



DMAA SPORTSMAN GOODYEAR RACING RULES JANUARY 2014

OBJECTIVE: Sportsman Goodyear racing is intended to be a low-key sport racing event which can be enjoyed by both novices and experienced racers. By disallowing expensive, high performance racing engines, both cost and performance are kept down to a level which all modelers can manage.

APPLICABILITY: All AMA general and CL general rules, the AMA Unified Control Line Racing Rules, and rules for event #317 Control Line Scale Racing shall apply unless modified below. In the case of a dispute, the event director shall have the final decision.

ENTRIES: Once a contestant has used an aircraft or engine in the event, that aircraft or engine may not be used by another contestant in the same event.

CONTROL LINE SPECIFICATIONS: Models must employ two multi-strand lines of at least .015" diameter. Line length shall be 52' 6" \pm 6", measured from the grip portion of the handle to the center line of the fuselage. Pull test is 25 pounds.

RACES: Heat races shall be 80 laps, with a minimum of one required pit stop. Feature races shall be 160 laps, with a minimum of three required pit stops. Races should run three-up whenever possible.

FIELD LAYOUT: The inner circle shall have a radius of 58'. The outer circle shall have a radius of 68'.

MODEL SPECIFICATIONS: Per Control Line Scale Racing. The builder of the model rule shall not apply. Only one fuel tank is allowed, with a maximum capacity of one fluid ounce. The fill, vent, and pickup tubes shall have a maximum outside diameter of 1/8". Quick fills are prohibited. Fuel shutoffs are permissible. Hot glove or hot thumb electrical contacts shall not be permitted.

PROPELLER SPECIFICATIONS: Only commercially available wood or injection molded plastic propellers are permitted. Composite propellers (carbon or glass fibers with synthetic resins) are not allowed.

ENGINE SPECIFICATIONS: Non-schneurle ported engines may be of plain bearing or ball bearing construction. Schneurle ported engines must be of plain bearing construction only, except that the Fox 15BB schneurle engine is specifically permitted in accordance with the constraints outlined below. Plain bearing conversions of ball bearing engines are specifically prohibited.

The following major components of the engine must have been produced by the original manufacturer for the specific engine in quantities of at least 1000: the complete crankcase including front and rear ends, or upper and lower portions as applicable, the crankshaft, cylinder and piston. Engine parts may

be modified by removing material only, except that cylinder plating is permissible. Non-stock cylinder heads or head buttons may be employed, however glow engines must use a 1/4-32 thread glow plug if the stock cylinder head or glow head is not used.

ENGINE SPECIFICATIONS FOR MAGNUM/ ASP ENGINES ONLY: Beginning in 2014, the Magnum XLS 15A and ASP S15A engines may be used as described below. These two engines appear identical other than the name on the crankcase. They are characterized by schneurle porting, ABC piston/ cylinder metallurgy, dual ball bearings, and a 4 bolt blue anodized cylinder head. As of November 2013, the Magnum XLS 15 is being sold by hobbypeople.net as part #210605, and the ASP S15A is being sold by hobbypartz.com as part # 72P-S15A. These numbers are included for identification purposes only; engines may be obtained from any source. The regulations below apply to these engines only, and supersede the specifications in the previous paragraph.

Engines must be of stock configuration only. No material may be added or removed (except through normal wear and use), except the engine mounting holes may be enlarged or elongated. No non-stock parts may be substituted except for the glow plug, venturi, needle valve assembly, ball bearings, gaskets, screws, prop washer and prop nut.

Engines shall be equipped with a venturi and spraybar meeting the following specifications. The venturi shall have an inside circular bore of no more than 0.251". The venturi shall maintain this diameter for at least .155" at the throat of the venturi where the spraybar is located. The spraybar assembly shall be located precisely through the center of the venturi bore, and shall have a constant circular cross section of at least .153" diameter for the portion of the spraybar in the throat of the venturi.

MODEL SPECIFICATIONS FOR MAGNUM/ ASP ENGINES ONLY: Lines may attach directly to the bellcrank, or leadouts may be used. The bellcrank and leadouts or lines must be external to the normal contours of the wing. The line/ leadout guide(s) may be inset into the wing, but shall cover no more than 1/2" of the lines or leadouts. The bellcrank may pass through the fuselage but must be visible and not fully enclosed. The pushrod and elevator control horn shall not be recessed or enclosed in the fuselage. Fuel shutoff linkages are exempt from any of the above regulations.

Background Information

SPORTSMAN GOODYEAR SUMMARY January 2014 Bill Bischoff

For many years the Fox 15BB has been the only competitive engine in our Sportsman Goodyear event. Some of these engines run very well, others not so much. In recent months we have been working with the Magnum and ASP engines as alternatives for Sportsman Goodyear. What we have found is that they are of consistent quality, their ABC design makes for excellent restarting, they are fast, and work well right out of the box with no special fitting or modifications. All of these qualities make them attractive to novices and experienced competitors alike.

Once satisfied with their suitability, we were then faced with the task of drafting rules that would allow them to compete with the Foxes on an equal basis. Based on our testing, these venturi and airframe restrictions will accomplish that goal.

To summarize, here are the changes/ additions to the rules effective for 2014 in Dallas:

- 1)REQUIRE .015 STRANDED LINES FOR ALL ENTRIES. This will slow all the models down a bit, and stranded lines are MUCH easier to deal with!
- 2)ALLOW ONLY WOOD OR PLASTIC PROPS; NO GLASS OR CARBON. This may not be necessary, but it will keep things more "beginner friendly".
- 3)REQUIRE 3 PIT STOPS IN THE FINAL FOR ALL ENTRIES. Not all of the Fox entries can make the final in only two pit stops. The ASP and Magnum get much better mileage and can easily make the final in two pits. Requiring three pits for everyone levels the field, and emphasizes the team aspect of racing a bit more.
- 4)ALLOW THE MAGNUM AND ASP ENGINES, BUT REQUIRE STOCK ENGINES AND A SPECIFIC VENTURI SIZE. Based on current testing, a 1/4" venturi puts these engines on par with my (better than average) Fox. A venturi restriction is also a proven method of keeping an event's performance under control, as it can easily be changed.
- 5)REQUIRE EXTERNAL CONTROLS FOR MAGNUM AND ASP POWERED AIRPLANES. Requiring external controls simplifies model construction. This should make the event more attractive to novices and "casual" racers. By imposing this restriction only on Magnum and ASP powered airplanes, no existing equipment is obsoleted.