

ON BURNING ROPE AND WORMHOLES

Sometimes freeflight folks get caught up in a certain way of doing things even though it becomes obvious that doing so is the major cause of wormholes in the ground. Burning rope has been around since the dinosaurs, but lately it has been superseded by what are called timers. These are very expensive (compared to burning rope) little mechanical gadgets that weigh about the same and are extremely accurate (compared to burning rope). They can, if hooked up in a particular way, actually prevent wormholes. Unless, of course, one becomes addicted to making wormholes.

Wormholes, the kind made by a freeflight out of control, generally happen during the teaching phase, where the pupil (model airplane) and the teacher (you) are not yet speaking the same language. A newly hatched model airplane will automatically go in the direction it is preprogrammed to go and job one for the teacher is to first discover that direction. Only after finding out that important information can the teacher give competent and correct instructions to the pupil. The time difference between getting that information and a wormhole is measured in seconds, sometimes parts of seconds and burning rope simply is not that accurate. In the pictures that follow, several hookups are shown using a timer as a way of preventing wormholes.



Photo 1 (left) shows a Texas Micro timer hooked up to a DT line that goes to a mousetrap. A rubber band maintains a small amount of tension. Photo 2 (center) shows the mousetrap cocked and waiting for the mouse. From the mousetrap a different line goes to the aft end of the stab. Tension on the stab is maintained by a spring. Photo 3 (right) shows the same mousetrap released after the line around the timer scroll is released. The spring has retreated to the rear and the stab has moved to the DT position.

In photo 1, note the offset 2-56 flathead screw around which the line is passed. Also note that the line and the fuel shutoff lever are both positioned in the same groove in the scroll. **THE SETUP AS SHOWN WILL GUARANTEE A DT ONE SECOND OR LESS AFTER ENGINE SHUTDOWN. EVERY TIME.** No burning rope, end of wormholes.

Several variations are possible. If the line were to bypass the 2-56 screw and head straight for the mousetrap, one would have a very effective wing strength tester in addition to an instant DT because the mousetrap release and the engine shutoff would happen simultaneously. The offset provides that tiny bit of time needed for the engine to quit producing thrust.

Another variation is that the groove the line runs in can be one or more grooves beyond the groove the shutoff wire runs in. This variation adds a bit more time after engine shutoff, the time delay being the time it takes for one revolution of the scroll. **THIS DELAY IS ABSOLUTELY REPEATABLE EVERY TIME.** Try to do that with burning rope.