

# Nor Cal Aero Club

## Flight Rules and Operating Procedures (2005)

Updates to this document can be found at [www.norcalaeroclub.com](http://www.norcalaeroclub.com)

### **BACKGROUND INFORMATION**

1. The Nor Cal Aero Club is organized to allow all humans to gain knowledge in the ways of flight.
2. Dixon Aviation Inc. is a crop dusting business and the airport is not open to the public. The landing strip at Dixon Aviation Inc. is a privately owned, private use (not public use) landing strip.
3. All visitors, members, and guests **must** get verbal permission to come to Nor Cal Aero Club **on every visit**. NCAC has an entrance  $\frac{3}{4}$  mile S. of Dixon Aviation.
4. Sportwings is a retail and mail order sport flying equipment supplier.

### **MEMBERSHIP REQUIREMENTS**

1. Pilots must be Nor Cal Aero Club (NCAC) members, must sign the NCAC waiver, and must be 18 years of age or older.
2. All pilots must be current USHGA regular or student members or equivalent from similar organization. The NCAC charges \$20 for processing temporary (30 day) USHGA memberships.
3. Associate (Annual) Club membership fees are \$50/year. Intro/student membership is \$5/day, and converts to an Associate membership when \$50 is accrued.

### **RATING REQUIREMENTS**

1. USHGA or foreign equivalent aerotow (AT) rating required and documented by logbook and/or rating card for solo flight. Minimum of Hang II (H-2) or equivalent is also required for solo flight.
2. It is optimal for pilots new to the club or lacking current logged aerotow experience to perform a tandem check-out ride with an instructor prior to solo aerotow flights. Pilots who waive the option for a tandem check out flight may choose to take their first aerotow flights in a NCAC training glider or other easy to tow glider. Alternatively, initial aerotow flights may be done late in the day when the air is smooth. Pilots waiving any or all of these options will be required to complete and sign an addendum to the NCAC liability waiver to this effect. Tandem instruction may be required per the discretion of the instructor, operations director (OD), NCAC board member, and/or tow pilot if a pilot demonstrates difficulty towing or tows in an unsafe fashion.
3. Pilots with minimal aerotow experience or pilots who do not tow smoothly may be required to perform additional solo flights in a NCAC training glider.
4. Experienced pilots transitioning to high performance gliders or transitioning to aerotow may be required to use a vertical fin on initial flights to reduce problems with yaw oscillation.
5. The NCAC, at the discretion of an instructor, OD, NCAC board member, and/or tow pilot, reserves the right to require additional training for any pilot who demonstrates problems under tow or in free flight or who is not current (see below).

## CURRENCY REQUIREMENTS

1. Currency is defined as having at least 5 logged aerotow flights within the last year.
2. Pilots who are not current must inform the OD or tow pilot prior to launch, of their last aerotow flight and where it took place.
3. Pilots who are not current may be required to take a tandem check-out flight, additional training, fly a training glider, and/or fly with a vertical fin.

## FEES FOR TOWS AND EQUIPMENT

1. Please inform the tow pilot/ OD of your desired release altitude prior to launch. You can get off tow earlier, but will be charged for your requested release altitude.
2. Providers of towing and/or equipment must be authorized by the NCAC board of directors and be compensated by the NCAC. Fees are shown below.

### Aero Tow Fees:

**All prices subject to change**

#### Altitude

1000 ft.	\$25	Package deal 5 tows to 1000' = \$100
<b>2000</b>	<b>35</b>	
3000	45	
4000	55	
<b>5000</b>	<b>65</b>	

The Buddy Deal: One Aero tow to 2000 ft. One Power Glider Flight (with instructor) Includes day fees and 1 Temporary USHGA membership if necessary for trike flight.	\$125
*Power Glider Flight: ½ hour of thrilling flight on board the two seat Power Glider. Couples flights (two Power Gliders and pilots) are available	\$150
*Aerotow clinic: All Day course includes 5+ tows to 1000' all NCAC equipment/fees. Prerequisite Rating: USHGA 2 with ¾ hours to hang 3 Log book required.	\$275
*Instructional Tandem Aero Tow to 2000' Includes day fees and 1 Temporary USHGA membership if necessary.	\$195
*Power Harness Introduction/Flight: Mosquito or D-Bug 3 hour Ground School - 1.5 hr+/- flight / day. Prerequisite Rating: USHGA H-3 with RLF & FSL sign-off.	\$175

\* Call (530) 888 8622 or email [sportwings@sbcglobal.net](mailto:sportwings@sbcglobal.net) to schedule

### Important:

Before flights may commence the OD or tow pilot must call Travis AFB tower @ 707 424 5793 and notify them with the following info :

**: REPORTING ULTRALIGHT TRAFFIC TO 2000' FROM HOURS (CURRENT TIME) TO SUNSET NNE TRAVIS ON 240 DEGREE RADIAL SACRAMENTO VOR 15.5 MILES OUT. :: :OD OR TOW PILOT TO REPORT OUT WITH TRAVIS TOWER AT END OF DAYS OPERATIONS.**

## **SAFETY ISSUES**

:Only persons who have signed NCAC waivers and read this document are allowed in flight area.

: Airspace restrictions are in place South of our launch area. No flights are allowed in these areas. Each pilot is responsible to know or make themselves aware of airspace restrictions when ever they fly.

:Dogs are welcome if on a leash secured to owner or owners vehicle.

:All areas outside of the designated parking, registration tent and comfort facilities are considered the flight area. This area is marked with cones and streamers.

:All NCAC launch and landings are to be conducted **South of mid field** turnaround.

**IMPORTANT:** This is a working crop duster operation. If you see an aircraft preparing to launch or land you must **give right-of-way**.

## **SAFETY EQUIPMENT**

### 1. Required Equipment

- a. Helmet.
- b. Steel carabiner.
- c. Hang loop with backup loop.
- d. Reserve parachute.
- e. Aerotow bridle with primary and secondary releases (OD or tow pilot must approve).
- f. Hook knife.

### 2. Recommended Equipment.

- a. Full face helmet.
- b. Wheels.
- c. Stabilizer fin.
- d. Use of launch cart. Individuals must obtain approval from the tow pilot or OD prior to aerotow foot launch or hang glider wheel launch.

3. All pilots are expected to perform a careful, complete preflight on all personal and club equipment they use, and are responsible for assuring that the equipment that he/she uses is in safe condition.

4. Any pilots using unsafe equipment or demonstrating unsafe preflight or flying practices may not be allowed to fly and/or may be required to obtain additional instruction.

## **FLIGHT LINE PROCEDURES:**

1. USHGA aerotow guidelines and sail plane-type aerotow procedures are used.

2. The OD will be in charge of flight line operations.

3. Please inform the tug pilot of your desired release altitude prior to launch.

4. First in line will be first to launch, except:

- a. Tandem flights have priority and may go to the front of the line in smooth air conditions.
- b. If a pilot has not completed required NCAC and/or USHGA paperwork.
- c. If a pilot and his/her equipment is not ready.

5. Everyone must be familiar with the "**HIERTow**" prelaunch checklist:
  - a. **Hang check:** carabiner closed and locked, in leg loops, harness closed (leg doors open), hang height verified, chute and helmet secured, no loose lines or cords.
  - b. **Instrument check:** instruments, other personal equipment secured, turned on and zeroed.
  - c. **Equipment check:** overview scan of glider (this does NOT replace a careful preflight!!) and launch cart.
  - d. **Release check:** check weak link, release function, bridle line routing (over the base tube and not twisted), location of hook knife.
  - e. **Tow check:** Verify no loose parachute, or loose lines or cords (especially VG lines or harness cords) that could get caught on the launch cart. Note wind speed and direction, scan for traffic in pattern, mentally prepare for tow and emergency actions.

## **FLIGHT PROCEDURES**

1. Prior to your turn to launch: preflight your glider and equipment, wait in line just off to the side of the launch area, and be in your harness and hooked into your glider if "on deck."
2. When your turn to launch: move to launch position, and go through the HIERTow pre-launch checklist with the OD, prior to the tug landing. Have your bridle ready to be connected to the tow rope. The command to take up slack by the OD is a low slow arm swing across the lower body. Launch command by the pilot is "GO, GO, GO!!", followed by arm circles by the OD, and an elevator waggle by the tug pilot to confirm the command.
3. At take-off: rise 10-15 feet above the ground to avoid the prop wash, maintain this altitude and wait for the tug to take off and catch up. Once the tug catches up to you, keep the wheels of the tug on the horizon until you reach 200 feet AGL, then go to a slight lower tow position in rough air (wheels somewhat above the horizon) or an even lower tow position in smooth air. Stay directly behind the tug in straight flight or slightly on the inside of the tug in a turn. If necessary, the tug pilot will signal you to maintain a higher or lower tow position. Follow his or her signals--you may "get the rope" if out of position.
4. Use yaw more than roll input techniques to avoid adverse yaw and yaw oscillations while under tow. If a pilot does not demonstrate the knowledge and ability to do this, they will be required to take additional tandem instruction, fly a training glider, and /or use a vertical fin.
5. When in doubt, release immediately. Don't try to hold on to a deteriorating situation.
6. Immediately activate your release if you experience an unexpected glider release from tow (this may be due to a weaklink break, line break, primary or secondary premature release, or release of the tow rope by the tug pilot). You must do this because you may not realize that you are dragging the rope. Whatever you do, **DO NOT land with the rope!**
7. While towing, don't mess around with closing your pod harness or allow yourself to do anything but concentrate fully on staying centered on tow. The tug may turn unexpectedly.
8. To signal you to release, the tug pilot will wave his or her arm up and down. The hang glider **MUST ALWAYS release at this signal**, just in case the tug pilot is encountering an emergency. In a

normal release, the tow vehicle will dive and turn left, and the glider pilot will turn right. The tug pilot will generally try to drop you in lift (if there is any!!)

9. Your chances of staying up are better if you don't worry about closing your harness, securing your bridle line, etc., until you have found and gained altitude in a nearby thermal.

10. Circle in the same direction as other pilots in a thermal, and always look for other pilots before making a turn to avoid collision.

12. Prepare early for landing. Watch for traffic, no radical flight maneuvers in the pattern, land into the wind. Do not fly low over the powerlines on Hwy 113. A long, straight in cross wind approach will keep you from coming in over the powerlines and out of the west fields. Move your glider east right up to the flight area line ASAP (immediately, if not sooner!!)

## **CLUB SERVICE**

This is the essence of what we do. By each of us striving to create an enjoyable environment for ourselves, others benefit. The monetary compensation is but one measure of our contributions. You might pick up litter or you might pick up the tow gear at the end of the day or you might head up the mowing squad. What ever you do do it because it makes you feel good about your club.

1. Members who perform authorized services for the club, such as maintenance, directing operations (OD), towing, etc., will receive a reduction in the cost of tow fees, at a work value of \$10.00/hour for services performed. Obtain authorization from club officers in writing prior to performing compensatable services.

2. The OD must be NCAC trained and authorized, and will be responsible for:
- Verifying club membership, ratings, and currency of pilots in the flight area.
  - Collecting tow fees.
  - Establishing launch order and priority.
  - Leading pilots through the **HIERT**ow pre launch check list.
  - Attaching the tow line.
  - Giving the signal to the tow pilot to launch.

In the absence of an OD, these tasks may be shared by the tug pilot and the hang glider pilot, if he/she is very experienced and approved of by the tug pilot.

3. Tow pilots must be NCAC authorized, and will have an ATP rating (aerotow pilot rating) from the USHGA, as well as a BFI (Basic Flight Instructor) rating from the USUA (United States Ultralight Association) or ASC (Aero Sports Connection). An exception to this will be a tug pilot who is in training and is under the direct supervision of a BFI.

4. Tow planes, launch carts, gliders and other equipment used by the NCAC must be NCAC approved and will be leased from a NCAC authorized provider. The towing and equipment provider will be responsible for all repairs, gas, and oil needed for ultralight vehicle maintenance, as well as maintenance of towing and other equipment used by the club.