**Tow pilots briefing Adapted to CGC**

**Updated 4/11/2021**

# Federal Aviation Regulations

Title 14 CFR

61.3 - Requirements for certificates, ratings, authorizations (pilot certificate, photo id)

61.23 – Medical certificates

61.31 – Type rating requirements, additional training,
and authorization requirements: (f) high performance and (i) tailwheel airplanes

61.51 - Pilot logbooks

61.56 – Flight review

61.57 – Recent flight experience

61.69- Glider towing: Experience and training requirements (a)(6) 24 month currency

91.3 – Responsibility and authority of the pilot in command

91.7 – Civil aircraft airworthiness

91-103 - Preflight action (Weather, notams, airplane)

91.105 – Flight crewmembers at stations – safety belts

91.113 – Right of way rules

91.139 – Emergency air traffic rules

91.151 – Fuel requirements for flight in VFR conditions

91.155 – Basic VFR Weather minimums

91.309 – Towing gliders – qualifications, airplane, towline, safety link, general course of action (signals, airspeeds, emergencies, towrope release) – Tow pilot/Glider pilot briefing

# Tow pilot

Qualifications (FAA, insurance, club), checkout (Husky, Pawnee), additional training.

IMSAFE checklist (Illness, Medication, Stress, Alcohol, Fatigue, Eating)

# Tow rope

Tow rings, towrope maintenance, towrope strength, weak links, towrope management (ground/flight).

# Tow Plane and procedures

Piper Pawnee PA25-235

Fuel consumption: 14GPH, usually it averages about 2 gals/tow

Stall speed 62MPH (Max Gross Weight, Flaps down), 46MPH typical landing weight and flaps down.

Fuel capacity 38 gals, 36 usable.

Oil capacity 12 qts, recommended: 10 qts min, 11 qts max

*Preflight:* weather and notams (FSS, 1-800-WXBRIEF), fuel and refueling, oil, propeller, towhook, tow release handle, mirror, windshield and windows, brakes, flight controls.

## Start

*Warmup* (2 to 4 minutes),

*Runup* (1800RPM: mags max drop 125RPM, carb heat 150RPM)

*Taxing* (wind, flight controls, brakes check and use)

*Tow rope* (procedures, signals, verify, knots, links, release/clear runway)

*Glider* (tow record, type of tow, airspeed)

*Take off* (fuel, mags, carb heat , belts, trim, wind/flight controls, gradual power, window, altimeter, glider, performance, emergency procedures/plans, kiting, tow rope break procedure),

*Tow* (airspeed, lookout, direction/area, training/soaring, rope break, wind change with altitude, max angle of bank, level off/power reduction, haze clouds and holes)

*Release:* (verify, radio, lookout, normal, emergencies, soft releases)

*Descent:* RPM (2100->2300), speed (max100 MPH), flaps (VFE 109MPH), flap retraction, pattern (lookout), Soaring NOTAM.

*Approach/Landing:* (lookout, short pattern, gliders in right pattern, 123.3, tow rope, corn, 75MPH on final, 120-200ft over threshold, tailwind, brakes, wet runway, crosswind operations, Southerly winds and obstacles)

*Descent on tow* (procedures)

*Cross Country tows* (procedures, cruise, descent, weather, maps, radio)

*Retrieves* (unfamiliar airports, obstacles, runways lengths, airplane performance, tow rope length, alternatives)

Tow Plane Record

**Safety first, if in doubt check, if doesn’t look right DON’T GO UNTIL IT DOES LOOK RIGHT!**

### Suggested readings

FAA-H-8083-13 Glider Flying Handbook

Piper Pawnee 235 Owner’s handbook (Essco Aircraft http://www.esscoaircraft.com)

Title 14 CFR (parts 61 and 91, see list above)

Towpilot Manual by Burt Compton (Bob Wander’s Gliding Mentor series (<http://www.bobwander.com>)

The Soaring Society of America (SSA, http://www.ssa.org) is a good source of information.

The SSA Soaring Safety Foundation (<http://www.soaringsafety.org/>) offers safety-oriented information.

In particular in the SSF DISTANCE LEARNING section you can find the:

Tow Pilot Course, Wing Runner Course.