

Making Foam Wheels and Getting a Hole in the Center of a Dowel

by George White

I don't know about you, but I've suffered plenty of frustration trying to form blue foam wheels. There are two problems. When making balsa wheels, I've been able to glue a small dowel in the center of a rough blank and form the wheel on a drill press using sandpaper. Try doing that with blue foam and you'll find the dowel tearing loose in seconds. The second problem is that of getting a hole in the center of the dowel in the first place. In a discussion with my Sea-Daddy **Gene Smith** of Oklahoma (for you landlubbers, that's a term for a guru), he solved both problems with his typical aplomb.

First, you need an adjustable chuck for your Dremel tool. They are available from Micro-Mark (Stock# 15264 — \$13.50). Make a rough blank wheel out of blue foam and drill a 3/32" hole in the middle. Then make two 1/4" diameter washers out of 1/32" ply. Sandwich the wheel blank between the two pieces of ply using a 2-56 bolt and tighten with a 2-56 nut. Chuck up the blank in your adjustable chuck in the Dremel tool, crank it up and sand away to get just the shape you want. The Dremel collet won't hold the 2-56 bolt straight — that's why you need the chuck.

Then after you've got that fabulously shaped wheel completed, you need a practical way to hold it on the axle. You can use a piece of aluminum tube or a dowel for an axle bearing. For small wheels, Gene, simply puts a piece of 1/8" dowel in the Dremel hits the end with a piece of sandpaper or emery board to ensure that it is straight across the end. Put the correct size drill bit for you landing gear in a pin vise and simply apply the drill to the end of the dowel. Don't ask me why, but the drill bit will automatically center on the spinning dowel. A couple of years ago I purchased a tool from Michael Heinrich of 611 N. Midland Avenue, Upper Nyack, NY 10960-1029 which allows holes to be centered in a 1/8" dowel, but it allows only very small holes to be drilled. Gene's method is quick and simple.

In next month's exciting issue of this fish wrapper, Mike Isermann describes how he makes foam wheels. Both methods work.