## NCSA landout/retrieve doctrine

Gliders routinely make safe landings at 'other' airports, and they are routinely brought back home with an aero retrieve. It's safe and reasonable!

That said, there are aspects of retrieves that can make them more problematic than a tow at the home airport. These need to be considered so the retrieve doesn't become (another) local legend, or worse yet, damage aircraft so they are not available to the soaring community afterwards.

Gliders can easily land in places where an aero retrieve would be problematic or illegal. The phone call for a retrieve tends to come at the end of the day. The pilots are going to be tired, and there may not be enough daylight. The tow pilot may (or may not) have the resources or time to do the minimal required cross country planning required by regulation and common sense. And finally, there's a big variation in the experience of the potential tow pilots and glider pilots. Everyone should bear in mind that the alternative, a ground retrieve, will be a hassle, but doesn't need a safety/sanity check.

Retrieves may only be done from these airports. If the airport is towered, then ask the glider pilot to call the tower explaining that a retrieve is needed. This gives the tower insight into what is undoubtedly an unusual situation for them. It also allows them to provide guidance.

Tracy - KTCY New Jerusalem - 1Q4 Rio Vista - 088 Napa - KAPC, tower, 707-255-1533 Buchanan (Concord) - KCCR, tower 925-685-5743 Stockton - KSCK - Tower - 209-982-4667 Livermore - KLVK, tower, 925-443-0666 Nut Tree (Vacaville) - KVCB Modesto - KMOD - Tower, 209-524-6985

## Tow pilots:

1] On days when cross country activity is especially likely, backschedule a retrieve timeline and let the pilots know what time to call by. Starting with sunset, add up the return trip, time at destination airport ½ hr min, outbound trip, time at home airport prior to departure, including fueling, finding ropes, etc. You will find this adds up to more than you'd think. Give the pilots your phone number.

2] If a retrieve is needed, praise the almighty for a welcome break from routine tows. Get the best contact info you can obtain for the errant pilot. Pilot name, pilot cell phone number, airport, location on airport. This said, if the day has been long and you're already knackered, don't hesitate to decline.

3] Plan the flight carefully. Pawnees are very short-legged, start with full fuel. If you haven't already, backschedule a timeline conservatively from sunset: Return trip, time at destination airport ½ hr min, outbound trip, time at home airport prior to departure, including fueling, finding ropes, etc. You will generally find this adds up to more than you'd think. If the answer is marginal, say "No". Hopefully you have foreflight or equivalent, but be sure to brief yourself properly on the route and on the destination airport.

4] Write down the tach time when you leave the fuel pump, retrieves are billed block time.5] Remove the towrope and stow it in the airplane before you leave Byron. Bring 2 ropes and a handheld radio.

6] If possible, overfly the destination airport and verify the position of the glider. Look again, maybe there's more than one.

7] Land, taxi to the glider, get out and talk to the glider pilot. Agree on a takeoff plan, including hookup, launch, climbout, probable route, radio frequency, and release. Caution the glider pilot to be extra careful to obtain super-conservative glide before release. Hopefully the glider pilot is located at a tenable takeoff spot, if not, you'll probably have to help push the glider to someplace that is reasonable. Using the towplane to tow the glider around the airport on the ground is fraught with peril.

8] If there's more than one glider needing a retrieve, evaluate the airport for the sanity of landing and taxi-ing with a trailed rope. You need to consider wires, fences, taxi obstructions, and airport social acceptability. If there is any doubt in your mind, do not hesitate to return to the home airport after glider release, roll up the rope, and go back to the retrieve airport with the rope safely stowed.

8] The takeoff plan depends on the glider pilot, the level of activity at the airport, and the type of glider.

- Ideally you'll unroll the rope, hook the rope to the towplane, taxi out, and the glider pilot will push the glider out, hook up the glider, and strap in. This can take a long time!

- If the glider pilot is especially confused or knackered, you may end up shutting the towplane down on the runway and assisting the glider pilot

- If the glider has a CG hook the wing-down takeoff can be challenging

9] Some sort of overhead departure is highly recommended to keep the glider (and towplane!) in-range of a safe airport, but can be dispensed with if both glider and tow pilot agree.

10] Beware of power reductions on tow, the tow plane is draggy and the glider is slippery. Power reductions should be super gradual and in steps. The glider tends to catch up with the towplane, very disconcerting. Best to maintain a continuous slight climb after the target cruise altitude is attained.

11] Everyone should stay on the takeoff airport CTAF until glider release. If it's a towered airport, then the tow pilot should initiate a frequency change to Byron's CTAF once the tower advises that frequency change is approved. The tow pilot must always verify that the glider is on the new frequency.

12] When the glider releases, the glider pilot may fly it back home much faster than you think ...13] Write down the tach time after you land at the home airport. Did we mention that retrieves are billed for block time?

## Glider pilots:

Prepare ahead for a landout

- Have good data on prospective landout places and have it easily available for use in a high-workload high-stress moment. This includes runways, field altitude, frequencies, L/R patterns Consider driving to high probability places and looking at them.
- Have some sort of minimal landout kit a little googling will reveal several lists. At a minimum have water, snack, clothing that's consistent with several hours (overnight?) outside, contact info, wallet, phone, probably a powercell for your phone. Bring some rope in case you need to tie down.
- Talk to your fellow pilots ahead of time and have a plan A for retrieval. Trade phone numbers. Have your trailer / car ready for someone else to use.
- Have an internal expectation of a cutoff time for an aero retrieve request. It will take longer than you think to get you back to Byron.

The landout

- Your primary responsibility is to land safely at a safe spot. Don't do silly things like rejecting a safe landing place in favor of a sketchy glide to an aero retrieve airport.
- When you land, get yourself off the runway and to a safe spot. Call the folks at Byron.
- If the airport is on the aero retrieve list, do your best to push your glider to a place that's a logical launch point. Otherwise get it somewhere where you can tie it down or disassemble.
- If there's an aero retrieve the tow pilot will show up. Talk to him and be sure there's a clear plan that includes pushing out, hooking up, launch, departure, route, and radio frequencies.