How to make your gliders go better

The Budd-Kicker

By Stan Buddenbolm, From the October 1977 Issue of the NFFS Digest
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What does it do? HLGs & catapult gliders have tremendous launch speeds requiring only a small amount of angular difference between the wing and the stab. This reduces glide time, stability, and thermaling ability.

The Budd-Kicker allows the CG to be moved forward with the incidence increased for level glide. At launch speed, 1/16" incidence would normally cause the model to loop like crazy but with the Budd-Kicker you get a nearly vertical launch with a beautiful transition, a stable, bouncy, improved glide and a model that loves to thermal.

The technique also simplifies construction. No longer do you have to take the time and trouble to get the wing and stab near zero incidence (think of all the bent wood you've rejected).

Simply glue the Budd-Kicker-equipped stab on with more than normal incidence (I use 3/64" to 3/32" but don't normally measure it) and move the CG forward from its usual position. If the model is too zero on launch, add a little incidence or remove a little Budd-Kicker; if it's too loopy, add a little Budd-Kicker. It's not hard to get that perfect transition.

So far I've tested this technique on 16" catapult gliders and 24" HLGs with good results. The famous glider designer, Lee Hines, said, "Hey you've really got something here," while flying one of my BuddKicker-equipped HLGs.

I would like to give credit to my friend Dick Baxter for the original design inspiration.