

Notes from Ken Erickson, RCPRO Club 40 Committee Chairman:

## **Explanation of Changes for 2016**

All changes are all in Section 16 for 2016.

The third class of RCPRO Club 40 Racing, Club 46 in the 2015 rules, has been renamed Club 40 Gold. Club 40 Gold allows ball bearing sport .46 engines with a street price of \$160 or less.

An additional engine was added to the Club 40 Silver section. It is the Evolution 46 NX with the Evolution one-piece muffler. This is the NMPRA / AMA engine designated for use in AMA 424 Sport Quickie beginning in 2016. The one-piece muffler that has been developed by Evolution is required in Club 40 Silver.

The original Evolution muffler may be used in Club 40 Gold with the 46 NX.

Another airframe, the SIG 4-STAR 54 EP/GP was added to the list of allowable airframes. It may not have parts swapped with the other airframes.

Wheel pants are not allowed with any of the airframes in Club 40 racing events, even for the airframes that include wheel pants in the kit.

Sections 1 through 15 and the Addendum have not been changed.

## **Explanation of Changes for 2015**

The addition of a third class to RCPRO Club 40 Racing, Club 46, required re-ordering Section 16, which covers the engine and airframe for each class.

The restriction against the use of backplate mounts and requirement to use beam mounts, which has been in Section 2 for many years, has been copied into **Section 16, Requirements:**

Quite a few of us are using LiFePo4 batteries. There were sentences about batteries in Sections 8 and 16, but they were different and contradictory.

Both of these have been replaced with "Batteries shall be of adequate capacity for the size and number of servos used."

In section 16, it was moved from "Allowed Modifications" to "Requirements"

The requirement that only 4 screw servos be used to control pitch, roll and Yaw was replaced by the following: 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.

In section 13.1.8, after the sentence "No mechanical device shall be used to assist in launching the aircraft", we voted to insert the following: "A mechanical stooage may be used to hold the aircraft until they are released by the starter to start the heat." Several groups have been having humans holding the airplanes, which were at full throttle, until the Starter signaled the release. They then ran back to count laps or call for the pilots. This was felt to be a dangerous practice. We decided "Launching" is making it go forward, "Holding" is preventing it from going forward.

The Addendum has not changed.

## **Explanation of Changes for 2014**

Our rules are based on the AMA Pylon Racing Regulations. We have separated them into two documents, one corresponding to Sections 1 to 15 of the AMA Regulations, previously called "Procedures", and one

corresponding to Section 16, previously called "Rules for the Airplane", a one-page listing of the rules for the airplane. They are still two documents, but the names have been changed to reflect what they truly are: "Sections 1 to 15, Procedures" and "Section 16, The Airplane". This was done with the 2013 Rules.

The changes, both of which are in "Section 16, The Airplane" are as follows:

1: We added: "All factory versions are approved."

Because: We wanted all stock, factory versions to be usable. However, only the modifications which are listed later are allowed. The committee members wanted the planes as stock as possible.

2: We replaced "You may modify the cheek/nose area of the kit and older Sky Raiders to match the current WM product. Do not enclose. Do not pinch narrower than the narrowest of current or previous airframes from WM."

With: "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."

Because: The previous statement only covered Sky Raiders. We believe the new statement allows the same changes to the Sky Raiders as the old one, while allowing retrofit of the stock wire gear to the new LA Racers. A Hint: Home Depot sells a 1/2x2x24 piece of oak, which I have used repair SR2s when the gear blocks have been ripped out.

Sections 1-15 and the Addendum have not changed.

### **Explanation of Changes for 2013**

A change to Section 1, voted in for the 2011 rules eliminated Backplate Mounts. However, the section was not edited at that time. That has been done in the 2013 version.

The changes in "Section 16, The Airplane" are as follows:

1: The sentence "You may Mix and Match fuselages, wings, landing gear and empennages." has been added just after the listing of the three planes allowed. The dimensions of the wings, horizontal stabilizers and elevators are identical. The only difference is the location of the wing servos. We already allowed mixing if those were the parts you had left after crashes. The ability to use such a hybrid is now extended. Occasionally the particular new model is not available from the distributor.

2: In "**Propulsion Systems Regulations**:", the sentence "Must be capable of standing at idle for 30 seconds and being shut off on command." has been added. This requirement was in early versions of the one-page document, has always been in the "Sections 1 to 15, Procedures" document. The vote to again include it in Section 16 was unanimous.

To enforce this, it is recommended that the following procedure be used: In 2013 each engine will be run, on the line, at idle for 30 seconds with no one holding the plane; and the plane must stand in place without moving during that time. This will be done during the first round only. If an engine does not idle for 30 seconds the pilot will get a zero for that heat. (Because it is a "Did not start" the heat.)

3: Under "**Fuel Tank**" The words "clunk-type" were added to the sentence allowing any brand of tank. The partial sentence "No "Bubbleless" tanks." was added. The two sentences concerning the use of internal bladder tanks were removed. The argument was presented that "Bubbleless" tanks have been used for years in Texas. Everyone else voted to allow only "clunk-type" tanks. Some of the points brought up were about the fueling stations, the perception that the additional expense would seem necessary to newbies, and general desire for simplicity.

### **Explanation of Changes for 2011**

There are a few changes in the RCPRO Club 40 "Rules" document and also in the "Procedures" document. Starting from the top of the "Rules" document, they are:

**New Wording in "Airframe Regulations"**: 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).

**Reason**: We want as much uniformity as possible in the airframe drag.

We have been informed that the stock wheels wear away for those flying from hard surface runways. Some get very small. We were asked to specify a minimum size for wheels in use and to allow a harder wheel, slightly smaller than the stock wheel. As I fly from grass at almost all the fields around Columbus, In, I did not know this. After verifying the wear, by checking with committee members and other

promoters around the country, I checked out available wheels. The DuBro Low Bounce wheels are harder rubber and the same width as the stock wheels. They are 57 mm in diameter. This change was submitted to the committee and officers and approved. New stock wheels are 60 mm in diameter. When your wheels have worn to 55 mm in diameter, get a new set of stock wheels or a new set of DuBro Low Bounce or some other 20 mm wide hard wheel.

**New Wording in "Propulsion Systems Regulations":**

**Wording transferred in from the "Procedures" document, with clarification:** 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.

**Reason:** This was the only line about what goes up in the air that was not in the one-page "Rules" document, where it belonged. The clarification, after much discussion, is that head shims may be removed, changed or added. We do not recommend it, but it is not forbidden. AMA rules silently allow this; we state it. Note that Backplate Engine Mounts have been removed and are not to be used.

**New Wording in the line for "Acceptable Alternatives":** or any clones/copies of the listed engines.

**Reason:** We were asked to allow more brands of engines. If someone has a sport .40 engine, probably not as good as the best brand, they should still be able to give it a try. This wording was submitted to the committee and officers and was approved. **We do not recommend buying a cheap, inferior engine, if you do not have a .40.** But we do want people to get their feet wet in this event with sport engine to which they already have access.

**New Wording in the line for "Sport/Novice Class Engines":** or clones.

**Same reason.**

**Changes in the "Procedures" document:**

The "Parts which may be changed" line was removed, transferred to the "Rules" document.

**Reason:** See above.

Recommendations for the matrixing and scoring programs from Paul Herman were added in the appropriate places.

**Reason:** They work fine, and have for years.

A recommendation for the NMPRA JudgeTimer program, written by Stan Douglas and significantly updated by Hank Kaufman was added.

**Reason:** Once you check it out, you will know. It is great. You can test it using the mouse or keyboard.

**The "Addendum: Racecourse Personnel and their Duties" has not changed.**