LAUNCHING WITH A WINCH*

On a number of occasions, it has been observed that various combinations of errors during winch and retriever setup or operation have caused near disasters or unfair conditions during competition. The following is intended to help avoid some of these errors.

When more than one winch is used they should be spaced 15 to 25 feet apart. Any closer raises the chances of line tangles. When a clump of weeds is partially encircled, the friction on the line during retrieve and the following launch is raised thereby lowering the winch and retrieve effectiveness. In addition, if the line stays caught under a weed or other snag, it acts as a turn-around and the effective line length is reduced thus reducing maximum launch height. If the line pops loose from a snag just after launch, the line may suddenly go slack leading to pilot excitement, disappointment or despair or worse.

When first walking the turn-around pulley out during initial set-up, care must be taken to keep the out and return lines separated. Either walk between the lines with the turn-around ahead of you, or walk back to the launch point after staking down the pulley making sure the out line and back line don't touch. If this is not done, during the first launch the out and back lines may wind around each other and cause a winch stall or even line breakage with possible disastrous results to the glider.

When more than one winch is deployed, the turn-around pulleys should all be the same distance from the winches. (It has been noticed that as much as a 20-foot difference between turn-around positions have occurred at some of our contests. When the ground is wet and soft, the turn-around stake must be driven in all the way, but when the ground is dry and hard, use restraint. Some poor guy has to remove that stake later.

When retrieving the chute, after a break, it is best to walk all the way to the turn-around to make sure the line isn't caught on the stake or that other snag problems don't exist. Also, as was explained above, be sure to keep the retrieving lines separated from the out-bound one. Walk a couple of feet to one side of the outbound line so the lines don't touch.

Except for special cases, like an almost instant pop-off or only one winch on the field, it's always best to START (a couple of taps) to wind the chute down to the turn-around after the chute comes off the hook. Failure to wind the chute down is frequently the cause of two or more winch lines getting tangled or the line tangled around the turn-around itself. This slows progress as the tangles must either be removed or the lines cut out and thrown away. Most of us come to the field to FLY, not to study and tie knots. Also, by winding the chute down to the turn-around, less chance of weed snag encirclement will take place and lines are easier to retrieve. Especially when the weeds are tall.

Anyone can expect an occasional backlash, but it has been noted that certain people cause most of the winch problems. If you are one of these, get help so that you can learn what you are doing wrong. If a backlash does occur, it's still better to wind the chute down to the turn-around than it is to get the line tangled at either end as well. You (or your timer if you are in a contest) should let someone know that a backlash or a

break has occurred so that it can be removed or repaired during retrieve and not get pulled any tighter.

During a contest if your plane pops off, your timer has the obligation to wind the line all the way down to the ground so it won't tangle either lines and delay things. If fun-flying, have someone come help with the winch. You usually have your hands full trying to bring your plane down safely if you have popped off at a low altitude. Your helper can make sure the lines don't get tangled. When a line breaks, the same applies, except now two additional problems occur. Most of the time the line with no chute can't be seen but the winch should be run a bit to try to keep that line off the other lines. In addition, the line on the chute may drift across the other winch lines. This is where quick action must be taken to be sure and clear the broken line so that launch operations may resume.

So, even during fun-fly days have someone serve as your winch assistant during launch and have him or her wind down the chute a bit (a couple of SHORT taps) for you after you've launched. By using just a little more thought and care, our whole launch operation can run more smoothly, and we can spend more time flying and less time correcting winch problems.

*Copied and edited from an article by Dan Capps of SULA (circa 1986)