

Silly Putty Timers and Cat Glider DT's

Several years ago John Steinheimer moved to Pensacola from Brooklyn, NY (he had first taken a course in "English as a Second Language for Brooklynites"). Since moving here, he has focused his considerable energy toward experimenting with Catapult and Hand Launched gliders. He has become your friendly editor's "glider sea daddy" (for you hippies from the 60's, that's the same as a "guru"). After watching his and other folks gliders fly over the horizon, he started getting serious about installing DT's on his planes. He uses the silly putty timer device described elsewhere in this exciting rag, and except when the weather gets cold (come-on, this IS north Florida/Lower Alabama, so we won't lie to you — it gets chilly here in the winter). In a recent launch on a cold day, his silly putty got so stiff it stopped working, but he had paid proper homage to the gods and the wind died down and after several minutes his glider landed nearby.

John has experimented with having the beer can piece pop out from the side, which causes the glider to smite the ground in a spin. Thinking there must be a better way, he put the beer can strip on top of the wing, which causes the glider arrive in about a 45° dive — a little less force than the spin.

After watching John having success with the beer can strip on top of the wing, I decided I'd have a go at that. I noticed that John only used a 1/2" wide strip of beer can. I thought perhaps if I used a much wider strip, the drag force would pull the nose up into a permanent stall and the plane would drop in a flat configuration. Ask me how I found out that theory was not so good. The wide strip is a very effective DT, but who wants their glider to perform outside loops in order to get out of a thermal and arrive for a landing upside down?

The reason John's 1/2" wide strip works is that it disturbs just enough of the airflow over the horizontal stab to cause it to lose a small amount of its downward force, letting the nose drop. Anything too wide and the stab loses so much down thrust that the glider will start doing inverted loops. Exciting to watch, but not good!!

John's advice for the "beer can atop the wing" program is to start with a 1/2" strip about 3" long, and trim it 1/4" at a time in length until you get a reasonably shallow dive rather than become a lawn-dart. Usually, a HLG will take about 3", and a cat glider will take a 2 1/2" long strip.