

EVERGREEN SOARING

WING RUNNER Procedure at Arlington Airport – October 2, 2009

The following is the local field practice for wing runners. It is established to provide for a safe launch operation that can be conducted with speed and efficiency. It is recommended that you go online to <http://www.soaringsafety.org/school/wingrunner/toc.htm> and go through the entire wing runner course. There you will find valuable information, from handling gliders on the ground, all the way through the launch sequence. Take the wing runner examination online, print out the certificate of completion and return it to the club secretary for recording. Click on the small "here" link for SSA members to get access to the exam.

- To save time, it is recommended that someone other than the wing runner run tow cards to the tow plane.
- It is recommended that the wing runner carry a portable radio tuned to 122.7 MHz and monitor air traffic communications to be aware of traffic in the pattern.

Pre-Launch Duties

- **Retrieve Tow Rope.** Watch for knots in tow rope. A knot can reduce rope strength by 50%. Rope retrieval should be initiated as early as possible in preparation for the launch. Avoid laying rope on the ground in the path of tow planes where they taxi out in position for launching.
- **Provide assistance to Pilot** when requested to ready pilot for flight. Assist the pilot with his parachute, seat belts, canopy or other items on request. The glider should be ready for take-off before the tow plane arrives..
- **Clear the area in front of the glider and the gliders wings of spectators and by-standers.** When the tow rope is connected all of **the area in front of the glider is a danger zone.**
- **Connect the tow rope to the glider.** Perform a test release if requested by pilot, and re-connect tow rope. Test final connection by pulling on rope until glider moves. In preparation for launch, connect the tow rope as early as possible. Do not interrupt the pilot going through a check list, or conversations between instructors and students. Note: Some gliders require an adaptor. Show the rope to the pilot for approval prior to hooking it up.

Launch Sequence

- **After the tow rope is connected, be prepared at all times to stop the launch or declare an emergency if things are not right.** Execute and use the proper hand signals. See the attached diagrams and descriptions of proper wing runner hand signals.
- **Scan the glider, look for unlatched canopy, open dive brakes, dollies attached to the glider, or other unsafe conditions.** If any of the unsafe condition exists, **stop the launch!**
- **Assume position at wing tip.** Position yourself where you can see the tow plane mirrors. **With wing tip on the ground** signal tow plane to take up slack, announce loudly **"Taking Up Slack"**. Do not wait for the pilot to give thumbs up signal. As the tow rope becomes tight sometimes the glider may roll forward. If this happens be certain that the glider wheel has not rolled over the tow rope and that the rope is clear of the wheel well area of the glider and not snagged on any part of the glider.
- **Scan for obstructions and traffic in front of the glider.** Especially watch for power traffic on the adjacent runway or traffic turning onto the taxiway crossing in front of the tow plane path.
- **Scan the pattern for air traffic approaching to land.** Look carefully for aircraft on final approach; they may be difficult to see. Also watch for power traffic entering the adjacent runway for take-off. Be aware of helicopters which might hover-taxi across the glider or tow plane path.
- **Level the glider wings only after the pilot gives you the thumbs up signal.** If necessary align or turn glider to point down the runway.
- **Make a final scan for air traffic in pattern or on the adjacent runway.** Look again for traffic or obstacles in front of the tow plane. Note: tow plane wings can obstruct vision of traffic crossing the taxi way in front of tow plane. If a power plane has taken the runway hold the launch until the runway and pattern are clear. Launch may be initiated with a power plane on final if the plane is 300 feet or more above ground level.
- **Give the glider pilot the thumbs up signal and/or loudly announce "Pattern Clear".**
- **When the glider pilot waggles rudder signal tow plane to begin take-off. If rudder is not waggled do not launch.**
- **As the glider begins its takeoff roll, run with the wing tip, holding the wings level until the glider has aileron authority.** If launching in a cross wind hold the upwind wing tip low. When releasing the wing tip let the wing tip fly away from your hand, do not hold or lift on the wing tip.

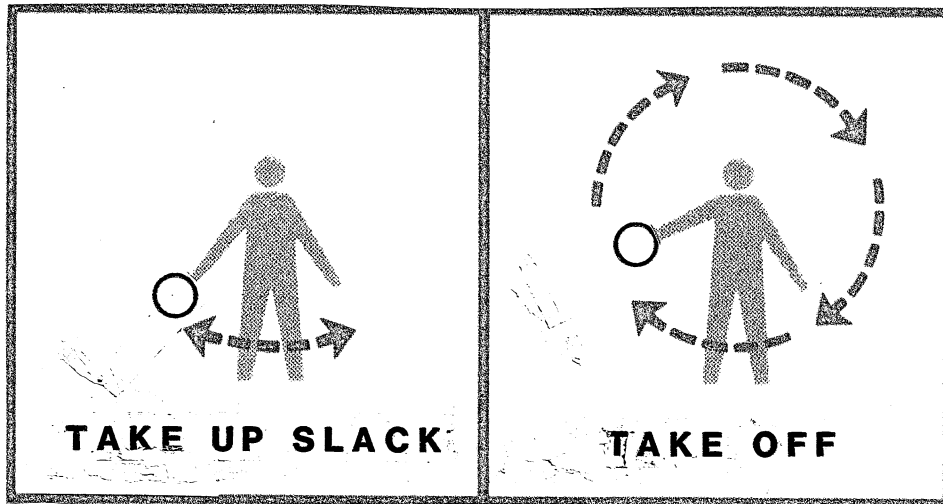
Post-Launch Duties

- **Scan the taxi way behind the launch area for tow ropes** that could be trailing out onto taxiway. A tow rope on the taxiway could be a hazard to power traffic. Remove any rope from the taxi way immediately.
- **Scan the launch area for any items or obstacles such as a dropped clip board, clothing, a tail dolly, seat cushions or other items** which could impede the next glider launch. Remove all loose items from the launch area.

SEE ATTACHED DIAGRAMS AND DESCRIPTIONS OF SIGNALS

HAND SIGNALS

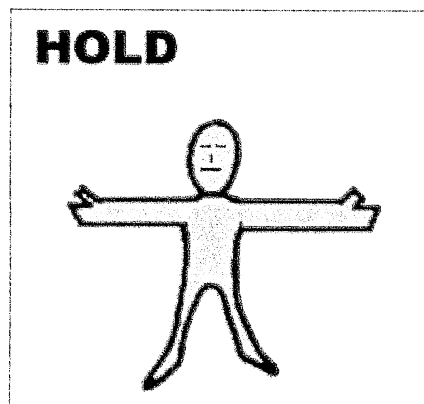
The **"Take Up Slack"** signal is given to instruct the tow pilot to begin a slow taxi forward to remove slack from the towline. It is very helpful for you to hold a hat or piece of clothing in the hand you are swinging to enable the tow plane pilot to see the signal better. **The wing runner signals the tow pilot to begin removing slack from the towline by moving one arm from side to side through a 1/3 to 1/2 circular arc below the shoulder.** *Note: Throughout the process, the wing runner should be monitoring the rope for proper takeout of the slack, the glider for further signals, and the pattern for conflicting traffic – watching the towplane provides no useful information! When the tow rope slack is almost gone it can be helpful to the tow pilot if the wing runner reduces the arm swing as the rope becomes tight. Remember the tow pilot has limited vision through small rear view mirrors that are vibrating and shaking.*



TAKE - OFF

The **"take-off"** signal is similar to the take up slack signal except the **arm is moved in a full circular motion.**

HOLD POSITION



If necessary, the wing runner should signal the tow pilot to "Hold" position by lowering the wing of the glider and holding both arms outstretched to the side. The wing runner may initiate the hold signal when necessary without request from the pilot of the glider.

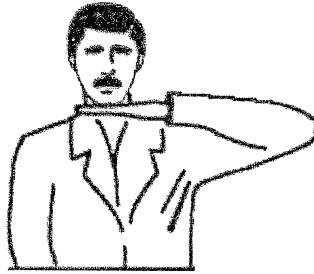
EMERGENCY SIGNALS

The following signals should be used when a hazardous condition is recognized.

Stop Engine/Release Towline

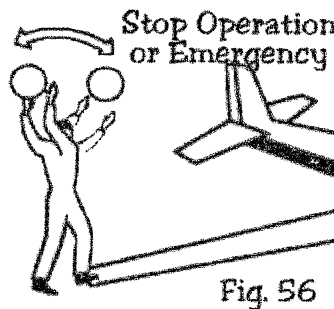
This signal is given to the glider pilot to command a release of the towline prior to launch. For the tow pilot, the signal is used to initiate a release of the towline and/or to command the tow pilot to stop the engine of the tow plane. This signal is given by moving a hand back and forth across the throat.

Stop Engine / Release Towline



STOP OPERATION OR EMERGENCY

The signal to stop operation is made by waving the arms back and forth above the head in a swift manner. The pilot of the glider may stop the launch operation at any time by releasing the towline. Before giving the signal, it is necessary to replace the glider's wing on the ground. This should direct the tow pilot's attention to the signal being given by the wing runner.



This signal is distinct from the "hold" signal that is associated with normal operations. If the "stop operation" or "emergency" signal is given, the wing runner should anticipate rapid action by the tow plane including the tow pilot releasing the towline and taxiing clear of the active runway.