## **Button type Dethermalizer Mounting**

by

Gerald Sullivan

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At the recent Orbiteers meeting, John Oldenkamp had two exquisite models for show and tell, a Thermal Hunter (from Larry Bagalini's new business) and a Gollywock. The Gollywock had an interesting variation of using the silly putty timer from the construction articles in the May and July issues of the Scale Staffel newsletter. John said that he prefers the silly putty timers to the Czech silicone timers as the Czech timers require too little of an actuating force, and the putty timers seem to be more consistent. (That makes me feel good as I make 'em and distribute 'em.)

John went on to relate how his planes would always start an pitch up/swoop down motion about 40 seconds into the flight which would keep getting worse as the flight progressed. John traced the problem to the stab being tilted up by the tip up rubber band overcoming the rubber band driving the timer, especially as the necessary turns on the timer are "used up". John wanted to drive the timer with a spring for consistency, but this had two problems: 1) the spring could be stretched too much and be ruined, 2) the relative tension problem would still be there.

John installed a device, for lack of a better name; I will call a Mechanical Amplifier (MA). It consists of a small piece of 1/16 o.d. aluminum tube and a piece of 1/32 wire. It is bent up much like the operation release wires on the multi-function windup timers on F1B planes. John then uses a spring to hold down the long arm of the MA and simultaneously drive the timer. Attached to the short arm of the MA is the line holding down the stab. See the diagrams.

All in all, a very neat device that weighs next to nothing and solves a big problem. John can now drive the timer through only 1/2 turn for a 2 minute run, where before it needed some 2 turns... Way to go, John.



Editor's Note: What isn't evident in Gerald's Drawing is the shape of the 1/32" wire which holds the stab down. The following is my half-baked attempt to depict that. When the spring comes loose from the timer, the rubber band at the bottom causes the longer wire arm to rotate aft, releasing the hold-down to the stab. The leverage allows for a stronger rubber band to be used at the bottom of the 1/32 wire to keep the stab pulled down. I've found that the 1/32 (approx.) round elastic sold in fabric stores for use in women's panties (skivvies to us sailors) works well and slips off the wire more easily than do plain rubber bands. Springs work even better)



(Next, Here's Another Idea Which Can Be Combined With The One Above — Ed.)

## A Pop-off Wing DT for P-30's

by Larry Bagalini

Published in the October 2004 issue of the "Scale Staffel," Gerald Sullivan, Editor The following was a hand out at the recent Orbiteers general meeting. It was drawn up by John Oldenkamp. The identified parts go a long way to showing how the device is made. Not shown is the line from a wing tip to the rear of the fuselage. A fishing swivel must be placed in this line.

1. Bell crank. Make from thin plastic, aluminum, or ply.

2. 1/8" i.d. aluminum tube. Drill 1/32, then file slot for axle.

3. Bell crank axle. # 90 nylon bolt, paper clip, or thin tubing.

4. Viscous Timer. Badger, Flite Tech or FAI Czech, Buddenbohm, etc.

5. Small stainless steel spring. Some ballpoint pen springs work well.

6. Plastic small diameter cocktail straw runs through pylon.

7. Spider wire lanyard. From WalMart fishing department or 10# monofilament.

8. .020 or .015 inch closed loop music wire turnaround.

9. Wing held down with 2 #10 bands tied together.

10. .5 or .75 oz. glass clothe over turnaround. Attach with CyA glue.

(Larry ties the bands to the peg at illustration 9 to keep from losing the bands.)

