



# The Tailwind



DECEMBER

DON LEWIS, EDITOR

2007

President: Lonny Johnson Vice-President: Tommy Whitworth  
Treasurer: Percy Hallock Secretary: Jeff Jordan  
Safety Officers: Bill Pruner, Phillip Elmore, Ron Hogan

## Next Meeting January 18 - Be There!

Be sure to check out the website at [www.fly-hrcc.org](http://www.fly-hrcc.org)

### MEETING MINUTES

- The last meeting was our Christmas dinner at Steamboat Bill's. A great time was had by all!

### TREASURER'S REPORT

The report was not updated in December, so here is last month's report in case you have forgotten:

October balance	\$1270.78
Income	635.00
Expenses	<u>(871.72)</u>
November balance	<u>\$1,034.06</u>

### FILLETS

by Ed Moorman  
from TRCC Noise  
Tuscon Radio Control Club  
Chuck Brooks, editor  
Tuscon AZ

As airplanes became more streamlined, some fuselage/wing intersections were found to cause turbulence and a slight yaw instability or tail waggle.

When Douglas Aircraft started building transport airplanes they had this yaw instability problem with the DC-1. Dr. Theodore Von Karmann was retained to find the solution. His work resulted in large fillets.

Some Radio Control (RC) airplanes exhibit this

wiggle or "tail dance," as it is sometimes called. The old Kaos was noted for its tail dance. Adding a fillet not only solves the problem, it also looks good.

Here's my easy method for making a fillet. First, let's get an idea of what a fillet looks like. It starts at the fuselage up near the thickest part of the airfoil and runs in a straight or slightly curving line to its widest point at the trailing edge of the wing.

Past the trailing edge it tapers back to the fuselage in just a few inches.

My fillets use a 1/32-inch plywood base. The part of the base which is over the wing extends under the wing saddle so when you tighten the wing bolts, it is clamped in place. This part is glued to the fuselage wing cut out or wing saddle. The part of the base which is back behind the wing is glued to the fuselage side.

Assemble your airplane, but leave the wing bolts slightly loose. Trim the edge of the 1/32-inch plywood so you can slide a half inch or so under the wing saddle and have a 2-3 inch portion flush with the fuselage side behind the wing. Slide the plywood in between the fuselage and the wing and get it positioned correctly, then tighten the wing bolts. Take one last look, and if it is the way you want it, glue it in place with CyA glue. After you have done both sides, you can remove the wing.

Cut a couple of pieces of Styrofoam or other light foam to match the outline of the fillet. I trim mine

down to a triangular cross section also. Glue this in place with epoxy or Titebond®. When the glue is dry, sand the foam to the shape of your fillet. Here are a couple of hints. Wrap coarse sandpaper around a large dowel or screwdriver handle. Sand in only one direction! If you try to sand back and forth in both directions, you will gouge and crumble the foam.

Once you have the foam sanded to the correct shape, rub on a thin coat of five minute epoxy. The epoxy hardens the foam and makes the fillet stick better. For filler, I usually use micro-balloons and epoxy mixed very thick. I have also used spackling paste, but I like the micro-balloons better. This gives the final shape and fills in any holes or gouges you may have. Don't use much, just enough to hide the flaws. After you have the coverage you want wet your finger with rubbing alcohol and rub down the micro-balloons to get a slick, smooth finish.

When everything has cured, give the fillet a light sanding with 320-grit paper or so and you are ready to prime and paint.

Foam fillets using this technique are very light. You can make huge fillets which weigh hardly anything, especially compared to the solid micro-balloon and epoxy kind. It's also easy, so there is no excuse not to have those big gorgeous fillets on your next airplane.

## EDITORIAL

### Why?

Recently, vandals used an ATV to tear up our runway. Why do people do things like this? How can anyone get pleasure from destroying others' property? Though our club has invested the sweat equity to establish and maintain one of the most beautiful model airplane flying fields in middle Tennessee, this field belongs to all of the citizens of Hendersonville.

During this past summer, we had the benefit of having a dedicated Park Ranger patrol that knew the parks, knew the rules, and maintained a high visibility in the parks 24 hours a day.

Unfortunately, that level of protective service is no longer maintained by the Hendersonville City Government.

This past fall, a political battle took place. The Hendersonville Police Department, though had in the past demonstrated complete incompetence with respect to providing police protection in the parks, argued that the Park Ranger program should be taken from the Parks Department and run by the Police Department. Our city leaders for some reason agreed and turned the program over to them.

Since that time, the Park Ranger program has remained with just one officer, reducing the park coverage to a single shift only during weekdays. None of the other police officers has been trained to know the parks and the rules in the parks. Response time to issues in the parks seems to have also grown tremendously. In addition, the confidence of the citizens who use the parks that they will be safe has dwindled. Why do the citizens of Hendersonville allow their elected officials to do things like this?

The Parks Department's capital budget has been cut to provide improvements in other areas, so the parks can expect no improvements this year. The Police Department is continuing to thoroughly demonstrate their incompetence at protecting the parks, so vandalism will most likely increase. This means that Hendersonville's parks will increase their state of disrepair (more vandalism – less money to fix the damage), usage will decrease due to the public's lack of confidence in their safety, and the outstanding parks system for which Hendersonville is well known (and brings a very significant amount of money into the community with the large tournaments they host) will eventually cease to exist.

Should the Hendersonville citizens sit on their duffs and let the city government become a "good old boys" club? They seem to be allowing that to happen. Thus, my question: Why?

*That's my opinion - it oughta' be yours! ☺*

## LETTERS TO THE EDITOR

*I will welcome any member to submit an opinion in writing so long as it is civil in its expression (I reserve the right to make that determination). You can email your letters to the editor to me at [Don\\_Lewis@comcast.net](mailto:Don_Lewis@comcast.net), or just give them to me at a club meeting.*

What?! No Letters?! Come on send one in... people are starting to think you're chicken!

## NOVICE NUANCES:

### *Installing control horns*

When installing control horns onto control surfaces the screwdriver invariably slips. The result is a hole poked into the covering material or a gouge in the balsa. There is a simple tool you can make that will eliminate this damage. Take a small piece of thin plywood and cut a rectangular opening in it just slightly larger than the base of the control horn. Place this opening around the control horn base before tightening the mounting screws. Now when the screwdriver slips there will be no damage to your new aircraft!

*Courtesy Fred H.  
Derby Radio Control Club  
Derby Kansas*

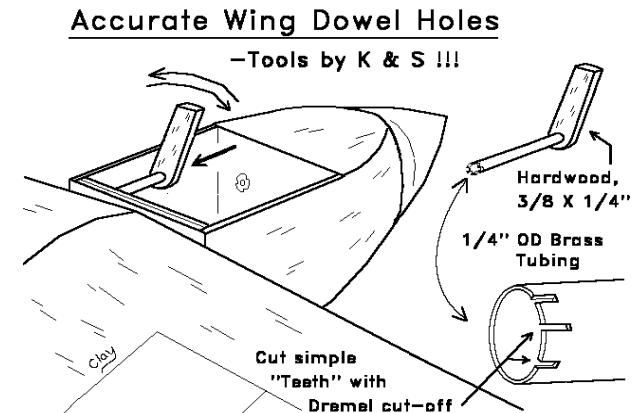
## WHY DIDN'T I THINK OF THAT?

### Holes for Wing Dowels

A standard scenario for installing holding dowels in the leading edge of the wing is to put the wing in place on the fuselage, mark the wing through the pre drilled holes in the fuselage former, remove the wing and drill it for the dowels. The problem is, when you drill, the drill bit "wanders" slightly, and the alignment comes out slightly off.

A solution? Use a piece of brass tubing as a hole saw. Cut teeth in one end, glue into a piece of hardwood to act as a handle. Now you can actually do or at least start the hole with the wing in place. Pushing and twisting the tubing, you cut right through balsa, and even light ply with little effort. Put in a small piece of dowel in your first hole so

that the alignment stays accurate for the second hole.



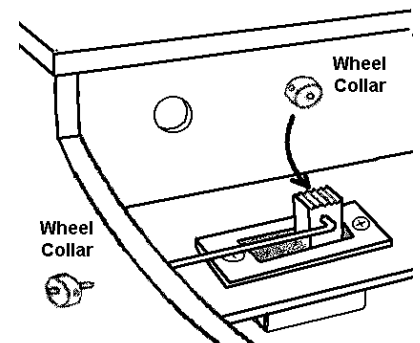
Note: a longer piece of brass tubing, with teeth on the end, can cut nice holes in the aft fuselage for Nyrod exits.

— Unknown

## Internal Switch

Mounting your receiver switch internally isn't too tough - here's one way. Just put in a piece of lite ply to mount the switch, drill out the hole in the switch as necessary to insert a piece of 1/16" music wire, and secure with 1/16" wheel collars.

Why mount the switch internally? Looks, mostly, especially for a scale model. Also there is less chance that an internal switch will get dirt, water, or fuel in it.



### An Internal Switch

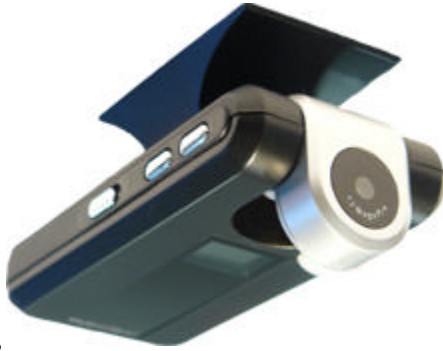
Note: Most modelers will mount the switch such that its OFF pushed in, and ON pulled out. This lessens the chance that bumping it during handling will inadvertently turn the switch on, and run down your batteries.

— Clay Ramskill

## NEW PRODUCT!

### *FlyCamOne2 Micro Video Camera*

New from Hobby Lobby! 3 in. x 1 1/2 in. x 1/2 in. (camera only), 1 oz. V.2 changes include: larger resolution, LCD display, rotating lens, longer battery life, and a thermal-activated motion detector. Video camera includes audio, still photos, a voice recorder, USB drive, and a Webcam. Unit is small enough to mount on just about any model airplane, small park flyer, RC car, train, skate board, or even a kite. Can be remotely activated using an additional servo. Videos are recorded with a resolution of 640x480 for clear playback, complete with sound, and 1280x1024 pixels for still photos. Camera lens rotates 90 degrees so you can take photos or video from multiple angles. Built-in rechargeable 200 mAh Li-Ion battery that charges via the USB port on your computer in about 1 to 1 1/2 hours. For video and audio-recordings, FlyCamOne2 requires an SD memory card (not included). With a 2GB SD card (not included) the video recording time is about 30 minutes. Webcam use requires the included software and USB cable. No software required for all other uses! You can edit and compress the .avi video files using Windows Movie Maker, included with Windows XP SP2 and Windows Vista. It costs \$98.80.



## SOMETIMES YOU JUST HAVE TO LAUGH...

A city-raised Yankee from Massachusetts was hiking through the mountains of northern Georgia when he came upon the tiniest cabin he had ever seen in his life. Intrigued, he went up and knocked on the door.

"Anybody home?" he asked.

"Yep," came a kid's voice through the door.

"Is your father there?" asked the tourist.

"Pa? Nope, he left afore Ma came in," said the kid.

"Well, is your mother there?" persisted the tourist.

"Ma? Nope, she left just afore I got here," said the kid.

"But," protested the Yankee, "are you never together as a family?"

"Sure, but not here," said the kid through the door. "This is the outhouse!"

## PRODUCT REVIEW:

### **BRILLELLI MODEL AIRCRAFT ENGINES 366GT 60CC**

*By Jake Ruddy*

Brillellii has been slowly but surely, taking it's place in the model aircraft engine world over the last couple of years. Sizes range from a 25cc to their newest engine the 366GT 60cc. Brillelli is known for excellent customer service and great engines.



Having owned a 25cc and a 46cc, I was looking forward to the arrival of the 60cc. I was pretty sure this would be another winner, and I was right!

Specifications:

**Model:** 366GT 60cc

**Price:** \$595.99 Including muffler and standoffs

**Weight:** 67oz including muffler, ignition, and standoffs

**Displacement:** 60cc

**Bench Mark Prop:** Xoar 22x8 @ 7500rpm

**Ignition:** CH

**Prop Hub:** Single bolt

**Recommend Props:** 22x8, 22x10, 23x8, 24x8

**Length:** 4.55" (back of prop to standoff mount)

**Width:** 6.25" (muffler to carb)

**Height:** 7" (plug to bottom most part of engine)

From the moment you unpack the box, your eyes quickly notice the nice CNC'd case. The lower half of the engine (including the prop hub) is nicely polished and immediately gives you a feeling of a quality engine.

When you look at the cylinder head, you will notice it has been bead blasted with a material that leaves it with a sparkling effect. The fins have been rounded to give it a nice finished look.

Ignition is a CH and it comes complete with a light muffler and standoffs.

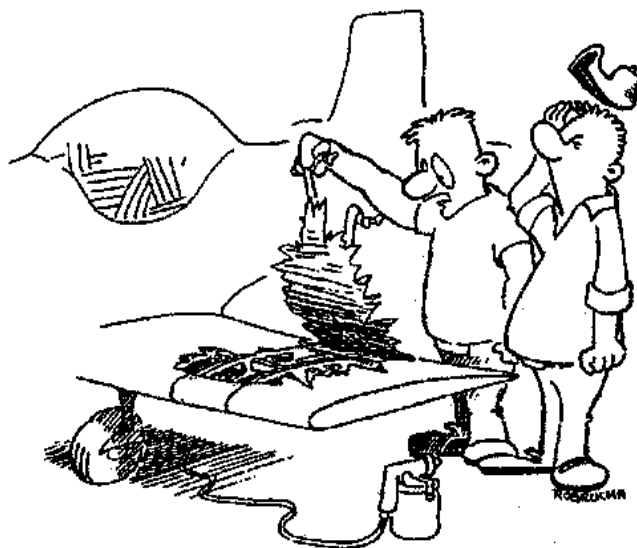
I installed the 366GT into my Wildhare Cap 85" (17 lb). What a power to weight ratio... it yanked the Cap around without a struggle.

The Brillelli 60 gives you comfort and confidence, from your first flip or flop to flirting with the ground while getting it down and dirty.

*For the complete review please visit:*

[http://www.rcuniverse.com/magazine/article\\_display.cfm?article\\_id=897](http://www.rcuniverse.com/magazine/article_display.cfm?article_id=897)

## THE LIGHTER SIDE OF R/C



IS THERE A DIFFERENCE BETWEEN  
DUCT TAPE AND MASKING TAPE?

## YOU MIGHT BE AN R/C MODELER IF...

*By Bill Atkins, Byron, GA*

... You keep feeling for the trim tabs on your TV remote control.

... You have at least three planes in various stages of completion.

## BARGAINS YOU CAN'T PASS UP

**New Something Extra** built from kit. Install radio equipment and engine and fly. \$135.00

Bill Carroll 615-824-1982

**Goldberg Ultimate 300** Built from kit. Cowl has been cut and may need to be replaced - everything else new. \$200.00

Bill Carroll 615-824-1982

**Cloud Dancer**, 8' span, RC Showcase 140 SE engine, Cost \$850 to build, PCM 4 channel radio, all new batteries. \$500.00

Percy Hallock 615-264-3619