

A larger version of the ZAPCAT 2010 National Championship logo, centered on the page. It features the word "ZAPCAT" in blue with a stylized blue cat head silhouette integrated into the letter "O", "2010" in white on a red rounded rectangular background, and "NATIONAL CHAMPIONSHIP" in smaller blue text below.

It is the racer's responsibility to ensure they pick up a copy of any amendments at race control throughout the season and read and understand them.

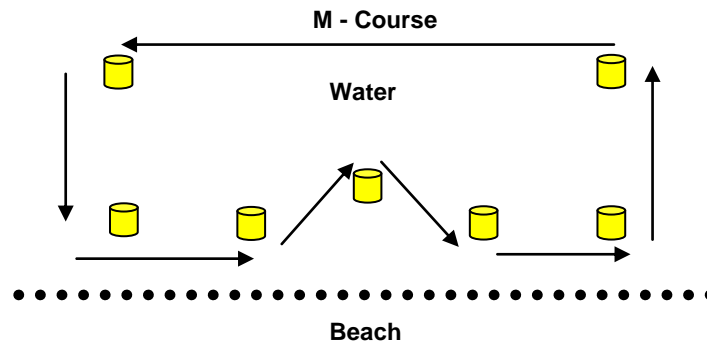
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These are the rules for the Zapcat One Design Racing Class. It is the responsibility of competitors to comply with these Class Rules.

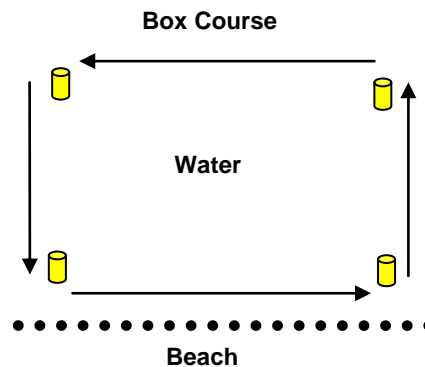
**L1: FORMAT**

1.1. Courses will be run on a circuit format which may include one of the below:

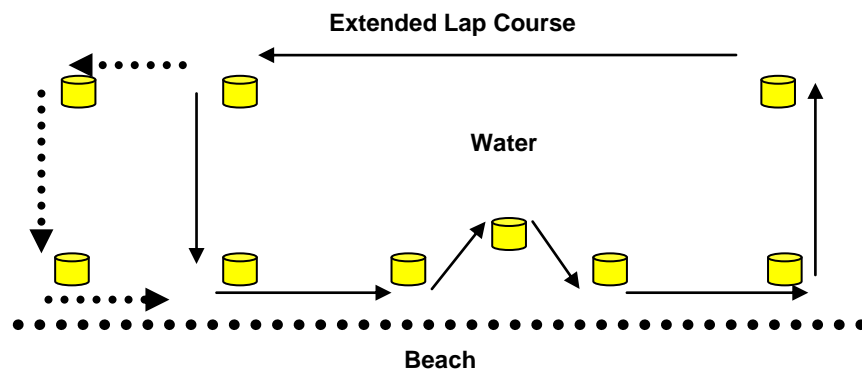
M course – used as the standard course for rough to choppy conditions.



Box course – used for difficult conditions, with surf and safety considerations



Extended Lap course – used for flat conditions, with 1 extended lap.



Courses may be altered to appropriate conditions – details will be given at drivers briefing.

1.2. All boats and engines must comply with the Zapcat design as specified by

ZCR Ltd.

- 1.3. A ZCR Ltd approved inspector will check and seal competitors' motors. All motors must be sealed on entering the Zapcat National Championship. (If the seal is to be broken written notification must be sent to ZCR Ltd). There will be random motor stripping and if anyone is found to be infringing the rules they will lose all accumulated points. The decision shall be made by the Official Race Committee.
- 1.4. Organisers/Competitors must ensure the safety of the public in all areas used by Zapcats whilst launching, racing and landing boats, with a designated area for fuel transference.

**L2: RACE RULES**

**2.1. Compulsory RYA Race Licence**

- (a) No competitor can take part in a race without being in possession of a current RYA race licence. Licenses can be a full Provisional/National licence or an Event licence. A Maximum of two Event Licences can be issued per person in any one year. After which a full licence must be applied for. A competitor can offset the cost of One Event Licence against their full licence. Both of which have to be issued in the current year.

- (b) Minimum Age

The minimum age for a Competitor is 16 years old.

If any crew member is under the age of 18, the other crew member must be 18 years old or older.

All age regulations apply at the date of the race.

All persons under 18 years of age must be accompanied at the event by a Parent/Guardian. All competitors who are under 18 on the date of the race will be required to submit written consent of their parent or guardian to their participation in the race and confirmation of their acceptance of the rules governing the race.

All persons under 18 years of age are also required to complete an RYA Certificate of Competence and return this to the RYA countersigned by a parent or guardian and the Zapcat OOD. Certificate of Competence forms are available from the RYA.

**2.2. Zapcat Racing Club Membership**

Individuals partaking in Zapcat Racing must be members of the Zapcat Racing Club, ZCR Ltd, Merlin Quay, Hazel Road, Southampton, SO19 7GB. All drivers must hold an RYA Powerboat Level 2 certificate.

**2.3. Mandatory Pre-Race Procedure**

- (a) All competitors must attend Race Administration to produce their RYA Race Licence and to sign on to the RYA Race Indemnity.

- (b) All competitors must attend the Drivers' Briefing.
- (c) Non attendance at Drivers' Briefing results in a disqualification.
- (d) All teams must have been scrutinised and passed by the official race Scrutineers as complying with the Zapcat rules. ZCR Ltd should hold a copy of each teams class compliance form. This is applicable to all and any equipment used.
- (e) All competitors are required to have an RYA log book registration form and these must be presented to Race Administration when signing in. Any damage to the boat incurred during the event will be recorded on this form which must then be returned to the RYA
- (f) All teams must have read the Advanced Race Instructions for the event they are attending and be able to produce a copy of them at Scrutineering.

#### **2.4. Format of Race Heats**

- (a) The organisers will determine the number of race heats to take place at an event.
- (b) The race committee will decide the number of boats allowed to compete in each heat/final.
- (c) All race heats will be a minimum of one lap. The OOD's decision is final.
- (d) Boats may qualify through the heats to take part in the finals.

#### **2.5. Race Starts**

The option of a beach start/re-start or deepwater start/re-start will be at the discretion of the OOD.

#### **2.6. Restarts**

All heats/finals are to be restarted until the required amount of full laps are completed, unless on the last lap, in which case the finish will be in the order the boats were after last rounding the finish buoy. The OOD has the discretion to change the number of laps if required.

#### **2.7. Disqualification**

Disqualification from a heat/final will be incurred for any of the following infringements:

- (a) Riding over a buoy or knocking a buoy flat \*
- (b) Causing a red flag infringement
- (c) Not following the nose to nose rule (rule 2.8)
- (d) Colliding with another boat
- (e) Barging another boat/ attempting to barge

- (f) Dangerous/ Reckless driving/ Cutting up a boat
- (g) Landing on another boat
- (h) Hitting a boat from behind
- (i) Abusing an official or another race competitor
- (j) Failing to comply with scrutineering requirements
- (k) Failure to comply with the Zapcat Branding Regulations
- (l) Failure to complete the course correctly
- (m) Failure to comply with advanced race instructions
- (n) Being on the race circuit without a helmet or properly fastened life jacket.
- (o) Unsportsmanlike conduct.

\*Should a buoy be damaged, the team responsible will be liable for the repair cost.

### **2.7.1 Yellow and Red Cards**

The following cards shall be issued for rule infringement including any incurred disqualification.

- 1. Verbal Warning - no card issued
- 2. 1<sup>st</sup> Yellow card issued - possible disqualified from heat/final
- 3. 2<sup>nd</sup> Yellow card issued - disqualified from heat/final
- 4. Red card issued - disqualified from the rest of the days racing

A 3rd Yellow card issued automatically converts into a Red card

Yellow cards are valid for two rounds of racing which includes the day issued.

A Red card is valid for the minimum of one Grand Prix and can be issued for a longer period at the discretion of the Race committee.

A Red card means that all points from the day shall be lost

For major infringement deemed by OOD or Safety Officer immediate issue of Red card may be enforced.

### **2.8. Nose to Nose**

A competitor's boat has the right of line, at any point of the race, when the tip of the tube of their boat is past the tip of the tube of another boat. In this event, the boat being passed MUST YIELD and offer the line to the overtaking boat! The boat that has the right of line can not barge any boat, even if the boat being passed does not yield their line. All competitors are

reminded that this is a non contact sport and failure to observe this rule will be penalised.

### 2.8.1 Pit Lanes

Should a Pit Lap be used, boats on their Pit Lap must give way to boats on the Main Circuit when re-entering the Main Course.

### 2.9. Flag Signals

The pilot AND co-pilots duty is to be vigilant and see ALL flag signals. Failure to comply with this rule may result in a yellow card.

Green Flag= Start Flag



Chequered Flag= End of Race/Winner

White Flag= Last lap/One lap to go



Yellow Flag= Caution: Danger nearby

No Overtaking allowed

Orange Flag= Restart of last heat





Red Flag= Warning - race stopped -  
return to start area

**2.10. Race Stopped**

In the case of a force majeure, accident, man-over-board and capsized Zapcat, the race will be stopped immediately by the Safety / Rescue boats by raising a RED FLAG. Any competitor who sees a force majeure, accident, man-over-board, capsized Zapcat or red flag must raise a hand in the air and come safely off the plane. If any competitor sees a raised hand then they must raise theirs and come safely off the plane.

All competitors must immediately stop racing. Race boats must proceed off the plane around the course to the designated start area to await further instructions. The race will be re-started without the capsized or man-over-board Zapcat. Further penalties can be enforced if a boat does not return to the beach immediately after one of the crew has entered the water.

If a day/grand prix is affected by time or environmental constraints the day will be shortened to the maximum number of heats completed by all competitors. Any boat that completes more than the required minimum number of heats shall have their latest scores discarded. Points from these heats will dictate final qualifying positions to run the final. If a final cannot be run, none of that day/round shall carry championship points. This will not affect the status of paid race fees.

**2.11. Retirement Procedure**

The retiring boat pilot and co-pilot must inform a Zapcat official. The retiring boat must leave the racing line if possible.

**2.12. Outside Assistance**

Once under starter's orders and during racing no outside assistance is allowed. The penalty is disqualification. This includes signalling or electronic communication. If a Zapcat official has reasonable suspicion of outside assistance the OOD may issue a points penalty.

**2.13. Post Race Declaration**

The OOD can ask for a member of each boat to report to the beach marshal after their heat if required. Racers shall sign off after they have finished their days racing. Any competitor who has not signed off 1 (one) hour after the days final, final shall be disqualified.

**2.14. Competitor's Responsibility: *All Race Boats must observe the International Rules for the Prevention of Collisions at Sea when encountering any Non racing craft.***

- (a) It is the competitor's responsibility to ensure that ALL PERSONAL SAFETY EQUIPMENT is in good condition, working order and complies with the scrutineering rules.
- (b) The decision to start or to continue to race is the sole responsibility of the competitor, unless the race is officially stopped.
- (c) It is mandatory for race crews to wear all safety clothing and equipment as per the scrutineering rules. However the efficiency of the crash helmet and racing vest is the sole responsibility of the wearer.
- (d) Smoking in the pits, smoking during racing, or smoking whilst waiting to return to retrieval area is strictly prohibited.
- (e) When finishing a heat/final or restarting a heat/final, all competitors MUST adhere to the instructions given by the OOD at the pre-race briefing on how to safely return to the start/re-start area.

#### **2.15. Kill Cords**

- (a) Kill cords are mandatory and must be attached to the driver and engine at all times. The co-pilot MUST carry a spare kill cord on the boat at all times.
- (b) A secure method must be used to attach the pilot's kill cord to their wrist/arm. This MUST fit tightly around the pilot's arm/wrist, not relying on a choker method to be effective. All kill cords must be Tohatsu marine kill cords and not extend over 1400mm at full extension between the cuff and engine.

#### **2.16. Protests**

Only a pilot may direct a query to the OOD, or a person appointed by the OOD for the race day (the use of audio visual media and footage cannot be requested). This MUST be done immediately after the heat/final. If the OOD or a Race Official has not seen an infringement, then it DID NOT happen. Protests as outlined in section P of PB1 are not permitted. The OOD's decision is final.

### **L3 ZAPCAT ONE DESIGN**

A Race Ready Zapcat must conform to the one design class and originally be supplied by ZCR Ltd or their approved agents. A list of approved agents can be obtained in writing from ZCR Ltd.

Only modification listed within these rules are allowed.

All items of equipment, the engine and craft must be made available to the Scrutineer when requested for technical examination.

#### **3.1 HULL**

- 3.1.1.** All boats to be fitted with a serial number and CE plate, issued by the manufacturer, on the nose cone & transom with all relevant information on, i.e. Make, Model & H.I.N. (also known as C.I.N or M.I.C).

- 3.1.2.** Boats must be inflated only with atmospheric air.
- 3.1.3.** Modifications above the waterline are allowed. These modifications will refer to foot straps, handles, loop patches and ropes only and not modifications that interfere with original outside dimensions or reduce the mass of the boat. Drilling of the nose cones to drain water is allowed with two 8mm holes at maximum. The waterline will be deemed to be the underside of the floorboards. Floorboards can be replaced with new boards of the same characteristics as the original Zapcat supplied boards at time of original purchase.
- 3.1.4.** No modifications below the waterline with the exception of polishing and one drain valve are allowed. The drain valve may be fitted within the Zapcat floor sail no further forwards from the aft edge of the trim tab at the vessels centreline than 600mm. The valve will comprise of a PVC ring 70mm outer diameter with a 38mm internal diameter. This will be placed on the sail surface against the floorboards. The hole through the floor sail must be in the centre of the ring hole and must not exceed the size of the internal ring. The exterior of the valve will be on the underside of the sail and protected by a 70mm circular patch glued along it's forward edge only, which fully covers the hole through the sail. Clarification, on this modification is available on the Zapcat Sail Valve homologation sheet, issue 1.
- 3.1.5.** All boats must be fitted with designated righting straps. These straps may not share common use as the designated bow line. Righting straps must be in working condition.
- 3.1.6.** If a hull is damaged and cannot continue to be used, it must be agreed and presented to the Chief Scrutineer before another hull is used. Replacement hull must be from the same class.
- 3.1.7** No fastenings can be used anywhere that do not have a locking mechanism except for life jacket and helmet fastening supplied by the manufacturers i.e. spring loaded karabiners.

## **3.2** **ENGINE**

- 3.2.1.** Outboard motors must fulfil the one design criteria
- 3.2.2.** To be homologated as a standard motor, an outboard motor must be manufactured in a standard production series (that is to say with all parts interchangeable and with identical dimensions, weights and materials).
- 3.2.3.** For the purpose of standardisation the UIM homologation sheets reference 00463 shall be used until superseded for reference only by ZCR Ltd. This includes taking the block to the homologated standard.
- 3.2.3.1** The only modification to the engine outside of the Tohatsu 50hp D2 homologation sheet is the 'allowance' of Tohatsu head gasket, part number 3T5-01005-0 Cylinder Head Gasket
- 3.2.4.** The engine has a built in bridge support which makes the original tongue in the Boysen backing plate obsolete. ZCR Ltd will therefore allow the middle tongue (and only the tongue) of the Boysen backing plate to be removed

from the reed. This will increase reliability and not performance.

- 3.2.5.** The rev limiter must be attached and functioning in the way designed by the engine manufacturer. Failure to have a functioning and attached rev limiter will be considered an illegal modification.
- 3.2.6.** When the motor is in the water the cooling must be effected by the motor's own circulating pump. External pick-ups or water pick-ups attached or affixed to the boat or motor are prohibited
- 3.2.7.** An effective control handle giving forward, neutral and astern movements is compulsory. The control handle for selecting gear, ready for use, must be within reach of the driver. Astern manoeuvring of the boat must be possible by selection of reverse gear only.
- 3.2.8.** The power head may be replaced during an event if it is not functioning properly. In the event of the power head being replaced, the original unit must be presented to the Chief Scrutineer for inspection.
- 3.2.9.** Tampering of the leading edges of the gearbox is not allowed. Only normal wear and tear is acceptable. The tolerance for this wear and tear is limited to 5mm. The repair and paint of the gear casing is allowed.
- 3.2.10.** The original propeller may be replaced by any other one which must be originally supplied by ZCR Ltd or their approved agents. The replacement propeller must form a seal with the gearbox to prevent "ventilation".
- 3.2.11.** Spark plugs, spark plug caps, and HT leads may be replaced. Additional coil earthing wires are allowed
- 3.2.12.** Revolution counters may be installed.
- 3.2.13.** The replacement of nuts or the addition of lock nuts, drilling and wiring, split pinning or key ring is allowed.
- 3.2.14.** Motor locking brackets may be removed. If the locking bracket is removed it must be replaced by a bungee retaining system. The engine skeg should not be able to be raised higher than the base of the hijacker keels when the engine retaining system is fixed and under load. The engine leg must be able to deflect when struck.
- 3.2.15.** The top three holes on the engine saddle can be elongated into a slot. This will invalidate the warranty of the saddle but not affect the rest of the engine. If you do not wish to lose the warranty of the saddle you can drill a slot in the transom to allow adjustment of engine height. This will invalidate the warranty on the hull.
- 3.2.16.** Tell tale cooling pipe outlet may be moved to another location on the engine tray. Size and dimensions must not change. Original exit hole must be filled.
- 3.2.17.** The crank may be welded or pinned as long as the dimensions of the crank after welding do not exceed the original manufacturer's dimensions for the crank. Any pins may not exceed 12mm in length.

- 3.2.18.** Measurements not quoted in the homologation sheet may not be altered in any form (e.g. polished, sanded, ground or skimmed.) If detail cannot be verified with the aid of the pictures in the homologation sheet, the part in question may be compared to a corresponding stock part. In such a comparison, three identical new parts must be used to get an average for that measurement.
- 3.2.19.** No part of the motor can be changed with another manufacturer's or pirate part.
- 3.2.20.** Engine Exhaust port; there is a casting mark on the inside of the engine exhaust port that does vary in size from engine to engine. This casting mark can be reduced but not totally removed. The casting mark must still remain visible and slightly proud. If the casting mark is reduced to less than 0.5mm this will be considered in breach of the rules.
- 3.2.21.** The motor cowling may be secured by means other than, or in addition to the standard means. No modifications shall be made that allow increased air flow. Only the original air intake shall allow air flow into the engine, however an 8mm hole may be drilled in the very bottom of the lowest point of the inner case of the air intake box to assist in water draining out.
- 3.2.22.** Steering dampers must be fitted and approved by ZCR Ltd. The supplied standard steering damper fitted by ZCR Ltd can be changed or modified. An efficient steering damper system must be fitted at all times to comply with racing rules. Scrutineers will have the ability to refuse a Zapcat the opportunity to race or continue to race if they are concerned by the performance of a steering damper system.
- 3.2.23.** Engines will not require seals on the inlet manifold. All other seals shall remain and must be in the correct place to compete. If engine seals are broken they will need to be replaced by the Chief Scrutineer. Resealing shall only be carried out if lead seal bolts are put back in their original holes.
- 3.2.24.** If an engine is to be replaced it must be agreed by and presented to the Chief Scrutineer before another engine is used.
- 3.2.25** The engine tiller and pivot bracket are to conform to the design as specified by ZCR Ltd, and must be able to pivot at the 10mm bolt.
- 3.2.26** ZCR Ltd is not liable for any costs to rebuild scrutinised engines. It is the competitor's responsibility to replace gaskets and rebuild the engine.

### **L3.3**      **PROPELLERS**

- 3.3.1.** Measurements of the pitch of the blade are given for information purposes only. It must be noted that equipment used by ZCR Ltd may give different results and use different measuring techniques to other propeller measuring equipment. For precise propeller specifications please apply for the propeller homologation sheets. It will not be accepted that you got it 'wrong' or 'they use different equipment'. If a rule infringement occurs, all points from the event shall be lost. All prior points could be lost and the decision shall be made by the official race committee.

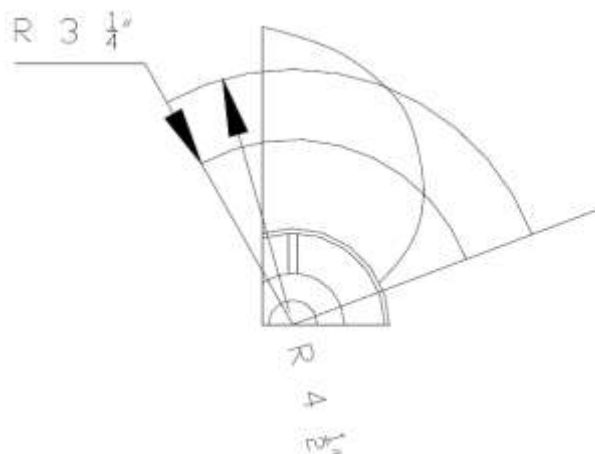
**3.3.2.** The propellers must be originally supplied by ZCR Ltd or their agents as part of the one design series and only the TN40, 'Standard' or 'Surf' propellers may be used. Details as outlined in the Zapcat propeller homologation sheets.

**3.3.3.** Modifications are not allowed except:

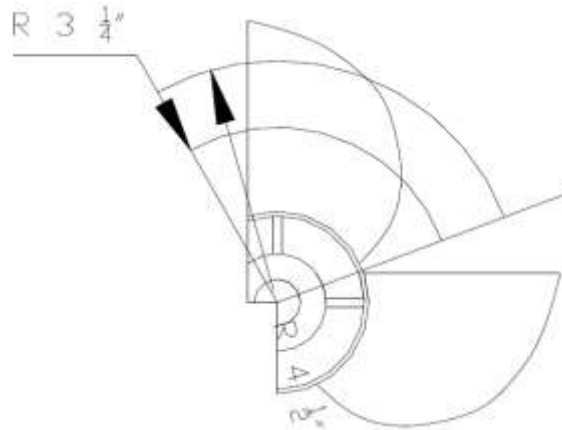
- Polishing and/or painting is allowed as long as it does not change any other aspect of the propeller, including the original thickness of the blades.
- The leading edge may be sharpened as long as it does not change any other aspect of the propeller. The sharpened edge must bevel from the back (low pressure side) and come into the blade no more than 2mm.

**3.3.4** The pitch of the propeller must not be changed or altered in any way. The pitch is measured at 6 different points that are calculated along two radii measured from the centre of the propeller hub. These points are where the radii intersects the leading and trailing edges with further measurements being 0.5 cm from the trailing edge leading forwards on a perpendicular chord meeting the desired radii. The official propeller scrutineer will check the whole blade area of the propeller, i.e. multiple points not just six points. Measurements will be checked on random race days as stated below for the standard and surf propellers.

	Scale B	Scale C
Radius from hub centre	R 3 ¼"	R 4 ½"
Trailing Edge	19 ½	19 ½
0.5cm from Trailing Edge	18	16
Blade Mid Point	14 ½	13 ¾
Leading Edge	14	12



	Scale B	Scale C
Radius from hub centre	R 3 ¼"	R 4 ½"
Trailing Edge	16	16
0.5cm from Trailing Edge	14	13
Blade Mid Point	12	10 ½
Leading Edge	12	10



All dimensions are in inches. These are simplified diagrams for the purpose of clarity and guidance to this rule.

- 3.3.5 The top three finishers of each final may be required to present their propellers to the chief scrutineer as well as any randomly selected boats for potential bench test scrutineering after the finals. Propellers will be returned after scrutineering if they pass. If a propeller fails scrutineering, it will be marked to show it is not class compliant and may be returned to the competitor.
- 3.3.6 ZCR Ltd recommends that competitors regularly send their propellers to the approved propeller scrutineer to be checked and maintained according to the rules. Any propellers that have work carried out on them must be sent to Zapcat's recommended propeller specialist for them to be checked.

### **L3.4 PROPELLER DEFLECTOR GUARD**

- 3.4.1. The outboard motor must be fitted with a ZCR Ltd approved deflector guard, originally supplied by ZCR Ltd or their agents. If a rule infringement occurs all points from the event shall be lost. All prior points could be lost and the decision shall be made by the official race committee.
- 3.4.2. Fixation bolts can be changed. The diameter and the number of fixings must remain the same, i.e. 8mm and 6 respectively. Fitting studs to the guard instead of using bolts is permitted. Studs must be 8mm in diameter. Slotting of the skeg is allowed. Fitment to the skeg must be via bolts, studs for skeg fixing are not allowed. The guard must be able to be removed and replaced.
- 3.4.3. Profiling of the deflector guard is permitted on any edge 90° to produce a semi circular radius of 1.5mm maximum, from original specifications. At no point can the thickness of the material be less than 2.8mm.
- 3.4.4. No other modifications are allowed. No areas can be filled and no extra welds can be used to aid performance.
- 3.4.5. If a guard breaks in any way it must be replaced or repaired immediately and the chief scrutineer must be notified directly. Failure to comply shall lead to disqualification.

#### **L4 FUEL**

- 4.1. Fuel must be a commercially available grade of automotive fuel. Specialised racing or power boosting fuels are expressly forbidden.
- 4.2. The use of additives aimed at increasing the power of the engine is prohibited, to either the fuel or at the air intake. The use of nitrous oxide injection units is also totally prohibited.
- 4.3. Only OEM fuel tanks or bladder tanks that have been originally supplied by ZCR Ltd either directly or via its agents are permissible.
- 4.4. The driver may not withhold the type of fuel/oil used and the mixing ratio of fuel/oil when requested by racing officials. At regional or national events, the organisers of the event reserve the right to use a nominated fuel supplier. Failure by competitors to use the nominated supplier will result in disqualification from the event.

#### **L5 PILOTS AND CO-PILOTS**

- 5.1. Pilots and co-pilots cannot swap roles during a full round of racing. Failure to comply will result in immediate disqualification.
- 5.2. Pilots and co-pilots cannot be replaced after they have signed in for a round of racing unless approved by the OOD. Failure to inform the OOD, undergo a drivers briefing, complete all required administration and paperwork will result in immediate disqualification.

#### **L6 RACE NUMBERS**

- 6.1. Race numbers must be on both sides of the engine cowling and must not be obstructed in any way. Race numbers must be black on a white background and 95mm in width, 175mm in height with a gap of 15mm. The numbers must have a white surround of at least 35mm. Numbers must be upright. The numbers must be placed towards the front leading edge of the cowling.
- 6.2. A race number must be displayed on the underside of the snout of the nose cone. They must be a minimum of 100mm high in the same font as the race number with an underscore.
- 6.3. Each crew member's helmet must be identified with their boat race number. This number shall be placed on the top surface of the helmet and shall be read from the rear. The numbers shall have a minimum height of 75mm and shall be of the same style as the race number. These numbers shall be made of black coloured self adhesive material with an underscore.

#### **L7 RACE STARTS**

- 7.1. Start Procedure

Heats/finals may start and finish either on the water (deep water start) or on the beach as designated by the OOD. The OOD will explain the location, race marks used and procedure for the said start at the Drivers' Briefing.

**THE HEAT/FINAL STARTS IMMEDIATELY WHEN THE GREEN FLAG IS LOWERED.**

**7.2. Start Abort**

If at any time during the start procedure the Starter raises a red flag, the start has been aborted. All crews must return to the muster area and wait for further instructions.

**7.3. Late Starters**

Any competitor not on the Start line before the start of the start procedure will forfeit the race including any restart.

**7.4. Postponed Start**

If for any reason the start has to be postponed the racers should remain in the muster area and await further instructions.

**L8 BEACH STARTS**

**8.1.** Heats/finals will be from a standing start position. The pilot will start in the boat with the engine ticking-over and the co-pilot will start in the water holding the boat with both feet on the ground.

**8.2.** The steering must be pointing straight ahead and all boats must hold their line for the first 50m or turning mark/gate as indicated at Drivers Briefing.

**8.3.** As the green flag is dropped the co-pilot must enter the Zapcat fully before the pilot can engage gear and pull away from the beach.

**8.4.** Boats must be held in a line in the water a minimum of 2 arms length apart.

**8.5.** In the event of a boat not starting immediately, it must withdraw from the water before the started boats complete a full lap. At no time shall anyone be allowed to be standing at the stern of the boat.

**8.6.** Co-pilots are not permitted to enter their boats until the heat/final has been started.

**8.7.** Co-pilots are not permitted to start the boat with the spare kill cord at the start of a heat/final.

**8.8.** The OOD has the discretion to change format according to conditions.

**L9 DEEP WATER STARTS**

Zapcats will muster at a start gate and line up in their correct grid positions. The start line will be formed by a perpendicular line from the transom of the start boat. The pace of the start boat and that of the start line will be dependant on the weather conditions. The Zapcats will line up behind the start line. On the dropping of the yellow flag, the start boat is indicating that it is happy with the line up. When the green flag is dropped, the race is started. Zapcats will not cross the line until the green flag is dropped. If a Zapcat crosses the start line before the green flag is dropped, this results in a restart. If the same Zapcat causes 2 restarts then that Zapcat on

completion of its second pre-crossing of the start line will automatically be disqualified.

**L10**            **RACE FINISHES**

**10.1.**           **Finishing Procedure**

The OOD will explain the location, race marks used and procedure for the said finish line. All Zapcats must complete the number of laps as specified at the Race Briefing. A white flag is flown to inform competitors of the last lap. The race officer's decision to fly the white flag is final whether the predicted numbers of laps have been completed or not. The chequered flag will be displayed at the Finish Line. After finishing, crews must ensure that they are clear of the area for crews following, return to the beach and report to Race Secretary to sign off if advised at race briefing.

**10.2.**           **Boat Beaching**

If a boat hits another boat, competitor or official during beaching, the offending boat shall be yellow carded, or disqualified, at the discretion of the OOD. At the end of a practise session or a race, boats cannot be driven up the beach from afloat. Any vessel seen doing this will be disqualified.

**10.3.**           **Finishing**

Boats will finish afloat with pilots, co-pilots and all equipment aboard.

**L11**            **PROTECTIVE CLOTHING**

**11.1.**           **Racing Vest**

Each person aboard a boat must wear an efficient buoyancy aid at all times on the water. Racing vests must be of the approved specification as supplied originally by ZCR Ltd. Racing Vests shall be worn at all times by all persons on board whilst racing. The efficiency of a racing vest is the responsibility of the wearer, but the following conditions must be complied with:

- (a) All vests must have an inherent buoyancy of at least 100 Newtons and shall be fitted with collars.
- (b) Straps shall be adequate and in good condition. All straps shall be at least 40mm wide and have a minimum breaking strain of 500kg. There must be lifting straps at the front or on the shoulders.
- (c) Zips are not permitted as the sole means of fastening a racing vest. Where zips are used as an ancillary means of closure they shall be in working order.
- (d) Tears or bad repairs through which buoyancy material may leak out shall not be permitted.
- (e) Vests shall be red.
- (f) Vests shall not be able to ride up over the wearers head and shall be

secure.

- (g) The position of the solid buoyancy shall be such as to ensure that an unconscious person shall float face up in the water.
- (h) The vest must have impact protection material covering the back.

#### **11.2. Helmets**

- (a) Helmets MUST conform to B.S. 6658b or to include UN ECE22\_05 and Snell M2000, M2005 with temple protection and must be coloured bright orange/day glow orange over 100% of its exterior.
- (b) Modifications shall not infringe on the standard and bolts used for fittings and attachment of a visor shall be small and on no account shall they protrude into the inner surface of the helmet.
- (c) Chin straps shall be in good condition, operative and unable to be accidentally undone.
- (d) Helmets shall be devoid of dents or splits.
- (e) The efficiency of a helmet is the sole responsibility of the wearer.
- (f) It is recommended that helmets are replaced when they reach three years from the date of manufacture.
- (g) ZCR Ltd advises that helmets should offer full face protection.

#### **11.3. Wetsuits/Dry suits**

A wet suit or dry suit must be worn whilst racing. Wet suit shoes / suitable protective footwear or similar must also be worn.

#### **11.4. Eye protection**

It is strongly recommended that suitable eye protection is worn during racing and practice. The efficiency of eye protection is the sole responsibility of the wearer.

#### **11.5 General Protection**

- (a) Competitors must not consume food or drink whilst racing i.e. no chewing gum.
- (b) All competitors must remove all items of jewellery as well as all piercing for their own safety.

#### **L12 INSURANCE**

All holders of an official RYA Race Licence are covered by The RYA's third party insurance policy. ZCR Ltd strongly recommends that all pilots and co-pilots have personal accident insurance providing a minimum cover of

£25,000 on death.

**L13 WEATHER**

The race organisers will cancel the race if the wind strength, direction or sea state is deemed to be unsuitable for any of the competing Zapcats. Limited visibility caused by mist, haze and fog or rain will also result in cancellation or postponement. The decision will be made by the race committee and is final.

**L14 ENTRY FEE**

An entry fee will be paid by all Zapcat teams for each round they wish to enter, a season discount may apply. All entry fees must be received 7 days prior to the event. Late entries will only be accepted at the discretion of the organisers. No refunds will be made in the event of cancellation

**L15 POINTS**

The results will be posted as soon as possible after each race heat. Competitors will be notified of the race results including disqualification through the scoreboard. It is the pilots' and co-pilots' responsibility to check the scoreboard. Points will be awarded to competing Zapcats according to their finishing position. All points from the heats will count to qualify for the final. Final positions for each round, including those who do not make the final, receive points that will count towards the season's championship.

**15.1 POINTS SYSTEM**

The following points will be awarded for each finishing position

<b>Position</b>	<b>Div 1</b>	<b>Div 2</b>
1	100	70
2	90	65
3	80	60
4	75	55
5	70	50
6	65	45
7	60	40
8	55	38
9	50	36
10	45	34
11	40	32

12	38	30
13	36	28
14	34	26
15	32	24
16	30	22
17	28	20
18	26	19
19	24	18
20	22	17
21	20	16
22	19	15
23	18	14
24	17	13
25	16	12
26	15	11
27	14	10
28	13	9
29	12	8
30	11	7

## 15.2 TIED POINTS

- (a) When competitors are tied for points going into a day's final, the organisers will count back their results from that day, awarding grid positions to those with the most successful results.
- (b) In the event of a tie at a National Championship Grand Prix event, the organisers will count back the results from that event, awarding finishing positions to those with the most successful results.
- (c) In the event of a tie in the National Championship, the organisers will count back the results from that season, awarding finishing positions to those with the most successful results.

**15.3**      **DNS DQ & RETIRED**

Did not start (i.e. failure to complete 1 lap) = 0 points

Retirements will get last place points

Disqualifications = 0 points, unless in a final where last place will be awarded

Disqualification resulting from an incident not caused by themselves will get last place points.

**L16**      **DISCARD**

**16.1**      After completing three quarters of the Championship, the team shall have their two lowest scores from separate events discarded if a Zapcat does not enter a round, it cannot take the non-entered round into account whilst calculating discarded scores. Entry is confirmed into a round upon receipt of race fees in full. There will be no discards allowed in the final remaining quarter of the Championship, this will be rounded to the nearest event.

**16.2**      A disqualification from a round or rounds of racing cannot be discarded.

**L17**      **SPONSORSHIP**

The Sponsorship documents produced by ZCR Ltd stipulate the areas that can and cannot be used on Zapcats when competing in the relevant Zapcat Racing event. Zapcats will be prevented from participating in any Zapcat event if the competing craft does not comply with the relevant sponsorship document. ZCR Ltd reserve the right to stop a Zapcat entered into an event from competing if any of their team title/ name and/ or branding of the craft conflict with that of a partner or sponsor of ZCR Ltd. Agreement from ZCR Ltd should be received regarding individual craft sponsorship/ branding prior to racing.

Sponsorship documents specific to ZCR Ltd events can be obtained from ZCR Ltd.

ZCR Ltd reserves the right to alter any sponsorship document seven days prior to a Zapcat Racing event.

Offensive or derogatory wording is not allowed.

Equipment supplied by sponsors that are required on board a "racing" Zapcat or person must have the installation signed off by the event chief scrutineer or safety officer.

**L18**      **PENALTIES**

For the infringements outlined below the following point deductions will be applied:

a)          Smoking in the defined wet or dry pits

- |    |      |   |   |
|----|------|---|---|
|    | I.   | for a license holder  | 50 points   |
|    | II.  | for a team associate or mechanic  | 50 points   |
| b) |      | Fuel transfer outside the designated fuelling areas                                     | 50 points   |
| c) |      | Launching   |   |
|    | I.   | persons on boats whilst being lifted, craned etc  | 50 points   |
|    | II.  | failure to wear protective equipment as supplied by club in the designated craning area | 50 points   |
|    | III. | Failure to wear life jackets when on water / pontoons                                   | 50 points   |
| d) |      | Lateness  |   |
|    | I.   | Late signing in at Race Control   | Warning   |
|    | II.  | Persistent late signing in at Race Control  | 50 points   |
|    | III. | Late show at Drivers Briefing   | Warning   |
|    | IV.  | Persistent late shows at Drivers Briefing   | 50 points   |
| e) |      | Failure to present equipment & craft for technical examination                          | Disqualification  |
| f) |      | Failure to comply with the Anti Doping Rules as outlined In PB1                         | Disqualification from Day and Reported to RYA for possible further action |

## L19

### Definitions

**“Mixed Team”** – A Mixed Team is that in which two opposite genders race together.

**“Rookie Team”** – A Rookie Team is that in which two individuals who have not raced in a Zapcat organised racing event before the beginning of the season.

**“Team Racing”** – A team will consist of 2 Zapcats. Zapcats wishing to enter team racing must register and enter as a team at the beginning of the season and race for one complete season and under the same team name.

N.B: Rule 2.10 takes precedents over all rules when the race committee sees fit.