

Taxing to Approach the Glider

Through years of towing gliders, I have learned some points of the towing process that I'd like to share with you. It is my hope these tips may help some of you become a safer and more considerate tow pilot. Perhaps they will also help you avoid the pitfalls I have found along the way. Now that I'm planning to spend less time in the Pawnee (and more time in a glider), I'm turning the reins over to others, and sharing a little knowledge I have gained along the way.

Let's begin with the rope. Even though it is the sailplane pilot's responsibility for checking the condition of the rope, it only makes sense to hook up to a *good* rope. Not only check the rope, but also check the rings and the tow plane release. Position the rope in a pile behind the *wing* of the plane, not directly behind the plane. If you stack the rope directly behind the plane, the prop blast will ball it up and tie it in knots. So "stack" the rope off to the side behind the wing. Pulling in the rope and stacking it behind the wing should be done each time you stop the tow plane. It keeps the rope out of the runway and out of the way of golf carts, cars, etc. As strange as it may seem, glider pilots will run over the rope time and time again with the golf cart or with cars. I often mention I don't mind if they run over it, the fraying that occurs will only directly affect them. I'm on the front end of the rope!

Before starting the engine, clear the area. Look behind you, as that's what or whom you are going to blow away. If there is anything behind you (a building, open hangar, an office with open windows, landscaping, people, animals) that could be damaged by blowing dust and sand, get out, go to the tail and move it around to the point where your prop blast is not going to bother anything save for a tree or two. I once prop blasted a Pawnee battery cover for several yards, not to mention the people who were chasing the parts. We were trying to jump start the battery in the rear of the Pawnee and I managed to prop blast everyone and everything. Not a good feeling. Many high time power pilots are surprisingly unaware of the havoc their prop blast creates.

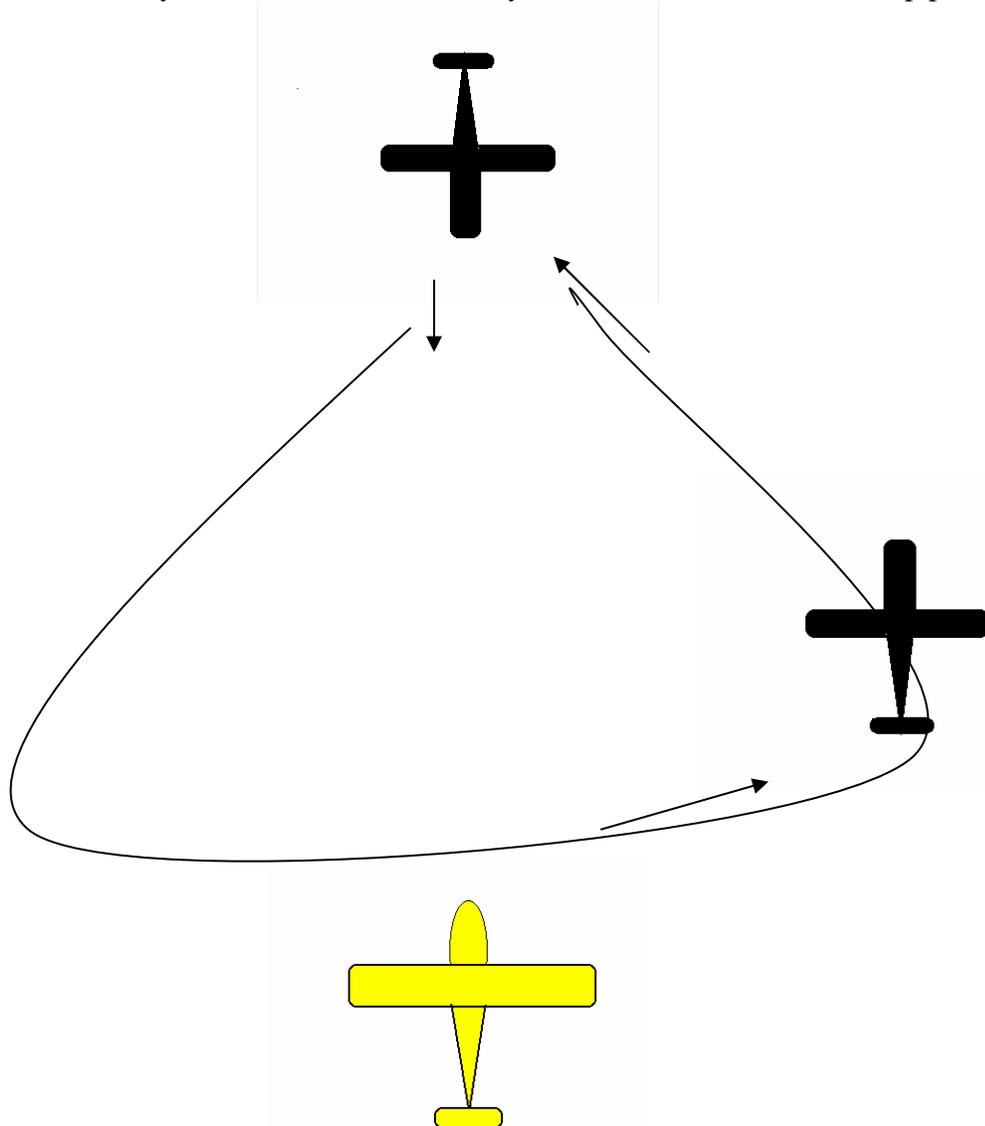
Keep an eye on your rope to be sure it is clear of obstacles and won't get tangled as you are taxiing out. Watch the rope follow you. If it balls itself up, you are then bringing the line boy a problem to solve. Sometimes it will make a loose knot or two, but should be easy enough for the line boy to untangle. I once tried to taxi out with the rope still in its stacked pile in the hangar (thinking I was going to save the time it took to pull the rope out of the hangar). I hooked one end to the Pawnee and off I went. This is a bad idea – the rings on the other end stuck in the door tracks. They proceeded to slide down the tracks and got stuck under the door. The building and the door are stronger than the Pawnee. It was a rude awakening when I reached the end of the rope and the slack was taken out. Thank goodness my belts were fastened!

As you pull out onto the runway, think about which gliders are airborne. This will increase your situational awareness about who may be entering the pattern. Solo students or instructional flights may be of short duration and may already be in the pattern. If there are high performance sailplanes up, you may want to look for them later, as you climb out, to use as markers for lift. Taxi onto the runway only after checking the pattern. Check downwind, base and especially final. Yes, I have taxied out and suddenly looked up, only to see a glider coming right at me!

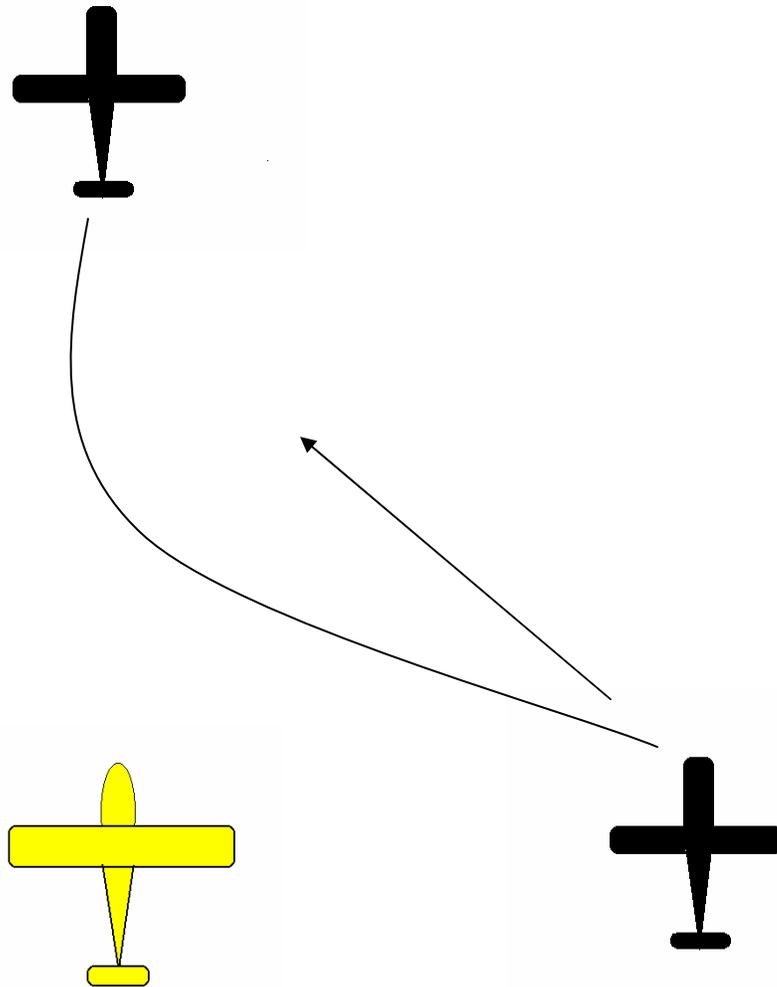
Now is the time to mentally make note of the type of flight and type of glider you are about to tug. Is this a 2-33, a 1-26 (tow at 55 to 60 mph) or is this a high performance glider, which will be towed faster (higher airspeed)? Is this a solo student? Is this an instructional flight? Is this a first time flight in a 1-26? Is this the pilot's first flight in his new high performance fiberglass

plane? If this is an instructional flight, will your trusted instructor want to box the wake, pull a “simulated” rope break, ask you to give the rudder waggle signal or wave them off? That’s the fun part of towing. Each flight is different.

As you approach the glider, turn the tow plane in front of the glider so the rope will pass close to the front of the glider. This allows the line boy (person) to be able to grab it or hook it with a specially made “hook”. The line person (if experienced) is your best friend and safety officer. Continue to taxi past the front of the glider, so when you turn the towplane to line up and take out the slack, you add power and the *prop blast goes to the side of the glider*. It is extremely rude to prop blast the pilot, his glider and the line boy. If you get in such a position where you think you may catch part of the glider with your prop blast, check and be sure the glider canopy is closed. Ask the line boy or instructor to close the canopy if need be. I have seen a Grob canopy blown so far off the side of the glider that the canopy hinges bent and the gel coat popped off. The back seat door Plexiglas window of the 2-33 has been cracked, as it slammed shut from the tow plane’s prop blast. You might mention to the line boy, student or instructor that they will loose their hats too! Not a pretty scene. Taxi far out to the side and make your turn, then gradually pull in front as you taxi forward. I can only best describe this as a teardrop pattern.



Another way to taxi to the glider is from behind. Come in at an angle, which allows the line person to “snag” the rope, but keeps your prop blast away from the glider and people. Below is an alternative approach to the glider when you both are headed in the same direction.



The only other thing to mention about taxiing is the use of the throttle and the brakes. Do not try to go and stop at the same time. Seems easy enough to understand, yet apparently easier said than done. I’ve seen pilots taxi out with the brakes squealing and giving the tow plane power. They are controlling their taxiing speed with the brakes, not the throttle. You will go through a lot of brake pads this way and unnecessary engine wear. You may also end up on your nose if you are not careful. The CG of the Pawnee is forward. Applying brakes when you have forward motion can bring the girl right up on her front wheels with her tail high in the air. I have seen our Citabria go over on its nose. I have been in the cockpit of a Pawnee when the tail came up so far, I swear the only thing that kept me from going over was luck. Beware of sudden stops. Use the throttle to move the plane forward, then take power off. Let the plane slowly roll, applying brakes when you are signaled to stop by the line person. Then slowly give it a little throttle (gas) to take up slack and take the power off again before applying brakes. This takes a little finesse, but it will save a lot of wear and tear on the plane.