The Rudder Waggle Signal – towing and sailplane spoilers (or air brakes)

The only reason we give the rudder waggle signal on tow is to signal to the glider pilot to close his spoilers. The rudder waggle is supposed to signify that "something" is wrong with the glider. In reality, if the canopy is open, the glider pilot is going to know it before you do. If the glider's aileron or elevator is not hooked up, the glider pilot will discover the problem before you will. If the tail dolly is on, the pilot is not going to know it (unless he realizes it on take off roll), and it will not affect your tow. This particular circumstance may affect your take off, if he loses control on the roll. However, once you are airborne, it will not affect your flight.

Chances are the only reason you are going to realize something is wrong with the glider is if it is effecting **your** flight. If the glider's spoilers are open, then you are not climbing as well as you normally do or perhaps not climbing at all! This is the key. When you look back at the glider in your mirror and see large orange or red squares above a fiberglass plane's wings, he has his spoilers open. Chances are good, very good, that he is clueless. If he had a clue, they wouldn't be open. Now is the time for a call to the glider on the radio. If he is not on the radio or does not have a radio, then we contemplate the rudder waggle. I say contemplate because when and where you give this signal could affect the outcome of the glider pilot's flight.

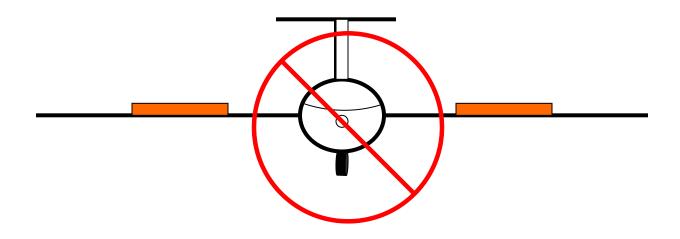
He has no idea his spoilers are open and chances are you are not climbing well. The glider pilot may very well come to the incorrect conclusion. He may decide there must be something wrong with your plane. "We're not climbing well, must be a problem with the tow plane's engine, yep there's **a signal**, so I'll release." Now once he has released, he is flying around with his spoilers open. As he rapidly looses altitude, he also looses his options, time and maybe even his airspeed. All could end in a very bad scenario, a sailplane crash.

If you have tried to contact the glider pilot by radio and he does not respond, check your climb rate. Check your engine gauges. If all is ok, and it will most likely be ok if you're in the Pawnee, (and he is not loaded with water) continue climbing. If you are climbing, continue to fly the flight. Even if you are just climbing 100 feet a minute, *just keep on towing him*. An important point here is to keep him over the airport. If he releases and his spoilers are open, he is going to loose altitude fast, so you don't want to have him miles away from the airport. Keep him very close.

If he remains clueless, his spoilers will remain open. Once you have him at an altitude where he has some time to think, (1500 feet or more) go ahead and give him the rudder waggle. The best possible outcome will be the sailplane pilot will check his spoilers and close them. You will notice your climb rate improve and your tow will return to the familiar mode you are accustomed to.

If you are having a problem climbing over an obstacle (clearing trees) during take off, you have no choice but to give him the rudder waggle immediately. If he does not close his spoilers, the situation will surely worsen. The trees will not get smaller. Wave him off. If there is no time for waving off, release him.

We have towed more than one glider with "his" spoilers open. Two of these gliders did close their spoilers on tow and the outcome was uneventful. Uneventful because the tow pilot did not experience a problem towing the glider, so we just kept on towing (one glider pilot figured out the problem before we were high enough to give him the rudder waggle while the other answered his radio and was told of the problem)! Another glider ground looped by dropping a wing and either released or back released as he went off the side of the runway. He never knew his spoilers were open and tried to blame his poor take off roll on his lovely wife, his wing runner.



No go for tow!