

PREMATURE TERMINATION OF THE TOW

So—tell me---exactly what is the probability of a PTTT on your next tow? The answer, from a Flight Instructor and author of international repute is “Exactly 50%--either it will or it won't!”

I heard this is a class from that instructor, and my startled brain, trained in statistics, said “Wow—that is about the most uneducated statement I have ever heard!” On further reflection I thought “This guy can't possibly be that dumb. What is he really trying to say?”

The plain answer is, that while statistically flawed, it is exactly the way to think about your next launch. At the end, I'll outline the lessons to be learned.

Let me relate a recent experience---last week in fact. I was at Chilhowee along with Dennis Linnekin and 2MG. We were leased to Chilhowee to instruct at the Women's Soaring Pilot Association seminar. That particular day, Dennis was flying the Chilhowee CallAir towplane. I had a soloed Student Pilot in the front seat. Takeoff was to the South, RWY 21.

For those unfamiliar with the layout, Chilhowee 92A is officially 2600 ft long, grass, field elevation 770 MSL. Takeoff is uphill going South. The North end has a 400 ft displaced threshold and the South end a 200 ft displaced threshold, leaving 2000 ft of runway. Beyond the South end is a small field and a big stand of trees. To the West is a sod farm and a river. Gliders use the West side for traffic pattern.

Dennis had already decided that a 45 deg right turn out just past the South end would give better options, and told me that earlier. Thanks Dennis!

So---at about 150 ft AGL, about 15 seconds after the right turn, I heard the rope release, and saw it fly away! Well—first order of business, get some airspeed. Next, as Tom Johnson said in FIRC class, wind your watch! (Modern—What?—digital quartz watches don't wind!) (Millennial-”What's a watch?”) Anyway-assess the situation for a few seconds. You lose about 3 ft of height per second—no need for rushing.

Return to the runway might have been possible, but a 75 ft tall tree line was in the way, making it iffy. A hard right turn of about 100 degrees put me on final for the sod farm—a smoother surface than Chilhowee! It would have been nice if the student could have removed his head so I could see better, but a slight snaking path showed me a hedgerow to clear, and a brown rectangular solid object about 3 ft by 2 ft by 1 ft tall. All else was clear. No problem—approach and touchdown minimum energy, and apply hard braking. An Armadillo hole is big enough to damage the landing gear for sure.

Jason Arnold contacted the sod farm and got permission to bring a 4-wheeler in--. A short 1 mile trek and we were back at the flight line. I inspected the mechanism, and asked the student if perchance he had pulled the release, or pushed the mechanism with a foot. Negative on that. We hooked the glider to the 4-wheeler, chocked the glider gear, and got some beef in front of the wing. Gently increased the pull until the pull overcame the chock and the beef. No release. I cleaned and lubed the mechanism and flew uneventfully after that.

I have since removed the release and sent for a rebuilt one, having found some evidence of mild wear. This release was replaced in Feb 2013, so 4 ½ years. 961 flights since. In any event, a rebuild costs much less than losing a member or two, or a K21.

So what are the lessons to be learned here?

Yes indeed—50 – 50. It will or it won't. Mr Murphy is waiting patiently for you to fall asleep. Be ready every time! Have 2 or 3 plans ready to go. When it happens, “wind your watch”. No need to rush, usually, and a hasty ill conceived action is trouble.

The Tow pilot should be part of the contingency plan. Dennis made it much easier for me.

Static friction (Stiction) is your enemy. Your defense is to let go of the release handle and let the spring do its job of overcoming the static friction. I see many “riding” the ball back to be gentle on the equipment. This practice can result in incomplete closure of the hook, and the trigger is set. After hook up, feel the release gently for free travel. There should be some free travel, with nearly zero tension. Otherwise, the release is pre-loaded somehow.

Have the hook-up person rattle the ring after attaching, to make sure hook up is proper.

Don't do stupid stuff---don't try for the runway if it is a bit doubtful—pick some thing else.

Practice accurate low energy landings. A sod farm won't always be available.

Finally—if you don't feel comfortable with the PTTT options, don't go! They won't always be perfect, but should be survivable at least.

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