



Southern Utah Pylon Racing Association

General Race Provisions and Racing Class Rules

The Mission of S.U.P.R.A. is:

- **To promote and encourage participation in the sport of radio control pylon racing in Southern Utah and Southern Nevada**
- **By establishing rules that provide a radio control activity which is safe, inexpensive and insures a level playing field for all competitors**
- **By acting as the controlling body for scheduled events**

Current as of May 20, 2008

Revision 01

GENERAL RACE PROVISIONS

These provisions cover the general formats for all classes. There may be some subtle changes from class to class. The specific race information may cover changes that are not reflected in these provisions or in the specific racing class rules. In any event, the specific race information and the rules for the specific classes take precedent. Be sure to read the specific race information as it becomes available. Many of the items listed here and in the specific racing classes are being held to the honor system. We want to keep the fun aspect in racing without feeling like we have to micro manage these rules, so please read all information carefully.

1. **AMA membership will be required and proof will be verified.**
2. **The current AMA safety code will be followed.**
3. **Event will be a two-pylon course.**
4. **All planes must comply with the current AMA safety code.**
5. **Backup airframes will not be allowed. This is on a per event basis. Only one plane can be registered per class, per event.**
6. **Fuel will be provided by the race organizer for the Sundowner and Sport Quickie classes only. See specific class rules for more information. All fuel left over from an event will be held by a member of the race committee and will be carried over to the next race.**
7. **Propellers will not be provided for any of the current classes. See specific class rules for more information.**
8. **Inspections of all aircraft will occur immediately following the pilot and safety briefing. Pilots will be asked to come to the briefing with their aircraft. Sundowners will be asked to have the canopy off for the inspection.**
9. **Heats will be run with 3 or 4 planes per heat depending on number of entries, 10 laps per heat.**
10. **All pilots, callers and anyone else considered to be "on the course" or in front of the safety line will be required to wear an approved hard hat, (which will be provided if needed). There will be no flying in front of the dead line.**
11. **All pushrods must be attached to the control surfaces and servos by either a clevis or other solid form. No ez connectors can be used.**
12. **However, ez connectors can be used on the throttle connection.**
13. **All engines will be required to have the throttle cut-off or engine shut-off available from the transmitter.**
14. **All takeoffs will be roll on ground. Pilots will be notified that the heat is starting and, at the starter's signal, will have 90 seconds to get the engine started and the plane airborne. Any pilot not in the air after 90 seconds will be signaled as a "No Start" and will not be allowed to take off. A re-fly may be granted under certain circumstances.**
15. **At the end of 90 seconds, the starter will signal "go" and the race will begin.**
16. **Official timing of the heat for all planes will begin when the first plane crosses the starting line after the "go" signal. From that point, all planes will be timed individually.**

17. Aircraft shall not fly lower than the tops of the pylons, (which will be between 15 and 20 feet high), at any time except during takeoff and landing.
18. Any plane jumping the start will be required to circle to the left, (not loop), behind the starting line and start again.
19. ALL planes must have flown prior to racing. (I.e., no maiden flights on first heat).
20. Planes may be inspected prior to racing. Inspections may include verification that the control surfaces and clevis' and control rods/horns are secure, props are the correct size where applicable, fuel is the correct type where applicable and that the airframes and engines are in compliance as described in the specific racing classes. Verification that the engine can be shut off from the transmitter may also be part of the inspection. Any non-compliance found during inspection may result in disqualification if it cannot be remedied before the start of the first heat of the day.
21. Depending on the number of entries, pilots may not be allowed to fly in the Sport Class if they are flying in the Sundowner or Sport Quickie class. This will be done in the interest of time and to also do what we can to keep the Sport Class an "entry level" class. However, pilots may fly in both the Sundowner and Sport Quickie classes.
22. Entry fees will be determined on a race-by-race basis. Entry fees will be on a per plane basis. Check the specific race information for details. Depending on the number of entries and possible unforeseen factors, up to 1/2 of the total monies received through entry fees may be given to the host club. The other 1/2 of the monies received through entry fees may be given to the race organization to cover the costs of the race and any possible prizes, which is yet to be determined.
23. Results will be entered into the scoring system and announced at the end of each event.
24. All efforts will be made to insure that the matrix will be managed so that everyone in the class gets a chance to race against all other racers in the class. This will be mainly dependent on the number of rounds that can be completed and the total number of pilots entered into each class.
25. Points are awarded according to finish position and number of cuts per heat. Depending on the number of planes in a heat, 3 or 4 points will be awarded for first place. Second place will receive 2 or 3 points, (once again depending on number of planes in heat). A cut will cost one point, two cuts will cost 2 points. More than 2 cuts will result in a zero time and last place. 1 point will be awarded to last place as long as the plane finishes the heat. 0 points will be awarded due to a "Did not start" or "Did not finish". Ties will be resolved according to best time. If a cut happens in the heat, the time will not count toward a best time for the plane.
26. A points system will be followed and awards for the top 3 finishers will be given for both the Sundowner and Sport Quickie classes at the end of the racing season. Points will be awarded according to overall finish position after each event. 1st place will be awarded 10 points, 2nd place will be awarded 9 points, 3rd place will be awarded 8 points, etc. If there are more than 10 participants in each class, all places from 10th and lower will be awarded 1 point. 1 point will be awarded to any participant who registers for an event even if he/she does not race.

Change history:

03/25/2008-original draft published.

05/21/2008-added wording concerning backup aircraft. Added wording for fuel being provided by race organizer and held over to next race. Added wording about propellers not being provided. Added wording about points system and year end awards. Added wording about entering and announcing results at the end of the event. Added wording about managing the matrix. Added wording about inspecting the aircraft.

SPORT CLASS

This class will remain basically unchanged from the way it has been done in the past.

NOTE: It is important to remember that this will be considered an "Entry Level" class for those who wish to give racing a try without feeling like they must have a specialty plane to participate. For now, this will still be a "Just for Fun" class with no real clear cut winner. The idea will be that if you have a plane that fits within the guidelines listed below, feel free to come out and give it a try.

1. All Engines and airframes must comply with the current AMA safety code.
2. Minimum wingspan will be 42 inches.
3. There is no minimum weight requirement.
4. Maximum engine size will be .50 c.i. for two-stroke and .80 c.i. for 4 stroke engines.
5. Twin engine aircraft are allowed as long as they meet the minimum wingspan requirement and the maximum combined engine displacement is equal to or less than .9000 c.i. for 2-stroke engines and 1.800 c.i. for 4-stroke engines.
6. All engines must be of stock configuration with no modifications or enhancements to increase performance.
7. Mufflers must be of stock configuration with no modifications or enhancements to increase performance. Baffle may be removed.
8. No tuned pipes or boost mufflers allowed.
9. Purpose built engines such as Nelson, Rossi or Jett engines are not allowed.
10. Y.S. engines are not allowed.
11. Any fuel may be used as long as it is commercially available and complies with the current AMA safety code.
12. Any propeller may be used as long as it is commercially available and complies with the current AMA safety code.
13. Airframes that qualify as Q-500 models will not fly in this class
14. EZ connectors are not allowed for any control surfaces, however they may be used on throttle connections.
15. All engines must have the throttle cut-off or engine shut off from the transmitter.
16. Because this is considered an "entry level" class, there will be no entry fee at this time. This may change in the near future.
17. Depending on the total number of entries, pilots may not be allowed to fly in other classes if they fly in this class. This will be at the discretion of the race organizer. This may be done in the interest of time and to help keep the class a true novice class. See the general race provisions for more information

Change history:

01/09/2008-original draft published.

02/09/2008-"Proposed class" wording removed.

03/24/2008-Wording added concerning racing in other classes. Wording added concerning entry fees. Changed maximum engine sizes for twin engine aircraft.

05/21/2008-Changed wording about entry fees. Added wording about removing the baffle from the muffler.

CLUB SUNDOWNER CLASS

PLEASE NOTE: If the listed class does not specifically say that something can or cannot be done to an engine or airframe or any other component, it should be considered that it CANNOT be done.

1. The model for this class will be limited to the [Hanger 9 Sundowner 50](#) only.
2. The engine for this class will be limited to the [Thunder Tiger Pro .46](#) only.
3. Muffler must be the original OEM, (Thunder Tiger), muffler that is supplied with the engine. No enhancements or modifications can be made to the muffler to increase performance, with the exception that the baffles may be removed. If it is necessary to replace the muffler, it must be a replacement in kind to the original muffler supplied with the engine. No Pitts Style mufflers.
4. Minimum dry weight of the model will be 5 lbs. 12 oz., (5.75 lbs.), Ready to fly, no fuel.
5. Fuel for this class will be provided by the race organizer. Fuel will have a Nitro-Methane content of 15%.
6. Propeller will be limited to the APC 10 X 7 Sport Prop only. Propeller will be the responsibility of the pilot. Race organization will not provide propeller. Propeller will not be modified in any way. Only whatever is needed to achieve proper balance may be done to prop as long as it does not change the pitch, length, thickness of blades or hub or anything that else that may change or enhance performance.
7. Model must be assembled according to the manual with no changes to the external outline of the model. No modifications or enhancements to the airfoils or any other part of the model are allowed.
8. Graphics may be added or removed or plane may be completely re-covered as long as no changes are made to the internal or external structure.
9. Pushrods may be replaced as long as it does not enhance performance.
10. Control horns may be replaced as long as it does not enhance performance.
11. E-Z connectors are not allowed on any of the control surfaces, however they may be used on the throttle connection.
12. It is highly encouraged and recommended that standard size servos are used. At a minimum the servos should be at least equivalent to the specifications of those recommended in the assembly manual. Micro servos are not allowed.
13. Engine shut off or throttle cutoff must be available from the transmitter.
14. Tailwheel assembly may be replaced as long as it does not enhance performance.
15. Main wheels and tail wheel may be replaced as long as they are at least the same width and diameter as the original wheels that came with the kit.
16. Main landing gear must be the original style that came with the kit. Gear may be re-painted or stripped completely clear of any paint or color, however, nothing may be added or removed from the leading or trailing edges nor any other part of the landing gear that may enhance performance.
17. The cover over the landing gear mount is optional.
18. It will be up to the race organizer as to whether wheel pants are required to be installed while racing, (knowing that some of the fields we may be racing at are rough or dirt).
19. The pilot in the model is optional.
20. Sealing the hinge gaps is allowed.
21. Spinner may be replaced, however the spinner must be a minimum size of 2 1/2 inches in diameter.

22. **It is highly encouraged that you add graphics to your aircraft to make it easy to identify while in the air.**
23. **Depending on the total number of entries, pilots may not be allowed to fly in the Sport class if they fly in this class or the Sport Quickie class. This will be at the discretion of the race organizer. See the general race provisions for more information.**

Change history:

02/09/2008-original draft published.

03/24/2008-Added specific propeller requirements.

05/21/2008-Added wording about fuel being provided by race organizer. Changed wording concerning prop. Changed airframe weight from 5.5 lbs. to 5.75 lbs. Added wording about removing the baffle from the muffler. Added wording about servo recommendations.

CLUB SPORT QUICKIE CLASS

PLEASE NOTE: If the listed class does not specifically say that something can or cannot be done to an engine or airframe or any other component, it should be considered that it CANNOT be done.

This class will remain basically unchanged from the way it has been done in the past. It will follow the basic format of the AMA 424 (Quickie 500 Sport) class with a few exceptions.

1. All Engines and airframes must comply with the current AMA safety code.
2. Minimum wingspan will be 50 inches.
3. Minimum wing area is 500 sq. in.
4. Wings and tails must be constructed of either all wood or wood sheeting over a solid foam core. Wings and tails manufactured in molds designed to produce hollow core structures are prohibited. Traditional fiberglass reinforcement, carbon fiber or inset wood spars continue to be acceptable. The last three inches of each wingtip may be made of any material.
5. There is no minimum weight requirement at this time but that is subject to change. Check the specific race information for details.
6. Maximum engine size will be .403 c.i. two stroke.
7. All engines must be of stock configuration with no modifications or enhancements.
8. Mufflers must be of stock configuration with no modifications or enhancements to increase performance, with the exception that the baffle may be removed.
9. No tuned pipes or boost mufflers allowed.
10. Purpose built engines such as Nelson, Rossi or Jett engines are not allowed.
11. Y.S. engines are not allowed.
12. Fuel for this class will be provided by the race organizer. Fuel will have a Nitro-Methane content of 15%.
13. Any propeller may be used as long as it is commercially available and complies with the current AMA safety code. (NOTE: Propeller type and size may be subject to change. Propeller may or may not be supplied by the race organizer. Check the specific race information for details).
14. Any type of wheel may be used but is subject to change. Check the specific race information for details.
15. EZ connectors are not allowed for any control surfaces, however they may be used on throttle connections.
16. All engines must have the throttle cut-off or engine shut off from the transmitter.
17. Depending on the total number of entries, pilots may not be allowed to fly in the Sport class if they fly in this class or the Sundowner class. This will be at the discretion of the race organizer. See the general race provisions for more information.

Change history:

01/09/2008-original draft published

02/09/2008-removed "Proposed Class" wording.

03/25/2008-added wording concerning propeller and fuel requirements.

05/21/2008-Added wording about fuel being provided by race organizer. Added wording about removing the baffle from the muffler.