



### **GENERAL RULES:**

1. APBA general safety and racing rules will apply unless there is a more restrictive Cal-Ore rule.
2. Drivers must be at least 18 years of age to race; 16 years of age to practice.
3. Drivers who are required to wear corrective eye lenses while operating a vehicle are also required to wear them while driving a boat.
4. Before a new driver can race, they must have driven for a period of more than 30 days prior to their first race and/or approval by the safety committee.
5. Before a new driver can race, they must be approved by a Safety Crew member or an Officer.
6. No driver shall operate a boat under the influence of drugs or alcohol either during practice or race day. No alcohol will be consumed from midnight before the race day until the driver and his boat have cleared inspection. Race officials may not consume alcohol until one hour after completion of race and all boats have cleared inspection.
7. All racers must read this constitution, sign, and return the certification page to an elected officer before they can participate in any event. Certification must occur annually.
8. All Rookies must have a one-inch wide white cross on helmet for their first full year, minimum five races. It must be ear to ear and front to back.
9. There will be a membership categories for boat owners and non-racing members.

### **ENGINE RULES:**

#### Motor Restriction:

1. American made Mercury stock production with a maximum of 45 cubic inch (four cylinders) displacement.
2. Stock engine with no internal modifications or use of parts that might enhance engine performance except as follows:
  - a. Balancing by grinding on crank, rods, and pistons okay. No drilling! No excessive material removing allowed!
  - b. Modified flywheel with no restrictions.

- c. Modified exhaust, DEQ approved type if possible, no modification to exhaust or intake ports. Factory machine marks to be present.
- d. No re-routing of the cold water system, except (3) 1/8 inch holes can be drilled from the bottom of the jacket to the hot water exit side. This matches some stock Mercury blocks. Water to be exited from exhaust side water chamber only.
- e. Single and dual, metal or fiber reeds okay.
- f. 5/32" maximum opening at the end of the reed stop, no modification to reed block pedal port opening.
- g. Two-blade props only.
- h. A pin may be added to hold the reed block in place.
- i. Cylinder boring is allowed with restrictions. Any standard or oversized two or three ring piston combination, that meets mercury marine specifications, with stock compression can be used, but not to exceed .090ths, combined total oversize of the four pistons.
  - i. Two .030 and two .015 over pistons can be used to achieve 45 cubic inches.
- j. Maximum compression reading (four rope pulls). These compression readings are not the maximum compression limits allowed, they are just a signal for the inspector that a motor may be illegal if the compression reading is above the following.
  - i. Two ring pistons (130 lbs) maximum
  - ii. Three ring pistons (140 lbs) maximum
- k. Carburetor jets cannot exceed .063 or #63s.
- l. A fixed position standard magneto or 12 volt or self energized fixed position electronic ignition will be used.
- l. Must have an automatic electric kill switch attached to throttle.
- m. No electric start. Rope pull by driver only. Check with safety committee.
- n. Only pump gasoline with no additives, not to exceed 92 octane.
- o. Any Two-Stroke premix oil allowed (1 yr. trial 2018 season).
- p. Motors must be bolted, clamped and tied (shock cord, etc.) to transom.
- q. Must have a working "Lanyard Kill Switch" permanently attached to life jacket and must be used at all times while operating a boat.
- r. Any racing design gear housing with 1 to 1, or 1 tooth under drive ratio, with or without water pump. Minimum length of lower unit skeg 3" consisting of a minimum of 10 square inches of surface area.
- s. Any other work or modification has to be approved by the club inspector.
- t. The top five boats of each race can be inspected and will have a seal applied to the block after passing inspection. Engines that have been sealed will not be retested unless protested. Drivers may choose to have their engines checked and sealed prior to any race.
- u. Any aftermarket pistons and components are approved for use with the same applicable restrictions as listed in this article. They must be an aftermarket reproduction that is built to the same specs as mercury components.
- v. Due to the scarcity of some connecting rods all rods may be ground in balancing but one rod must be very lightly touched in the grinding process to prevent over grinding for lighter rods.

## **BOAT HULL RESTRICTIONS:**

Boat restrictions:

1. Boats must be at least 13'6" (actual built size) no additions to make length. All boats are to be constructed of wood. Two lines of carbon fiber may be added to the construction of the cockpit sides for reinforcement.
2. No wings allowed.
3. No automatic motor tilt systems.
4. No external adjustments from cockpit.
5. No motor lifts.
6. No thrust bars.
7. No devices operated from the cockpit other than the throttle and the steering wheel.
8. Stationary center fin must have a total of 35 sq inches and be no shorter than 5". Full fin recommended.
9. Boat, driver, motor and accessories must have a finish weight of at least 575lbs excluding water. There will be a mandatory weigh-in for each boat at their first race of the season.
10. Steering, throttle, and kill switch must all pass safety inspection yearly before each boat's first race.
11. Gas tank must be secured.
12. All boats must have a functional paddle.
13. Any boat not up to specifications listed above will be disqualified until fixed.
14. All racers must start and finish in the same boat.
15. All drivers are responsible for meeting the minimum requirements set forth in article 8 section 9. Scales will be brought to some races for spot-checking weight. Top 5 finishers may be spot checked after any sanctioned race.
16. Any boat ran in the Kilo's must be compliant to all Cal-Ore rules and regulations as a competition boat. Any boat ran in the kilo's must have competed in at least one Cal-Ore River race.

## **SAFETY:**

1. Life jackets must be worn at all times while operating a boat.
2. Life jackets must be "A" type (For use in an open cockpit and by an unrestrained occupant. Maximum boat speed is less than 100 mph) certified Jacket 75% orange in color and must be in good shape and inspected yearly, and after an accident.
3. Helmets must meet Snell 2000 or newer (SA, M, K, CMR/CMS 2007, CMH); SFI competition 31.1 and 31.2 specs. Currently the upper 50% of the helmet must be a solid color of orange, fluorescent red, fluorescent green or yellow in color and worn at all times while operating a boat. Cal-Ore does not recommend the use of full face helmets.
4. All boats must have a working lanyard kill switch attached to the driver.
5. Rules of the water will be discussed at each driver's meeting before the race.
6. Practice days and warm ups:
  - a. Down river boat has right of way.
  - b. Always stay to the right.
  - c. Use caution when entering or exiting pit area.

- d. Run (turn) counter clockwise when doing laps.
7. Any boat that is in front of another boat(s) has the right of way on the course and the passing boat must use discretion.
8. Any boat that has a prop on can only start motor with the prop in the water.
9. It is up to the driver to find boat holders for each start and restart of the race.
10. Boat holders can only enter the water waist deep, and must sign a release waiver.
11. If you are not on the starting line three minutes prior to when the race is scheduled to start, you will be disqualified for that event. If you are on the starting line and can't get started, you will have 2 minutes after the start of the race to get started (this means on the bank engine shut off).
12. A safety committee will be decided on every even year by the club. There will be 3 members. The committee will be from California and Oregon. The purpose of the safety committee is to observe and advise drivers as to the safety rules and practices at race sites and practice sessions. Their duties also include observing and advising rookies to qualify them for their first racing start. The safety committee reports to the Cal-Ore Risk Manager who is also a safety team member. Members of this committee shall not serve as an elected officer of the CORRA concurrently except for the Cal-Ore Risk Manager..
13. The Cal-Ore inspector will inspect all racing equipment and review and enforce safety and category rules.
14. No drivers may be under the influence of alcohol during operation of the boat. And, shall not consume any alcoholic beverages or intoxicants midnight before the race and 1 hour after any time trial or race. Racers may be subject to spot or random alcohol testing.
15. No smoking allowed in pit area.
16. All racing teams shall have in their pit at least one 5 pound fire extinguisher.
17. Drivers must wear a Kevlar cut suit while racing and during practices.
18. The referee and safety committee handles safety rules and any issues related to the course or an incident that took place during the race will be reported to the designated referee by the driver's representative.
19. In the event of an accident a driver that stops to help a victim may regain the position he/she were in before stopping.

### **RACING START RULES:**

1. All boats will be pointed at an angle into the river in the direction of the start.
2. There will be a maximum of two boat holders per boat.
3. If a boat does not have a boat holder that boat must start in the back of the lineup.
4. All boat holders must stand in the bight (on the inside if the boat facing the direction of the course) or at the transom.
5. The boat holders must stand (hold) in the back half of the boat they are holding.
6. No boat holder shall be over waist deep in the water while holding a boat.
7. One boat holder will signal to the starter that they are ready for the start as the starter points to the boat.
8. The driver is responsible for the placement of his boat and boat holders.
9. Boat holders will either attend the primary drivers meeting or a meeting at the end of the course that they are working conducted by a race official.
10. All boats must be spaced safely apart taking into consideration space available for the start. Recommend at least six foot spacing between boats.

11. If boat holders are not present at the drivers meeting or boat holders meeting, that boat will start at the back of the lineup after starter has given them starting instructions.
12. While time trial/qualification runs are officially underway, all boats must remain on the trailer with engines un-fired. Trailered boats may start their engine to "warm-up" before the green flag or after the checkered flag never during an active run.
13. Drivers who did not attend or participate in time trials will start at the rear of the drawn starting line-up but before rookies of the second day's race. exceptions are mechanical failure prior to their timed run, time trials cancelled prior to run due to course closure, time constraints or general safety concerns.
14. Each racer will have only 1 fully timed run for time trials. Racer may make an additional timed run, time permitting, if racers initial run was incomplete due to an unforeseen temporary course closure, or mechanical failure prior to the completion of their full timed run.

### **COURSE RULES:**

There will be no racing where boats will meet head on unless separated by a buoy line. Each race will consist of laps (amount determined by each course). Each lap will have two legs. Each leg will have a start and finish (Example 1: point A to point B; point B to point A / Example 2: point A to point B; point B to point C).

A sweep boat will start and run the course immediately after the last boat has left the starting line, and the sweep boat will only stop for a combined time of 2 minutes per leg. Boats unable to start at the beginning of any leg must wait until the next leg to re-start (this assumes that there is another start at that location). Any driver that breaks down during a leg may try to re-start until he is passed by the sweep boat. (In races W/O a sweep boat if you kill the motor you cannot re-start.). You can re-start after all boats have passed on the next leg (before the sweep boat passes by). On the last leg, the race is over if passed by the sweep boat. The sweep boat will not pass as long as your boat is under power with the exception that the race official in the sweep boat may ask the driver to pull over in a safe pace if the boat is determined to be impeding the progress of the race.

### **MISC RULES:**

Gas may be purchased by another driver prior to the race. This should be done as early as possible and no later than 2 hours before the start of the race. Only once a year a engine case split inspection may be performed by and at the discretion of the Inspector and/or Referee. This inspection will be conducted as soon as the race concludes at a site determined by the officials. If the inspector finds the motor to be illegal, penalties are as follows:

1. Driver and owner will be disqualified for that event.
2. Driver and owner will forfeit prize money and points for that race.
3. Driver and owner will not be allowed to race until the problem is resolved.
4. Driver and owner must pay \$100.00 each to the club as a fine. If driver is the owner then the fine is \$200.
5. If driver or owner is caught cheating twice, they will be disqualified from racing for one year from the date of the infraction on top of the penalties assigned.

6. Every race must have a driver representative for any complaints, protests, safety issues, or any other issues that may require the referee's decision. This is designed for on course issues. Protests by drivers need to be brought to the driver's representative, not directly to the referee.
7. Any current Cal-Ore member can have a racer inspected to the specifications described in Article 7.
8. Any racer or club member with voting privileges can pay \$100 dollar fee and have the race inspector conduct a complete inspection including fuel as described in Article 7. The party protesting must also pay cost of the protest (off site fuel test etc.). If the engine or fuel is found to be illegal the driver or owner of the illegal boat must reimburse the protesting party. The driver and owner of the illegal boat will also be subject to all penalties and fines described in Article 10.