

## 2011 PYLON RULES

### GENERAL INFORMATION

1. This is a Palos R/C Flying Club event. It is not sanctioned.
2. Hot dogs and soft drinks will be provided to flyers and workers after racing is finished.
3. There will be prizes given to pilots and workers on a random drawing basis.
4. The frequency board will be used. Pilots are responsible for radio frequency conflicts.
5. The CD and Starter will be responsible for the heat matrix.
6. Pilots can enter more than one airframe, however each must complete their respective heats in the proper sequence.

### RACING RULES

1. AMA 424 and safety code apply to 2-turn course, nominally 660' in length.
2. Planes should fly around the course anti-clockwise, above the pylons at all times.  
BUT: a legal lap only has only to extend beyond the pylons; it is not necessary to physically go around the pylons; it is safer and less crowded.
3. Three-plane heats will be run. When all pilots signal ready, the starter will announce "start engines" and a 60 second clock will begin. Flyers can launch at any time when ready (hand launch is O.K.), and take up position behind turn 2. After 60 seconds, a 5 second count down will be given by the starter. Planes should fly behind turn 2 and try to time their passing of the turn 2 pylon just after starter reaches zero. A penalty may be applied to those who clearly cross the pylon too soon. Those with engine trouble or take-off failure can try again at any time, even after the race has started.
4. The race consists of 10 laps, if no cuts. Pull up out of the course when you have completed your heat. Land in the landing zone as directed by the CD, after the last racer has completed the course. A 10% penalty is imposed on a single cut. Two cuts and you are out of that heat (results in zero points). Point values are: 3 for first place; 2 for second; and 1 point for third. You must complete the 10 lap race to receive points.
5. A handicap system based on engine rpm will be applied as follows: All engines will have ground rpm recorded by the CD. The handicap is based on each individual engine's RPM relative to the highest RPM at the field.  
For example: If the highest rpm of all planes present is 16,000, and your rpm was 14,000, then your handicap is  $14000/16000$ . Your time will be reduced by this fraction for scoring points. In no case will a handicap be less than 0.75 (in this case, engines turning less than 12,000 rpm will be assumed to turn 12,000 rpm) The flyer with 16,000 rpm has a handicap of 1.00.  
All engines **must** use an APC 9x6 prop for the tachometer test and rpm record.  
**Other props can be used for racing, but only a 6 inch pitch . . . Except for engines with a tuned pipe or high performance muffler.** Those engines must use the APC 9x6 prop for flying also.
6. Engines of .40 c.d.i. displacement are preferred, however because of the handicap system in use, engines of a larger displacement may be used. **All** engines regardless of size will be subjected to the tachometer test using the APC 9x6 prop. If the engine is too large to safely turn the APC 9x6 prop at full throttle, it cannot be used in the event.

7. The caller/timer will use a stop watch to time the aircraft. Timing will begin when the starter announces "Go" ... or the start of the race...and will stop when the racer crosses the plane established by pylon 2 on the last lap. Individual pilot finish placement during heat racing is **not** final. Final finish placement for each heat is calculated at the end of the event using the handicap system. Because of the handicap system any particular racer may cross the finish line after other planes in the field but still be declared the first place finisher for that heat. Or, on the other hand, the first to cross the finish line may not be the first place finisher for that heat because of handicap system.
8. The caller/timer will also have a mechanical counter "clicker" to count laps. The caller must announce the lap count to the flyer so that the 10 lap course can be established. The caller must observe the light bar for his color light, and yell "turn" to his flyer when it flashes. Colors will be assigned before each race when each aircraft is held up for identification to the light bar signalmen.
9. Use your own fuel. Load enough fuel to fly much more than the 10 laps; you may have to loiter prior to racing, or to land.
10. Bring as many APC 9x6 props as you think you will need. We have extra 9-6 props.
11. Check your glow plug between races!
12. GO FAST, TURN LEFT AND HAVE FUN!

#### Staffing

1. A starter
  2. A caller, and a timer if possible, for each pilot.
  3. 3 signalmen on the lights at turn 1.
- Total: 7 to 10 people. The CD can race also.

#### Starter:

1. Stationed in the pit area, to signal the beginning of the start engine timing.
2. To conduct the count down to the race start.
3. To announce that start of the race.
4. To announce the end of the race... the last plane to complete 10 laps.
5. Starter decisions are final.

#### Callers/Timers:

1. One caller for each pilot during a heat.
2. Will verbally announce to his pilot when his plane has crossed the turn 1 pylon as indicated by the light bar signal.
3. May also be the timer and lap counter. Stop watches and lap clickers will be available
4. All callers who observe cuts at turn 2 must report them to the CD as they occur.

#### Turn Judges/Light Bar Signalmen:

1. You will be stationed in line with turn 1.
2. Know your airplane! It will be displayed prior to the start of the heat for you to identify. You must be able to follow it.

3. Judges/Signalmen must Signal as the aircraft cuts the imaginary vertical line to the turn 1 pylon, not some time later or before it gets there ... no anticipation!
4. Signalmen call in a cut on the 2-way radio if your aircraft does not cross that line.

#### Suggestions for aircraft

Quickie 500 type aircraft are preferred. ARF's and ARC'S like the viper at Tower or local supporting hobby shops are excellent. They are inexpensive airframes and easy to assemble. We do not weigh or measure them, but we do inspect them informally for safety. Any 40-sized aircraft will do. If enough trainers, sport planes, and electrics are present, they can fly in their own heat. Any engine that can run an APC 9/6, or even a 10/6, is fine.