

## **2015 Club 40 Rules for the Airplanes- Section 16 (Version 12/20/2014)**

### **16.0 Classes** (in the order they were established)

#### **16.1 Club 40 Silver**

##### **16.1.1 Airframes:**

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

The World Models LA Racer 40 ARF, per instructions

The Sanaloma Laser, Inc, Club 40 Raider Kit, uses WM hardware or allowed substitutes.

All factory versions are approved. 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

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

##### **16.1.3 Engines:**

Recommended: Thunder Tiger Pro .40 BB ABC w/Muffler

Acceptable Alternatives: SuperTigre GS-40, GMS .40 ABC BB, Evolution .40NT and .40 NX, OS .40 BB sport engines or any clones/copies of the listed engines

#### **16.2 Club 40 Bronze:**

**16.2.1 Airframes:** See 16.1.1.

**16.1.2 Minimum weight:** Minimum weight without fuel is 4 lb. and 4 oz.

##### **16.2.3 Engines:**

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.

#### **16.3 Club 46 Gold**

**16.3.1 Airframes:** See 16.1.1.

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

##### **16.3.3 Engines:**

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 S46All, or any clones/copies of the listed engines, or any Club 40 Silver engine as listed in 16.1.3.

#### **16.4 Requirements:**

##### **16.4.1 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.

Batteries shall be of adequate capacity for the size and number of servos used.

##### **16.4.2 Engine, tank, Prop:**

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

Engine mounts must be of the beam type. No backplate mounts allowed.

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.

## **16.5 Allowed Modifications**

**16.5.1 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.

### **16.5.2 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.

### **16.5.3 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.

### **16.5.4 Fuel tank:**

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

### **16.5.5 Hardware:**

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

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.

Nylon wing bolts are allowed.

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

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

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

Any modification deemed to be an attempt to provide for speed enhancement, shall not be allowed.