

# **Two Oceans Slope Soarers Pylon Racing Event**

These rules relate only to the Two Oceans Slope Soaring Pylon Racing Event of the 27<sup>th</sup> and 28<sup>th</sup> of January of 2024

Flying sites and number of rounds flown shall be governed by the match director

## **Basic rules**

1. Three different classes may be contested. The entry fee shall allow the contestant to enter any or all of the three classes. The match director will decide on how many classes each contestant may enter on the weekend depending on the number of entries and the weather conditions.
2. A plane may be entered into more than one class.
3. A contestant may have more than one plane per class
4. No glider entered may have a propulsion system fitted unless the propeller has been removed.
5. The three classes are:
  - 1.) Open Class
  - 2.) 2 Meter Class
  - 3.) Combat Wing Class
6. A scored flight must consist of ten (10) laps flown by a single pilot that is timed. The distance of each lap shall be decided by the match director who shall attempt to have it at 100 metres in distance, never longer. The match director shall have the final word in the length of a lap.
7. The match director shall stipulate the pilot standing position for each round.

## **Glider specifications.**

### **1. Open Class**

Any glider constructed of either foam, balsa or composite materials with the following specifications.

Maximum wing surface area 150 dm<sup>2</sup>

Maximum flying mass 5kg

Maximum wing loading 75 g/dm<sup>2</sup>

The pilot may have an assistant who may only launch and offer advice until the model has passed Base A.

The assistant may help with the landing after the timed run has been completed.

## **2. 2 Meter Class**

Any glider constructed of either foam, balsa or composite materials with a wingspan of no more than 2 meters.

The pilot may have an assistant to launch and give advice throughout the timed run but may not touch the transmitter until the timed flight is complete where after the assistant may help with the landing if required.

## **3. Combat Wing Class**

Aimed at the swept combat wing (like the Wingrider 48" Bee). Limited to 48 inches / 1220mm wingspan. No fuselage pods are allowed and must have two vertical fins on the wing tips. The leading edge must be of constant sweep angle. Construction may only be of soft foam with no rigid covering materials such as balsa or composite materials.

The pilot may have an assistant to launch and give advice throughout the timed run but may not touch the transmitter until the timed flight is complete where after the assistant may help with the landing if required.

The Match Director shall attempt, whenever possible, to adhere to the following rules as per the FAI, unless otherwise stated in the specific rules of the 3 classes stipulated above. The Match Director shall have the final authority in how the event is run.

### **FAI rules relating to F3F slope soaring pylon racing**

**5.8.3. Competitor and Helpers:** The competitor must operate his radio equipment personally. Each competitor is permitted one helper. The helper is only to assist and advise the competitor until the model is passing Base A for the first time and after the timed flight is completed.

**5.8.4. Definition of an Attempt:** There is an attempt when the model has left the hands of the competitor or his helper.

**5.8.5. Number of Attempts:** The competitor has one attempt on each flight. An attempt can be repeated if:

- a) the launching attempt is impeded, hindered or aborted by circumstances beyond the control of the competitor, duly witnessed by the official judges;
- b) his model collides with another model in flight or other impediment and the competitor is not to blame on that account;
- c) the flight was not judged by the fault of the judges.

- d) the model (i.e. the fuselage nose) fails to pass above a horizontal plane, level with the starting area, within five seconds of exiting the course, due to circumstances beyond the control of the competitor, duly witnessed by the official judges.

The re-flight shall happen as soon as possible considering the local conditions and the radio frequencies. If possible, the model aircraft can stay airborne and has to be brought to launching height, launching speed and launching position before the new 30 second period is started by the judge.

**5.8.6. Cancellation of a Flight:** A flight is official when an attempt is carried out, whatever result is obtained.

A flight is official but gets a zero score if:

- a) the competitor used a model not conforming to FAI rules;
- b) the model loses any part while airborne;
- c) the helper advises the competitor during the timed flight;
- d) the model is controlled by anyone other than the competitor;
- e) the flight is not carried through;
- f) the model lands outside the assigned landing area;
- g) the model is not launched within 30 seconds from the moment the starting order is given.
- h) any part of the model aircraft fails to pass above a horizontal plane, level with the starting area, within five seconds of exiting the course.

**5.8.7. Organisation of Starts:** The flights are to be performed round by round. The starting order is settled by draw in accordance with the radio frequencies used.

The competitor is entitled to three minutes of preparation time from the moment he is called to the ready box. After the three minutes has elapsed, the starter may give the order to start. After the starter has given the order to start, the competitor or his helper is to launch the model within 30 seconds. The competitor or his helper is to launch the model by hand from the starting area indicated by the organiser.

If possible, the starting area, including the audio system, shall be situated in the middle of the course (equal distance from Base A and Base B).

The time from launch to the moment the model enters the speed course must not exceed thirty seconds.

If the model has not entered the speed course (i.e. first crossing of Base A in the direction of Base B) within the thirty seconds, the flight time will commence the moment the thirty seconds expires. If the model has not entered the speed course within the thirty seconds, this is to be announced by the judges.

**5.8.8. The Flying Task:** The flying task is to fly 10 legs on a closed speed course of 100 metres in the shortest possible time from the moment the model first crosses Base A in the direction of Base B. If some irremovable obstacles do not allow 100 metres the course may be shorter but not less than 80 metres. This exception does not apply for world or continental championships.

**5.8.9. The Speed Course:** The speed course is laid out along the edge of the slope and is marked at both ends with two clearly visible flags. The organiser must ensure that the two turning planes are mutually parallel and perpendicular to the slope.

Depending on the circumstances, the two planes are marked respectively Base A and Base B.

Base A is the official starting plane. At Base A and Base B, an Official announces the passing of the model (i.e. any part of the model aircraft) with a sound signal when the model is flying out of the speed course. Furthermore, in the case of Base A, a signal announces the first time the model is crossing Base A in the direction of Base B.

**5.8.10. Safety:** The organiser must clearly mark a safety line representing a vertical plane which separates the speed course from the area where judges, other officials, competitors and spectators stay. Crossing the safety line by any part of the model aircraft during the measured flight will be penalised by 100 points subtracted from the sum after conversion, the penalty not being discarded with the result of the round. The organiser must appoint one judge to observe, using an optical sighting device, any crossing of the safety line.

**5.8.11. Judging:** The flights are judged by two judges who do not have to be the same for all competitors.

The judges' task is to control that the flights are performed according to the rules, to be time keepers and to ensure that the right distance is flown.

**5.8.12. Scoring:** The result of the flight is stated as the time in seconds and hundredths of seconds obtained by each competitor. For the purpose of calculating the result of the round, the competitor's result is converted this way:

$$\frac{1000 \times Pw}{P}$$

Where **Pw** is the best result in the round and P is the competitor's result.

**5.8.13. Classification:** The sum of the competitor's round scores will determine his position in the final classification. If more than three rounds were flown the lowest round score of each competitor will be discarded and the others added to obtain the final score which will determine his position in the final classification. If more than fourteen rounds were flown, the two lowest round scores will be discarded.

To avoid ties in the classification concerning the five best scores, "classification rounds" are flown until the ties are broken. If this is not possible, the result of the discarded round will determine each competitor's position in the final classification.

**5.8.14. Organisation of the Contest:** The competition must be held at a site which is suitable for slope soaring.

When marking the starting and landing areas and the turning planes, the organiser must take into account the configuration of the terrain and the wind direction.

**5.8.15. Changes:** Any changes in the flight and landing areas may be made only between flight rounds.

**5.8.16. Interruptions:** A round in progress must temporarily be interrupted if:

- a) the wind speed constantly is below 3 m/sec or more than 25 m/sec.

- b) the direction of the wind constantly deviates more than 45° from a line perpendicular to the main direction of the speed course.

If these conditions arise during the flight the competitor is entitled to a re-flight.

A round in progress is to be cancelled if:

- a) the interruption lasts more than thirty minutes;
- b) fewer than 50% of the competitors have been able to perform the task caused by marginal conditions. Without the condition "constantly" (i.e. 20 seconds) have been met and thus caused re-flights.

**The Match Director shall have the final authority in all the above listed rules**