

Kansas Soaring Association  
Tow Pilot Qualification  
Syllabus and Status Log

This document outlines the qualifications and standards required by the Kansas Soaring Association (KSA) to perform the duties of tow pilot in a KSA aircraft.

REQUIREMENTS:

1. Meet all current FAA requirements for towing gliders as specified in 14 CFR Part 61.69
2. Complete the SSF tow pilot training course (<https://www.soaringsafety.org/learning/towpilot/towpilot.html>), successfully pass the SSA members Final Examination and present a copy of the certificate of completion.
3. Complete the KSA tow pilot training syllabus. The combined syllabus and record of completion consist of 3 sections on the following pages, ground training, glider flight training, and tow plane flight training. All 3 sections must be completed.

## Tow Pilot Qualification Syllabus & Status Log

Tow Pilot Name: \_\_\_\_\_

### Ground Training

The tow pilot candidate must review the following with an authorized instructor.

ITEM	INSTRUCTOR INITIALS	DATE
<b>Regulations:</b>		
14 CFR Part 61.69 - Glider and unpowered ultralight vehicle towing: Experience and training requirements		
14 CFR Part 91.309 - Towing: Gliders and unpowered ultralight vehicles		
14 CFR Part 61.31(f) - Additional training required for operating high- performance airplanes		
<b>Tow Plane Operations:</b>		
C-175 aircraft familiarization (cockpit brief, walkaround)		
C-182 aircraft familiarization (cockpit brief, walkaround)		
Inspection of tow hook		
Rear view mirror adjustment and positioning		
Aircraft checklist		
Aircraft positioning & supplies in hangar (walk through in hangar)		
Fueling		
Tow tickets		
Airspeed control, glider airspeed limitations, bank angles		
Signals		
Risk management		
Towing emergencies		
<b>Sunflower Airport Operations:</b>		
Runway positioning		
Signals and positions with 2, 1, or 0 line crew		
Positioning for release, glider maneuvering on tow		
WSA/KSA glider wind limits		
<b>Tow Lines:</b>		
Tost & Schweizer rings		
Inspection for fraying, abrasion, broken strands, ring condition		
Weak links and adapters		
Tow rope used is 3/8" hollow braid polypropylene type with an estimated 1200 to 1500 lbs breaking strength (new)		
Tow rope splicing demonstration & practice		
Present SSF tow pilot course completion certificate		

**Glider Flight Training**

The tow pilot candidate must either possess a FAA glider rating, or fly as a student in a glider on a minimum of 3 aero tows. In either event, the candidate must fly with an authorized instructor and receive a logbook endorsement for 61.69(a)(3). The instructor will enter either a checkmark indicating the item was conducted on that flight.

Tow Pilot Name: \_\_\_\_\_

Instructor Initials:				
Date:				
ITEM	Flight 1	Flight 2	Flight 3	Flight 4
Takeoff				
Climb				
Turns on tow				
Boxing the wake				
Slack Rope				
Observe glider problem signal				
Observe emergency release signal				
Normal release				

ITEM	INSTRUCTOR INITIALS	DATE
Tow pilot candidate logbook endorsed for 61.69(a)(3)		

**Tow Plane Flight Training**

The tow pilot candidate must initially observe a minimum of 1 tow conducted by a qualified tow pilot and then conduct a minimum of 5 tows as the sole manipulator of the controls while accompanied by a qualified tow pilot. The qualified tow pilot will enter either a checkmark indicating the item was conducted on that flight or an "S" indicating that item was conducted satisfactorily by the candidate. All items must have an "S" to complete this phase

Tow Pilot Name: \_\_\_\_\_

Qualified Tow Pilot Initials:						
Date:						
ITEM	Flight 1	Flight 2	Flight 3	Flight 4	Flight 5	Flight 6
Tow rope selection, prep., hookup						
Tow plane positioning on ground						
Radio calls						
Take-up slack						
Advancing power						
Takeoff roll						
Climb						
Glider maneuvers on tow						
Inflight signals						
Release						
Power management in descent						
Flap usage						
Landing position & towrope considerations						
Position for next tow or ready position						
End of day duties						

ITEM	QUALIFIED TOW PILOT INITIALS	DATE
Tow pilot candidate logbook endorsed for 61.69(a)(5)		

I verify that \_\_\_\_\_ is qualified per this syllabus for tow pilot operations in Kansas Soaring Association towplanes.

\_\_\_\_\_ {signature, Sunflower tow pilot checkout pilot}

\_\_\_\_\_ {printed name, Sunflower tow pilot checkout pilot}

\_\_\_\_\_ {date}

## KSA C-175/182 Tow Pilot Checklist

### Prior to Step

NOTAMS/TFRs .....Checked  
Weather.....Checked

### Preflight Checks

Ignition..... OFF  
Master Switch ..... OFF  
Flaps..... DOWN  
External Inspection ..... Complete  
Tow Hook.....Checked  
Tow Release.....Checked  
Tow Rope ..... Length/Condition Checked

### Before Start

Fuel Selector Valve..... BOTH  
Circuit Breakers..... IN  
Mixture ..... Rich  
Propeller ..... High RPM  
Carb Heat.....COLD  
Prime ..... As Required  
Throttle.....Cracked  
Magnetos..... BOTH  
Master Switch ..... ON  
Prop Area ..... Clear  
Ignition..... START  
Oil Pressure.....Green  
Radios ..... 123.50

### Runup

Brakes ..... Check  
Flight Controls..... Free/Correct  
Mixture ..... Rich  
Throttle ..... 1700 RPM  
Magnetos.....Checked (<125 RPM drop)  
Carb Heat.....Checked  
Prop ..... Cycle  
Engine Instruments..... Check  
Throttle..... Idle  
Altimeter..... Set

### Before Takeoff

Tow Ticket..... Complete  
Carb Heat..... Cold  
Mixture ..... Rich  
Propeller ..... High RPM  
Flaps  
    ≤70 mph ..... 10°  
    >70 mph ..... 0°  
Trim ..... Slightly aft of T/O  
Fuel ..... BOTH, qty sufficient  
Tow Release..... Clear

### After Release (Left Turn)

Flaps..... 0  
Throttle ..... Bottom of Green Arc  
RPM ..... Middle of Green Arc  
Mixture ..... Lean  
Airspeed..... 140 mph

### Before Landing

Mixture ..... Rich  
Prop ..... High RPM  
Carb Heat..... ON

### Shutdown & Securing

Mixture ..... Cutoff  
Magnetos..... OFF  
Master ..... OFF

### Aircraft Reference

Approach Speed..... 70-80 mph  
Capacities:  
Oil Capacity ..... 8-10 qt  
Useable Fuel  
    182 .....55 gal (20 normal tows)  
    175 .....43 gal (15 normal tows)

#### Special Precautions and Notes

- Watch tail clearance pulling out of hangar
- F2 landings only in C-175
- Ensure CHT<400
- C182 – no fuel drain under the cowl