

"T"URBULATOR

Newsletter

of the Rio Rancho
Radio Control
Flying Club

AMA Club #2770

WATERMAN FIELD

ELEVATION 5840 FEET

35° 17.2'N 106° 44.8'W

New Avistar 30cc
Maidens



PRESIDENT'S CORNER

"Da Prez Sez"

Greetings fellow frustrated flyers. April is already bringing winds that are affecting many late mornings and afternoons. Lots of information, group size restrictions and requests to stay home have hit the news. That being said the lock on the field gate remains the same. Use your best judgement as always. My simulator is getting a fun workout. I had to go and check out a couple of planes on the simulator after reading "Do you turn with proficiency" in the March Model Aviation. (Ask me later what I found out :-). You already know cancelled events for the club (See Below). We will hopefully be able to reset some dates in the future. Lastly, we want everyone and your families to be healthy. If you need any help (other than building your next plane from scratch) please let us know via email or phone. See you soon.

Coming Events

1. April Meeting Cancelled due to Corona Virus.
2. All Events at the Star Center Cancelled by the Star.
3. Maloof Field Closed until further notice.
4. Balloon Park Closed until 15 April 2020

RC Float Plane Basics

Converting your favorite model to an RC float plane can be a lot of fun. It can also lead to a lot of frustration and wasted money if you "dive" in without doing your homework.

While transforming your plane for use at your favorite water hole is not difficult, there are a few guidelines to follow that will greatly increase your chance of success.

In other words, it's not quite as easy as replacing the wheels with a set of floats and heading to the lake...

E-Flight J3 Cub

What makes a Good Float Plane?

RC airplane floats don't have the friction of the wheels to keep the airplane from rotating or moving sideways. A short and stubby airplane will basically spin around wherever it wants...

The tail moment of a longer plane's vertical fin will keep the plane turned towards the wind in the same way a weather vane points toward the wind. When flying from the ground you have to look at the wind sock to determine which way to take off. A good RC float plane IS a wind sock!

Besides having a long tail moment, it's smart to start with a plane that can fly stable and low speeds until you get used to taking off and landing on the water. If you're looking for the quickest and easiest route, E-Flight offers a set of floats that will fit their 25 size high winged park flyers which make perfect RC float planes once you master the basics of flight. These floats are made specifically for these planes and are a breeze to install even if you are completely new to water flight.

Size is important too, the bigger and heavier your plane is the better it will handle wind and ripples on the water. This is definitely something to keep in mind if you plane to fly from a large lake where waves may be an issue...

You're trusty old high wing trainer makes a perfect RC float plane. Adding floats to larger planes is not quite as straight forward as slapping a set of E-Flite floats on an E-flite plane.

But no worries, we're about to get into the details of choosing and installing your own floats.

What Floats to Use?

Have you decided on a plane? Good, the next step is finding the perfect set of floats for it...

Before we talk about the size of the floats, you need to determine what type of float you want to use. You can buy ABS plastic floats, build a set of balsa wood floats, or maybe you'll decide on foam core floats.

What Size Floats?

Some floats specify that they're good for a certain amount of weight. Others, like these Hangar 9 40-Size Wood Floats are made for planes with a specific engine size.

While these specs are useful, one of the most important things to consider is the length of the floats. The length of your floats should be pretty close to 70% to 80% the length of the fuselage measuring from the back of the propeller to the elevator hinge.

Hangar 9 40-Size Wood Floats

More than likely you'll be able to find a set of commercial floats that will come pretty close to this critical dimension. It doesn't have to be exact, but it does need to be pretty close.

If you can't find a set with the length you need, no worries. Just make your own set of foam core floats.

Critical Aspects of Installation

Installing the floats... Ah, this is where most of the problems occur if you don't know what you're doing... There are several things at play that must be "fine tuned" for your RC float plane to have the correct angle of attack for creating lift once the plane is up on the step skimming across the water...

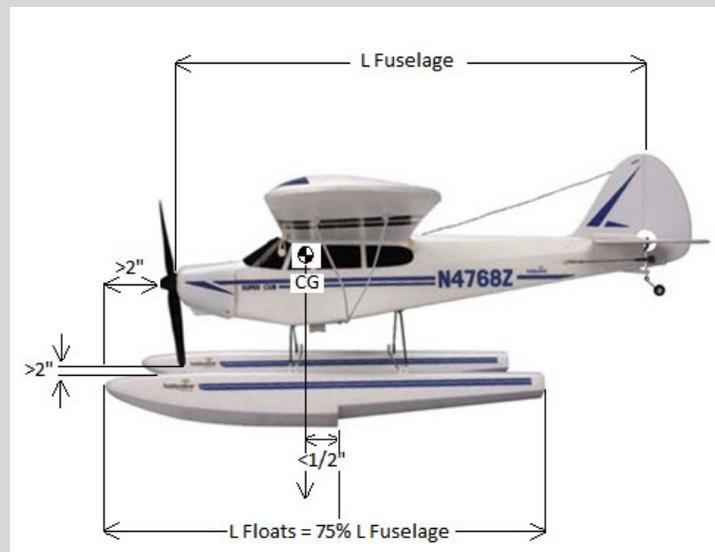
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Center of Gravity

The first thing you need to do is locate the center of gravity of your airplane. It's best to make sure the CG is set the the original specifications set forth in the manual.

Tip

Make sure the plane is balanced before you install the floats. After the floats are installed, balance the plane again by adding weight to the floats, not the airplane. This way the plane will still be balanced should you decide to remove the floats.



MINUTES

Minutes from the March 2020 Club Meeting

The March meeting was held at the Village Pizza and started at 6:00pm.

The meeting opened with approximately 36 members and guests.

Doug welcomed everyone to the Village Pizza and the March meeting.

Doug then opened the meeting to any issues that member wanted to discuss. No issues were brought up.

Doug accepted a motion to close the meeting at 6:20pm and the meeting was closed.

At the end of the meeting there was a male and female raffle for the St. Patrick's Day decorations that were placed on the table.

RC Float Plane Basics Continued

Position of the Step

The "step" of the float needs to be located at or just behind the center of gravity of the airplane. As a general rule 1/2" to 1" should be about right for most average sized RC float planes.

The front of the floats should stick out a couple inches past the propeller in order to keep the plane from nosing down into the water.

The last thing you want is for the propeller to cut the front of your floats off! So be generous and give yourself a comfortable couple inches of clearance between the propeller and float. It may be a good idea or even necessary to install a 3 bladed propeller to give you the added clearance and torque as explained here.

Mounting Angle

No matter how much power you have, your RC float plane will stubbornly refuse to lift off the water if the attitude of the plane is too low once the plane is riding up on the step of the floats. In this situation, your RC float plane is nothing more than a speed boat with wings! If the nose is angled upward too much the plane will want to lift off too early and may stall. Mounting your floats to the airplane at the correct angle is absolutely critical. Doing so incorrectly is the source of most RC float plane problems....

You want to get the floats parallel to the attitude of the airplane. First mount the front of the floats to obtain the proper propeller clearance. Then adjust the back of the floats until you get the top of the floats parallel with the horizontal stabilizer of the airplane. This should put you pretty darn close to where you need to be. The wing incident relative to the top of the floats should be a couple of degrees positive. If not, you need to slightly increase the height of the front mount until you achieve a 2-3 degree positive wing incident.



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We are always looking for articles, pictures and your input!

For comments, or suggestions

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RIO RANCHO RC CLUB

AMA Charter #2770

www.rioranchorcflayers.org

Next Club Meeting

Cancelled due to Corona Virus