



# FREQUENT FLYER



THE NEWSLETTER OF THE CHENANGO RC CLUB

## WINTER 2005

### KEEP IN TOUCH VIA THE INTERNET

The Chenango RC Club has two websites up and running to keep you in touch with other members and what's going on.

[www.chenangorc.net](http://www.chenangorc.net) is the club's main website and is updated often with important announcements, etc.

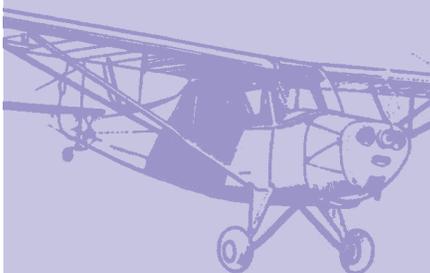
The club also has an ongoing discussion forum at <http://forums.delphiforums.com/chenangorc/start> which has proven to be extremely valuable in communicating with other club members. Visit once and you'll see how useful it is.

## CHENANGO RC CLUB AND TRI-COUNTY MODELERS ANNOUNCE JOINT WINTER FLYING SERIES



Soon winter will be upon us and for many of us the flying season will be at an end. We will spend the next few months working on projects for the start of the forthcoming spring flying season. However, a few brave souls will ignore the elements during these months to go out and try to acquire the coveted AMA "fly all months" patch. Now if you live in the southern states where it is warm all year this isn't a difficult task. Here in the north a pilot has to conquer the snow, wind and bitter cold. For those who are willing to go out and subject themselves to these elements, the patches sort of take on the meaning of a badge of courage. This brings me to the point I want to discuss for those of you that want to shrug off the cold and stand in an open field with the wind whipping at you. The Chenango RC Club has teamed up with Tri County Modelers in Sidney in an inter-club event known as the Winter Bush Series where we will fly through the winter months. We will start early in December and the series will run through March. The events will be held at the following locations and

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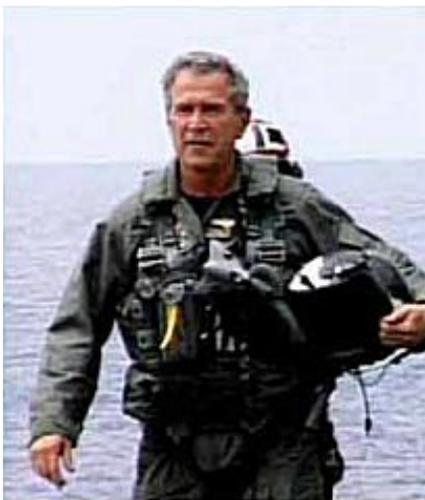
Chenango RC Club finally gets a pavillion built.

and dates: the Sidney or alternate Bainbridge fields: Dec 4, Jan 8, Feb 5, Mar 5 and at the Columbus field: Dec 18, Jan 22, Feb 19, and Mar 19. The idea is to first have fun and to also have a little competition based on an accumulation of points and at the end of the series whoever has the most points will get a trophy of sorts. Mostly you will have bragging rights to say you put in the most number of flights through the winter. The pilots that choose to stay in the comfort of a nice warm home will think "what are you nuts?" but you can counter and say "well I was out flying and having fun."

Though all the details have not been finalized as of yet, basically this is how it works; for every pilot that shows up and makes one flight on the dates specified, he/she will get 10 pts. for their 1st flight of the day. A flight consists of takeoff (unassisted) 3 laps around field (normal flight pattern) and landing (dead stick landings will count). 1 pt. for each flight thereafter. You may fly any plane that is capable of taking off the ground and landing. Generally speaking a plane fitted with floats will work the best in the snow (providing there is snow), wheels otherwise. Floats seem to work better than skis especially for the type of snow we get in this area. Mostly the competition is just an excuse to get together and have some fun, keep your flying skills honed, and maybe to meet some new people. It is not required that you participate in the competition, like I said, it is just the excuse. This event will be held regardless of the conditions so be prepared. So put some floats on your airplane when we get the snow and come out with the rest of us. I hope to see you all out at the field this coming winter and having lots of fun.

-Dave Muhlfeld

**The pilots that choose to stay in the comfort of a nice warm home will think "what are you nuts?"**



Oops, wrong kind of Bush Pilot!

## CHENANGO RC CLUB - TRI-COUNTY MODELERS Winter 2005

# Bush Pilot Series

Events held every 2 weeks throughout the winter months, alternating between the Sidney/Bainbridge fields and the Columbus field. Keep this schedule handy and don't go to the wrong field!

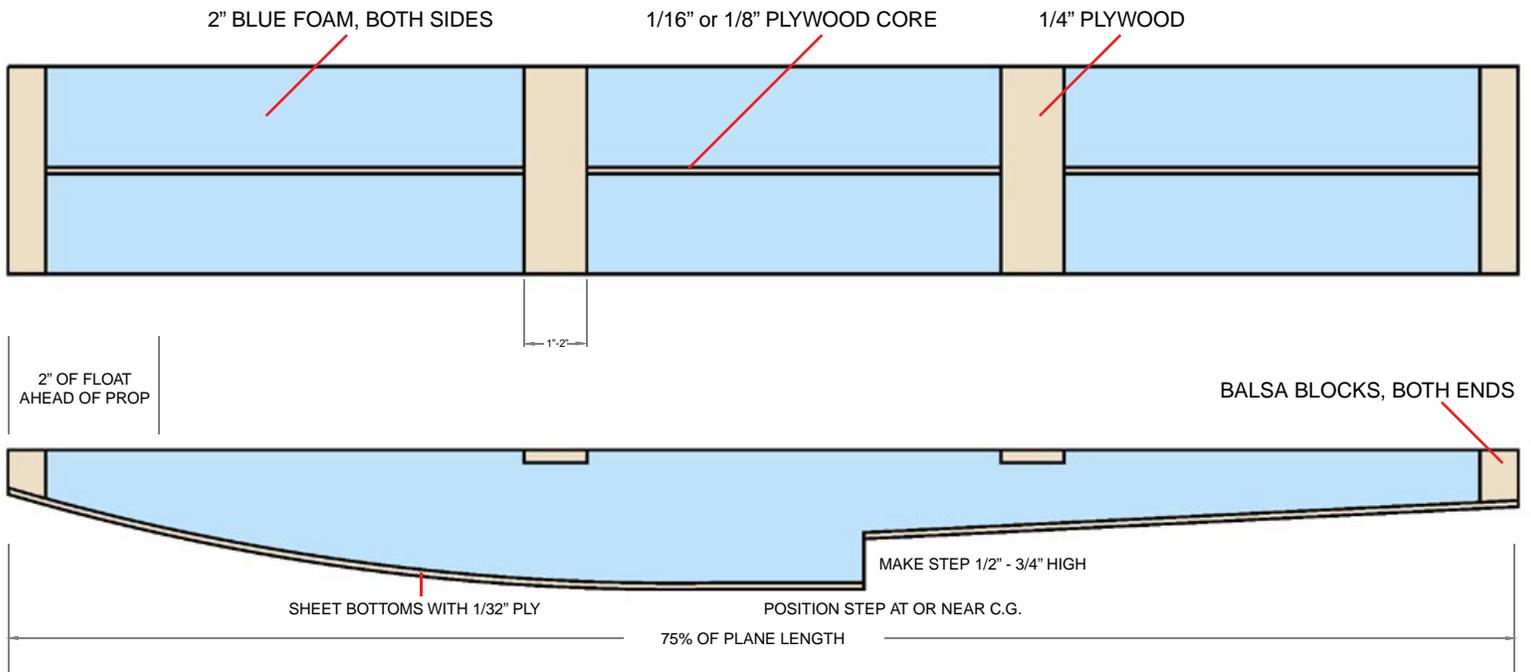
### SIDNEY/BAINBRIDGE FIELD

December 4th  
January 8th  
February 5th  
March 5th

### COLUMBUS FIELD

December 18th  
January 22nd  
February 19th  
March 19th

# How to Make Inexpensive Floats



## By Dave Muhlfeld

Floats can be a useful addition to your airplane, not only for flying off the water, but for flying off of the snow as well. Both activities are a lot of fun and I would recommend that you at least try it and one of the best places that you can utilize them is in the Winter Bush Series taking place this winter. This event can make good use of the float design I will explain.

The biggest problem facing a modeler is the cost of a float system. They can be expensive; \$45 for the cheap floats, and even more for the better variety. There is a low cost alternative that may be of interest to many of our members and that is to make your own. By making your own it will allow you to try them and see if you have the interest to pursue buying a more expensive float version.

The design of a float starts with regard to your particular airplane. The overall length of the plane is of first significance. The length of the float should be 75% of the total length of your airplane from tip to tail, i.e. a 56" long plane will need to have floats that are 42" long. Please include the motor and spinner in the measurement.

(Plane length) X .75 = float length

An important detail is that the front tip of the float must extend forward of the prop by a minimum of 2" (do not count this in your overall measurement). This is a must if you are planning on flying off water. If this is not done the plane will nose over and the prop will cut into the water and stall the engine out or even worse, a complete nose over and then you will have to clean the engine inside before proceeding.

The width of the float can vary to some degree depending on the size and weight of the airplane. A good starting point is at least 2-4" for a 40 size airplane to maybe 3-4" on a 60 size and up. The 4" wide works out with the blue foam plus what ever you use for the rib. The design is flexible and the foam comes in different thickness so experiment on snow, the width for that is not as important as on water.

The step in the float should be at about the CG point of the airplane. The step height should be about 1/2" to 3/4", the thickness above the step is 2-3" depending on the size and weight of the plane.

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BALSA BLOCKS, BOTH ENDS

MAKE STEP 1/2" - 3/4" HIGH

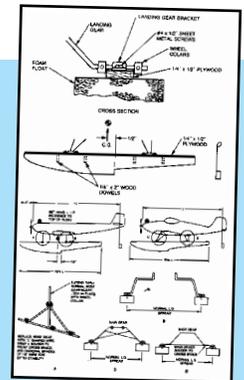
SHEET BOTTOMS WITH 1/32" PLY

POSITION STEP AT OR NEAR C.G.

75% OF PLANE LENGTH

2" OF FLOAT  
AHEAD OF PROP

1"-2"



**For  
More  
Info:**

[www.flyinglindy.homestead.com/skisandfloats.html](http://www.flyinglindy.homestead.com/skisandfloats.html)

Another great source of information for making homemade floats and skis, includes drawings of different mounting methods.

<http://rc-float-flying.rchomepage.com/Glow%20Cores/floatcores.htm>

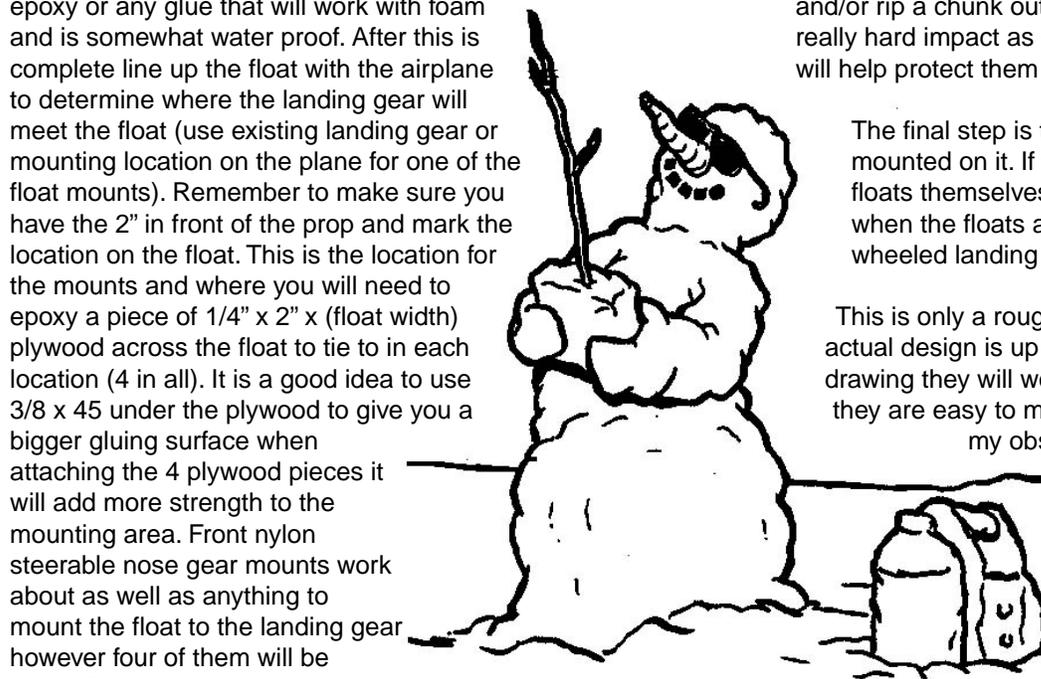
A little more advanced, using hot-wire cut foam cores to make floats.

[www.rc-float-flying.rchomepage.com/Winter%20Floats/winterfloat.htm](http://www.rc-float-flying.rchomepage.com/Winter%20Floats/winterfloat.htm)

A lot of great info about cold-weather flying.

There are two types of foam, the blue building foam sold in sheets and the white foam similar to what they make coffee cups out of. The blue is better, it is a little denser and easier to shape. The white is a little lighter but more difficult to work with. You can buy the blue foam at any lumber yard and have enough to make several sets of floats. The foam can be cut with a saw, knife or hot wire. If using the hot wire be careful of your selection as some foam gives off toxic fumes that are really harmful to you. I believe the pink foam is one of these and why I didn't mention it as a type that can be used.

So now you should have all the information needed relating to the size of the float and it is time to start construction. Please refer to the drawing at the top of the page while the following steps are described. The float design shown is made up of foam on both sides of a plywood rib. The plywood rib can be made out of either 1/16" or 1/8" plywood. The plywood works best or you can use balsa at a minimum 1/8" thick. If you decide to use balsa you may want to add stringers to give it rigidity. The rib is the most important part in that it adds strength and stiffness to the float and is the main member where the attachment to the plane is made. This rib is made to the profile of the float as shown. You can vary the shape to some degree to suit yourself and the tools that you have to work with. The foam is attached to both sides of the rib with carpenters glue or epoxy or any glue that will work with foam and is somewhat water proof. After this is complete line up the float with the airplane to determine where the landing gear will meet the float (use existing landing gear or mounting location on the plane for one of the float mounts). Remember to make sure you have the 2" in front of the prop and mark the location on the float. This is the location for the mounts and where you will need to epoxy a piece of 1/4" x 2" x (float width) plywood across the float to tie in each location (4 in all). It is a good idea to use 3/8 x 45 under the plywood to give you a bigger gluing surface when attaching the 4 plywood pieces it will add more strength to the mounting area. Front nylon steerable nose gear mounts work about as well as anything to mount the float to the landing gear however four of them will be costly. They will allow you to use a wheel collars to hold them on and make taking them off easier when reverting back to wheels. This is especially true if you are making use of the main landing gear of the plane as one of the supports. You can also use hardwood blocks as well with holes just big enough for the landing gear however you should make them big enough so that you can put screws through them as well as gluing them down. The floats should be level with the center thrust line of the plane to about 1 degree up at the front. Remember when selecting the landing gear either bought or something that you make, that when the floats are mounted to the plane that you will have clearance at the float for the largest prop that you may use, bear in mind the floats will go past the prop. Additionally do not make the gear too narrow, a wide stance will be more stable and work better. Finally cover them



Finally cover them

with a low temp Monokote or some covering that when applied will not melt the foam. Screw the nose gear blocks on or whatever you chose and mount them to the plane.

Other things that can be added but will increase cost but also will make them last longer and give more satisfaction overall. The following option I would strongly recommend and that is the addition of balsa blocks fore and aft (aft can be made of plywood) which will make them more rugged in case you hit something (remember the float tips will be out in front of everything else) and later the aft block will provide you with a mounting point for a rudder which is required for use in water or if you decide to do option 2 it will allow attachment points for the sheeting.

The second option is to sheet the float with 1/32"+ balsa or some people have sheeted just the bottom with 1/32" plywood. If this is a choice that you plan on doing the foam should be sanded as smooth as possible with a sanding block and or the use of filler to level the surface. This is done so that when the sheeting is applied there will be no air gaps between the foam and the sheeting. My recommendation would be to sheet the bottom at least. The bottom sheeting when flying on snow may prevent serious damage to the floats if you should hit something hard buried in the snow which might dent or gouge the foam and/or rip a chunk out. Nothing will prevent damage from a really hard impact as we all know but the wood on the bottom will help protect them during normal use.

The final step is to balance the plane with the floats mounted on it. If weight is needed, put any weight on the floats themselves so that the plane will still be in balance when the floats are removed and you revert back to wheeled landing gear .

This is only a rough guide to get you in the ball park, the actual design is up to you but if you make them per the drawing they will work. So basically that's all there is to floats, they are easy to make and a lot of fun to fly with. It has been my observation that any shape or style will

basically work on snow. Try to utilize as much material that you may have on hand or can find. Many construction site dumpsters may have odd pieces of foam that can be used or, like I said, the foam comes in sheets so find someone else that is interested and you can split the cost.

Some people have used home paneling for the center rib which is 1/4" thick plywood and it worked well, it just adds a little more weight, you'll have to decide if it's worth the trade-off. Experiment with the design or try to copy commercial floats, whichever you chose if you follow the basics I have outlined here I am sure they will work. Many of the commercial float planes used a single belly float but remember, with that type of design wing sponsons will be required to hold the plane level for takeoff. I will not go into the design of that here but if you have an interest try experimenting with it. As with any hobby there are many aspects to explore and floats are just one of the many variations in this hobby so give them a try, you may get hooked on floats, they really are a lot of fun.

# The Tail Section

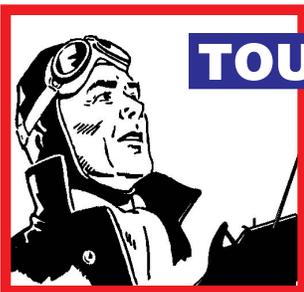


It's December already and The Chenango RC Club's first full season of flying is behind us. I think congratulations are in order for every member of the club who helped to make the Spring and Summer such a success. Thanks to everyone who pitched in with the many improvements made to the field as well as mowing and just showing up to fly, all of which contribute to the club's success.

We are now looking forward to the winter flying season and I hope many of you will join us along with our friends in the Sidney club as we brave the weather in the "Bush Pilot" series. And if you're not willing to stand out in the cold and fly during the winter, at least make plans to attend the club's monthly meetings during the cold months and share with us what you're working on and planning to fly next year. Thanks also to everyone for having a SAFE season. While we had our share of crashes and close calls, there were no injuries (other than to Mark's pride). Let's keep our record going throughout the winter and into next year.

Speaking of next year, why not plan to take part in the pylon racing series that we are planning in conjunction with the Sidney club? All the details haven't been worked out yet but it looks like we will have two classes, an "Open" class where anything goes as long as you use a .46 engine and a "Mustang .40" class that requires that all participants start with the Great Planes .40-size Mustang kit and compete on a level field that should showcase piloting skills rather than outright speed. We will be setting up a course at our field in Columbus and the schedule will alternate between there and the Sidney field, similar to the way the Bush Pilot series will be held. Both classes will require solo runs "against the clock" rather than having multiple planes in the air at the same time. Since most of us are new to this type of thing, it greatly reduces the risk of collisions and accidents and still provides plenty of excitement. If you're interested, contact one of your club officers or call George Tecza in Sidney (607-563-3736) for more details.

*See you at the field!*  
-Dan Hayward



## TOUCH AND GO'S

We could really use a couple of steel **55 gallon drums** to use as trash barrels, if anybody knows where we can get some, please let us know.

The **NY State Police** have contacted all RC clubs and are asking us to be aware of any suspicious activity involving the use of RC aircraft. They've provided us with a number to call: **1-866-SAFE NYS (1-866-723-3697)**

**Dues** are due by March 31st. You can make your check out to "Chenango RC Club" and bring it to a meeting or mail it to:

Chenango RC Club  
c/o Mark Larsen  
Hillside House B-22  
Norwich, NY 13815

