

WHY USE CYANOACRYLATE GLUE

by Chris Starleaf

Published in the Jan/Feb 2005 issue of Tailspin, the journal of the Bay State Squadron's Pilgrim Flyers, Mike Nassise, editor

It is interesting how many different techniques and materials are used in our hobby. Something as universal and basic as glue can make fundamental difference in building style. I've taken a few moments to reflect on why I came to primarily use cyanoacrylate (Super Glue) as the structural glue in all my model building, and it ends up that it just seemed to be the most convenient glue available when I began to build free flight models again.

I was happily discharged from the US Navy in 1988 and lived, at the time, in a small townhouse in Connecticut with my wife and two small kids. Since we were rather poor and spent most of our time at home as a family unit, I reconnected with a hobby that I had enjoyed as a kid, building models.

Back then, (way back in 88!) a typical drug store would have a few Comet, Guillows and Easy Built balsa kits on the shelf, and I could actually just buy most of the building materials I needed at the same shopping center. \$20.00 would get you a kit, glue, sandpaper, pins, etc., A couple of small tubes of Super Glue could be had for less than a buck, and the stuff worked great. Now, jump ahead 17 years, and I'm still building stick and tissue models. Sometimes, I fear it's actually become an obsession !

Now, I live in the Midwest and my kids are pretty much grown up. I've got more money to spend on stuff and I've learned a thing or two about getting the stupid models to fly and look decent. I like to special order kits, plans, wood, wheels, rubber, tissue, etc. from all over the world, even from the former Soviet countries! Yet, I still love to use the same Duro brand cyanoacrylate glue that comes in the little .11 oz. blue and white tubes. This is the same glue I first bought at Walgreens and I now buy at Wal-mart. I still use the Duro cyanoacrylate glue because:

- (1) Speed is the real advantage. If the parts are cut out, you can actually assemble an entire airframe in an evening, wings, stringered fuselage and all. Zip-kicker makes the process even faster. Boxing up a fuselage can be done in 10 minutes. Forget about clamps. This is fun!
- (2) Cyano glue is really strong and the glue will wick and soak into an end-grain joint better than any other glue. The simple fact that you soak joints rather than apply glue between parts makes things much easier and more straight forward.
- (3) Cyano glue is cheap and readily available. The stuff is sold everywhere.
- (4) Repairing models is fast and solid, even on the flying field.

Unfortunately, there are drawbacks to using cyanoacrylate glue. Nothing is perfect.

- (1) Cyano glue dries very hard. It should not be used on portions of a model that will require lots of shaping with sandpaper after assembly.

- (2) Cyano glue is unforgiving. You cannot tack glue with it. The glue is much stronger than the balsa it is holding together. It also fogs clear canopies.
- (3) It gives off very unpleasant vapors that irritate the eyes and it clings to human skin. It is not harmful though.
- (4) The applicator can easily clog and be very frustrating.
- (5) I don't have any exact data, but I'd guess that cyano can be slightly heavier than other glues.

Another aspect of using cyano glue that I've enjoyed is the ability to restore a favorite older model. I will borrow one of my wife's large roasting pans (you're a braver man than !! Editor), fill it with lacquer thinner, and literally strip the paint and tissue off an old airplane leaving clean white balsa bones to refinish and recover. Try that with any other glue!

I'm not trying to change anyone's building style and, make no mistake, I will always use a lot of Ambroid, Duco, and white glue in my model building. When it comes to laying down sticks, and the basic structural assembly of a stick and tissue model, I'd be lost without my trusty cyano glue.

Via the Cloudbusters Newsletter edited by Pete and Doris Azure