

# AGS Pylon Racing

The field is located in Tioga County off of Day Hollow Road and only 3.4 miles from Rt. 26.

Look for the AGS logo on a sign on the north side of Day Hollow Road at Warrick Road.

AMA membership is required to fly at the AGS field and all races are open to any AMA member.

Planes with both glow engines and electric motors are permitted.

Channel 42 cannot be used at the AGS field.

# ***AGS Pylon Racing***

The purpose of the event is to promote affordable pylon racing for the Aero Guidance Society and other RC pilots.

Pylon racing is one of the most exciting aspects of RC. It is also one of the least expensive means of getting an adrenaline rush. Multiple planes flying an oval race course at the same time, neck and neck, is exciting for the pilots, their helpers, race officials and spectators.

The AGS Pylon Racing supports two racing categories, Quickee 500 and Sport Cub.

The Quickee 500 category will allow both glow engines and electric motors.

The Sport Cub category is for Park Zone Sport Cub planes with no modifications except for coloring.

## ***REGISTRATION***

There is a registration fee is \$ 35.00 for the full season or \$5.00 per race; money collected is used to cover cost of awards and refreshments for race helpers, and the end of season party. The fee covers all classes and categories.

## ***RACE FORMAT - QUICKEE 500***

Up to eight AGS Pylon races will be held, if possible.

Races will consist of two classes, new racing pilots and experienced racing pilots.

Each pilot will have an opportunity to race in three heats.

Heat matrices will be set up for 2 plane heats and will not be changed after the start of racing.

An airplane which has completed all ten laps of a heat shall be considered to have finished the heat.

A handicap system will be used for determining starting positions as follows:

- For the first four races, starting positions are determined by the finishing order from the previous year.
- After the fourth race, the current season points are used to determine starting positions.
- The pilot with the lowest points will start first, the next higher point total will start 2nd.
- New pilots will always start ahead of experienced pilots when they race together.
- A new pilot will automatically receive the lowest ranking for the class in which they are entered. If more than one new pilot joins a class, each pilot's ranking will be assigned randomly by the Statistician for the first four races in which they participate.

The matrix for each heat will be based on current season points.

- Lowest seasonal points are the first heats
- Highest seasonal points are the final heats.

A two pylon race course will be used. The runway used for takeoffs and landings, and all areas which are part of the racing oval or infield, are considered to be part of the race course.

All flying must be done in a counterclockwise direction around the pylons.

Pilots must fly on the proper side of the race course at all times. (See Safety section below.)

Each Quickee 500 heat will consist of 10 laps, or 9 1/2 laps if wind direction requires it.

Sport Cub planes will fly 5 lap races.

Planes must complete all race laps to receive points.

Cut Rule: 1 cut = +1 lap, 2 cuts = +2 laps, 3 cuts = Disqualification from that heat.

Pilots who are new to the AGS Pylon event must demonstrate their proficiency to the Race Coordinator by flying ten laps around a setup race course before being allowed to race.

All new pilots must have an experienced pilot as a caller to help them fly a safe course.

No limit on engine starting time.

The Starter will implement a staggered start to avoid collisions.

When launching models for the start of a race, the Starter must use a full arm horizontal figure "8" motion with the green Starter's flag, at a rate of about 1 second per each half of the figure "8" shape.

Pole position (the one closest to the inside of the oval) starts on the first drop of the flag, second position starts on the second drop.

Restarts are not allowed if the plane does not get airborne at the drop of the initial start flag. The pilot's helper must immediately leave the runway.

When a pilot completes all laps of a heat, he must climb and clear the race course, and allow the rest of the pilots to finish the heat.

Planes will be cleared to land in the order in which they finished the heat as determined by the Starter.

Reasons for race cancellation include;

- High winds - determined by vote of those racers present.
- Rain - determined by vote of those racers present.
- Low ceiling or other low visibility conditions.
- Insufficient crew to operate the race safely.

## **SCORING**

Heat points - 1st place = 2 points, 2nd place = 1 point

A disqualification, a DNF (Did Not Finish), or a "black flag" event as defined below under Safety will result in zero points for that heat.

Any obvious equipment malfunctions during a racing heat, which causes a violation of the AGS safety and sound rules, will result in zero points being given to that contestant for that heat. The malfunction must be corrected before the plane will be permitted to fly in another heat.

Season points = total of each racer's best six races.

All ties in season point standings will be broken by fly-offs at the conclusion of the last race providing that each tied racer can fly at that time. If a racer cannot fly a fly-off race for whatever reason, a tie(s) will be declared.

# ***AIRPLANE SPECIFICATIONS***

**QUICKEE 500** - Refer to AMA Competition Regulations, event 424.

1. Box shaped fuselage.
2. Exposed engine/motor, no fuselage structure ahead of the firewall.
3. 3 3/4 lbs. minimum dry weight.
4. 3 1/2 x 2 7/8 inch minimum fuselage dimension.
5. 2 1/4 x 2 1/4 inch minimum firewall dimension.
6. 1/4 inch maximum radius on fuselage corners.
7. 500 square inch minimum wing area.
8. 50 inch minimum wing span, 52 inch maximum wing span.
9. 1 3/16 inch minimum wing thickness, 47 1/2 inches of wing span must comply.
10. 2 1/4 inch minimum landing gear wheel diameter, two wheels fixed, conventional landing gear required, no wheel pants.
11. The airplane must be equipped with a radio having four separate channels to independently operate the engine throttle, rudder/v-tail mixer, ailerons, and elevator. In-flight needle valve adjustment by radio is not permitted.
12. Unmodified, strictly stock O.S. 40-FP/FP-RN, or O.S. LA-.40 engine with O.S. muffler (P/N E-3030) must be used with cone insert.
13. Maximum 15% nitro content fuel.
14. APC 9x6 propeller required (no modifications except for balancing).
15. Electric Quickee 500 planes must set the maximum rpm at 13,000 rpm with the APC 9x6 propeller by using the throttle control limit on the transmitter.

## ***SAFETY***

Consideration of safety for spectators, participants, and contest personnel is of the utmost importance.

Prior to each heat, the radio transmitter controls must be exercised to verify that all transmitter controls cause the airplane's control surfaces to move in the correct directions.

All spectators, including pilots and helpers not participating in the heat, shall remain behind the safety fence during the heat.

All takeoffs, landings, and aircraft retrievals will be done under the control of the Starter.

All people on the race course during a race must wear a hard hat. This includes the starter and helpers.

Pilots must go behind the other planes on the starting line when moving to their flying positions.

A plane which fails to take off may not be restarted and may not be retrieved until after the heat has finished.

The loss of any part of the model aircraft after the starting signal and before landing disqualifies the model aircraft for that heat. The plane must be landed immediately and receive a safety inspection before flying again.

All planes involved in a mid-air collision must land immediately and receive a safety inspection before flying again.

Any plane that crashes and is damaged must be checked prior to flying again. Nose-overs on takeoff or landing do not apply. (A broken propeller does not qualify as "damage").

Planes landed prior to completion of a heat must not be retrieved until after the heat has finished.

If a pilot is informed that he is on the wrong side of the race course (opposing traffic) he must immediately move back to the proper side of the race course.

Hazardous flying over the race course or any flying over controlled spectator areas or pits during competition is a "black flag" offense and will result in disqualification from that heat. The pilot must climb and exit the race course immediately. A second violation will result in disqualification from the remaining heats. Repeated violations will result in disciplinary action.

Hazardous flying shall include but not be limited to:

- Flying the plane in any orientation other than upright with positive G turns during the heat.
- Flying on the wrong side of the race course (opposing traffic) unless the situation is corrected immediately.
- Deliberate deviations from the defined Race Format given above.
- Any flying that is deemed unsafe by the Starter.