

Four-Star-40 "Sport" Pylon Race

Revised October 3, 2012 in red

Previous Revision October 13, 2007

INTENT: An entry-level sport pylon race that will encourage sport pilots, with a sport plane and limited engine, to race. To have a low pressure racing atmosphere and when the racing is over the same planes can be "sport flown" every day.

The plane and engine are to be "completely stock" (as purchased from the manufacturer). Intentional "Border Line" rules bending will NOT be tolerated.

Good sportsmanship is a requirement.

PLANE: A Sig 4-Star 40. The plane must be built per the kit plans. A minimum ready to fly weight of 4-3/4 pounds, without fuel is required. No racing modifications or altering the standard kit will be allowed, other than the engine mounts may be lowered 1/4" (this helps keep the engine from bogging in a turn). No racing tires allowed. The wings must have the center section reinforced. A back-up plane may be used on the same frequency. Tail-wheel mounting may be strengthened as long as all parts are left on the exterior of the fuselage. No air-streamlining radiuses. 4 servos are to be used as per kit plans. Incidence angles as per kit plans. Canopy applied as per kit plans. The ARF Four-Star 40's are legal including the wheel pants.

- Templates will be made for thickness of fuselage, wing, horizontal & vertical stabs.
- Leading and trailing edges to be rounded, as shown on the plans. (The stock kit provides 1/4" balsa for horizontal & vertical stabs) Stock thickness MUST be maintained.
- Stock items: Landing gear (not sharpened or rounded), 2-3/4" tires (STD profile) Minimum tail wheel diameter is 3/4" as shown on kit plans.
- Engines: MUST BE STOCK. Bearings can be changed; Head gasket must be left in, compression or porting cannot be altered. Muffler headers cannot be altered.
- Carbs must be stock. Internal parts cannot be altered.
- Engine must be able to idle, and be shut off by radio control.

ENGINE: In order to keep the aircraft as evenly matched as possible and as simple as possible, the following engine rules will apply:

ENGINE TYPE: A stock Super Tiger GS40 with a "stock" type muffler to be used. Altered "High Performance" engines will NOT be tolerated. Engines to be mounted upright. Ground RPM's not to exceed 15,000.

PROP: To be furnished by host club, or if approved by CD you can use your own propeller. Only a Master Airscrew 10 X 6 GF1, GFII, (GF1 and GFII or no longer made but some are still available) GFIII, or Scimitar will be used. Club furnished balanced props are all to be placed in a bag. Pilots may choose to use club furnished props, or if approved by the CD, pilots may use their own propeller. They must be left as they are, except enlarging shaft hole, remove the flashing, and balancing by sanding one side only.

FUEL: Each pilot must furnish his/her own fuel not to exceed a standard 15% Nitro mix. The host club may furnish the fuel if so desired. Brand should be announced prior to race day.

RADIO: Radios must follow AMA and Club rules just as in sport flying. Any of our normal channels may be used.

RACING: 10 laps, with a flying start. Four plane heats, when possible. Two pylons set at 660 feet apart so long as the hosting field allows for safe operation. **Only have to fly the distance, you do not have to go around the pylons. Cut judges are instructed accordingly.**

- The pilot's caller must be with the pilot at the start & during the race.
- All pilots must have their planes in the "Ready Box" when called for the next heat.
- 90 seconds maximum to have the engine started & the plane in the air after the starter has identified aircraft to the judges & given the command to start engines. At the end of the 90 seconds (or if everyone is in the air & ready), the CD/starter will call out loud that a 10 second out loud countdown will begin now and

at the end of that countdown the race begins. **The race is officially started when the countdown reaches zero.** All aircraft are to be behind (or left side of) the Start/Finish line at the sound of the start horn. Any aircraft seen ahead of that line will be given 1-cut at that time, just as if they cut a pylon. 10 laps are to be flown. If possible there will be 4 planes in each heat, if the matrix allows.

- First place in the heat will receive 4 points; second place will receive 3 points, third place – 2 points, and fourth place – 1 point in a 4 plane heat. If a 3 plane heat is flown then first place receives 3 points, second place 2 points, and third place 1 point. If a pilot crosses the Start/Finish before the sound of the horn or cuts one pylon he will receive only 1 point. If a pilot cuts two or more pylons, he will receive “0” for that heat. If a pilot cuts any pylons, he is automatically put in last place and any pilots behind him that did not cut will advance one place in the standing. Ex: If a pilot in first place cut one pylon and the rest of the heat didn’t cut any, the second place pilot gets 4 points, the third place gets 3, the fourth place gets 2 and the first place pilot gets only 1 point. **When a pilot receives 2 cuts he MUST pull up & out of the racecourse. Anyone that refuses to do so may be disqualified at the discretion of the starter.
- When a cut judge calls in a cut for example he/she says “cut blue”, the CD/starter will respond “cut blue” to show acknowledgement of the cut back to the cut judge. The CD/starter will call out loud “cut blue” so that all pilots can hear the call. Radio traffic should be as brief as possible to preclude “walking” (talking over) on another incoming call.
- The starter will judge mid airs on an individual basis. If air-worthiness and safety are questionable, the pilot will be asked to land. The heat may be re-flown at the starter’s option.
- BONUS POINTS: Engine to be running after landing/rollout. Running engine: +1 Point Bonus.
- Pilot stations assigned according to matrix.
- Any pilot flying a plane behind the flight line will get a Black Flag and receive a “0” for that race.
- Prizes are to be awarded for 1st, through 5th if more than 10 entries. Ties will result in a fly-off unless there is a frequency conflict, where a flip of the coin will decide the winner.
- Any disagreements with a call or cut must be discussed with the starter. If the starter asks for assistance, the CD may be involved as well. Anyone caught harassing a Lap Counter or Cut Judge will be given a Zero or disqualified.