South African Model Power Boat Association (SAMPBA)



RACING RULES AND PROCEDURES FOR MODEL POWER BOAT RACING AT SAMPBA NATIONAL EVENTS.

OUR CONDUCT:

All members, and the SAMPBA Management committee, will treat one another with respect at all times. Swearing, aggressive and disrespectful attitudes will not be tolerated, and depending on the severity of the offence, could lead to penalties by the committee including the possibility of cancelling the membership of a member.

(Revised & Updated: January 2020.)

Please accept that the many references to 'he' or 'his' are equally relevant to 'she' or 'hers' and should be read as such. Our apologies to the ladies who are racing with us currently or wish to race with us in future.

NOTE: This rule book was copied from the CMBC club to form a basis/starting point for the official SAMPBA rules

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Section 1. Definition of Models

The design of the hulls are defined by the various class rules.

Models are controlled by the Pilot using radio control.

All models irrespective of class should in terms of form and design look like a boat.

Boats may be raced with or without a closed deck / cockpit / cover.

Classes and Rules

- Hydroplane/Outrigger
 - Free design Hydroplane/Outrigger with surface or semi-surface drive propulsion. These two designs run/score as one class at SAMPBA.
- Offshore
 - Free design offshore boats. V-type or catamarans (tunnel hulls) with surface drive propulsion and inboard motors.
- F1-Outboard
 - Free design tunnel hulls resembling full size F1 hulls with surface drive propulsion and outboard leg mounted motors.
- F1 Inboard
 - Free design tunnel hulls resembling full size F1 hulls with surface drive propulsion and inboard mounted motors.
- Gas (Modified) F1 Inboard
 - The following rules and specifications are a guide to assist future pilots who wish to participate in this class, with choosing a boat that conforms to both the spirit and the technical requirements of the class:
 - i. Any purposefully designed and designated 'F1 hull' (molded or built from a wood kit), which originate from a recognized hull manufacturer, as a 'gas-size' F1 hull, (see example list below of some of the hulls that are already recognized), will be accepted as a legal hull for participation in this class. These hulls are still subject to certain other specification rules. See Item-4 (Specification Rules) on the next page. Currently recognized and approved hull examples for this class are: YPC, Dominator, ML-GS480, Thor470, AHGasF1 and HBGasF1.
 - ii. Any attempt to enter what is clearly a catamaran hull into the IB-F1 class, with what will then be an easily recognizable, non-standard, F1 deck and F1 canopy configuration, will be subject to a visual 'test' by the Race Control Management (RCM) of the day, specifically to determine if the deck and canopy resembles the front-view and side-view profiles of the approved hulls in point 2 above, as well as to satisfy the other relevant rules in this section of the rule book.

- iii. Any specific boat may only be entered and raced in one class per one race-event.
- iv. Specification Rules:
 - a) A 'dummy' engine-cowl is optional.
 - b) Both fixed and steerable strut-drives are accepted.
 - c) No turn-fins or trim-tabs are permitted.
 - d) The separate rudder positioning (left or right of the strut), is at the pilot's discretion but it must be mounted against the back of the transom. The rudder may also be part of a one-piece 'strudder' unit which could also be mounted in the center of the transom.
 - e) All boats must have a sturdy handle (mounted on top of, or protruding through the top of the canopy) suitable for launching and/or lifting the boat from the water by the rescue boat crew.
 - f) Cowls (or cowl sections) may be fixed and/or removable at the pilot's discretion.
 - g) Number of longitudinal running/wet surfaces = 2. (These running surfaces could be interrupted by 'steps/water-breaks' across the running surface)
 - h) Engine placement should be +/- mid ship. For aesthetic reasons it is recommended that the engine be covered by an F1 canopy/hatch, on the side of which the race number for each boat is normally carried.

Section 2. Classes and Class Registration

Classes by engine type and capacity.

- F1
- o 3.5 Nitro Maximum engine capacity: 3.5cc (Nitro)
- 7.5 Nitro Maximum engine capacity: 7.5cc (Nitro)
- Gas Outboard & Inboard Maximum engine capacity: 35.0cc (Spark ignition)
- Offshore Modified engines.
 - Offshore Sport Maximum engine capacity: 4.2cc (Nitro)
 - Gas offshore Mono Maximum engine capacity: 35.0cc (Spark ignition)
 - Gas offshore Catamaran Maximum engine capacity: 35.0cc (Spark ignition)
 - o Gas Inboard & Outboard Tunnels Maximum engine capacity: 35.0cc (Spark ignition)

- Gas offshore Stock (Unmodified) engines.
 - Stock Mono Only this one engine / capacity: 25.4cc Zenoah G260 PUM
 - Stock Catamaran Only this one engine / capacity: 25.4cc Zenoah G260 PUM
- Hydroplane/Outrigger modified engine classes.
 - o 3.5cc Nitro Maximum engine capacity: 3.5cc (Nitro)
 - Gas Maximum engine capacity: 35.0cc (Spark ignition)

NOTE! All mono, catamaran and F1 boats must have a robust carrying handle/s to facilitate launching and lifting of the boat from the water by the rescue-boat crew.

Class Registration

- There is no requirement to 'register' any of the seven current classes below. However starting up any other class would require a request to, and approval by, the club committee.
- Classes currently being raced at SAMPBA are as follows
 - o Formula-1 Gas Inboard (Modified spark-ignition engines, 35 cc Max.)
 - o Formula-1 Nitro Outboard (Modified engines, 7.5cc Max.)
 - Offshore Gas STOCK Mono or Catamaran hulls. (Stock spark-ignition Zenoah G260PUM 25.4cc)
 - Offshore Gas MODIFIED Mono or Catamaran hulls. (Modified spark-ignition engines, 35cc Max.)
 - Gas Sport-Hydro/Rigger (Modified spark-ignition engines, 35cc Max.)
- Classes that were previously raced at SAMPBA but have not been raced for at least the last season are:
 - Formula-1 Gas Outboard (Modified spark-ignition engines, 35cc Max.)
 - Formula-1 Nitro Outboard (Modified engines, 3.5cc Max.)
 - Offshore-Sport Nitro Mono or Catamaran (Modified engines, 4.2cc Max.)
 - Nitro Sport-Hydro/Rigger (Modified engines, 3.5cc Max.)

Gas Stock Class Engine Specification Rules

- In general, the following rules apply: (Some exceptions follow below)
 - This class shall only use the Zenoah G260PUM motor and no other.
 - The motor must remain stock as is supplied by the manufacturer and may not be modified in any way. No component material may be removed or added in any way.
 - o All parts on the motor must be as supplied by the Zenoah Company.

Carburetion exceptions.

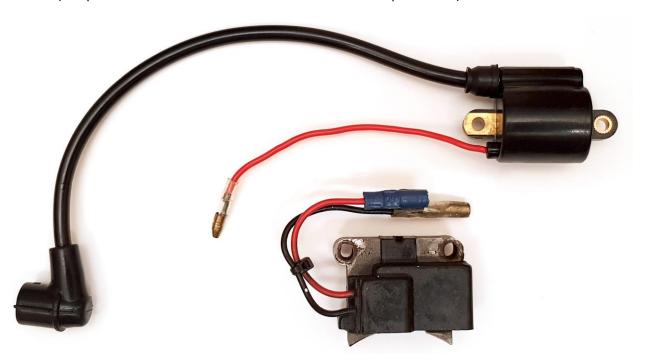
- Only the Walbro 644 and 257 carbs may be used. These may have the choke butterfly removed (644) and bolt-on velocity stack removed. No other modifications may be made to the internals and flow path of the carburetor.
- o NOTE! 'Butterfly'/shaft units of the above carburetors may be replaced with aftermarket parts of exactly the same shape and dimensions as the original part.

Base gasket

 Only the blue base gasket as supplied by Zenoah may be used. No aftermarket (compression enhancing) gaskets may be fitted.

Piston

- Piston shall be the manufacturer supplied piston only. No lightening or relieving of piston is allowed.
- Ignition Coil exceptions.
 - The grey ignition coil may be relocated at the pilot's discretion.
 - The following aftermarket coils may be used in place of the original coils. Details may be obtained from the committee.
 - (See photos below of the two aftermarket coils that are permitted!)



Bearings

- Any off the shelf, metal cage 6001 bearing maybe used with the necessary chamfering done to it to ensure the needed crank float.
- No fiber cage bearings with ceramic balls will be allowed.
- No metal cage bearings with ceramic bearings will be allowed.

Seals

- OEM Zenoah seals, as well as locally available aftermarket seals may be fitted. Seal retaining springs may not be removed.
- o No aftermarket zero drag (Metal) seals may be fitted.

Spark Plug

 Spark plug may be replaced by an NGK of the same specifications as the Champion supplied with motor. No Iridium plugs allowed.

Pull Starter

- The original pull start unit may be replaced with a OE easy start or an aftermarket easy start/pull start unit.
- Addition of a 'Geezer Wheel' behind the collet chuck is permitted but a complete pull start unit must remain in place and be in working order. Boats may be started with the rope pull start, or with a belt on the 'Geezer Wheel' using an electric starter.

Exhaust/Tune Pipe System

o Header Tube:

A header with OD (outside diameter) of no more or less than 22mm or 7/8" (22.23mm) must be used. This header diameter must run all the way until the start of the diversion cone. No progressive (increasing diameter) headers or integrated headers would be allowed. For clarity, this eliminates the legal use of a Quickdraw header as its diameter increases towards the rear.

See definitions from the English dictionary of the words 'PROGRESSIVE' and 'INTEGRATED' below.

- PROGRESSIVE (Adjective):
 Favoring or advocating progress, change, improvement, or reform, as opposed to wishing to maintain things as they are
- INTEGRATED (Adjective):
 Combining or coordinating separate elements so as to provide an interrelated whole

o Tuned Pipe

The tuned pipe may be any available pipe (commercially or custom made) but may not have more than 2 diversion cones and 1 conversion cone. Any parallel band width (fattest part of pipe) pipe may be used. All pipes must be muffled to meet the 95dB limit set as per the noise regulation.

Scrutinizing

- Race control is entitled to decide on an engine scrutiny of any stock class participant's boat at the
 end of any race day. Such scrutiny will be carried out in the presence of race control, and 2 other
 members appointed by the committee.
- At this motor inspection the club would supply a new blue base gasket to replace the one on the scrutinized motor if the member request it. If at any time the scrutiny officials decide that an engine has been modified, the member would lose all his/her points for the season to that date. On the second offence by such a member, he would be brought before the committee where he may be suspended from the club indefinitely. (i.e., membership terminated!)

Section 3. Principal rules, personal and technical rules

Principal rules

- Competitions where these rules apply.
 - SAMPBA rules apply to all SAMPBA sanctioned events.
- Entry fees, membership fees and special levies
 - SAMPBA race entry fee will be determined by the SAMPBA committee annually and published on www.sampba.co.za.
 - o SAMPBA membership fee will be determined by the SAMPBA committee annually and published on www.sampba.co.za.
 - New members who affiliate during the year will pay proportional affiliation fees as determined by the committee.

Protest fees

The protest fee at all official SAMPBA events is R200.00 cash.

Personal rules

- Age groups
 - At SAMPBA events the competitors are divided into two age groups Juniors and Seniors. This rule
 will only apply if there are sufficient Junior pilots. Junior pilots will be allowed to race with senior
 pilots in any class but only as approved beforehand by the committee. The committee will make
 their decision on the basis of a Junior members experience and competence in controlling his boat in
 competition conditions.
 - A Junior is someone who in the year of competition is not older than 18 years. (Someone is no longer a Junior if they have their 19th birthday in the year of the event.)
- Competitor Registration on race days

- In order to compete in a club event, the pilot's entry fee is payable to Race control at registration. All non-member pilots have to pay the non-member-entry/race fees as specified on the club website, in order to participate on club race-days.
- By entering the competition, the pilot accepts these rules and indemnifies SAMPBA or the hosting club or association from any claims whatsoever. All pilots must sign an indemnity form before their first race.
- Minimum / Maximum competitors per heat

Offshore: 1 boat minimum, 12 boats maximum

O Hydro/Rigger: 1 boat minimum, 6 boats maximum

o Gas F1: 1 boat minimum, 12 boats maximum

O Nitro F1: 1 boat minimum, 12 boats maximum

- Multiple groups per class per race day
 - o If the entries exceed the maximum boats allowed per class, the pilots will be divided into 2 or more groups. The pilots in each group will be determined by a 'lottery' draw.
- Any number of entries per class per race day, (even if just one entry is received), will be entitled to race in the maximum number of heats allowed per class!
 - Race control is currently applying a scoring rule that allows for stopping a heat at any point if a specific pilot is (by whatever circumstance) already the last pilot racing in a heat through retirements by all other boats in that heat, or because that pilot was the only entry in that class heat. Such a 'winner' will then be awarded 1st place points score for the day, and be credited with the historic average winning lap score for that class. This could mean that such a pilot will receive the above point score and lap score, even if he has only completed just a few laps in that heat!
- Assistants and substitution of the competitor
 - o It is preferred that in all classes a pilot will have an assistant. This will be to assist in launching and retrieving the boat.
 - The assistant is allowed to help the pilot in the preparation for the start, during and until the finish of the race.
 - The assistant is not allowed to control the boat at any time that the boat is on the water unless the competitor becomes incapable of doing so. The assistant may stand behind the pilot on the driver's stand during the heat but may not interfere with, or talk to, or hinder any of the pilots.
 - Under no circumstance may any pilot (or pilot's assistant) on the drivers stand argue with, or make any aggressive comments towards another pilot or assistant on the stand, during milling time or the duration of a heat. Pilots must reserve such behavior for discussion after the heat is completed and preferably in the presence of race control.
 - Substitution of the competitor is not allowed during the race.

- Heat duration.
 - Heat duration is specific to each class as specified below:
 - Stock & Modified Gas Catamaran, Stock Gas Mono, Gas F1 Inboard:
 - 8 x Heats of 5 minutes each.
 - 2 worst heats are thrown away.
 - Mod. Gas Mono:
 - 8 x Heats of 5 minutes each.
 - 2 worst heats are thrown away.
 - F1 Outboard Tunnel Nitro:
 - 8 x Heats of 5 minutes each.
 - 2 worst heats are thrown away.
 - Gas Hydroplane/Outriggers:
 - 8 x Heats of 3 minutes each.
 - 2 worst heats are thrown away.

Technical rules

- Propulsion of models and fuels
 - Only internal combustion motors are allowed. Jet engines and other forms of non-standard propulsion are not allowed.
- Fuel
 - Pilots can either use a methanol/nitro/oil mixture, or pump fuel/oil mixture as prescribed by the class. The percentages in the mixture, and the octane of the pump fuel is at the pilot's discretion up to class limits as specified below.
 - All nitro engines:
 - Must be a methanol / oil mixture, with or without Nitro
 - o All Gas engines:
 - Must be a petrol / oil mixture. Maximum octane allowed is 110. No nitro or N.O.S. allowed
- Noise level reduction rules (Also see Section 9 for measurement procedures.)
 - All internal combustion engines must be equipped with devices to reduce noise levels i.e. silencer and/or cover.
 - The maximum decibels allowed is 95 dB/A. (As measured in accordance with the procedures detailed further on in this rule book.)

- After a boat is checked by the decibel meter for noise, the pilot must be warned and advised immediately if the boat exceeds 95 decibels, and he will also be informed that the boat will have to be re-checked at the next race meeting. He will be permitted to continue racing on this day.
- o If at the next race meeting, the boat still exceeds 95 decibels, the pilot will be instructed to immediately remove his boat from the dam, and not restart the engine again unless he has fitted new or additional silencing and wishes to have the boat re-tested. Such a re-test will be done at the discretion and timing of the senior race controller/committee members on duty at the time.
- If that specific boat is retested on the same day, and again fails to achieve a reading within the 95 dB/A, the pilot will not be permitted to compete with that boat for the rest of the race meeting. This applies to subsequent race meetings as well, until the boat is again tested and complies with the 95 decibel maximum.
- The noise level rules will be applicable to all boaters using the dam facilities at any time i.e. during a race, at free practice or at fun days.
- If at any time, a silencer or tuned-pipe is lost or becomes loose resulting in a dramatic increase in the noise level of that boat, race control will be permitted to instruct that pilot to bring his boat in to the retrieval area on that lap and to stop the engine.
- Application and use of radio control equipment and frequency control
 - During official events, only digital and proportional operated radio control equipment is allowed. The
 radio control must be capable of working within 20 kHz, which for example, would allow 12 models
 in the 27 MHz band. The use of any other frequency bands may be possible.
 - The 35 MHz band is reserved for the exclusive use of model airplanes and will therefore not be allowed.
 - At the start of the season/first race meeting all boats must be registered. A frequency and a race number will be allocated to each boat for the year.
 - Radio/frequency checks will be carried out prior to the start of every first heat to prevent clashes.
 When someone has a problem the race will be run if the problem can't be rectified immediately.
 - When competitors are not racing in the current heat, radios may not be switched on within 1000
 meters of the competition area. (Not even in the hot pit areas) Competitors who disobey this rule
 will be disqualified from that day's racing and could lose points.
- Transponders and their use for lap scoring

<u>Due to equipment failure, the transponder system is currently disabled at SAMPBA until</u> <u>further notice. Therefore all rules related to the use of transponders, are not currently applicable.</u>

The use of computerized race control technology has been introduced at SAMPBA and requires that all boats are fitted with SAMPBA-specified transponders, so that the boat's progress in terms of completed laps and timing can be recorded in real time in the race control computer system. It is the responsibility of all pilots to purchase these transponders from SAMPBA and any new members are encouraged to do so as soon as possible after joining. Relevant information is available from any committee member.

- NOTE! The 7-digit transponder number must be clearly displayed anywhere on the deck of the boat with the numbers being at least 10mm high.
- Buoys (Dimensions, construction and anchorage)
 - o The race course will be marked by buoys, yellow, red, orange or white in colour.
 - The shape of the buoys can be cylindrical, round, square or rectangular. The buoys will be anchored so that they are at right angles to the water surface.
 - o The buoys must be between 300mm and 400mm in length and diameter.
 - Buoys must be made of materials such as polystyrene, rubber, cork, compressed high density foam or any other material that will minimize damage if a boat collides with it.

Hot Pit Area (construction and materials)

- The Hot Pit area must provide adequate space for the competitors and their models and assistants.
 Any obstructions which could endanger the safety of the competitors and the models must be avoided.
- o All boats may at all times <u>only</u> be started in the Hot Pit areas. Then launched and retrieved from the launch area.
- Access to the launch area should be clear. Visitors, family members, and particularly children, must not be allowed at the entrance to, or in the hot-pits. Any member witnessing children or unauthorized persons in the hot pits area, have the right (and responsibility) to remove such individuals!
- o All footwear of a Slip-on/slip-in fashion, with or without straps, is banned!
- Only tekkies, or shoes with laces, or gumboots must be worn.
- No Rockeys/Crogs/Slip slops. Shoes must be worn at all times, no bare feet allowed. If at the
 committee discretion your foot wear is not appropriate you will be asked to change and no further
 discussions would be entertained.
- Steps to launching area should provide for separate 'walk down' and 'walk up' lanes. Steps closest to buoy 1 is the 'walk up' lane and the steps closest to driver's stand is the 'walk down' lane.

Safety regulations

- All boats must have sufficient floatation (pool noodle etc) as to facilitate the boat to float above the water line when filled with water
- All boat motors must be able to be cut with the radio equipment. (By activation of switches or levers on the radio transmitter.)
- All competitors must wear appropriate foot gear which is of a non-slip form. Sandals or CROCS style slip on foot wear is not allowed. All footwear of a Slip-on/slip-in fashion, with or without straps, is banned!
- Only tekkies, or shoes with laces, or gumboots must be worn.

- No Rockeys/Crogs/Slip slops. Shoes must be worn at all times, no bare feet allowed. If at the
 committee discretion your foot wear is not appropriate you will be asked to change and no further
 discussions would be entertained.
- All personal boat stands/mountings, in the pit areas, must be of a sturdy nature and even though engines may not be started in the pit areas, such stands should preferably have some form of propeller protection.
- O NOTE! IN THE INTEREST OF SAFETY, THE SAMPBA COMMITTEE HAS DECIDED TO MAKE IT A HARD-AND-FAST RULE THAT NO BOAT ENGINES ARE PERMITTED TO BE STARTED IN THE PIT AREAS EVEN WITH THE PROP REMOVED, AND THAT ANY ENGINES MAY ONLY BE STARTED IN THE HOT PITS AREAS.

HOWEVER, NO BOATS THAT ARE NOT IN THE CURRENT HEAT, MAY BE STARTED ANYWHERE UNTIL THE MILLING TIME FOR THAT HEAT IS COMPLETED. ENGINES MAY THEN BE STARTED IN THE HOT PITS AREA, BUT WITHOUT TX CONTROL. I.E. ONLY WITH ACTIVATION OF THE THROTTLE LEVER BY HAND.

THE PENALTY FOR TRANGRESSING THE ABOVE RULES WILL BE AT RACE-CONTROLS DISCRESSION, BUT COULD INCLUDE THE PENALTY OF LOOSING 100 POINTS FROM HEATS TOTAL POINTS-SCORE THAT COUNT FOR THAT DAY.

Sport Rules

- The competition area
 - The competition site, especially the racing water and the surrounding area, should be selected by the organizers to give the competitors the best possible conditions to achieve good results.
 - The organizers will ensure that adequate safety measures are in place to protect competitors, officials and spectators from possible danger.
 - The competition site, the racing water and the surrounding area must be checked prior to the race by the race officials. In the event of complaints from the competitors, the organizers must attempt to correct the fault immediately.
 - The competition site and the race water must not be contaminated by mineral oils, grease and other poisonous substances. No competitor or assistant may discharge or dump any fuel into the racing water.
 - Failure to comply with this rule by a competitor will result in disqualification from the competition.
 Lodging a protest will not be entertained at all.
- Allowed number of boats entered per class by a pilot, entry possibilities and race condition of the models.
 - A pilot can register two models per class and will only pay entry fees for the second boat if and when he uses it in a race-heat.
 - The transponder number of the second boat must also be provided to race control at the time of registration so that the transponder numbers for both boats will be linked to the pilot's name in that class, in the computer system. This will provide for a seamless transition for the system to collate the scoring for that pilot even if he changes to the second boat after heat number two and completes racing heat 3 and 4 with the second boat.
 - Payment for racing the 2nd boat must be made before it is brought to the hot pits.

- o In the event of the second boat having a different frequency the pilot must also register this frequency at the time of race entry.
- It is the choice of the pilot which of the two models he will use for a race/heat. The second model
 does not have to be of the same design or paint scheme as the first model, but must clearly qualify
 as being of the same class.
- The second boat must carry the same race number as the first boat.
- Only one model can be brought onto the hot pit area. In the event of a breakdown during a heat, the
 pilot will not be allowed to use the second model in that same heat. It may only be used during the
 next heat.

Re-run of a race

- There is no right to a re-run if a model is damaged during a heat or if a propeller is caught by a foreign object like weeds, fishing line etc. or if radio equipment malfunctions.
- A heat can be repeated when timing or lap counting fails, or after disruption caused by drifting buoys etc.
- Or at the discretion of the Race Organizer.
- Registration of competitors and models, scrutiny of boats
 - Race Control is entitled to request that each competitor registers their models including any spare models and their radio equipment, within the registration time prior to the race event starting.
 - The competitors must show their boats for scrutinizing, if requested to do so.
- Calling time (time allowed to get ready)
 - The calling time is two minutes. Within this time, the start controller will call the class/heat type by name to take their positions on the hot pit area.
 - If the competitor does not take their position on the hot pit area with their model within the calling time, the competitor loses their right to start the race
- Interruption or suspension of the competition, or cancellation of a complete raceday!
 - An interruption, delay or cancellation of the complete competition can only be decided on, and announced, by the chief judge/race controller/organiser.
 - An interruption or delay of a heat at the starting jetty can only be decided by the chief judge/race controller/organiser.
 - Cancellation of a complete race day, due to weather/forecasts, or any other potentially disruptive aspect, is permitted by the committee. Such a decision will always be made in the interest of the club membership, and their and the club's equipment, and will be communicated to all members via the SAMPBA WhatsApp chat-group facility. Such decisions will be made within the best available time frame, but could include being made a day (or days), prior to the race day, or at the start of

proceedings of the actual race day, or even at some point during a race day. The full prerogative for such a decision is held by the committee and will be binding irrespective of how any such disruptive aspects materialize on the actual race day.

SAMPBA protest policy

Principal rules

- A protest can only be lodged if the competitor is convinced that their race result has been compromised by one or more of the following:
 - another competitor piloting his boat in contravention of the racing rules.
 - another competitor having a boat that does not conform to class rules.
 - a decision, act or omission made by one of the competition officials.
- The final results, placing, the awarding of titles, medals and honorary awards can only take place after all lodged protests have been resolved.
- The decision of the jury is final. Appeals are not accepted.

• Lodging of protests

- Each protest must be verbally reported to the chief judge immediately upon observation of the alleged infringement, either by the pilot or his assistant.
- The protest must be lodged in writing to the chief judge within half an hour after the race in which the incident occurred.
- The lodging of a protest does not necessarily exclude the accuser or the accused competitor from further participation in the day's competition. However this will be subject to the committee's judgment on the severity and type of offence.

Some protests may require that the judgment, and/or ruling, can only be made at the end of the race day. If such a protest involves having to scrutinize equipment such as a boat or a transmitter or fuel etc., then such identified equipment may not be tampered with, or removed from the pit area, specifically if the accused pilot wants to leave the race site and wishes to take his equipment with him. This would then clearly represent a situation where the accused pilot wants to remove the possibly errant equipment before a judgment can be made by the race control / committee officials.

If such an accused pilot ignores the above ruling, and leaves the race site with his all his equipment, prior to the judgment of the protest, he will automatically be deemed to be guilty of the relevant offence and will receive the full appropriate penalty.

- If after a verbally lodged protest measures are taken to correct the situation, a written protest will not be necessary.
- o If the competitor is still not satisfied, he may proceed with the written protest and pay the protest fee.
- The written protest must contain the following:
 - Grounds of the protest (respective rules, regulations, acts and where to find them)
 - Time, place, a precise description of the incident, the reason for the protest, possibly including drawings and other evidence.

- Statements and names of witnesses who were involved in the incident and who are willing to truthfully answer questions regarding the protest.
- Statement containing the name of the official to whom the verbal protest was lodged, the time when it was lodged, and by whom it was lodged.
- o The protest must be signed by the competitor.
- The protest fee must be paid in cash, when the written protest is lodged, or the protest will be null and void.

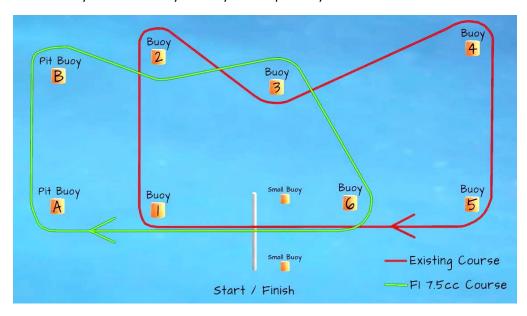
Handling of protest

- The jury has to consider an officially lodged protest for which the protest fee has been paid, and give a decision.
- The jury will consist of the chief judge, the competitions manager and one other committee member.
- The competitor who has lodged the protest and the person against whom the protest negotiations are conducted, have the right to attend the hearing without voting rights.
- For the protest negotiations the jury can call further witnesses involved in the incident who must give a truthful account.
- The decision given by the competition management on the outcome of the protest will be announced to the affected competitors. If the protest is successful, the protest fee will be returned to the competitor. If the protest fails, the protest fee will remain with the organizer.
- If the protest is successful and the person against whom the protest was conducted is found guilty of breaking racing rules, the penalties will be imposed against the accused competitor.

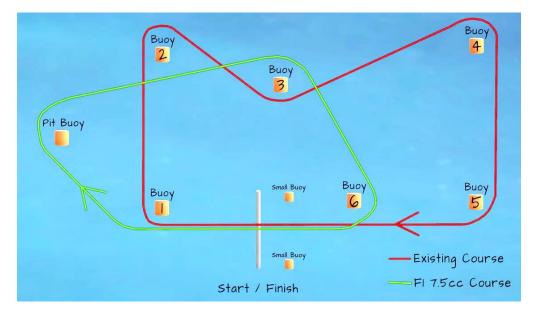
Section 4. General rules: competition course

- General rules regarding the setup of the competition course on the water.
- The layout of the course has been altered a number of times in recent years to make best use of the watersurface area. The committee has the right to make such changes based on the changing conditions at the dam and in the best interest of the general racing membership. They will consider membership input for such decisions if needed.
- The two layout designs below are options for a layout.
- The layouts below incorporate the new Buoy 6, (for the nitro F1 class), placed between Buoy 5 and the start/finish line.

SAMPBA Layout - 2 Pit Buoy: The layout if 2 pit Buoys are used:



SAMPBA Layout - 1 Pit Buoy: The layout if 1 pit Buoy is used, course goes inside of Buoy 2

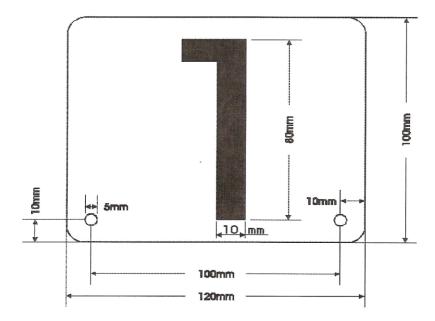


Section 5. General rules for start & termination of race or heat

- During a race a competitor will not be allowed to interfere verbally with another competitor, distract or become physical with another competitor. Doing so could result in a warning, lap deduction or disqualification depending on the severity of the offence.
- After completion of a race, all boats must be taken out of the water immediately, the radio must be switched off, and the hot-pit area vacated A.S.A.P. No servicing or repairs are to be carried out in the hot-pit area.

Section 6. Competition requirements

- General construction rules and regulations.
 - 1. A hull has no construction rules, however it must, in form & shape look like a boat.
 - 2. All model engines must have full throttle control.
 - 3. The size of the fuel tank is not restricted.
 - 4. Every model must have on the deck a longitudinal mounted number plate, made out of a flexible, durable material such as poly carb, plexi glass or Perspex.
 - 5. It is strongly recommended that race numbers must be visible from both sides of the boat without exhaust pipes etc., obscuring vision to the numbers on both sides. (See drawing below).
 - The number plate for the F1 boats must display a bold black number on a white background, and must be mounted on both sides of the cowling.
 - The dimensions of number plates for classes Offshore/Hydro rigger are as follows.
 - Number boards on riggers will be 80mm high by 100mm wide, with 60mm letters, mounted on the side or on top of tub.
 - Number boards on all other gas-class hulls will be 100mm high by 120mm wide, with 80mm letters, mounted on the top of hull to provide 100% visibility from the race control tower.
 - 6. These rulings have not been enforced in recent years but they are now 'HARD AND FAST' rules which have to be adhered to prior to participation on race day.



- 7. The organizers will provide one powered rescue boat, which will only be allowed onto the water after a heat has been completed or at the sole discretion of the judge. The general rule for rescue boat responsibility is the pilot of the first boat to need rescuing, accompanied by a helper.
- 8. The crew of the rescue boats are encouraged to wear life jackets which are available from race control. However, it is everyone's own responsibility and therefore your own prerogative to wear the jackets.
- 9. During the race nobody is allowed in the racing water. Competitors not obeying this rule will be disqualified. During the race your boat may be recovered from the side but may not re-enter the race.
- Procedures for races in the Offshore / Hydroplane / Outrigger / F1 classes
 - 1. Before the start of each set of heats a radio check has to be carried out to determine if the pilot's radio equipment is working properly with no interference. After the check, no protest will be entertained.
 - 2. Each race consists of three independent phases:
 - Preparation time (Hot-Pit time): 5 minutes
 - Milling time: 2 minutes
 - Course time (Race time): As defined in Section 3: Heat duration and course design
 - 3. During preparation time all boats must be in the hot-pit area. Pilots may work on their models, start and warm-up the engine, but NO boats may be launched.
 - 4. Boats may be recovered and re-launched during the milling time ONLY, boats may only be retrieved between the hot pit area and the Pit Buoy. And no racer is allowed to enter the water at all during the retrieval. A designated pole can be used to reach boats. The model must be returned to the hot pit area and normal re-start procedure must be followed.
 - 5. After the start has been signaled no further boats may be launched.
 - 6. 'The start' (as referred to above), is the audible start sound from the computer.

- 7. The competitors must drive their boats around the course in a clockwise direction.
- 8. During milling time, to ensure the safety of all boats, boats must keep to the "lanes" they are in as if they were racing. Cutting in front of other boats, zigzagging across the course, circling boats etc. to avoid crossing the start line early will be penalized by one lap. Boats making use of a clutch may not come to a dead stop on the water.
- 9. At the end of the milling time, the race will officially start randomly (determined by the computer), at any point during the following 10 seconds, only when an acoustic signal (beep) is given, regardless of where the boats are positioned on the water.
- 10. Boats crossing the start / finish line before the acoustic signal, have a false start and therefore their race only begins after they have crossed the start/ finish line again.
- 11. During the race time the pilot may only leave the driver's stand if his boat has stopped somewhere on the course, or after he has steered his boat to the launch/retrieval area and killed the engine with his transmitter. However while driving, the pilot may not leave the driver's stand.
- 12. All buoys must be negotiated in accordance with the course. Touching the buoys is allowed. Only those laps negotiated in accordance with the course are counted.
- 13. If a buoy is passed on the wrong side, the pilot is not allowed to circle the buoy and will be penalized with one lap at the end of the heat.
- 14. A slower boat can be overtaken on either side. During the overtaking maneuver the slower boat must keep its line. It is up to the faster boat to overtake the slower boat without interfering with it. The overtaking boat must keep its line or lane until it is at least 2 boat lengths ahead of the slower boat. It may then move into the racing lane in a smooth line.
- 15. The faster boat is not allowed to interfere with the slower model during the overtaking maneuver.
- 16. The boat on the race line which is less than 5 boat lengths from a buoy has right of way. A maneuver to force a boat to take the inside of a buoy in order to overtake is not permitted.
- 17. If a boat loses its number-plate or a number during the race, Race-Control (RC) could instruct that pilot to bring the boat in immediately and a new number must be fitted before his racing can commence. This is a procedural requirement as RC cannot always identify such a boat without its number, in the event of warnings, penalties, missed laps etc. In the interest of fairness and uniformity, this rule will be applied in all cases. However, race control may decide not to instruct such a pilot to bring his boat in depending RC's ability to recognise that boat even without it's number.
- 18. In cases of unfair behavior, interference with other competitors, not following the rules or endangering of spectators the chief judge can pronounce the following penalties:
 - The first occurrence of not following the racing rules, where no other boat has stopped as a result of the incident, a verbal warning will be given 1st warning.
 - The second occurrence of not following the racing rules, or a more serious incident, will be punished with having to go around the pit buoy on the next lap 2nd warning.
 - The third occurrence of not following the racing rules, or a more serious incident, will be punished with a one lap deduction 3rd warning.
 - NOTE! If any one of the above three instances in i, ii, or iii also results in, and causes, another (secondary) boat to be damaged or stopped in the water, a disqualification of the errant pilot, from that heat, will be applied by R/C.

- Running over or crashing into, (even touching or lightly bumping into), a stopped 'dead' boat after it has been announced on the PA as a 'dead boat', will be punished by disqualification from that heat. The DQ'd model has to complete the lap he is on and be taken out of the water immediately.
- The competitor will be verbally informed of the DQ details and he may also request a written penalty.
- In exceptional cases of continuous infringement of the rules or in cases of bad behavior a competitor can be banned from further participation in the race meeting by the chief judge.
- The end of the race is indicated by an acoustic signal. After the final signal, pilots must complete the lap they are on as fast as possible. The computer will record the time delay to complete the last lap. This time will be recorded with the number of completed laps.
- Basic rules and penalties in the Offshore/Hydro Rigger / F1 classes
 - 1. Failing to comply with the following rules could result in a disqualification from one heat or the entire competition.

Weaving turns

- 1. Excessive weaving on the course is not permitted, except when giving way or to avoid a collision. Minor steering corrections to the left and right, or to overtake other boats is allowed.
- 2. The following cases will be penalized by a one lap deduction:
 - A weaving turn in excess of 45 degrees.
 - When a competitor endangers another model by turning or weaving.

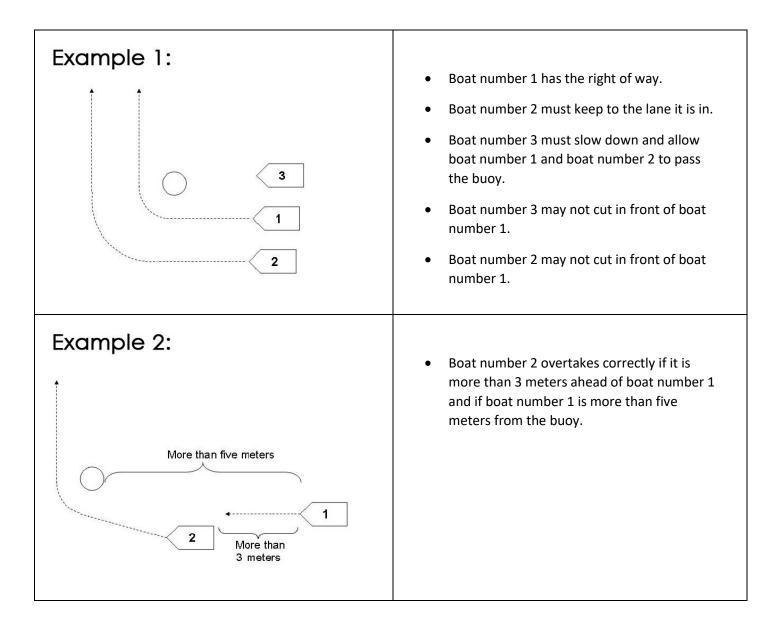
Right of way

- 1. Reliable turning and steering techniques as well as sporting fairness are requirements for the correct use of the race course.
- 2. The normal racing line is the line closest to the outline of the course. Boats on the racing line have right of way.
- 3. A boat on the normal racing line has the right to maintain its course.
- 4. A boat overtaking a boat ahead which is on the same racing line must be at least 3 meters ahead before it has the right of way.
- 5. The following cases will be penalized by a one lap deduction:
 - Not following the rules that specify the right of way.
 - Preventing other boats from overtaking by zigzagging, making S-turns, etc.

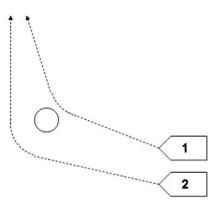
- Negotiating / passing the buoys
 - 1. Buoys 1, 2, 4 and 5 must be negotiated on the outside, while buoy 3 (the middle M buoy) must be negotiated on the inside.
 - 2. Buoy penalties are given by the judges and assistant judges and not by fellow boaters. It is not possible to protest their decision.
 - 3. The following cases will be penalized by a one lap deduction:
 - Passing a buoy on the wrong side. There will be a one lap penalty for each buoy missed.
 - Cutting, crossing or driving through the race course.
 - 4. Whenever a boat is launched onto the water at the start of or during a heat, it must be steered straight and directly towards the outside of the pit-buoy, and then on towards buoy-2, giving safe way to any boats coming up to buoy-2 from buoy-1. Failure to take proper precaution in complying with this rule could lead to disqualification from that heat.
 - 5. If a competitor cannot steer their boat properly they will receive a warning. If their driving does not improve, they will be disqualified from the heat and will be told to remove their boat from the water after completing the lap they are on.

Section 7. Rules for overtaking in all classes

The following examples are only guidelines for the judges and cannot be cited by competitors in a possible protest. In the situations described below serious danger could arise to other boats or spectators. In this case, the chief judge may order the competitor causing the danger to discontinue the race. The competitor will be disqualified from this heat and will receive no points.

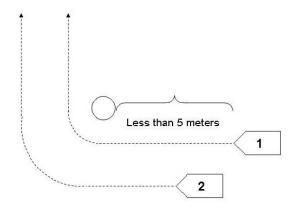


Example 3:



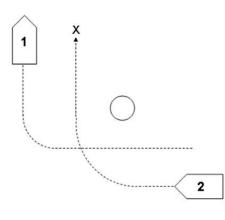
- Boat number 2 receives a 1 lap penalty because it forced boat number 1 to pass the buoy on the inside to avoid a collision.
- Boat number 1 will not receive a 1 lap penalty subject to a decision by the chief judge.

Example 4:



• Boat number 2 correctly leaves the racing line clear.

Example 5:



 Boat number 1 leaves the inside racing line clear because it turned wide. It allows boat number 2 to overtake by making a tighter turn to position X. Boat number 2 has the right of way.

Section 8. Calculation of final results per national race event

- As indicated earlier in this rule book, the transponder system is not currently operational. This has prevented
 the absolutely accurate timing function for the 'completion time' of the last lap of each boat in each heat. It
 is simply not humanly possible for a manually operated lap-scoring system to achieve this 100% accurately.
 Therefore the previous results-determination method of using the last lap completion time data, to break a
 tie of points, is also no longer practical/possible. The committee will therefore apply the following method
 to break such a points tie.
 - 1. If two or more pilots in one class, have the same final points score for the day, the first method of breaking the tie will be to look at which of the pilots have more 1st place heat finishes than the other pilots. If these pilots have the same amount of 1st place finishes, then the same method of breaking the tie will be applied by looking at the highest number of second place finishes. This method will continue to be applied until one pilot has more 1st or 2nd or 3rd or 4th place etc finishes, which would then break the tie.
 - 2. In the extremely unlikely event of the above 'finish places' method not breaking the tie, these pilots will be classified as being tied, and they will each receive the same amount of points as they originally scored for the day.
 - 3. If there were just two pilots involved in the tie and they ended up by being tied (after application of ruling no 2 above) in say second place, then they will both receive 300 points for the overall placing in the event, (i.e., championship points), and the next placed pilot will then be in 4th place for the day and will receive 169 championship points. The same logic will be applied if there were more than 2 pilots in the tie.
- Competitors receive the following points per heat:

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1st Place = 400 points
2nd Place = 300 points
3rd Place = 225 points
4th Place = 169 points
5th Place = 127 points
6th Place = 96 points
7th Place = 72 points
8th Place = 54 points
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- A racer is awarded the total number of points from all his heats, minus his worst two heats scores.
- IMPORTANT NOTE!
 - If a pilot's boat stops on the course during the timed heat, and has for argument's sake completed 6 and ½ laps when the boat stalled at say 3 minutes into the heat, his lap score for such a heat will be 6 completed laps in the full running duration time of that heat (example 5 minutes for 7.5 F1's), with no last-lap-completion-time, because he did not complete a lap after the computer end-siren.
- 'Last-man-standing' rule does not automatically apply anywhere in the racing system!
- Scores for determining SAMPBA champions in each class will be calculated by addition of each pilot's pointsresults per class, from all <u>heats</u> in the event, minus his two 'worst heat-scores' throw-away score.

Section 9. Methods for measuring noise levels

General

- o The measurement microphone must be positioned as follows:
 - Height 1 meter, approximately 200 mm above the water level.
 - Position at a right angle to the center-line of the course.
 - The measurement microphone must be located at right angles with the connecting line of the two lowest buoys and securely positioned.
- o It is a requirement that boats must pass the noise measuring equipment at full speed.
- The noise measurement must be taken when the boat is on the base line and at least 15 meters away from the microphone.
- Noise limit will be enforced at 95 dB and any boat over the limit would be warned and must have it repaired by the following race day. If not within the limit at following race day, the boat cannot compete until the silencing problem is rectified.
- Re-testing boats that were measured as being above maximum noise levels
 - Any boat that was tested and measured to be above the maximum noise level must be re-tested with no other boats running that could influence or interfere with the reading.

End of rulebook.