Kit FF47 Howard DGA-9 building notes from Rick Foch

I found your website and spent many hours enjoying it. I bought some balsa, tissue and your 36" Rearwin Speedster and 15" Howard DGA-9 and was surprised by your speedy response. Upon inspection, I was really impressed by the nice quality of your balsa. It is far better than what I had been used to seeing in my RC kits. Your domestic colored tissue looked good too, and I was looking forward to trying it.

I decided to build the little Howard first, since it seemed that it might be easier to handle smaller parts...Wrong! It was quite a relearning experience for this ham-fisted RC'er to handle 1/16" square parts, especially those less than an inch long. Also, I rediscovered that 320 grit is fairly coarse sandpaper for this size model. Anyway, I patiently persevered and after about 12 enjoyable evenings and 30 or so hours, I turned a small pile of sticks and a little tissue into a cute little 11 gram (minus rubber) flying machine. Boy am I hooked! Enclosed are a dozen pictures of my Howard, one of me, and a few of my youngest grand daughter, Asierah, who loves airplanes, too.

I couldn't resist making a few simple changes to the Howard: it's easy to do so with these beautifully simple SAM designs. I added a couple more ribs in each wing panel (for looks only), built a one-piece wing and stab (stronger and easier to align), added one diagonal brace on the fuselage side at the landing gear attachment, and made the nose cowl as a separate part from the fuselage. These mods were made with the wood left over after cutting out the printed parts and the extra piece of 1/16" square I had left (pays to cut the longest strips first). Instead of wheel pants, I made laminated balsa streamlined balloon wheels. For the dummy scale engine, I scanned a direct head-on photo of a Pratt & Whitney R-985 and printed it at the correct scale size. I made a full IFR instrument panel for the Howard the same way. For the cowl and struts to match the pretty orange tissue, I mixed several drops of red Tamiya acrylic into their orange and brushed two thin coats over 2 coats of thin nitrate dope. The black numbers and trim are cut from your black tissue.

About your tissue: It is one of the easiest and best domestic tissues that I ever tried. The Howard is one of the few wrinkle-free FF models that I ever built. I had many good covering jobs with silkspan and silk, but always seemed to have trouble with tissue...but not anymore! I originally used clear dope to attach tissue and I decided to try the glue stick method. I didn't like it, so a put a coat of thin nitrate on the structure, sanded off the fuzz and applied a second coat. I then used very thin clear brushed through the tissue. This classical method worked OK, but the tissue didn't seem to soften much and rolled-over edges were continually trying to lift. So, I tried thinned white glue to adhere the covering and that worked beautifully for me. The edges laid down and stayed down. Overall, I found the use of thick CA for the structure, white glue for attaching the covering and thinned nitrate dope on the tissue a great combination. Easier than Ambroid and dope plus much less tendency to warp since the finishing process doesn't soften the glue joints. In fact, my Howard has no warps! I did use Ambroid for laminating the cowl rings, since nothing sands with balsa as well.