



2023 TTSA Standard Operating Procedures

DRAFT Date: 5/14/2023

Welcome to Truckee-Tahoe Soaring Association (TTSA)

a federally chartered, California 501c3 non-profit Corporation

The specific purposes of TTSA are to advance the science, art, and safety of soaring flight in the northern California and Nevada region by educating individuals and promoting awareness among individuals with a specific focus on training the next generation of soaring pilots and aviation leaders to serve their community and society, and to be the preeminent glider training and flight facility in the region for flight adventure and scenic rides, private pilots, students of all ages, and other professionals.

TTSA operates as a club. Everyone who flies in a TTSA glider or receives a tow must be a member. Memberships will be available via the TTSA Office.

You have chosen to fly with us and we look forward to a long, mutually rewarding relationship.

Thousands of operations, both glider and power, take place at Truckee each year. Deviations from accepted procedures can have serious consequences. These SOP's have evolved from the input of many capable people, FAA and airport regulations, years of experience, and common sense.

You are required to read and sign these SOP's stating that you understand the SOP's and will abide by them.

ALL FLIGHT OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE [LETTER OF AGREEMENT](#) WITH THE TRK AIRPORT TOWER. By signing on the SOP signature page you acknowledge that you have read and understand the pilot responsibilities identified in the LOA. Please ask questions and clarify any issues that you don't fully understand *before* signing your name. **Failure to abide by any part of these SOPs may result in revocation of your flying privileges at TTSA.**

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A. KTRK AIRPORT OPERATIONS

Control tower: The Class D Tower remains in effect for 2023. Controlled airspace is from the ground to 8,400 feet MSL, within a circular boundary 4.2 nautical miles from the Airport center and is operational in accordance with NOTAMS and other airport information published in the airport directory. **All aircraft must have an operable radio to fly within the Class D boundary.** We recommend you have an ADSB out transponder. We will not tow you without a radio.

Frequencies are:

- Tower/CTAF (120.575)
- Ground (118.3)
- ATIS (118.0)
- Unicom/FBO services (122.95)
- Oakland Center (127.95).

THESE FREQUENCIES ARE SUBJECT TO CHANGE, PLEASE SEE THE AIRPORT DIRECTORY FOR CURRENT FREQUENCIES.

[Truckee Tahoe Airport](#) is a very busy **towered** airport. If you are not used to flying in a towered environment, we'd like to help your experience be safe and fun. KTRK is a Class D (Delta) airspace, with regulations covered by FAR 91.129.

TRANSPONDERS: TTSA and KTRK STRONGLY encourage all pilots to have and USE transponders, and to maintain radio contact with NORCAL Approach when flying in the Reno aero environment. The FAA has assigned transponder code 1202 for use by gliders, with an effective date of March 7, 2012.

FLARM: TTSA and KTRK STRONGLY encourage all gliders operating out of Truckee (or flying in the area) to have a FLARM. There have been many examples in recent years of midair collisions that might have been avoidable had both pilots had operational FLARMS onboard.

B. FLIGHT OPERATIONS

1. General

SAFETY MUST COME FIRST! You are expected to understand and abide by our SOP's, all applicable FAR's, and airport regulations. Failure to do so may result in our refusal to tow or allow sailplane operation from our facility. *These SOPs are part of our lease.* We won't allow our lease with the Airport District to be jeopardized by irresponsible acts of commission or omission by any individual.

a) Documentation: Pilot information and insurance. Before flying at TTSA, all pilots must present the following documentation:

- Pilot certificate
- Private/Club aircraft Liability Insurance
 - Proof of liability insurance must be submitted (annually) to TTSA for tow-launch privileges.
- If necessary, additional documentation may be required for commercial operations per FAR's.

If you want, you can email this documentation ahead of your arrival for the season to generalmanager@soartruckee.org

b) Initial Checkout. If you are **new to soaring operations here or have not flown with us in the last 2 years**, you must obtain an area familiarization session from a TTSA authorized flight instructor. The orientation will consist of a minimum of a ground orientation, and, at the discretion of the TTSA instructor, an area check out flight. We highly recommend this. There is no charge for ground orientation. Should an area checkout be required, standard TTSA charges apply for the instructor's time, aircraft rental (if applicable), and towing.

c) Pre-flights and staging.

- Do a preflight and a positive control check BEFORE you move your glider to the staging area.
- Do not leave your glider unattended with the tail wheel dolly on the aircraft **anywhere on the airport**. Dust devils and/or wind can damage your glider and other gliders in the blink of an eye.
- NEVER leave your glider unattended in a movement area - that includes taxiways. You may ONLY leave your glider unattended if it is tied down in a non-movement area. There are tiedown spots in the staging area at the threshold of Runway 20.
- When you move your glider across the double yellow lines, you are on an active runway, controlled by the tower.
- Clearance for the glider to enter the runway for hookup will be requested by the tow plane, and is always required.
- On the runway, **you must be in your glider**
- If we are short of line staff, assistance from you or one of your fellow pilots may be required to move the glider into position on the runway.
- Motorgliders moving the glider to stage on the west side of runway 20: you may be on foot to help move the glider but you must be accompanied by a TTSA flagged golf cart. You may only move across the runway with radio permission from the tower.

Departure Procedures: **Keep your eyes open and maintain situational awareness during departure.**

- The minimum tow release altitude is **8,000 ft MSL** (and this will be the minimum charged for your flight). **Even with strong lift encountered you must stay on tow until 8,000.** Low releases interfere with Tower instructions and incoming aircraft. The only exception to the 8,000 MSL release altitude is when the aircraft is under the command of a TTSA instructor and after receiving approval by the Tower.
- **Ballasted gliders and motor gliders must launch from the threshold of the runway. No exception.**
- Tandem glider operations launch from the threshold of the runway at the discretion of the owner/operator. See your club's specific requirements.
- Pre-flight, positive control check, and radio check in the tie-down area.
- **Do not use the Tower or Ground frequency for radio checks.** We suggest using 123.3
- Only then should you move your sailplane into the lineup for takeoff. Make sure you have a completed, legible tow ticket with all the necessary information.
- Motor gliders should submit their takeoff ticket **to the office**, before departure. This is both for accounting purposes and ensures the office staff is aware of your flight.
- Pilots must remain with their sailplane once it has been placed into the takeoff lineup!
- **You must have a working radio to fly at KTRK.** This will be strictly enforced! **No Exceptions.** The tow plane pilot is the PIC in the flight of two. **If you cannot establish 2 way radio contact with the tow plane on the runway, you will be pulled from the runway.**
- When the tow plane has taken the slack out of the line, **call on the tower frequency 120.575 "Rope tight, glider _____ (identify your glider with your contest ID) ready for takeoff.** Call "Stop takeoff" if not ready. The tow plane will be in radio contact with the Tower and will make all calls.
- Relay any instructions to the tow pilot via line personnel when you give them your tow ticket. This will keep radio traffic to a minimum. The tow pilot will make every effort to comply with your wishes subject to safety and traffic considerations.
- When ready to release, clear to the right, release and turn right.
- Announce "___ (glider ID), off tow" when tower frequency is not busy.
- See the Tahoe Truckee Airport "[Emergency Landing Guide](#)", and in the addendum, for areas suitable for landing due to emergencies during launch.

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Landing Procedures: **Keep your eyes open and maintain situational awareness during arrival**

For helpful information on returning to KTRK, see **TTSA's Safe + Friendly Operations Guide**.

- *Before entering the controlled airspace (below 10,000 feet in 4.2 miles of the airport), you must contact the tower and state your intentions,*
- First, obtain the weather information on ATIS 118.0 and advise the tower:
- **"Truckee Tower, Glider (tail number), x miles North, inbound for landing Runway 20 with weather (or "information xxxx")**

OR

"Truckee Tower, Glider (tail number), x miles North and staying aloft."

- Advise them of any special considerations
- If staying aloft within the controlled airspace, contact the tower when you are ready to land. Get the weather again before you make your call:
- **"Truckee Tower, Glider (tail number), at (hotrocks, frog pond, etc.), inbound for landing Runway 20 with weather (or "information xxxx")"**

Expect to be routed to and report "Lone Pine" for pattern entry to a left downwind to Runway 20 (Lone Pine is the tree by itself east of Martis Dam Road and North of the arrival corridor to Runway 29). You will likely be cleared for landing upon turning downwind.

IMPORTANT NOTE: Short landings on Runway 20 could be fatal.

- **Often there is downwash at the cliff just off the runway.**
- **Often there are strong headwinds on final.**
- **Often there is turbulence.**
- **Be scrupulous about keeping a good glide angle to your landing target. Often, your turn from downwind to base will be much shorter than at other airports.**
- **Do NOT put yourself at risk by attempting to land short or by forcing one of these turnoffs.** Runway 20 is 4,654 feet long and **every foot of it** is available for your safe landing. We are happy to retrieve you from any distance, if it means you are safe.

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Upon Touchdown:

- **DO NOT USE THE FIRST TURNOFF (towplane staging area) TO EXIT THE RUNWAY**
- Manage your energy so that you can get your glider off the runway at the second (LEFT angled turn-off) or third turnoff, "P", (Papa - RIGHT 90 degree taxiway off runway 20).
- *If safe*, manage your landing energy to roll past the hold-short line on the angled turnoff. If you stop before the hold short line, immediately exit the aircraft and pull the glider past the hold short line...*then* advise the Tower that you are clear of the runway. As soon as practical, pull your glider off the angled taxiway and onto the taxiway back to the launch area. There may be gliders landing behind you who need the **entire** angled turnoff.
- **UNLESS YOU ADVISE THE TOWER PRIOR TO LANDING, YOU ARE EXPECTED TO ROLL OUT SHORT OF RUNWAY 11/29. (See Emergency Procedures, #9)**

Motorglider Takeoff:

- A motor glider will always stage and conduct its checkout and engine run-up in the run-up area, not on the runway. For runway 20, this area is on the west side of the runway threshold. Prior to entering the taxiway or runway, the motorglider will ensure that its radio is functioning, and that the pilot can properly monitor transmissions from the control tower despite engine noise. The motorglider is responsible for radio communication with ground control and the tower while in the class D airspace

Note: Truckee Tower is familiar with using contest IDs for gliders instead of N numbers AND PREFER TO USE THE CONTEST ID's displayed on your vertical stabilizer.

- Prior to entering the runway or taxiway, the motorglider shall contact the Tower, saying position and intention:
“Truckee Tower, motor glider (identify your motor glider) east side of Rwy 20, request permission to taxi to the run up area at the threshold of runway 20”.
- Only when given permission may the motor glider cross to the run up area.
- Once your motorglider has either taxied, or been towed onto the west side of runway 20, **you must remain with your glider. This is a direct request from Airport Operations.** If you must leave your glider, you can have a stand-in attend to the aircraft. Your stand-in must be able to move the glider.
- You must have radio permission from the Tower before crossing any runway - on foot, in a golf cart, or in your glider.
- When the motor glider is ready for takeoff, the pilot shall then call the Tower on 120.575:
“Motor glider (identify your motor glider) is ready for takeoff at runway ____.
- The pilot must respond to the Tower’s “cleared for takeoff” by repeating the clearance including the glider ID. If you are unable to comply with the clearance to take off, you should respond with “UNABLE” and state your intentions to remove the aircraft from the active runway as soon as possible.

Emergency Procedures:

1. a. Inside the Truckee Class Delta airspace, use control Tower frequency (120.575) for emergencies.
b. Outside of the Delta airspace, use 121.5
2. ABORTED TAKEOFF on runway: Tow plane calls **“Emergency... tow plane (identify) aborting takeoff, runway_____.”** If sailplane does not immediately get off tow, tow plane will release the towrope and stay clear to the left of the overtaking sailplane.
3. AIRBORNE: Tow plane calls **“Emergency... tow plane (identify) releasing tow, Truckee”**.
4. ROPE BREAK: Sailplane calls **“Truckee tower, glider (identify) rope break, must land immediately.”**
 - a. See airport map diagram for emergency landing areas
5. TOW RELEASE FAILURE: Sailplane calls **“Tow release failed, tow plane release rope”**.
 - a. The tow plane will position the sailplane in the airport pattern with extra altitude and will release the rope from the tow plane. The sailplane should land long to avoid catching the towrope on objects at the approach end of the runway. If neither can release, follow the next procedure below.
6. LANDING WITH TOW PLANE: Tow plane calls **“Emergency... tow plane (identify) is landing runway_____ at Truckee with glider in tow”**. The approach to the runway will be made straight into the wind if possible. A long runway is preferable, and the landing will be made long. The tow plane will continue down the runway and track left to stay clear of the overtaking sailplane that will track right during the landing rollout.
7. MOTORGLIDER ABORT TAKEOFF: Motor glider calls **“Motor glider (identify) aborting takeoff, runway_____.”**
8. HAZARDOUS SPILLS: A “hazardous spill” is defined as an unauthorized or unintended release of a chemical or substance that may be injurious to the environment. In our case, a potential spill could include AVGAS, battery acid, oil(s), solvents, resins or similar materials. In the event of a hazardous spill, contact the airport manager. Also call airport maintenance at 530-587-8992, as they may be able to help contain the spill.
9. LANDING LONG: You must hold short of Runway 29 and inform tower of intentions.
10. AVIATE, NAVIGATE, COMMUNICATE.

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Cross Country + Soaring Operations:

For your safety the TTSA staff may contact the proper authorities (FAA, Sheriff, Civil Air Patrol) for overdue aircraft not identified via a flight tracker or reporting its status by 5 pm. This may result in a formal search and rescue operation.

Ground Retrieves: Under normal circumstances, TTSA *will not* participate in ground retrieves. Please make arrangements with your crew or fellow pilots for ground retrieves. Please also make every effort to advise the office of your land-out status. You should also carry a cell phone with the number of someone who will be at the TTSA. The tower keeps track of all gliders launching from TTSA and prefers to be notified of any glider that will not be returning before sunset. We will notify them of any glider that lands out and will not be returning.

Aero retrieves: TTSA encourages cross-country flight, and we will make every effort to provide an aero retrieve, consistent with safety and our operational requirements. There can be no TTSA aero retrieves from Topaz or Herlong due to hazardous conditions. We might be able to aero retrieve from Sweetwater, but this is not guaranteed. There are also fuel-endurance limits to our retrieves. Please check with TTSA Staff about retrieval locations.

Truckee Ground Retrieve Assistance: Private pilots are required to designate a retrieve person responsible for retrievals after 5:00 pm. Name and cell phone# of designated retrieval crew must be given to the Office (on tow ticket) prior to take off. Failure to designate a retrieve person will result in TTSA being the default retrieve crew. Costs of the tow plane pilot and ground crew wait time will be charged to the pilot's account at overtime rates.

C. Additional Information of Importance

GATE AT MARTIS DAM ROAD - The gate on Martis Dam Road at the entrance to the gliderport will be closed and locked at 5:30 pm or when the tow planes are tied down at the end of daily operations. The gate will be opened in the morning by the first TTSA staff to arrive between 8 and 9 am. *If the gate is closed and locked when you arrive or depart, you must lock it behind you after you enter or exit.*

ASSISTANCE IN GLIDER OPERATIONS: Line assistance is critical to safety and a smoothly functioning launch and recovery operation. TTSA line personnel have all taken the Soaring Safety Foundation Wing Runner Course. You are encouraged to review this course and have anyone helping you take this on-line course.

(<https://www.soaringsafety.org/learning/wingrunner/wingrunner.html>)

INSTRUCTION: TTSA encourages club-based flight instruction. To ensure safety consistency at the site, all club CFG's providing instruction must become an "Associate TTSA Instructor." Associate Instructor status will be given at the discretion of the TTSA General Manager. TTSA aircraft can only be flown for instructional or commercial usage by pilot employees of TTSA.

CAMPING - **Camping, including tents; overnight parking; use of bunkhouse or onsite housing is PROHIBITED** at the gliderport inside of the fence along Martis Dam Road.

FLIGHT AREAS - Your family and friends are welcome in the tie-down area. Please make sure they understand aircraft movements. Only trained personnel should be allowed near or on the flight line.

OXYGEN - Only TTSA staff are allowed to fill O2 bottles. We will bring the oxygen cart to your glider.

BILLS - Please pay your bill in the office at the end of each day. A processing fee will be added to all invoices sent via e-mail for on-line payment.

SPARE KEYS - For your convenience, we have a board in the office where you can leave a spare set of keys to your glider trailer and tow vehicle while flying. Please check with office personnel before storing.

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TOOLS - Some hand tools may be borrowed, but please ask first! Other than that, equipment in the tool shed is off-limits.

GLIDER TRAILER PARKING - Please check with the office before parking your glider trailer. Trailers must be parked as close together as is reasonably possible to assure room for everyone. All glider trailers must be identified with pilot name and/or glider number.

INTERNET ACCESS - TTSA has a hot spot for use in the office. The office internet service is available for limited use by members in the area of the office.

GOLF CARTS - Golf carts are to be used primarily for moving gliders to/from the launch/landing areas. Golf carts can only be driven by TTSA employees, line personnel or authorized adults. Please don't tie up a cart longer than necessary.

ANY non-operational requests to operate a Golf Cart in a movement area will be denied by the tower. Golf carts may not operate on taxiways or runways without authorization from the tower! All golf carts must have a flag on display and a working radio onboard.

OPERATION OF A GOLF CART IN A MOVEMENT AREA WITHOUT EXPLICIT DIRECTION FROM THE TOWER MAY RESULT IN THE REVOCATION OF ALL PRIVILEGES AT TTSA. Golf carts shall never be used to access the south airport complex as methods of simple transportation.

SKYDIVING

Skydiving at KTRK will not be active during the 2023 season. When it resumes, remember it places additional "see and avoid" procedures on all traffic at TRK. For specifics of the Skydiving operation see addendum to the SOP's "Parachute Operations at TTAD"

Aircraft Operating Procedures are put into place for collective safety. Your cooperation will ensure a safer flying environment for you, your family, and friends. We're glad you've chosen to fly at Truckee.

TTSA reserves the right to decline to give aero tows or flight instruction to anyone who knowingly violates any of the SOP's or that we, in our sole discretion, deem to not possess the aeronautical skills or temperament required for safe flight.

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