

2018 RCPRO Club 40 Rules for the Airplanes - Section 16 (Version 1/1/2018)

16.1 Airframes

16.1.1 Airframes Allowed

The World Models Sky Raider Mach II ARF or ARC, per instructions

The World Models LA Racer 40 ARF, per instructions

The StegallHobbies.com Club 40 Racer (Sky Raider clone), WM hardware or allowed substitutes.

SIG 4-STAR 54 EG ARF, per instructions

16.1.2 Airframe Variations

All factory versions are approved.

Additional color trim or recovering is encouraged.

You may modify older versions to match current factory versions.

You may use wooden blocks to modify the new LA Racer to install the older wire gear.

You may mix and match fuselages, wings, landing gear and empennages of The World Models planes and the Club 40 Racer. This does not apply to SIG 4-STAR 54 EG ARF.

16.1.3 Airframe Restrictions

Wheel pants are not allowed even if the kit includes them

16.2 Classes (in the order of advancing performance)

16.2.1 Club 40 Bronze:

16.2.1.1 Minimum weight: Minimum weight without fuel is 4 lb. and 4 oz.

16.2.1.2 Engines: (bushing bearing engines of .46 c.i. or below)

Thunder Tiger GP-40 or GP-42, OS .40 or 46 LA, OS .40 FP, Magnum .40 GP, Tower Hobbies 40 or clones of the listed engines are allowed.

16.2.2 Club 40 Silver

16.2.2.1 Minimum weight: Minimum weight without fuel is 4 lb. and 8 oz.

16.2.2.2 Engines: (ball bearing engines of .40 c.i. or below, with 16.2.2.3 exception)

Thunder Tiger Pro .40 BB ABC w/Muffler, SuperTigre GS-40, Magnum XLS 40, ASP S40AII, GMS .40 ABC BB, Evolution .40NT and .40 NX, OS .40 BB sport engines or any clones/copies of the listed engines.

16.2.2.3 Alternative Engines: NMPRA / AMA 424 Approved Evolution 46 NX with Evolution one piece muffler.

16.2.2.4 Props: The Evolution .46 NX is restricted to the APC 9 X 6 Sport Prop.

16.2.3 Club 40 Gold

16.2.3.1 Minimum weight: Minimum weight without fuel is 4 lb. and 8 oz.

16.2.3.2 Engines: (ball bearing engines of .46 c.i. or below)

Sport engines of .46 cubic inch maximum displacement with a maximum street price of \$160.

Pre-approved Engines: O.S. 46AXII, O.S. 46AX, O.S. 46FX, Thunder Tiger Pro 46, SuperTigre GS-45 Dual BB ABC, GMS .46 ABC BB, Evolution .46NX, Magnum XLS 46, ASP S46AII, or any clones/copies of the listed engines, or any Club 40 Silver engine as listed in 16.2.2.2.

16.3 Requirements:

16.3.1 Airframe:

A minimum of 3 hinges per aileron, 4 per elevator and 3 per rudder are required.

Wheels must have minimum diameter of 55 mm and minimum width of 20 mm. Hint: Stock wheels (60 mm) or DuBro 2 1/4 Low Bounce (57 mm)

Planes must have canopy, original or very similar.

Pushrods, if replaced, must exit the fuselage sides in the same position as original specification.

Servos controlling the pitch, roll and yaw functions shall be of adequate strength for the weight and speed of the aircraft. Two-screw servos especially must be mounted securely and of adequate strength.

No EZ-type connectors on ailerons, elevator or rudder. They are only allowed on throttle. Also see section 8, especially a. and i, of AMA Pylon Regulations or RCPRO Club 40 Rules.

16.3.2 Engine, tank, Prop:

All engines must be stock, with stock carburetor, and muffler with original baffle, if any.

Planes must be capable of standing at idle for 30 seconds and being shut off on command.

Props shall be unmodified and commercially available. Balancing only will be allowed as defined in Section 7.5 of AMA Pylon Regulations or RCPRO Club 40 Procedures.

No "bubbleless" tanks. The tank may only be pressurized with muffler pressure.

16.4 Allowed Modifications

16.4.1 Airframe: Assemble according to the manual, with the materials provided, except for:

Recovering plane is allowed

No airframe modifications other than repairs or reinforcement.

Dual aileron servos are allowed.

Control surfaces may be hinged with the supplied metal or CA hinges, other CA hinges, plastic hinges or hinge points (Robart or similar).

Hinge lines may be sealed using tape, stick-on plastic covering, or iron-on plastic covering.

Do not remove any wood except to clear for Sport muffler or move throttle servo to the side.

Canopies made of fiberglass that are clones of the originals are allowed

16.4.2 Propulsion System:

Shimming the engine mount to change the thrust line is acceptable.

Parts, which may be changed and may come from any source: Bearings, Gaskets (& head shims), Glow plug, head and crankcase bolts, propeller nut & washer and Remote needle valve assembly.

16.4.3 Prop / Spinner:

1. Any spinner of not more than 2.5 inches in diameter is allowed.

2. Spinner weights that fit inside a spinner, Heavy Hub and aluminum Safety Spinner nuts are allowed.

16.4.4 Fuel tank:

Any brand of clunk-type tank may be used. Tanks may be raised or lowered to allow for consistent engine runs.

16.4.5 Hardware:

Control horns, push rods and linkages may be replaced with similar hardware.

Battery packs may be four or five cell (or 2-3 cell LiPo) with a suggested minimum of 500 mAh.

Nylon wing bolts are allowed.

You may substitute machine screws, nuts and screws of same or larger diameter (#4 SAE is fine)

16.4.6 Control System:

Stabilizing radio control systems may be used. Gyros, AS3X, and other technologies that improve flight handling are allowed.

Telemetry systems that provide flight data to the pilot are allowed.

Race CD will have the final say on legality of "modified" aircraft.

Inspectors may use templates or a "standard" aircraft. See Technical Inspection Form