HOLDING THAT STAB DOWN

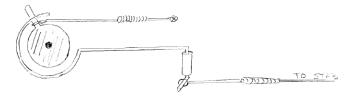
By George White

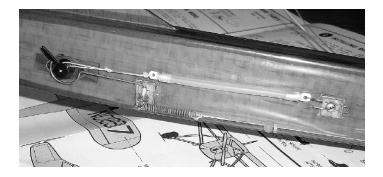
For those endurance flyers who used a pop-up stab for a DT activated by a burning fuse and are faced with fire restrictions at your flying site, the button or silly putty timer is rapidly becoming the substitute. As relatively new kid on the block I've always used the button timers. However, I'm the first to admit, if used correctly, the fuse is probably the most accurate DT timing device other than an electronic one. In using button timers I quickly learned that there is a conflict between the power required to hold the stab down and the power needed to properly run the timer. One of the local "older boys" advised me to simply pull the stab down with a line, wrap it around a peg about halfway between the timer and the stab, and the use a spring at the front end of the line to activate the timer. I quickly found that you must use a very soft and flexible line from the timer to the stab to do this successfully. I use 6-8# braided fly fisherman's leader line. A monofilament line will work, but not reliably, especially in cold weather, when it tend to acquire a "set" and not want to unwrap from the peg when the timer releases. The photo below illustrates this setup on my Miss Canada.



It never occurred to me that this might be useful information to someone thinking about changing from a fuse to a button timer until I received an email from a reader of our website, John Worsley of SAM 1066 and SAM 35 in Hampshire, England. John was kind enough to recommend I add that to our "how to's" in the newsletter. Consider it done, John.

My "Sea daddy" (only a sailor will understand that term) Gene Smith espouses another, equally reliable scheme on his little 1/2A Gas ship. He uses a wire which circumscribes 270° of the button timer arc and is held against the inside of the timer arm by the wire extending aft and bending down through an aluminum tube and then bent out at 90° from the fuselage, and canted about 15° forward. Over that bottom canted portion of the wire is a ring attached to a spring attached to the line which holds the stab down. That spring has to be strong enough to overcome any tendency of the stab to move in flight. Attached to the timer arm is another, much weaker spring which activates the timer. I have found that an 18" long piece of .009" wire made into a spring using the Kavork Fags spring winder (see Articles Index for details on the winder at www.pensacolafreeflight.org) provides good, reliable tension for a button timer. The drawing below illustrates the rig. The photo below that is the setup used by Gene. Note that he uses surgical tubing instead of a spring to activate the timer. Such a setup will work wonders on an endurance model, but would produce gales of laughter and retching at the judges table for a scale ship.





Other very creative stab DT schemes may be found in the July 2006 issue of Flying Models.