**RAFGSA - RETRIEVE DRIVER TRAINING**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**No member is to undertake safety-critical tasks unsupervised before being certified competent by an authorised instructor.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Instructor**  **Signature** | **Instructor**  **Name** | **Date** | **Notes** |
| Launch Cable Safety |  |  |  |  |
| Vehicle Daily Inspection |  |  |  |  |
| Vehicle Refuel |  |  |  |  |
| Use of Radio |  |  |  |  |
| Visual Signals |  |  |  |  |
| Situational Awareness |  |  |  |  |
| Speed Limit & Vehicle Care |  |  |  |  |
| Taking up Slack |  |  |  |  |
| Stopping with Cable Attached |  |  |  |  |
| Normal Retrieve |  |  |  |  |
| Mid-Field Retrieve |  |  |  |  |
| Launch Failure (cable intact) |  |  |  |  |
| Launch Failure (cable break) |  |  |  |  |
| Weak Link Failure on Tow |  |  |  |  |
| Winch Driver Safety |  |  |  |  |

**The above-named member has completed all relevant training and is authorised to perform the duties of a Retrieve Driver.**

**Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Instructor Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_**

(Please also complete the member's *Ground Training and Qualification Record*)

**RETRIEVE DRIVER TRAINING – GUIDANCE NOTES**

**Full Driving Licence**

* Manual car licence (no automatic transmission restriction).
* Prerequisite for driving retrieve vehicles.

**Launch Cable Safety**

* Do not handle cables / parachutes unless absolutely necessary.
* Do not handle cable / parachute while the other cable is moving under power.
* How to hold / pull a launch cable.
* **Cables may start moving without warning.**
* Risk of sharp strands.

**Vehicle Daily Inspection**

* **Fuel:** at least half full. **Oil:** sufficient on dipstick. **Coolant:** top up if required. **Tyres:** correctly inflated. **Wheels:** bolts secure. **General condition of vehicle:** checked, free of FOD.
* Location of fluids / compressor.
* Remove drip trays before moving.
* Cold start: wait for glow plug light to extinguish before attempting to start.

**Vehicle Refuel**

* Fuel compound lock combination.
* Use of diesel refuelling rig.

**Use of Radio**

* **Controls:** on / off / vol, channel (usually Ch 2), push-to-talk switch.
* **Callsigns: “***(North / South)**Retrieve”, “Winch”, “Launch Point”.*
* Basic radio procedure: how to form a message. If in doubt: use plain English.
* Switch off radio and place on charge in workshop at end of day.

**Visual Signals**

* Winch stop light.
* Bus lights: signals to winch.

**Situational Awareness**

* Where is the other cable now? What is it doing?
* Effect of wind: where will the other cable fall when released by glider?
* Motor glider / aerotow operations: take-off and landing directions?
* Are gliders landing across the top table?
* Launch failures: where will the glider land?
* What is the winch driver doing? Is (s)he in the cab? Is it safe to tow the cable out?
* Which glider will launch next?
* Where do the launch point want you to drop the cable?
* Is the cable towing out smoothly?
* Vehicles, other members, trespassers.
* After dropping cable at launch point: confirm it’s not following you as you drive away!

**Speed Limit & Vehicle Care**

* 15 mph max
* Beware of bumps.

**Taking up Slack**

* Use mirrors to watch cable as slack removed.
* Creep forward (clutch control, no throttle) until slack removed. Then smooth acceleration.

**Stopping with Cable Attached**

* To reduce speed: lift foot off accelerator – cable will slow you down.
* To stop: lift foot off accelerator and depress clutch – cable tension will stop you. Avoid using brakes, except in emergency (cable drum likely to over-run).
* To allow cable removal: creep backwards to remove tension. Beware people behind vehicle.
* Satisfy yourself that cable has been removed before driving off. Do not rely on ambiguous ‘bang’ on back windscreen.
* Drive straight ahead until parachute visible in rear view mirror (if it has been inadvertently re-hooked onto tow ball, a turn could drag it across an adjacent glider).

**Normal Retrieve**

* The standard procedure. Max 15 mph, 2nd gear.
* One or 2 retrieve vehicles?
* Ensuring cable separation.
* Considerations for towing across rough grass (bows can’t pull straight).

**Mid-Field Retrieve**

* When is it appropriate to mid-field retrieve?
* Which cable can be mid-field retrieved?
* Where to wait for cable.
* Comms with winch driver before towing out.

**Launch Failure (cable intact)**

* Situational awareness: where will the glider land?
* Can the cable be towed straight back to launch point, or should it be wound fully in first?
* Need for constant awareness of what other cable / aircraft are doing.
* Comms with winch driver before towing out.

**Launch Failure (cable break)**

* Considerations as above.
* How to locate the broken end & what to do with it. Before towing broken end back to winch: **Where is the parachute? Is it safe to tow the cable?**

**Weak Link Failure on Tow**

* How to recognise.
* What to do about it.
* Is it safe to go straight back to the parachute (location, other cable launching)?
* How to attach new weak link.
* **Inform winch driver and get acknowledgement before re-commencing tow-out. If no answer, do not move. Winch driver could be working on cable.**
* When able: remove broken weak link to prevent injuries. Dispose of safely to avoid FOD.

**Winch Driver Safety**

* Biggest hazard: towing cable out while winch driver has hands / arms / legs in proximity to cable or drums. **RISK OF FATAL INJURIES.**
* Need for constant vigilance for winch driver location and activity.
* Use radio / watch for light signal before towing cable out in non-standard situations.
* Agreement with winch driver before commencing mid-field retrieving.
* If in doubt: STOP and ask. Don’t be afraid to use radio to clarify understanding, or ask someone more experienced.