

PEAK OF FLIGHT

NEWSLETTER

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Model Rocket Tips: Part 2



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Model Rocket Tips: Part 2

By Chris Michielssen

In the first tips article I mentioned The Idea Box Page in the old Estes Model Rocket News. You would think these ideas were more current. The aluminum angle fin marking tip shown here (**Figure 1**) dates back to 1965!

FOR MARKING GUIDE LINES...

No longer is a drawer or door will needed to draw the guide lines parallel to the centerline of body tubes. Most

Hardware stores have aluminum angle strips in the "Do-it-yourself" supplies. Select a piece having at least 1/2" sides and cut it to 4" or 6" long. Sand off the cut edges on each end with medium or coarse grit paper and you have a tool for a variety of jobs requiring a metal straightedge. For marking guide lines, set the angle piece on the tube as shown.

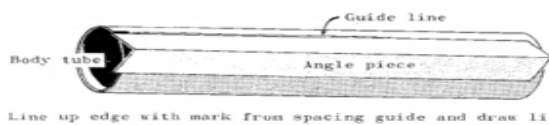


Figure 1: Aluminum angle marking tip

And on the rocketry forums it seems everybody is papering fins. Estes introduced that in The Idea Box 47 years ago!

Here's more tips reprinted from my model rocket building blog:

CLEARING SUPER GLUE NOZZLES

Super Glue (CA Glue) nozzle tips often get clogged when the trapped glue dries. After using the glue, hold the bottle upright, surrounded and covered with a paper towel. Squeeze the bottle to blow the glue out of the tip. If glue is dried in the nozzle you can sometimes knock it out with an unwound guitar "B" string (**Figure 2**).

Additional tip - For longer usable life, keep your super glue bottle in the refrigerator. Be sure you stand or wedge the glue bottle securely so it can't fall over and leak as the door is opened and closed.



Figure 2: Methods for cleaning out your super glue nozzle

DOWEL CUTTING

Don't just roll your knife blade over a dowel to cut it in two. You'll end up with a spiral cut running down the dowel (**Figure**

3). Instead, try rolling 1/2 turn forward, then one full turn back (**Figure 4A, Page 3**). The first part of the back roll has the blade in the first half cut notch you made. Go slow with the blade at a ninety degree angle to the dowel. After you've cut 2/3rds the way through, the dowel can be broken by wiggling it back and forth down the cut line (**Figure 4B, Page 3**). Smooth out and square off the cut with a few passes of a sanding block.



Figure 3: What to avoid when cutting your dowel

STRAIGHTER DECAL APPLICATION

It's hard to visually align a decal on a fin with angled trailing fins. I stack up CD boxes until I reach the area of the decal baseline. Vertical decals can be aligned by setting a CD case on its side or by using a ruler that can stand on its edge (**Figure 5, Page 3**).

Check some of your older, finished models. You might be surprised to find the decals aren't quite straight.

About this Newsletter

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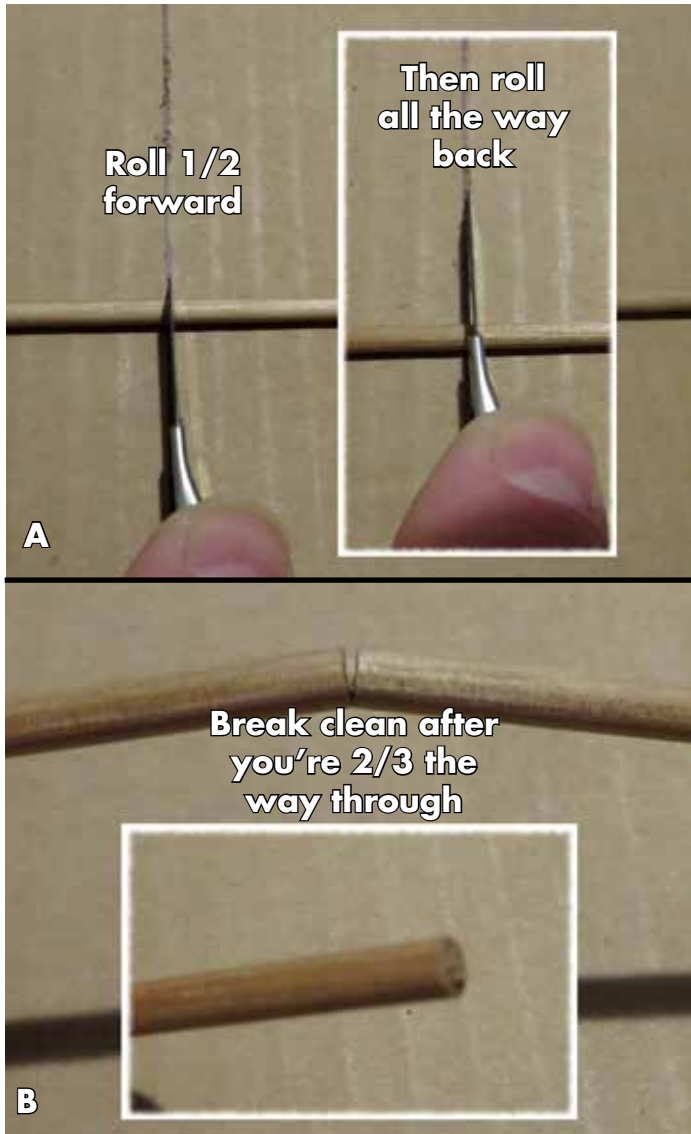


Figure 4 (A&B): How to cut a clean edge on your dowel



Figure 5: Using a ruler or stacked up CD cases to check if your fin decals are level

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ENGINE DESIGNATION MARKING

Here's one I picked up at a NEFAR launch from Bill Gibson. I'm surprised I never did this years ago. Sometimes models are prepped a few days before a club launch. By the time launch day rolls around weather conditions could change and different engines may have to be switched out.

By marking the igniter retaining paper I know what engine is in the rocket without removing it. This is especially valuable if the engine is friction fitted. In the first picture, the engine is obviously a B6-4 (**Figure 6A**). The "E" lets me know it is an Estes engine. The "X" means wadding has been installed.

In the second picture I was using an older style Quest igniter. The 1/4" of exposed engine casing was marked with the engine designation (**Figure 6B**). At your next club launch the RSO (Range Safety Officer) will appreciate the few seconds it takes to mark and identify the engine used.

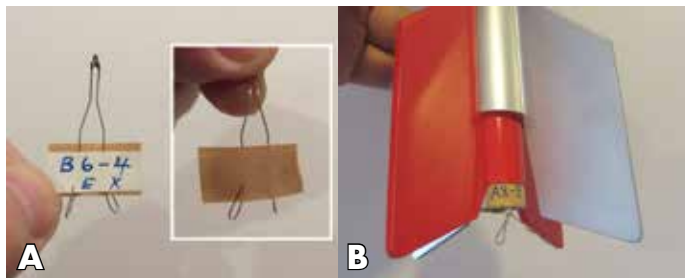


Figure 6 (A&B): Labeling your igniters/engines for quick reference



Figure 7: Swap the nozzle on your wood glue bottle

MORE CONTROL GLUE NOZZLE TIPS

The nozzle tips that come on Titebond glue bottles are wide and dispense too much glue for most rocket building. Save your smaller, orange Elmer's glue nozzle tips and replace the Titebond bottle toppers (**Figure 7**). The screw on shoulder threads are the same on both bottles.

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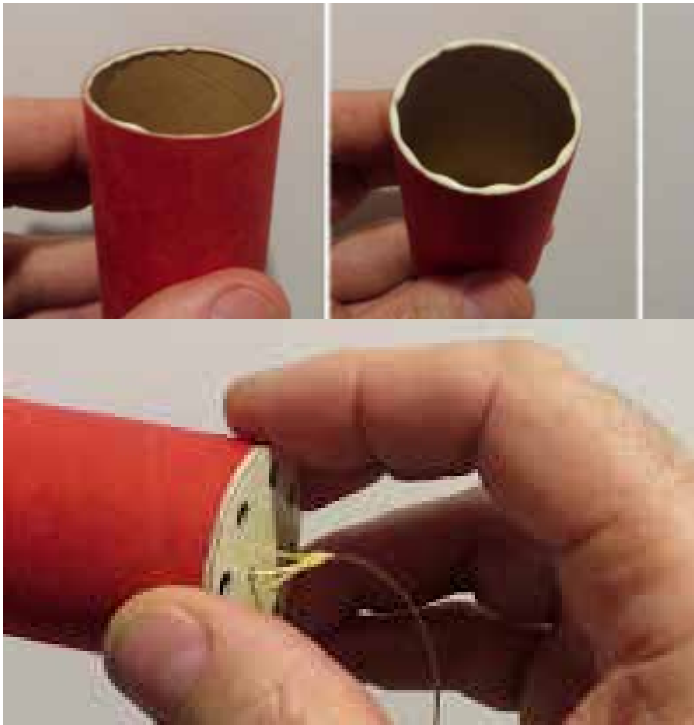


Figure 8: Gluing an internal fillet

INTERNAL FILLETS

When gluing together a Centuri style baffle, there's not much gluing surface on the thin edge of a coupler. First, sand the coupler edge flat. When the coupler tubes are cut they are actually at an angle.

Lay your glue bead with most of the glue to the inside of the coupler. Set the flat baffle disk on the coupler and turn the disk (**Figure 8**). This smooths out the glue bead making a more even internal fillet.

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TYING SHROUD LINES ON SEMROC PARACHUTES

Face it, most people hate assembling parachutes. The Semroc chute disks are especially difficult. You'll find it easier to hold and tie the shroud lines using pliers or long tweezers. If you use your fingers, the oils on your skin will diminish the adhesive on the disk. You can hold the sticky disk on the tip of your knife. It's also easier to place the disk on the parachute corner while it is still on the tip of the knife blade (**Figure 9**).

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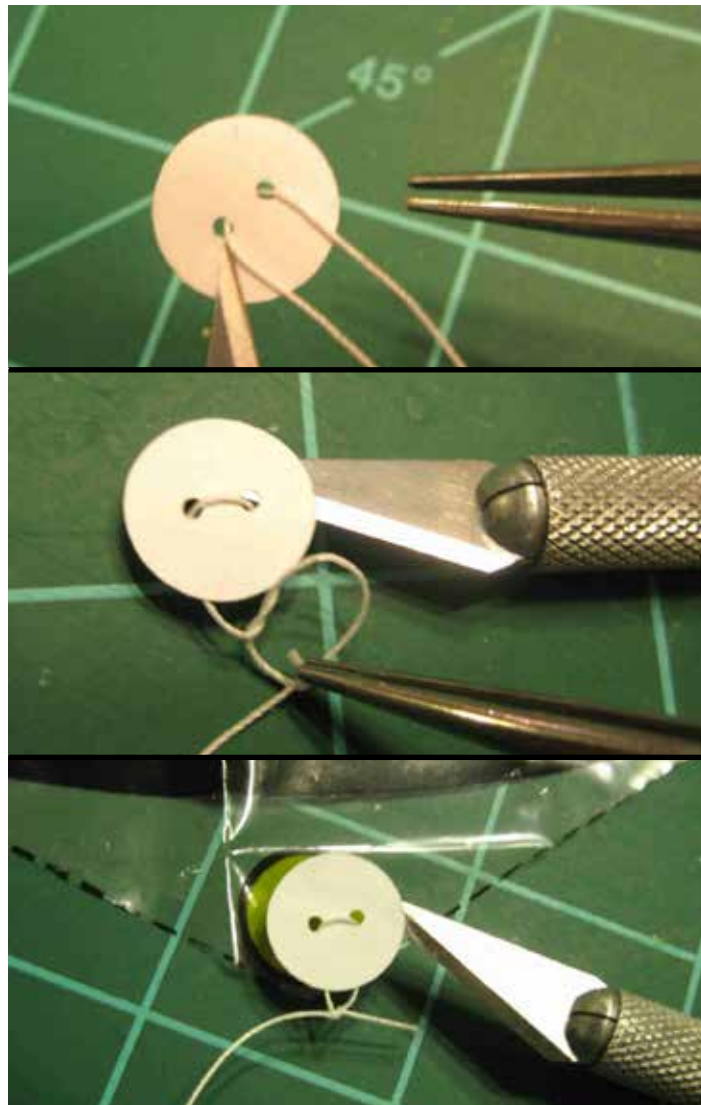



Figure 9: Use pliers and a hobby knife to aid in the assembly

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SPRAY PAINT DECALS

Sometimes you have a very small area to mask and paint. On my Tomahawk rocket there was a very thin band of tan paint going around the nose cone. Instead of intricate masking, it's easier to make a spray paint decal. The decal ends up being about the same thickness as masked spray paint would normally be.

Take a new sheet of white decal paper. The white base paper will act as a white undercoat to the color you'll be spraying over it. I usually mask off an area wider than the final piece I'll need. Spray on the color using light coats. Let the paint totally dry.

You won't have to use a clear coat on this, since the spray paint won't run like the ink on a home printed decal. Cut the pieces to the size you'll need before soaking. Just like a water slide decal, soak, slide and transfer onto your model. The last picture shows the thin, tan wrap around spray paint decal right above the brown band on the nose cone (**Figure 10**).

About The Author:

Chris Michielssen is an avid builder and flyer of low power model rockets. He produces Odd'l Rockets and accessories, available from Apogee Rockets.

His building blog: www.modelrocketbuilding.blogspot.com is followed by 700 people each day worldwide.



Figure 10: Use spray paint on decal paper and place it on the finished rocket

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