

Let's Go Fly a Kite?

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It seems everything old is new again. Unfortunately, when it comes to ways to harm ourselves in or with our sailplanes, we never seem to come up with new ideas.

Such is the case in a recent accident where the sailplane kited on take-off and upset the tow-plane. Tragically, the tow-pilot was killed.

While the exact causes are unknown at this time, the basics do not change. And the mitigation strategies for stopping a kiting situation have not changed.

We all know the sailplane will generally take off first from the ground well before the tow-plane. Situations such as a heavily ballasted sailplane can change this, but that is another discussion.

The sailplane wing is much stronger and more efficient than the horizontal stabilizer and elevator of the tow-plane. If the glider pilot kites the glider, the pull of the glider wing can and will easily overpower the ability of the tow-plane elevator to stop an uncontrollable pitch down moment of the towplane.

We know that the sailplane will lift off first and we must be vigilant to stay low behind the tow-plane until it also lifts off and starts to climb. It is a task that requires our full attention with no distractions

Make sure your cockpit is properly set-up and the sailplane is properly configured. Have all your gear stowed away in its proper place. Have your GPS programmed and ready to go before entering the cockpit. Have your ballast and water accounted for.

And most importantly, have your flaps set to a take-off setting and the trim set for tow. Trim set too far aft will get progressively harder and harder to overcome as the aircraft accelerates on take-off. It will also facilitate a nose up pitching tendency and could cause a kiting incident or accident.

We all should have learned this concept early on in our training, but it is amazing how many pilots do not properly set the trim for take-off. Having the trim properly set makes flying the sailplane easier should something unexpected occur.

But after a while, take-offs can become routine and seem benign. And, if everything is normal, you will probably be alright. And that is when trouble can strike.

But what if something unusual happens? That's when trouble can strike. There are several YouTube videos of distractions that can happen on the takeoff part of the tow. (Just put "scary glider takeoff" in your search engine and watch some amazing videos.)

As in any unusual situation, your first and primary task is to fly the aircraft!



The canopy flies open, fly the aircraft. Your water bottle falls into the footwell, fly the aircraft. You realize your GPS is not properly programmed, fly the aircraft. You hear an unusual bang and do not know what to do, fly the aircraft.

But what does that entail?

You must maintain the proper position on take-off. If the nose starts to pitch up and you realize you will lose sight of the tow-plane, or if you lose directional control, release immediately! Your tow pilots life may depend on your immediate action! Fly your glider and land straight ahead. You probably have plenty of runway ahead of you at this point, so a release is the safer option.

It can not be emphasized enough, if you begin to lose attitude or directional control, release immediately. No questions asked.

Your decision to do this must be made long before you get into the sailplane. This scenario should be part of your “what-if” planning. The decision to eject on a bad catapult launch is made in the comfort of the ready-room while drinking bad coffee with your squadron mentors. These kiting scenarios should be evaluated in a comfortable, low stress environment, but preferably not while watching “Walker, Texas Ranger” or your other favorite TV show.

If you ever do start to kite, it will happen faster than you can imagine. You must be ready with a decisive plan of action to recognize and react to the situation as it is occurring.

Remember, distractions in the cockpit are the number one cause of takeoff accidents. We practice rope-break scenarios but it is very difficult to practice common distractions. The takeoff and the tow must be conducted in a sterile environment as free from unnecessary distractions as possible. The glider pilots sole responsibility is to fly the glider as precisely as possible and maintain the proper tow position. As an instructor, it is imperative that you emphasize the sterile cockpit environment during takeoff and tow to your student so that they understand the importance of this concept and do not allow themselves to become distracted.

A great way to prepare yourself is to use Condor. Practice your plan of action. Get familiar with how quickly the situation can deteriorate. All of this will help you be ready.

And remember, leave kite flying to fun picnics in the park.

