

**1. OBJECTIVE**

To provide closed circuit pylon racing between individuals at the club level at a reasonable cost.

**2. AIRFRAME SPECIFICATIONS**

**2.1 MODELS**

For beginner racers, all variety of aircraft are permitted. Once a racer has become more experienced, the racer is encouraged to fly a standard Club 20 type aircraft. Full race specific aircraft such as the Nelson powered Q500 aircraft, Q40, Formula One and FAI style aircraft are not permitted. CPPRA district legal Webra powered Q500 aircraft are legal but points for no more than three season races per year will be counted in the season point total. These three races must not occur on consecutive race weekends. Delta wing aircraft are not permitted.

**2.2 FUSELAGE**

At the widest point the fuselage must be a minimum of 2.75" (70mm) and the depth a minimum of 5" (127mm) at its deepest point, these dimensions must occur within the wing chord but need not coincide. The cockpit must measure a minimum of 1.25" (32mm) wide at a point 1.5" (38mm) down from its top.

**2.3 WING**

The wing area shall be a minimum of 300 sq.in (1935 sq cm) this to include the area taken up by the fuselage at the wing root, and have a minimum thickness of 0.875" (22mm) measured outside the fuselage wing fillets. The wing thickness may decrease in a straight taper from root to tip, minimum tip thickness being 0.625" (16mm) measured 15 inches (381mm) from the center of the wing. Wing span shall be not less than 30 inches (762mm) and not more than 46 inches (1168mm).

**3. FLYING CONTROLS**

There is no restriction on the type of radio control or the number of flying control functions although the class is primarily intended for three function proportional equipment which includes a positive means of engine shut off.

**4. PROPELLER**

A fixed pitch commercially available two bladed stock manufactured propeller. The propeller cannot be modified in any way except for balancing, where sanding/trimming on one blade only will be allowed. For Webra Quickie aircraft competing in Club 20, the propeller must be a plastic 9x7 sport prop.

**5. SPINNERS**

A rounded spinner must be used having a diameter not less than 1.5 inches (38mm). If a spinner nut is fitted, the fuselage immediately to the rear of the propeller shall remain a minimum of 1.5 inches (38mm).

**6. WEIGHT**

The weight of the model as flown, excluding fuel shall be not less than 2.5lbs (1136gr)

**7. FUEL**

The use of glow fuel with a maximum content of 15% nitromethane (standard Q500,Q40 racing fuel) will be permitted for racing. The fuel is to be provided by the racers themselves or may be provided by the club. Ether and/or starting fluids may be used externally by each competitor to aid only in the cold weather starting sequence.

## **8. ENGINES**

The engine must be front induction side exhaust with a displacement of 3.0 to 3.5cc. The carburetor may be either a venturi type or throttleable R/C type but the throat diameter at its smallest point must not exceed 8.0mm (.315 inches) and it must be round. The piston and liner, connecting rod, wrist pin and prop driver must be unmodified. Only steel ball bearings may be used. Repairs to a damaged engine may be carried out using the manufacturer's recommended parts, to bring the engine back into or as near as possible, to its original state. The engine may also be repaired by brazing or welding, provided that the performance is not enhanced. Only commercially available makes of engines shall be allowed. Any form of in flight mixture control or fuel pumps is not permitted. Only conventional threaded glow plugs are allowed.

## **9. SILENCERS**

A tuned pipe or muffled silencer must be utilized. It must be a commercially available item. Modifications to accommodate mounting, tuning, and pressure fitting adaptations are allowed.

## **10. RACE COURSE DIMENSIONS**

Course size is 100 ft between base pylons and 380 ft from the base pylons to the No.1 pylon. The start line will be no more than 100ft from the base pylons. The four launching positions will be marked at 15ft intervals along the start line center to the course. The pylons should be a minimum of 15ft high, the top of the No1 pylon should be above the horizon if possible.

## **11. MID AIR COLLISIONS**

In the event of a mid air collision, all the models involved in the collision will land and receive one point only for that heat.

## **12. STARTING PROCEDURE**

The race will consist of 4 competitors maximum and ten laps of the course will be flown. Models will be hand launched with a staggered start from behind the start line. One minute will be allowed for starting engines. If none of the models in the heat has launched on command of the Starter, then all pilots will receive zero points for that heat. When at least one model in the heat has been launched, the other models must be launched by the time the first model has reached the spot on the pylon course opposite the start/finish line after having rounded #1 pylon. A competitor may only retrieve his model after the race has finished and all other models that raced have landed. Pilots and their callers must stand behind the start line at all times during a race.

## **13. TIME KEEPING**

The pilot's caller will be responsible for keeping the race time for his pilot. The time will be reported to the starter at the completion of each race. The starter may request a visual verification of a competitor's time. All watches are started at the beginning of the 60 second count down clock. Watches are stopped when the appropriate aircraft crosses the finish line after the completion of 10 laps. If a pilot receives one cut, then a penalty of 15 seconds will be added to the flying time. If a pilot receives two cuts, then he will receive no points for that heat of flying.

## **14. DANGEROUS FLYING**

Dangerous flying is defined as consistently flying below pylon height, which endangers officials or other competitors. The Starter may give a competitor a warning for low flying. If the competitor continues to fly dangerously, the Starter can assign a cut to the pilot or disqualify him from that heat. The initial warning counts for all following heats, semi finals and finals. At the Starter's discretion he may disqualify a competitor from the event if he thinks the competitor is continuously flying dangerously and warnings have not been heeded.

## **15. PYLON JUDGES**

For each pylon, one judge shall stand directly under the flag to determine whether or not a cut has been made. The cuts will be reported to the starter at the completion of each race.

#### **16. INTERPRETATION OF THE RULES**

Any interpretation of these rules will be at the discretion of the acting CMPRA Executive Committee, who's decision will be final.

#### **17. RULES ENFORCEMENT**

Enforcement of these rules is the responsibility of the Contest Director or Starter, whose authority is absolute. Rule changes will only be permitted once yearly at the annual general meeting of the CMPRA. Any new rules will be effective for the next Club 20 racing season beginning in the fall of the year.

#### **18. SAFETY AND GENERAL RACE PROCEDURES**

MAAC safety procedures and guidelines must be followed at all times. General race procedures as outlined in the MAAC Pylon Race Procedure Guide should be followed as much as possible but may be modified for the purposes of winter Club 20 racing.