from the landing spot scores = **5pts**
- A Distance between **1m to 2.5m** from the landing spot scores = **4pts**
- A Distance between **2.5m to 5m** from the landing spot scores = **3pts**
- A Distance between **5m to 10m** from the landing spot scores = **2pts**
- A Distance between **10m to 15m** from the landing spot scores = **1pt**

A score of '0' landing points will be recorded for the Pilot if:

- The glider during landing hits the Pilot or any other persons.
- The nose of the model sticks into the ground and the tail does not come to rest on the ground.
- The model comes to rest more than 15m from the landing target.
- **Pilots who are still flying 1 minute after their classes target flight time has ended.**

### **Bungee Class**

Following the 2024 championship the Bungee heats and Championship will take a different format to the Electric Classes. The basic format will take the form of a self-scoring, lunch-time event, similar to postal events some might be familiar with. In essence the Bungee Class will run at lunch time with a dedicated 1-hour slot for pilots to complete their 4 flights within.

#### **For Bungee Launch Gliders -**

- During the dedicated 1-hour slot (lunch break) Pilots may perform 4 launches at their discretion.

## **South West Thermal Gliding Competition 2025 – Rules 1.2** Feb '25

- The bungee flights are self-scored by the pilot or a helper and recorded on the provided Score Cards.
- Bungee flight time is taken from the point when the models release from the bungee. This is to avoid models being "kited" to gain extra time.
- The Target Flight time for the Bungee class is 5 minutes.
- Your flight times will be converted to seconds for scoring purposes.
- Paper-based Score Cards will be issued and used on the day to keep track of results
- Your best 3 flights scores from the possible four flights will be added together to give you a total score for each event. Championship positions will be calculated following the event as positions on the day will be taken from the paper-based score cards.

**Points For Length of Flight (Bungee)** – Flight time for the Bungee class **starts at the point the gliders release from the bungee** with the Target Flight time being 5min. For each flight your score will be recorded in seconds which gives you your Flight score. Landing bonuses, given in seconds, will then be added to this score.

If you fly-out the target flight time you then have 1 minute to complete your landing in. If you fly over this 1 minute landing slot **no** landing points will be awarded.

A score of '0' for flight time, and in essence the heat, will be recorded for the Pilot if:

- The Glider comes to land outside of the landing boundary specified by the organiser.
- The Glider has crashed through electrical or structural failure. *(Note - If gliders survive a mid-air collision and safely fly-out the heat then a score will still be awarded)*

**Points For Spot Landing (bungee)** – Each Pilot will nominate one of the available landing spots as their landing target. Points will be scored on the distance from the landing spot with the position being taken from where the glider comes to rest, not where it first touches down, and will be measured from the nose of the glider. Distances will be measured by a 'tape' with the end secured at the centre of the landing target. No landing aids such as hooks or barbs are allowed.

Landing points are awarded based on distance from the landing spot, which are given as seconds as below. The emphasis for the Bungee class will be flight time with landing points being a smaller value compared to that of the electric classes.

- A Distance of **1m or less** from the landing spot scores = **5 seconds**
- A Distance between **1m to 2.5m** from the landing spot scores = **4 seconds**
- A Distance between **2.5m to 5m** from the landing spot scores = **3 seconds**
- A Distance between **5m to 10m** from the landing spot scores = **2 seconds**
- A Distance between **10m to 15m** from the landing spot scores = **1 second**

A score of '0' landing points will be recorded for the Pilot if:

- The glider during landing hits the Pilot or any other persons.
- The nose of the model sticks into the ground and the tail does not come to rest on the ground.
- The model comes to rest more than 15m from the landing target.
- **Pilots who are still flying 1 minute after their classes target flight time has ended.**

A set of standardised competition bungees that will be used at each event. For reference the competition bungees are made up of 10m of Silicon Rubber Tube (8mm OD) with a 50m line. *(If you have questions regarding the bungee type, please contact Guy at [mrp\\_guy@yahoo.co.uk](mailto:mrp_guy@yahoo.co.uk))*

### **The 2025 Championship:**

Currently **8** Championship rounds have been agreed and planned for, with the best **5** results to count towards the championship. If further events are added it will remain with your **5** best results being counted towards the championships. If events are cancelled due to weather or other extenuating circumstances, then the number of results counting towards the championship will be reduced.

## **South West Thermal Gliding Competition 2025 – Rules 1.2** Feb '25

### **Height Limiters - Please Read:**

As the competition has developed over the last 4 years it has now become clear that a fixed motor run time for each class is no longer giving an equal launch height across the range of gliders taking part. Although never before directly stated, the old motor run times were targeted to give an equal launch height of approximately 200m across the different electric classes. During the 2024 championship events it was clear that some models could almost double the targeted launch height in the given motor run time, especially in the 2m class, whereas some models in the 4m class were struggling to get to 200m in 20 seconds.

Therefore for 2025 we will be introducing the need for height limiters to be fitted to gliders in both the 2m & 4m electric classes. **For both classes the height limiters should be programmed to cut power to the motor after a 30 second motor run, or the glider reaching an altitude of 200m – which either one happens first.**

Concerns have been raised, and noted, that this could put some people off from taking part especially if they only compete in a few of the events, for example just their home club's rounds. **In not wishing to exclude anyone from taking part some alternative options regarding the need for height limiters have been considered and are outlined below.** These will still be at the discretion of the contest director on the day so it is advised to contact the organisers prior to the event if you have any questions. As time will be called after the 30 seconds motor run window the main focus on these alternative methods will be to maintain and achieve a maximum launch height of 200m.

- Some radio systems, especially open-source style with telemetry, and where RX's are fitted with Altimeters, and GPS units, you can program your TX/RX to cut power at predetermined altitudes. If this can be demonstrated, then this system could be used. These systems may also allow motor run times to be set.
- Through the use of variometers giving live telemetry feedback on height which is presented in either a reading of metres or feet, then a 'observer' could monitor this and confirm when to cut motors if the target launch height is reached before the end of the 30 second motor run.
- Gliders would compete test launches with a 'borrowed' height limiter to assess climb rate and a bespoke motor run time given to the pilot/glider for the duration of the event.
- Based on style and type of glider, and at the discretion of the Contest Director on the day, it would be recognised that the model would be unlikely to achieve the 200m launch height within the 30 seconds and would be allowed to compete without any 'height limiting' aids.
- For Newcomers wishing to have a go, or those who are unlikely to fly in more than 2 events during the year, and at the discretion of the Contest Director on the day, Pilots would be allowed to compete without the any 'height limiting' aids if none of the above points can be met, albeit a bespoke launch time might be given based on the style and type of glider being flown.

**For those Pilots serious considering entering 5+ events and competing with the championship in mind, we really would ask that you secure a Height Limiting Device** – the simplest and cheapest version suitable for this competition is the CAM Height Limiter unit which is known to be stocked by HyperFlight and has been used and tested by many competing pilots already.

<https://www.hyperflight.co.uk/products.asp?code=CAM&name=cam-height-limiter>

If you do have any questions around the need for height limiters, please contact Guy at [mrp\\_guy@yahoo.co.uk](mailto:mrp_guy@yahoo.co.uk)

### **Event Dates:**

- **Torbay Rd.1 - Sat 5th April** (Reserve 12th April)
- **Okehampton Rd.2 - Sat 26th April** (Reserve 3rd May)
- **Catstor Rd.3 - Sat 17th May** (Reserve 24th May)
- **Okehampton Rd.4 - Sat 21st June** (Reserve 28th June)
- **Torbay Rd.5 - Sat 19th July** (Reserve 26th July)
- **Catstor Rd.6 - Sat 9th August** (Reserve 16th August)
- **Farway Common T.B.C Rd.7 - Sat 30th August** (Reserve 6th September)
- **Okehampton Rd.8 - Sat 20th September** (Reserve 27th September)

There will be an **entry fee of £3** per pilot for each event with funds going towards prizes for the day and overall championship, and any equipment needed.

## **South West Thermal Gliding Competition 2025 – Rules 1.2** Feb '25

**Those wishing to take part will need to register by 6pm on the Friday before the event day by contacting the C.D via e-mail or the SW Model Gliding Telegram group.**

