

**NEW ZEALAND WATER SKI RACING ASSOCIATION INCORPORATED**  
**WATER SKI RACING RULES FOR SERIES RACES, NORTH ISLAND TITLES, AND NATIONAL TITLES**



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***New Zealand Water Ski Racing Association Inc***

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## Preliminary Provisions

### Introduction

- 1 The Rules of the New Zealand Water Ski Racing Association Incorporated (NZWSRA) provide for the **Racing Committee** to create rules which govern events run by the NZWSRA. These Rules govern Series Races, North Island Championships, National Championships, and any other ski racing event organised by the NZWSRA which declares these rules (or any part of them) to apply. River races (such as the Bridge to Bridge and Twin Rivers) have their own rules which are provided to entrants, but will refer to parts of these rules to avoid unnecessary repetition.

### Title and Commencement

- 2 These Rules may be cited as the NZWSRA Racing Rules and come into force on 1 September 2012 and continue to apply until such time as they are revoked.

### Amendments

- 3 These Rules may be amended from time to time by the **Racing Committee** at a meeting convened for that (and any other) purpose. Any amendments shall be effective from the date the amended rules are available to be downloaded from the NZWSRA website or notified to members in accordance with the Rules of the Association.
- 4 Where it is considered necessary because of safety reasons, the **Event Judge** may amend these rules provided that any amendment shall only be effective if advised at a **Pre-Race briefing** or a **Special Briefing** and shall only be effective for the races covered by that **Pre-Race Briefing** or **Special Briefing**.

### Purpose

- 5 The purpose of these Rules is to provide **Members** with a set of rules which enable the NZWSRA to perform its functions and carry out its **Events** in a transparent, fair, safe, and consistent manner.

### Overview

- 6 These Rules are set out in parts:
  - Part A - The Organisation: this part details how **Events** are to be organised, and the persons involved.
  - Part B – Entries Classes and Licences: this part details the different classes in which competitors may race, the entry and licence requirements.
  - Part C - Boats and Equipment: this part details the requirements relating to boats and equipment used while competing in **Events**
  - Part D - Safety: this part deals with all aspects of **Event** safety.
  - Part E - Course Rules: this part covers the rules that apply for each **Race**.
  - Part F – Protests: this Part deals with protests.

Part G – Penalties – this part deals with penalties that apply for breaches of the Rules.

Part H - Scoring: this part details how points are scored.

## Interpretation

7 In these Rules, unless the context requires otherwise:

“**Able to Race**” for the purposes of rule 137 means the **Event Judge** is satisfied the Competitors would have raced but for the cancellation of the **Race**;

“**Alternative Briefing**” means an alternative briefing arranged by a member who was not present at a **Pre-Race Briefing**. The fee payable for an **Alternative Briefing** is \$30 per competitor unless prior arrangements have been made and agreed to. Any fee is payable prior to the **Alternative Briefing**;

“**Beach Marshall**” means a person appointed by the **Event Judge** at an **Event** and who is responsible for the efficient launching and retrieving of boats to and from the water.

“**Chief Judge**” means a judge appointed by the **Event Judge** to oversee and be responsible for the judging of a **Race**. The **Event Judge** may be the **Chief Judge**;

“**Chief Safety Officer**” means a person appointed by the **Management Committee of the Association** to be the **Chief Safety Officer** for the Association;

“**Chief Scrutineer**” means a person appointed by the **Technical Rules Committee** as **Chief Scrutineer** who is competent to check boats and / or equipment for compliance with the Rules. Where the person appointed as **Chief Scrutineer** is not available to attend an **Event**, The **Chief Judge** shall appoint a Scrutineer to act as **Chief Scrutineer** for that **Event**;

“**Day Licence**” means a licence issued by the **Event Judge** to any person after passing the relevant **Day Licence** test, and may be issued on such terms and conditions as the **Event Judge** thinks fit. **Day Licences** will only be issued to a person in respect of two **Events** per season, \$20 for the first and \$40 for the second. Further day licences may be issued at the discretion of the Race Day committee, should the person not have had full use of their first two day licences e.g., boat failure meaning they didn’t get to compete for a full weekend.

Drivers or observers competing on a **Day Licence** will draw the outside lane(s) and are not permitted to compete in Formula 3 or Open classes, unless approved by the **Race Day Committee**.

“**Drivers Licence**” means a **Drivers Licence** issued by the NZWSRA and includes a **Day Licence** issued to a driver.

“**Event**” means a water ski racing series race, North or South Island Championship race or National Championship race organised by the NZSWRA or any other ski racing event organized by the NZWSRA and declared to be subject to these rules (or part of them). For the purposes of a **Day Licence**, where two **Events** are held in the same weekend, an **Event** includes both days.

“**Event Judge**” means a **Judge** appointed by the **Executive Chief Judge** who assumes responsibility for overseeing the judging, timekeeping, and point scoring for any particular **Event**.

“**Executive Chief Judge**” means the person appointed by the Executive Committee of the NZWSRA as **Executive Chief Judge** and who is responsible for the appointing and removing **Judges**, timekeeping, and point scoring, and who appoints an **Event Judge** for any particular **Event**;



“**F2 Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements.

“**Financial Penalty**” means \$30 for the first breach of a rule at an **Event** and \$50 for any subsequent breach of the same rule at the same **Event**;

“**In-Field Area**” means the inside of a circuit defined by lines joining the outside of course buoys;

“**Judge**” means a person who has passed a judges test within the last three years and is appointed a **Judge** by the **Executive Chief Judge**

“**Management Committee**” means the **Management Committee** appointed in accordance with the Rules of the Association;

“**Member**” means a member of the NZWSRA and includes a person who holds a current **Day Licence**.

“**MOC Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements;

“**Novice Skier**” means a skier who, two years prior to an **Event**, had never skied in a **Event**.

“**Observers Licence**” means an **Observers Licence** issued by the Association and includes a **Day Licence** issued to an observer.

“**Open Drivers Licence**” means a **Drivers Licence** endorsed as an **Open Drivers Licence** by the **Executive Chief Judge**.

“**Open F1 Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements.

“**Open F2 Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements.

“**Proper Skiing Position**” means the skier is in possession of the towing line and their weight entirely supported by their ski;

“**Protest Committee**” means a committee formed under Rule 107 and which must comprise the **Event Judge**, the **Chief Judge**, and between one and three judges, decisions of which shall be by majority with the **Chief Judge** (if necessary) having a casting vote;

“**Provisional Winner**” is the skier(s) who first cross the finish line;

“**Race**” means a series **Race**, North Island Championship or National Championship or any other **Race** organised by the NZWSRA which declares these (or part of them) rule apply.

“**Race Day Committee**” means a group of five members present at an **Event**, one of whom shall be the **Event Judge** who shall select four other members who shall be members of the **Management Committee**.

“**Race Officials**” means the **Event Judge**, the **Chief Judge**, at least two **Judges**, a **Scrutineer**, a **Safety Officer**, the **Beach Marshall**, the **Starter**, at least two **Time Keeping Officials**. **Race Officials** do not need to be members of the NZWSRA.

“**Rescue Boat**” means a boat suitable for rescue operations crewed by a driver and person with suitable medical training and which has a safety stretcher available for use.

“**Safety Committee**” means the **Event Judge**, **Chief Safety Officer**, and one member of the **Technical Rules Committee**.



“**Safety Officer**” means any member appointed by the **Event Judge** to assist the **Chief Safety Officer**;

“**Scrutineer**” means a person appointed by the **Technical Rules Committee** to assist the **Chief Scrutineer**;

“**SMOC Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements.

“**SMOC F4 Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements;

“**SMOC F5 Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements;

“**SMOC F6 Boat**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements;

“**SMOC Motor**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements;

“**Social Rope**” means a ski rope which does allow the handles to be further than 45 metres from the transom of the boat.

“**Social Ski**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements

“**Special Briefing**” means a meeting of all **Race** entrants held during an event for the purpose of advising members of a change to the rules applying for the remainder of an event;

“**Standard Bottom End**” has the meaning set out in Appendix 2 – Technical Definitions and Requirements;

“**Starter**” means a person with reasonable experience of water ski racing and who is appointed and briefed by the **Chief Judge**;

“**Time Keeping Official**” means a person appointed by the **Chief Judge** to record competitors’ times. Competitors must not disturb Time Keeping Officials during a **Race**;

“**Time Penalty**” means 10% of the Provisional Winner’s time.

- 7.2 **Age:** the age of a skier is determined by their age as at 30 June in the year in which the season commences.
- 7.3 **Singular and Plural:** Singular words include the plural and vice versa.
- 7.4 **Gender:** words denoting the masculine include the feminine and vice versa.
- 7.5 **Headings:** Headings are used in these Rules for convenience and do not affect the interpretation of the Rules.
- 7.6 **Discretion:** Where these Rules allow for discretion to be exercised, unless stated otherwise, that discretion shall be exercised by the **Race Day Committee**. Decisions shall be by way of a majority with the **Event Judge** having a casting vote. Any of the members of the **Race Day Committee** may obtain guidance from any other person.
- 7.7 **Matters of Fact:** Where these Rules call for matters of fact to be determined, the matter of fact shall be determined by the **Race Day Committee**. Any members may obtain guidance from any other person.

- 7.8 **Rules of the Association:** Where any term used in these Rules is defined in the Rules of the NZWSRA that term shall have the same meaning as that defined in those Rules unless the term is also defined in these Rules.

## Summary

To be able to compete in a **Race**:

- (a) You must be a **Member** of the NZWSRA.
- (b) The **Race** must have been organised in accordance with Part A.
- (c) You must have entered the **Race** in accordance with Part B – Classes, Entries and Licences on page 6.
- (d) Boats and Equipment must comply with Part C – Boats and Equipment on page 9.

While competing in a **Race**:

- (a) You must comply with the Safety Rules set out in Part D - Safety on page 10
- (b) You must comply with the Course Rules set out in Part E – Course Rules on page 11.

After a **Race**:

- (c) Protests will be dealt with in accordance with Part F - Protests on page 15.
- (d) Penalties and Sanctions will be imposed in accordance with Part G – Penalties and Sanctions on page 16.
- (e) Points will be calculated in accordance with Part H - Scoring on page 17.

## Part A - Administration

### Organising Events

- 8 The **Management Committee** shall be responsible for organising **Events** but may delegate any aspects of **Event** organisation.
- 9 To hold an **Event** the **Race Officials**, the **Rescue Boat**, and sufficient course boats must be present.
- 10 Inter-communication devices must be available to **Race Officials** and the **Rescue Boat**. Competitors must not listen to communications on such devices unless instructed to do so.
- 11 A Programme of **Events** shall be published prior to the commencement of a season together with the dates and venues. The Programme may be subject to such qualifications as considered necessary.
- 12 A schedule of races for each event should be made available at least 7 days prior to the **Event**. The **Race Day Committee** reserves the right to alter the schedule having regard to the entries received and / or weather conditions.
- 13 Prior to the start of any **Event**, the **Event Judge** shall ensure an Event Compliance Sheet has been completed.

## Part B – Classes, Entries and Licenses

### Classes

14

Entries are open to the following classes:

Class	Entry Restriction
Open Formula 1	<b>Open F1 Boat.</b>
Open Formula 2	<b>Open F2 Boat</b>
Formula 3	<b>MOC Boat.</b>
Worlds F2	<b>F2 Boat</b>
Formula 4	<b>SMOC F4 Boat</b>
2 Up	Any Boat, two skiers.
2 Up 60 mph	Any Boat, two skiers
Formula 5	<b>SMOC F5 Boat</b>
Formula 6	<b>SMOC F6 Boat</b>
Masters	Skier must be over 40 years of <b>Age</b>
Under 19	Skier must be under 19 years of <b>Age</b> .
Junior	Skier must be under 16 years of <b>Age</b> .
Sub-Junior	Skier must be under 13 years of <b>Age</b> .
60 MPH	Any Boat, any skier.
<b>70 MPH</b>	<b>Any Boat, Any Skier</b>
Novice	Any Boat, <b>Novice Skier</b>
Social	Any Boat, <b>Social Ski, Social Rope</b>
Tadpole	Any Boat, Skier must be under 10 years of <b>Age</b> .

15

The maximum time of races for National **Events** is:

Men's Open F1 & F2, & M.O.C – 1 hour + 1 lap

Men's S.M.O.C – 45 minutes + 1 lap

Women's Open – 45 minutes +1 lap

Women's M.O.C & S.M.O.C – 45 Minutes + 1 lap

16 – 19 years 45 minutes + 1 lap

Junior Boys & Girls 30 minutes + 1 lap

Sub Juniors Boys & Girls 15 minutes +1 lap

Novice, Masters, Tadpoles & Social 15minutes + 1Lap

2-Up & 2-Up 60MPH – 5 laps

The final lap may be declared if the lead boat is within 30 seconds of the race time above.

16 A boat may enter a class higher than the boats specification. For example, a **SMOC F6 Boat** may enter Formula 4. An **F2 Boat** may enter Open Formula 1. SMOC boats may also enter Worlds F2.

17 Where the number of entrants is sufficient (at any stage of the ski racing calendar), the above classes will be split into male and female classes and, if necessary, points will be reallocated accordingly.

18 A dispensation may be sought from NZWSRA Rules by making an application in writing to the Racing Committee 14 days before it is required, using the Dispensation Application Form. The applicant will be informed in writing of the outcome. The outcome must be posted to NZWSRA members before the event.

19 For Tadpoles, the **Chief Judge** may determine the course. Helmets may not be required. All skiers must be on the same form of ski. No dropping skis.

20 Teams entering the 60 **or 70** mph class (including 2Up 60 mph) must comply with the following rules:

- (a) Boats must not exceed 60mph. **or 70MPH in the case of 70MPH class**
- (b) In the 60 **or 70** mph class boats may only tow one skiers. In the 60 mph 2 Up class boats must tow two skiers.
- (c) ~~The maximum tow rope length is 36 metres from the towing point to the handles.~~

#### Remove Rope Length Rule

- (d) Competitors must carry a Global Positioning System (GPS) supplied by the NZWSRA during the event to determine Maximum Speed, Distance Traveled and Time Taken.
- (e) Directly before **Race** start, **Race Officials** will “reset” or “zero” the Max Speed and Trip of the allocated GPS. The GPS is to be placed in the boat in a position to receive GPS signal at all times. A Velcro strip will be added to the back of all GPS units to aid the attachment of the unit to the boat. The GPS will be checked and max speed breaches noted by **Race Officials** at the end of the **Race**. The driver is the only crew member to read the GPS in the boat. The observer must keep full attention on the skier at all times. It is the responsibility of the crew to start the GPS before leaving the beach and stop it when the **Race** is completed (ie when the skier is back in the boat).
- (f) All GPS units must be returned the **Chief Judge** (or other designated person) as the competitor leaves the water.
- (g) Appeals or protests will not be permitted on GPS readings or failure. (h)

No GPS assisted speed control over the boat is to be used.

- (i) If required the organisers of the event shall homologate the course using a GPS. The time allowed for traveling the course or lap can be made known to any Competitor.
- (j) A time penalty of 10 seconds will immediately be imposed for breaching the 60 mph limit per **Race**, plus, for every 0.1 mph increment over 60 **or 70** mph, 1% of points will be deducted.
- (k) **For 60 MPH** - Any driver found to exceed 65 mph twice, or 70 mph once in the season, will not be eligible to compete in the 60 mph class for a period of 12 calendar months.

For 70 MPH - Any driver found to exceed 75 mph twice, or 80 mph once in the season, will not be eligible to compete in the 70 mph class for a period of 12 calendar months.

- (l) If the maximum rope length is breached by a competitor this will result in immediate disqualification from that **Race**.
- (m) Grids for the 60 & 70 mph races will be as follows:
  - (i) The first **Race** of the season will be by random draw;
  - (ii) For subsequent **Races**, the lowest points scorer will have lane 1, the highest will have the outside lane, all others according to their points.
  - (iii) For National Championships the draw will be random on day one. Day two will be determined according to the points from day one; the lowest points scorer will have lane 1, the highest will have the outside lane, all other according to their points.

## Entries

### Eligibility

- 21 To be eligible to enter, all Competitors must be **Members** and must hold the appropriate licences.
- 22 Entries cannot be accepted in respect of any competitor who has not paid penalties from a prior **Event**, or who is subject to disqualification.

### Method

- 23 Entries for an **Event** are to be submitted online via the NZWSRA Website ([www.skirace.co.nz](http://www.skirace.co.nz)). **Members** will be advised when online entries close. Any changes to entries must be notified prior to entries closing.
- 24 Payment for entries must be made two working days prior to the **Event**.

### Changes / Late Entries / Withdrawals

- 25 The person responsible for Entries may, in their absolute discretion, accept entries after online entries close but the entry will be subject to a penalty of 50% of the fee payable for the entry. The entry will not be accepted without payment of the fee and penalty.
- 26 A competitor who has entered a **Race** in an **Event** may, at the absolute discretion of the person responsible for entries, amend that entry provided that the amendment may not be accepted if there is not adequate time to make the amendment requested.
- 27 Any Team withdrawing their entry will receive a credit for any fees paid if they withdraw before online entries close. Otherwise, they will receive a credit of 50% of any fees paid.
- 28 Where any **Event** or **Race** is cancelled by the **Event Judge** or the Association, any entry fee (but not penalty) paid will be credited.

## Licences

### Skiers

- 29 Being a competitive member of the Association licences members to compete as a skier.

### Observers

- 30 Observers must be over 16 years of **Age** and hold a current **Observers Licence** or **Drivers Licence** issued by the Association in accordance with the procedures prescribed by the **Racing Committee**.
- 31 The Licence may be issued or become subject to such conditions as the **Racing Committee** think fit.

### **Drivers**

- 32 Drivers must be over 18 years of **Age** and hold a current **Drivers Licence** issued by the Association in accordance with the procedures prescribed by the **Racing Committee**.
- 33 The Licence may be issued or become subject to such conditions as the **Racing Committee** think fit.
- 34 Drivers who do not hold an **Open Drivers Licence** are not permitted to compete using an Open or F3 (MOC) boat, unless exemption is given by the Racing Committee.

### **Fees**

- 35 The fees payable for a Skiers Licence, **Observers Licence** or **Drivers Licence** is disclosed on the Application Form.
- The fees payable for a Skiers Licence, Observers Licence, Drivers Licence and SMOC fees are disclosed on the Application Forms.

### **International Competitors**

- 36 Holders of an international licence can apply to the **Executive Chief Judge** (or a person authorised by the Executive Chief Judge) for approval to compete in an **Event** in the way in which that person could participate in their home country. Approval to compete may be subject to such restrictions as the person issuing the licence considers appropriate.
- 37 The cost to compete in each **Event** will be NZD\$50.
- 38 International competitors are not eligible to be awarded National Titles.

### **Licence Tests – Drivers and Observers**

- 39 Licence Tests shall be as set by the **Racing Committee** and shall comprise two parts:
- (a) the applicant's theoretical knowledge will be tested by completion of a written test; and
  - (b) upon successfully completing the theoretical test, the applicant's practical skills will be tested at the next available opportunity.

## **Part C – Boats and Equipment**

- 40 Before being able to participate in any **Race**, boats and equipment must comply with the Technical Rules and definitions set out in Appendix 1 – Rules Relating to Boats and Equipment and Appendix 2 – Technical Definitions and Requirements.
- 41 Although the NZWSRA will check boats and equipment prior to any **Event**, the owner of the boat or equipment is ultimately responsible for ensuring the boat and / or equipment is in good working order and safe to compete.

## Part D - Safety

### General

- 42 The **Safety Committee** may prevent any competitor, at any time, from competing or continuing to compete if, in the opinion of the **Safety Committee** the competitor poses a risk to themselves or to any other competitor.
- 43 The **Safety Committee** may impose any conditions it considers appropriate before allowing a competitor to compete in a **Race**, including requiring a competitor to obtain a medical certificate satisfactory to the **Safety Committee**.
- 44 The **Safety Committee** may recommend the **Chief Judge** stop a **Race** if conditions are considered unsafe.

### Eyesight

- 45 A driver or observer who requires corrective lenses under normal circumstances must wear corrective lenses while competing in an **Event**.

### Rescue Boat

- 46 No **Race** shall be permitted to start or continue if a **Rescue Boat** is not available.
- 47 If a competitor requires transportation in the **Rescue Boat** the **Chief Judge** shall stop the **Race** by displaying the Red Flag. The **Chief Judge** will decide whether or not the **Race** will be restarted. The Team responsible for the **Race** being stopped shall receive a DNF.

### Team Communication

- 48 The driver and observer must understand and agree upon hand signals required to safely compete in a **Race**. It is recommended that drivers and observers at least be able to communicate instructions to decrease speed, hold speed, move in or out of lanes, and to retrieve a fallen skier.
- 49 Skiers and observers must understand and agree upon hand signals required to safely communicate instructions to decrease speed or hold speed.

### Alcohol / Drugs

- 50 Competitors' breath alcohol levels may be checked at any time during or before an **Event**. Any competitor with a breath alcohol level of more than zero will not be allowed to compete for the remainder of the day.
- 51 Any competitor who consumes alcohol within 10 hours before or during an **Event** will not be allowed to compete for the remainder of the day.
- 52 Any competitor who, in the opinion of the **Safety Committee**, is adversely affected by the influence of alcohol or drugs (whether or not measurable) will not be allowed to compete until such time as the **Safety Committee** is satisfied that the competitor is no longer adversely affected.

### Scrutineering

- 53 All boats and equipment must be checked for compliance with these Rules.

- 54 Spot checks may be made at any time during an **Event**.
- 55 Although boats and equipment will be checked, scrutineering is not acceptance of compliance. The owner and / or driver remain responsible for ensuring boat compliance, and the owner and / or user of equipment remain responsible for ensuring equipment compliance.

### **Briefing**

- 56 To be able to compete, all competitors must have, signed a NZWSRA waiver (as prescribed by the **Management Committee**), performed a complying breath test, and attended an entire **Pre-Race Briefing**, or have attended an **Alternative Briefing** given by the **Event Judge**.
- 57 At a **Pre-Race Briefing** or **Alternative Briefing** competitors will:
- (a) Be given details of the course including the position of the competition area, location of turn buoys, course direction, the finishing buoy, length of the first straight, and any other details of the course.
  - (b) be advised of any changes to the Rules which apply to the **Event**;
  - (c) be given the opportunity to ask questions about matters raised at the briefing.
  - (d) If the **Event** is a two day **Event**, whether there will be a **Pre-Race Briefing** on the second day.
- 58 The **Event Judge** shall ensure details provided at a **Pre-Race Briefing** or **Alternative Briefing** are recorded on the Event Compliance Sheet.
- 59 After the **Pre-Race Briefing** competitors will be given the opportunity to familiarise themselves with the course.

### **Health & Safety**

- 60 All competitors must adhere to Ski Racing New Zealand Health and Safety Policy

### **Accident Forms**

- 61 The **Chief Safety Officer** shall draft a report on any accident or incident which in the opinion of the **Chief Safety Officer** should be documented and provide that report to the **Race Day Committee** as soon as practicable. The **Race Day Committee** shall determine what action (if any) should be taken.

## **Part E – Course Rules**

### **Introduction**

- 62 This Part sets out the rules to be followed from the point where boats enter the water to the point where they exit the water (or park on the beach).

### **Start**

- 63 Lane / grid positions will be made available to competitors as soon as reasonably practicable before a **Race**, and will be determined as follows:





- (a) Lanes will be drawn firstly according to class, and then by competitor. On the first day of an **Event** the draws will be random. On the second day they will be reversed.
  - (b) Cross entries will be grouped with the highest class entered per the table in rule 14.
  - (c) Where considered appropriate, a number of grids may be used.
  - (d) A Driver who does not hold an Open Drivers Licence will always draw the outside lane. If there is more than one, they will together draw the outside lanes randomly on the first day, and reversed on the second day.
- 64 15 minutes prior to the start of a **Race** a siren, horn, or other means of indication will be sounded and a yellow flag will be raised. This indicates competitors have 10 minutes to launch their boat and be leaving the boat ramp towards the start line. Competitors should ensure they know their lane and grid position. The ramp may be closed 5 minutes before the **Race** starts. Any boats which have not started towards the start line may not be permitted to compete in that **Race**.
- 65 All team members must be wearing helmets and buoyancy vests at any stage while their boat is on the plane or within 10 metres of the circuit.
- 66 Five minutes before the start of the **Race**, the start boat will raise two flags (the Green Flag and a National flag).
- 67 Boats must start in the lane and grid position allocated, and should therefore group near the start boat in the order allocated. Lane #1 starts closest to the Start boat unless advised otherwise at the **Pre-Race Briefing**.
- 68 Boats must be at least 10 metres apart at the start of the **Race** and should be no more than 15 metres apart.
- 69 30 seconds before the **Race** starts, the Green Flag on the start boat will be lowered. Skiers may enter the water. Ski ropes may only be run out after the Green Flag has been lowered, but boats must remain behind the start boat until the National Flag is lowered.
- 70 Boats which have run out their ski ropes before the **Race** starts must not be on the plane before the **Race** starts.
- 71 If a start is delayed for any reason, the Yellow Flag will be raised. Boats must slowly retrieve their skiers and remain in the start area. As soon as the **Race** is ready to be restarted, the Yellow Flag will be lowered and the two start flags will be raised. The procedure in rules 66 to 73 apply, except that the two start flags will indicate three minutes to the start of the **Race** (ie 2 ½ minutes until the skiers may enter the water).
- 72 The **Race** starts when the National Flag is lowered.
- 73 If the start has two or more grids, the above applies to the first grid. For the second grid:
- (a) Skiers may enter the water and ski ropes may be run out after the National Flag for the first grid has been lowered.
  - (b) The National Flag will be raised.
  - (c) Boats must remain behind the start boat until the National Flag is lowered again, which will be 30 seconds after it was lowered for the previous grid.
  - (d) This procedure will continue until all grids have been started.

### During the Race

- 74 Observers must remain in the cockpit of the boat and keep the skier under observation at all times.
- 75 Skiers must not fasten their tow rope or handles to their body. Doing so will result in disqualification.
- 76 If you miss a start:
- (a) your orange flag must be raised;
  - (b) the boat must slow to idle and turn to return towards the skier to attempt another start. Wide and / or fast turns will result in disqualification.
  - (c) Your orange flag must be lowered once the skier has successfully started.
- 77 If the first straight of the course is less than 2km, boats must maintain their lane positions until they have completed the first corner unless determined otherwise by the Chief Judge and Safety Officer, and competitors advised at briefing.
- 78 Skiers must remain in the wake of the boat.
- 79 Where two or more boats are in the same lane, the trailing boat must remain 100 metres behind the skier of the leading boat.
- 80 When crossing lanes, your boat and skier(s) must maintain a clearance of least:
- (a) 20 metres behind any skier(s)
  - (b) 5 metres to the side of any boat or skier
  - (c) 100 metres in front of any boat.
- 81 Boats must be at least 5 lateral metres apart from any other boat, skier, or ski tow rope. This rule is subject to rule 68 and rule 87.
- 82 All course buoys must be passed on the outside. Missed buoys may only be recovered on the same lap on which they were missed. Failure to pass all buoys on the outside means the lap was not completed and will not be recorded by the timekeepers.
- 83 Boats may only enter the **In-Field Area** when retrieving a fallen skier, have retired, or have completed the **Race**. Any boat re-entering the circuit from the **In-Field Area** must give way to boats on the circuit.
- 84 No changing of lanes is permitted from within 100 metres of the turn buoy or mark, until the skier rounds the buoy/s and attains a straight line on the natural course.  
[adapted from IWWF Racing Rule 8.05]
- 85 In the event of a boat broaching or hooking and where the skier is unable to maintain a Proper Skiing Position the Team will be disqualified for the rest of the **Race**. The **Chief Judge** will decide whether the driver will be allowed to compete for the remainder of the **Event**. The boat must be re-scrutineered.
- 86 If the skier falls during a **Race**:
- (a) The observer must raise the Orange Flag;
  - (b) the boat must be off the plane before turning to return to the skier;
  - (c) the direction of the turn to return to the skier must be in the safest direction;
  - (d) any boat returning to a skier must yield right-of-way to other boats

- (e) If there is a risk of the ski rope becoming tangled with another competitor the rope must be retrieved.
  - (f) Physical contact with the skier is permitted for the purpose of replacing equipment, but the propeller must not be rotating.
  - (g) The Orange Flag must not be lowered until the skier is in the **Proper Skiing Position**.
  - (h) If a skier falls on a corner, and the safest line to restart the skier means one of the turn buoys will be missed, Rule 82 shall not apply if the skier skis as close as reasonably practicable to the inside of the turn buoys.
- 87 If another skier has fallen, that skier may be passed on whichever side is safest. The driver or observer must acknowledge the safety flag or a fallen skier by raising their hand. A lateral distance of at least 10 lateral metres must be left on either side of any stationary boat, skier or ski gear in the water.
- 88 A yellow flag will be raised by a course boat to indicate a fallen skier or other safety related issue. Extreme caution must be taken in the yellow flag zone. The Yellow Flag Zone is that part of the course from the Yellow Flag to the incident which gave rise to the Yellow Flag being raised. The driver or observer must acknowledge the safety flag.
- 89 If a Red Flag is raised during the **Race**, you must stop, idle back to and retrieve your skier, and idle towards the nearest course boat away from the incident requiring the attention of the rescue boat or event which gave rise to the red flag being raised.
- 90 A blue flag will be raised on instruction of the **Chief Judge** when the leading boat has one lap to go.
- 91 A chequered flag will be waived from a course boat or such other place as advised at the **Pre-Race Briefing** to indicate you are about to complete the **Race**.
- 92 The team completes the **Race** when their skier, being in a **Proper Skiing Position** passes the Finish Buoy while the Chequered Flag is raised.
- 93 When passing the Chequered Flag, the skier must be in a **Proper Skiing Position**, or regain a **Proper Skiing Position** without falling.
- 94 The time allowed for all boats to pass the Chequered Flag is 5 minutes plus the time taken by the winning boat to complete its last lap. Any boat not finished within this time will receive a DNF.

### After the race

- 95 After passing the Chequered Flag boats must proceed to the **In-Field Area** to an area where skiers can be dropped safely, bearing in mind that subsequent boats may need to re-pass the Finish Buoy. At appropriate venues it may be possible to finish on the outside of the course, the **Event Judge** shall advise at briefing if this is to be the case. Boats retiring before the end of the race (including those who finish first in a split time race) who have retired on the outside of the course may return to the ramp if they do not impede with those boats still racing.
- 96 Skiers must hold their handles until their boat returns to retrieve them.
- 97 Skiers must be retrieved from the water as soon as possible and in a manner which reduces the risk of other boats becoming tangled with tow lines.



- 98 As soon as the skier is retrieved from the water (either after the **Race** or upon retiring from the **Race**) team members may remove their helmets for so long as they remain in the centre of the **In-Field Area** and the boat is stationary or at idle.
- 99 Once all skiers have been retrieved a red flag will be raised by the Rescue Boat. Once the Red Flag is raised, boats may return to the boat ramp.

## Flags

- 100 Various flags are used before, during, and after a **Race**. The table below describes each flag, what it means, and when it must be used.

GREEN	Prestart and identifying flag for <b>Judges</b> , Safety and Rescue Boats.
Dimensions	50x50cm.
YELLOW	Caution. The <b>Judges</b> and safety Boats will raise the yellow flag when a skier has fallen, when a skier is in the water or in any case of interference after the Start Flag has been lowered.  The YELLOW flag will also be raised at the sound of the 15 minute warning and lowered 5 minutes before <b>Race</b> start. Dimensions: 50cmx50cm.
RED	<b>Race</b> Stopped. The <b>Judges</b> and the Safety Boats will raise the Red Flag to stop the <b>Race</b> . Dimension 100x100cm.  The RED flag will be raised on the completion of a <b>Race</b> to signal to competitors that the <b>Race</b> is completed and they are cleared to return to the pit area.
BLACK	Disqualification. The black flag is used to notify a competitor that he has been disqualified and that he must retire from the <b>Race</b> . When the black flag is shown the number of the Team being disqualified should be displayed in figures not less than 300mm high at a point designated by the <b>Chief Judge</b> . Dimension 100x100cm..
BLUE	One lap to go. Dimension 100x100cm.
CHEQUERED	Finish. The chequered flag indicates the end of the <b>Race</b> .
Dimensions	100x100cm.

## Part F - Protests

### Introduction

- 101 The Protest provisions are provided as a means of determining whether competitors are or have complied with these Rules.
- 102 Any competitor may protest against another competitor. It is expected that most circumstances which may give rise to a protest will be able to be dealt with through discussion and without resorting to the formal procedures set out below.

### Lodging a Protest

- 103 Protests must be lodged with the **Chief Judge** using Form TR8 (in duplicate) and must be accompanied by a Protest Fee of \$30.00. The Protest Fee will be refunded if the **Chief Judge** considers the protest to be reasonable.
- 104 The **Chief Judge** may initiate a protest if, in the opinion of the **Chief Judge** a competitor has breached the Rules.
- 105 The details included on Form TR8 should be sufficiently comprehensive to allow the protest to be determined fairly and quickly.
- 106 Protests must be lodged within 30 minutes after the completion of a **Race**. The **Chief Judge** may extend the time allowed for lodging a protest if the delay is not prejudicial to determining the protest.

### Determining a Protest

- 107 The **Chief Judge** shall form a **Protest Committee** to determine the protest in such manner as the **Protest Committee** determine. If the **Protest Committee** believe a competitor has breached the Rules that competitor shall be given the opportunity to be heard by the Protest Committee before a decision is made.
- 108 No person involved in the protest shall be involved with determining the protest or any appeal.
- 109 No competitor shall discuss the protest with the **Protest Committee** unless requested to do so.
- 110 The decision of the **Protest Committee** shall be in writing and posted by the **Chief Judge**. It will be delivered to competitors only as determined by the Chief Judge. [Note that subject matter around judging decisions may be used for educational purposes]
- 111 If the **Protest Committee** determines the Rules have been breached, a penalty must be imposed in accordance with Part G – Penalties and Sanctions.

### Appeal

- 112 The decision of the **Protest Committee** may be appealed to the **Management Committee** within 7 days, but the appeal is restricted to the interpretation and application of the Rules. The **Protest Committee's** findings of fact are final. Any appeal to the **Management Committee** shall be accompanied by a fee of \$100. The fee will be refunded if the appeal is upheld, either in full or in part.
- 113 In determining any appeal, the **Management Committee** may obtain such advice as it considers appropriate.

### Part G – Penalties and Sanctions

- 114 Penalties will be imposed for any breach of these Rules in accordance with the procedure set out in this Part.
- 115 Financial Penalties apply to the whole Team unless stated otherwise. It will be up to the Team to decide who pays the penalty.
- 116 Where a single incident results in more than one penalty, only the more serious penalty applies.
- 117 Penalties shall not apply if the incident which gave rise to the penalty was caused by actions of another team and the breach was necessary for the safety of competitors.

- 118 If a penalty or sanction is specifically provided for in a Rule, only that penalty or sanction applies.

### Time Penalties

- 119 A **Time Penalty** will be applied for a breach of any rule described in the “Start” rules commencing on page 11, except for Rule 65 and Rule 68.

### Financial Penalties

- 120 A **Financial Penalty** will be imposed for any breach of the rules described in the “After the race” rules commencing on page 14.

### Time and Financial Penalties

- 121 A **Time Penalty** and a **Financial Penalty** will be imposed for:
- (a) any breach of the rules described in “During the Race” rules commencing on page 12.
  - (b) a breach of Rule 65 or Rule 68.

### Sanctions

- 122 Any competitor Team or competitor who breaches the same Rule three times during an **Event** shall not be permitted to compete for the remainder of the **Event**. The **Event Judge** shall report the breaches to the **Racing Committee** who will take such action as it considers appropriate.
- 123 Any competitor who acts in an unsportsmanlike manner may, upon the unanimous decision of the **Race Day Committee**, be disqualified from competing for 24 hours.
- 124 Any competitor who communicates with a Judge in a disrespectful manner will be disqualified from competing for 48 hours.
- 125 Any competitor who repeatedly communicates with a **Judge** in a disrespectful manner (whether or not at the same **Event**) will be disqualified from competing immediately, and for the subsequent six **Events**.
- 126 Any Team which competed in breach of the Licencing provisions shall not receive points, a DNS, or a DNF. (i.e., as if they had neither entered nor competed) and shall be fined \$50.

## Part H - Scoring

### Series Races / North and South Island Championships / National Championships.

- 127 Points for each class / **Race** are determined according to the following method: The Provisional Winner is the skier(s) who first crosses the finish line.

The Official Winner is the skier with the fastest average lap time (determined by their time in seconds (including any penalties) divided by the number of laps completed). The Official Winner receives 1000 points.

All other skiers' points are calculated according to the following formula:

$$1000 \times A / B:$$

A = Official Winners average lap time

B = their average lap time

Examples are provided in Appendix 3.

- 128 Times are recorded to within 1/100<sup>th</sup> of a second. Points are rounded to two decimal placed.
- 129 The time taken to complete a **Race** is the time from the start to the time the skier(s) cross the finish line.
- 130 Times used to calculate average lap times are actual time plus any time penalty imposed.
- 131 Any time penalty imposed will be a percentage of the Provisional Winner's time.
- 132 Times recorded by **Race Officials** will be the only times recognised.

### Provisional Results

- 133 Provisional Results may be made available as soon as practicable after each **Race**.

### Final Results

- 134 Final Results will be made available as soon as practicable but not before any protest has been determined by the Protest Committee, or any appeal to the Management Committee.

### Placings

- 135 Overall Series Placings are determined by the aggregate of all points scored less the two lowest scores. Lowest scores may be a score of zero, a DNS, or a DNF.
- 136 Placing for North or South Island Championship and National Championship events will be determined by the aggregate of points scored over the two days

### Cancelled Races

- 137 If a series **Race** is cancelled those competitors present, entered, and **Able to Race** will be given an average of their points calculated over the whole season according to the following formula:
- 138 TP / RC where  
TP = Total points from all races completed (ie excluding DNS or DNF)  
RC = the number of races completed.
- 139 Until average points are able to be calculated, an "A" will be shown on the points table.
- 140 If the North Island championship is cancelled, total points scored in the Series Races (without average points or dropping points) will be used to determine the results.

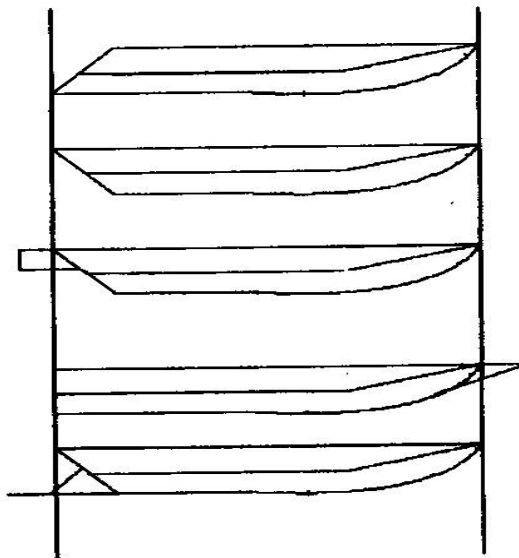
## Appendix 1 – Rules Relating to Boats and Equipment

### Boat Requirements

#### Length

The Boat used for towing skiers must not exceed 6.5 metres in overall length. The overall length is measured between the two perpendiculars at the extremities of the structure, including the shell or skin, which constitutes a floating vessel, but excluding any extensions as illustrated. A maximum of 1 metre is allowed for accessories (ie the whole unit is not to exceed 7.5 metres).

**Figure 3**



#### Design

The design of a boat or combinations of hull and the power source must be compatible for the speeds traveled during an event. The owner must provide proof of boat handling if requested. Motors exceeding 200 Kilograms in weight will not be permitted on boats with length less than 17ft, (5.182mtrs).

#### Name

Boat names shall not be of such a nature as to cause embarrassment or discredit the sport.

#### Towing Eye

Shall be adequate for towing the boat when waterlogged.

Shall be strongly fixed to the structure, not merely to the decking. It should be remembered that this item may have to carry the whole weight of the waterlogged boat.

#### Painter/Mooring Lines/Bow Lines

Shall be strong enough for the purpose and shall be long enough for mooring but not long enough to reach the propeller.



The painter shall be attached to the towing eye and shall be secured in the cockpit, preferably by jamming cleat to avoid the crew having to climb onto the bow to accept a tow.

### **Sharp Edges**

All mascots, lights, bow fittings and other sharp edges shall be adequately protected or removed.

Fixed aero foils or adjustable aero trimming devices attached to the hull or engine must be securely fixed and stayed.

### **Windshields**

Shall be well secured

Shall not be of plate or ordinary glass

Scrutineers may order the removal of any windshield that appears dangerous or approve the addition of approved safety films and similar products.

No part of the cockpit or windshield shall be enclosed to cover or surround the crew or part thereof, including any item or fitting which may cause entrapment. i.e., seat belts, foot holds, rope holds, and the like.

### **Steering Gear**

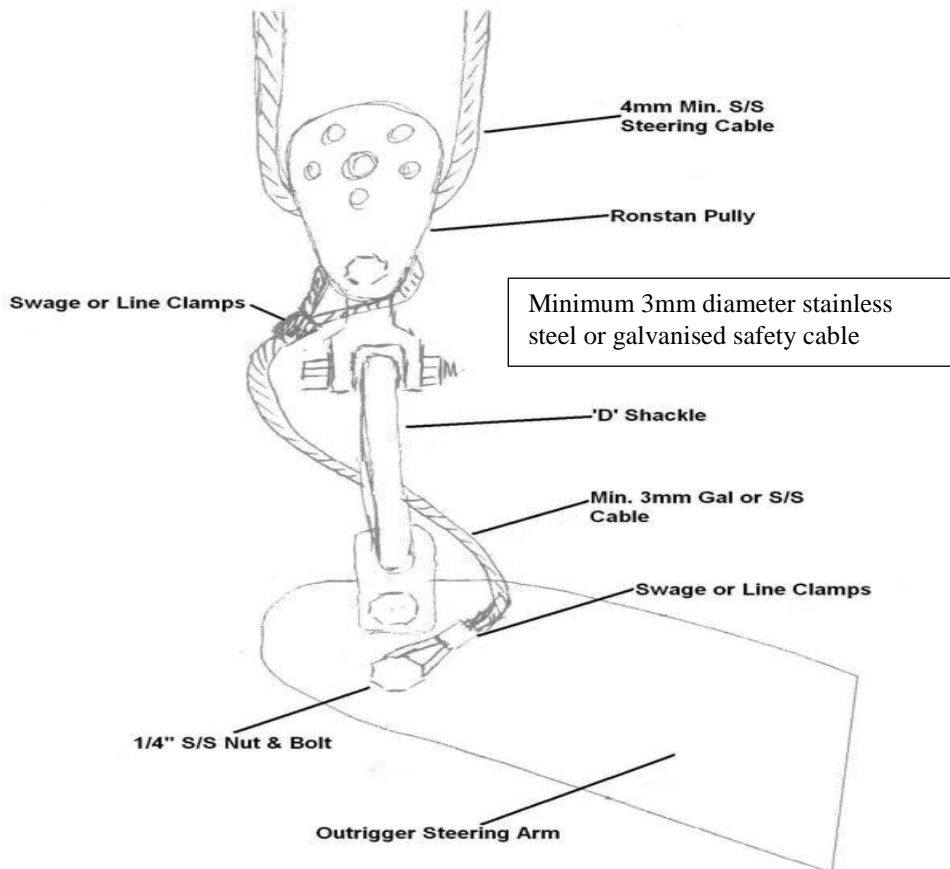
- a) Steering wheel and drum shall be secured and locked onto the shaft.
- b) Steering wheel unit shall be fixed to, or through, the dash panel or a steering mounting bar and shall be through bolted and locked.
- c) Steering wheel strength shall be checked, if the wheel is split or cracked the wheel shall be rejected. Wheels of the laminated rim type shall be checked for wear caused by the breakdown of the laminations. Plastic composition wheels shall be checked for early fatigue where the spokes join the boss to ensure the wheel cannot be forced to spin on the internal boss without undue minimum of pressure.
- d) Where the shackles or such devices are used to attach the steering to outboard engines, they shall not be of a non-ferrous metal. Scrutineers shall satisfy themselves that this is so even if the shackles are painted.
- e) Pulleys shall operate freely and Wing pulleys to be of a through bolted type with positive locking.
- f) Steering wires shall be in good condition and shall have free running throughout their path, with adequate tension throughout their travel.
- g) Wires shall be secure and where doubled to form an eye shall be around a thimble and shall be secured with two bull dog clips or equivalent.
- h) Locking wire to be fitted to all shackles, turnbuckles, stretching screws etc.
- i) There shall be no undue degree of play in the steering system, but the steering wires shall not be over-tightened in a "piano-wire" fashion.
- j) For outboards - attachments to the engine, for inboards - attachments to tillers and/or quadrants and their fittings to the stock shall be in good condition and secure.
- k) Engine or tiller and rudder shall operate with full and free movements in the correct sense and shall be fitted with stops to prevent over-control.



- l) Rudder assemblies, gland keys etc., shall be in good condition and secure with lock nuts and/or tight split pins.
- m) For rod steering, the rods are to be sufficiently rigid to prevent undue flexing.
- n) Rack and pinion steering shall be in good mechanical condition with no excessive backlash. Casings should also be checked.
- o) All wing pulleys with riveted pins of non-ferrous material shall be rejected, or the riveted pins shall be replaced by a positively locked stainless steel bolt. Pulleys should also, if possible incorporate a bush.
- p) All pulleys with any tension shall not cause the yoke to clamp down on the pulley wheel.
- q) All pulleys which use an attachment hook of non-ferrous material shall be rejected.
- r) All attachment hooks shall be closed.
- s) Sheathed steering cables shall not be permitted.
- t) Wires to the steering wheel running across the front of the dash board shall be effectively be shielded. It is also recommended that the wires running fore and aft inside the cockpit be similarly shielded.
- u) Jet boats must be fitted with a rudder extending below the bottom of the boat and operating in conjunction with normal jet steering.
- v) Teleflex-type steering shall incorporate dual system (for outboard speed events only).
- w) Steering equipment is not to be ground or drilled to ease in assembly. (shackles, pulleys etc.)
- x) Steering cables must be replaced before the start of every season (before the start of series race number 1 or first race the boat competes at). It is up to the boat owner / driver to monitor the condition of the cable throughout the season.
- y) A 4mm or 5mm steering wire cable is to be used. The cable material may be of galvanised steel or stainless steel and the construction shall be 7x19 (7 strands of 19 wires).
- z) Steering wires are to be fitted with a scrutineer's tag at all times
  - aa) All wing mountings where secured to the engine shall be exposed for the purpose of Scrutineering.
  - bb) The engine cowlings should be cut/trimmed or adjusted to achieve a minimum of 10mm above and below the wing to allow the scrutineer to complete a visual check.
  - cc) A safety wire shall be attached connecting the wing to pulley in case of failure at this point. This may be achieved by one of two means:
    - A loop of cable secured by 2 cable clamps or a crimped connection. Minimum 3mm s/steel or galvanised cable
    - Or by the method illustrated below.



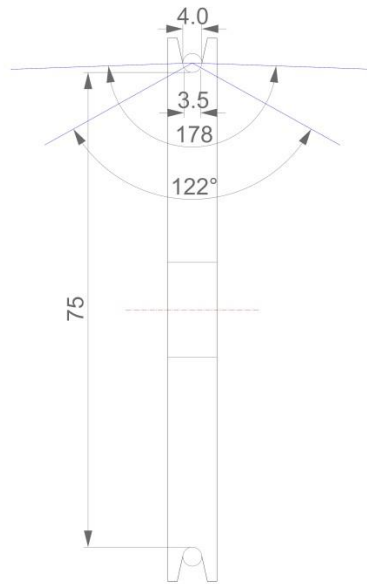
4mm or 5mm diameter stainless steel or galvanised steering cable



**Edit 2017**

**Stainless Steering Cable**

- a. Cable to be 304 grade Stainless Steel 7 x 19
- b. 4mm only
- c. Proof of cable type/ purchase date to be shown at start of the season - this is for both galv and Stainless Steel cable
- d. Minimum pulley / helm Diameter for SS to be 75mm - please note: This is absolute borderline in regards to safe operating parameters of SS cable – it is preferred that it is 100mm
- e. Groove size to be a minimum of 3.5 mm & a maximum of 4mm



4mm cable 7 x19 SS 304

**Control Cables**

All Control cables shall be taped or screwed down securely.

**Fuel Tanks**

Shall be secure in all directions.

Shall not leak.

Shall have sensible filling and venting arrangements where applicable, that are not close to any parts, such as exhaust manifolds.

It is recommended that there should be an easily accessible means of shutting the fuel supply off from the tanks.



**Fuel Lines.**

Shall be leak resistant and run in a manner to avoid damage. Lines shall be in good condition with proper connectors. Flexible hoses and pipe runs should be clipped up at suitable intervals with fair runs to the engine (at all points of travel in the case of outboards). Lines should be fire resistant non-collapsing.

### **Throttles**

All throttles must be operated by foot, whether inboard or outboard.

All carburetors and/or throttles must be spring loaded to close at the engine, and must function accordingly.

### **Extinguisher System**

Approved fire extinguisher must be carried at all times (Certificate of inspection must be current).

Shall be of satisfactory condition and easily accessible.

Only fully charged extinguishers shall be permitted and they shall not contain carbon tetrachloride. It is recommended that the extinguisher be capable of putting out a petrol fire at least four square metres.

### **Components**

All component parts of a boat such as fuel tanks, batteries and hatches, etc, must be securely fastened in a permanent manner to prevent movement.

### **Battery Storage**

Batteries, where carried, shall be easily accessible and prevented from any movement in any direction by means of adequate hold downs.

Insure there is adequate support below the battery.

Batteries shall not be placed in sealed compartments.

### **Propellers**

Propellers shall be sound, particular at the blade roots.

All propellers to be lock nutted and/or secured by a split pin or locking tab.

### **Propeller Shaft**

Propeller shaft to have training collar fitted in front of the log.

Top line shaft (jack shaft) between engine and gearbox or stern leg shall have a circular braces or suitable supports to contain the shaft, or any other moving part of the mechanism within the vicinity of the Driver or Observer or likely danger, is to be fully enclosed with a safety guard (guard should be a minimum 3mm steel or 6mm aluminum).

The base of the propeller shall have at all times some clearance between the rear of the skeg (inboards).

### **Buoyancy**

All boats shall have sufficient buoyancy to keep afloat in all conditions. Buoyancy aids or material shall be adequately fixed. Scrutineers shall not be responsible for determining the adequacy of the buoyancy in any boat, but may suspend acceptance if in doubt.

Unless a boat has built in positive buoyancy, the team must demonstrate visually the adequate buoyancy aids have been installed. Truck tubes or similar may be secured in the bow of the boat.

### **Seating**

Adequate seating to be provided for Driver and Observer.



Seats will be firmly mounted and secure side by side with the driver.

Observer shall face the rear of the boat and be positioned to allow full view of the Skier/s at all times whilst remaining seated.

Observer's seat will be next to or in front of Drivers seat. No part of the Observers seat will extend past the rear of the Driver's seat.

Observers must remain seated in the cockpit of the Boat and must keep the Skier under observation at all times during their participation in the event. The only time the Observer may leave their seat is to put weight on the foredeck only when starting the skier/s or assisting the skier/s in the water or boat. The Observers feet must remain on the floor at all times the Boat is under power.

### **Cut Out Switch**

Cut out switch is compulsory

Path and length of the cord shall ensure disconnection of switch whatever the direction of ejection.

Cord and attachments shall be adequately attached to the cut out switch.

Shall actually cut the engine completely when operated.

No device shall be fitted to render the switch plug inoperative.

Control unit shall be within easy reach of the Driver in their normal position.

Unit shall be attached securely to the boat structure.

### **Official Race Numbers.**

Official numbers will be those allocated by the person responsible for NZWSRA memberships. .

A register of allocated numbers will be maintained and reviewed. Any allocated number not used for two race seasons or if membership of the association lapses for 2 years, the allocated number will be removed from the register and be available for reallocation, in the third season.

Numbers to be coloured black on a background of white by means of a waterproof enamel paint or plastic transfer in such a manner that they are clearly visible on both sides of the boat. Minimum dimensions of individual numbers will be height 300mm, width 225mm, thickness 50mm, and spacing 75mm, and the white background forms a border around the numbers, of 20mm minimum..

All numbers are to be placed in a near vertical position as possible and are to be visible from both sides of the boat at a distance of 50 metres.

Where a straight number board is fitted it is a requirement that the front leading edge of the number board be rounded and have a minimum diameter of 25mm.

### **Safety Flag.**

Safety flag [for downed competitor] must be flame orange 50cm x 50cm fixed to a sturdy pole no less than 1.0meter in length, and must be part of the equipment.

A suitable flag pole holder will be provided for the use when the skier is in the water and the Observer requires both hands for other operations. The safety flag must be in a clearly visible location in all directions when mounted in the pole holder.

### **Medical Flag**

All boats will carry a blue and white medical flag, 50cm x 50cm fixed to a sturdy pole no less than 1.0meter in length. The flag will be half blue and half white (separated diagonally) on each side. This flag will be raised only when assistance is required.

### **Distress Flares (For Offshore Events)**

Boats must carry a minimum of two orange coloured daylight smoke flares for ignition, should a member of the crew or competitor be seriously injured, subject to the Local Governing Authority.

Flares etc normally have a stamped expiry date and if they have expired or the date is illegible or the condition poor they shall not be accepted.

### **Paddle**

A paddle (not a water ski) shall be stored for immediate use, but not loose.

The paddle shall be of practicable form related to the size of the boat and in suitable condition.

### **Handholds**

All boats will have adequate stationary handholds fixed securely to the hull and in a convenient location for the Observers use at any time. They shall be located to prevent entrapment of the boat crew.

### **Footrest**

All boats are to have adequate footrests for the Observer and to be suitably located for bracing the Observer within the seat.

### **Engine Mounting and Transmissions – Outboards**

Mounting brackets shall be secure and in a satisfactory condition.

Jacking Plates shall be secure and in a satisfactory condition and secured to the transom with a minimum of 4 bolts.

Engine mountings shall be attached to the transom/jacking plate with a minimum of 4 bolts.

All bolts shall be adequately tightened.

### **Engine Mounting and Transmissions – Inboards**

Engine Mountings shall be sound.

Where an out drive or jet unit is fitted, the out drive ring connection to the transom and the unit to the rings shall be secure.

Transmissions and all parts motivated by the engine shall be efficiently shielded so as to prevent damage to persons or structure in the event of a breakage. For shafts in excess of 30cm in length the shielding shall not allow more than 1 cm clearance at either end.

Bearers shall not be saturated with oil.

### **Engine Condition**

The engine shall be free of dangerous corrosion, oil or fuel leaks or excessive heating and shall not be a danger to adjacent structure. Oil leaks are a particular source of fire danger.

For enclosed inboard engines, flame arresters are compulsory.





### **Engine Noise**

Engine and Exhaust noise not to exceed the Local Governing Authorities standard for decibels and every effort be made to reduce excessive noise levels where ever possible. There shall be adequate insulation where required and runs sited to avoid fire.

### **Anchor (if required)**

Anchor shall be of weight and type adequate to hold the boat. Shall be properly stored to prevent damage, but shall still be accessible.

### **Compass (if required)**

Main Compass shall be securely mounted and should be able to be read by the driver.

There shall no large metal objects near the vicinity of the compass.

Compass shall be liquid dampened and clearly show the cardinal points.

### **Bilge Pump**

Shall be in proper working order and properly secured to the boat.

Shall be reasonably accessible for operation.

Shall have a suction pipe to the lowest suction point.

It must be possible to pump out all sections of the boat, even if separated by water tight bulk heads.

### **Engine Wells**

For boats with engine wells, any non sealed openings, other than self draining holes in the transom, shall be above a horizontal line through the lowest point of the top of the transom.

## **BOAT CREW EQUIPMENT**

### **Helmets**

All Boat and Crew members competing in speed events shall be required to wear Day Glow Orange Helmets.

### **Helmet Types and Condition**

All helmets are to comply with NZS 1884, ASA, UIM or be approved by the **Technical Rules Committee** on production of relevant certification. And must be in good condition and devoid of dents and splits. Any holes drills to improve hearing must not exceed 4mm diameter nor number more than one each side (this is in order that the helmet is not weakened). Helmets that are constructed from plastic material should not be painted unless this is authorised by the manufacturer, but should be self coloured day glow orange Helmets made from fibreglass maybe painted. Helmet visors shall be in good condition and devoid of cracks and easily detachable (i.e. not bolted down). Visors must not be secured in any way which prevents them lifting up (i.e. taping). Failure by a team member to correctly wear their helmet whilst under power as a team on race day in the normal manner may incur a penalty.

Helmets may only be removed while in the infield area of the circuit. You must then be stationary or at idle(i.e. not on the plane).

### **Life Jackets**

All boat Crew **Members** competing in events shall be required to wear a waist coat type unaltered Life Jacket with leg straps. Life Jackets must be equipped with collars and/or must have flotation material high on the chest to hold an unconscious persons face out of the water. Life jackets and life collars, if any must be securely fastened at all times, while on the course, racing or testing. Leg straps must be securely fastened to the Life Jacket and legs.

### **Life Jacket Inspections**

Life Jackets shall also meet the following inspection requirements.

Lacing ties and/or straps shall be adequate and in good condition.

Zips where used shall be in good working order.

Tears or rents or bad repairs whereby the buoyancy will leak out, shall not be permitted.

Jackets shall be dry and not oil or water logged.

### **Jackets shall be fitted with integral hold down straps to the legs. Life Jacket Colour**

All Life Jackets to be predominantly orange, yellow or another clearly distinguishable colour.

### **Minimum Standard Acceptable**

The Racing Life Jackets minimum standard acceptable is to comply with NZS 1822, ASA 1512 or to have UIM approval.

### **Safety Belts**

Safety Belts are not permitted.

### **Footwear**

All boat Crew **Members** competing in events are to wear footwear of a closed toe type.

### **Firesuits**

Minimum of single layer fire resistant overalls must be worn as a driver or observer when in an inboard and competing at a NZWSRA event.

## **SKIER EQUIPMENT**

### **Skiers Helmet**

Approved Fluorescent Orange Helmets to be worn by all Skiers. The Helmet must cover the ears, securely fit on the head, have secure straps, and float.

The possibility of “bucketing or enforcing” water between the helmet and the head can be reduced by ensuring the helmet is fitting about the head or else it should have substantial drain holes.

### **Buoyancy Vests**

If a wetsuit is worn over a vest, crutch straps are not necessary. The top half of the wetsuit must be predominantly fluorescent orange, pink, green, or yellow. Any exception to these colours must be approved by the **Technical Rules Committee**.

### **Safety Water Ski Trunks**

Safety Water Ski Trunks with manufactured, unaltered leg straps may be acceptable.

### **Buoyancy Vests**

Buoyancy Vests shall also meet the following inspection requirements.

Lacing ties and/or straps shall be in good working order.

Zips, where used, shall be in good working order.

Tears, rents or bad repairs whereby buoyancy will leak out, shall not be permitted.

Jackets shall be dry and not oil or water logged.

Jackets shall be fitted with hold down straps to the legs.

### **Race Ski**

A coloured fluorescent orange paint or adhesive tape at least 15cm in length and full width of the ski must be placed on the upper and lower front tip of all skis.

Skis must be in a serviceable condition.

Skis shall not be more than 3 metres in length.

Any type of bindings and fins of recognised manufacturer are allowed except in events specifying skis without such fittings.

A competitor wishing to use any equipment that does not comply with these rules, may submit a sample to the **Technical Rules Committee** for determination at least four weeks prior to the event.

### **Tow Line/s**

Tow lines shall be provided by the Skier, preferably of Polythene or Polypropylene material. Point of attachment shall not extend beyond perimeter of gunwale. No harness is to be used. A harness is defined as any device which permits the handles to be locked together or allows the skier to be towed without retaining hold of at least one of the handles.

The minimum length of a tow line is 21 metres, including handles and skiers bridle.

The maximum length of a tow line is unlimited, providing safety limitations are maintained.

### **Other Equipment**

Water bottles and the like (Camel Backs) may be worn for hydration purposes and shall be made of a soft material e.g. made of wetsuit material. These must be worn on the back, but must not be worn under the safety straps of the race suit. If the container is housed in an integral pouch as part of the wet suit, the safety straps of the wet suit must pass under the pouch and not around the pouch. All stoppers must be of soft plastic material. The drinking tube is to be long enough to reach the mouth but not long enough to reach the eyes. These devices must be checked by the chief scrutineer events with notation of approval made in the TR4 Scrutineers Form of each boat the skier skis with.

No clinch gloves are permitted.

## **Appendix 2 – Technical Definitions and Requirements**

## **F2 Boat**

“F2 Boat” means a boat which complies with IWWF Rules and which has been sealed in the manner prescribed by the Technical Rules Committee. Interpretation of the IWWF Rules will be made by the Technical Rules Committee. The rules governing this class are set by the International Water Ski Federation. Competitors must refer to the current IWWF Rule Book. However, the minimum boat length (measured per IWWF Rules) shall be 5.48m and the NZWSRA Technical Rules Committee will be responsible for any interpretation / clarification or ruling on the IWWF Rule book for use in the NZWSRA. Engine sealing and inspection requirements for NZWSRA F2 boats are managed using the ‘TR5 SMOC Form’ and NZWSRA SMOC procedures, including the fees and declarations required of competitors

## **MOC Boat**

“MOC Boat” means a **SMOC Boat** with a modified motor (but a **Standard Bottom End**) and not super charged or turbo charged;

## **Open F1 Boat**

“Open F1 Boat” means a boat with engine(s) restricted to a maximum 575 cubic inches or 9.42 litres, does not use Nitrous Oxide, and has a maximum length of 6.5 metres.

## **Open F2 Boat**

“Open F2 Boat” means, for an outboard, a boat with engines restricted to a maximum total capacity of 8.5 litres. Twin rigs must have **Standard Bottom Ends**. Maximum of two engines. No Super charging or Turbo charging permitted. No Nitrous Oxide. Single rig Outboards may run “quick – foot” gearboxes and short (F1) midsections. For an inboard, engines are restricted to a maximum total capacity of 575 cubic inches or 9.42 litres naturally aspirated. A penalty of 1.4 of capacity for super charging or turbo charging (i.e. max capacity 410 cu). No Nitrous Oxide. The maximum length 6.5 metres.

## **SMOC Boat**

“SMOC Boat” means a boat which:

- (a) is a standard factory production model run about (but does not have a cabin);
- (b) has a cockpit size which allows a rectangular box measuring 1680mm long and 1170mm wide to be placed within the cockpit without any obstruction of any part of the deck (excluding helm, seats, and handles);
- (c) has an observers seat next to or in front of the driver’s seat
- (d) has a single engine; and
- (e) has a standard windscreen.

## **SMOC F4 Boat**

“SMOC Boat” means a **SMOC Boat** with **SMOC Motor** sold and badged as 225HP and which does not exceed 247HP;

## **SMOC F5 Boat**



“SMOC F5 Boat” means a **SMOC Boat** with a **SMOC Motor** sold and badged as 200HP and which does not exceed 220HP;

### **SMOC F6 Boat**

“SMOC F6 Boat” means a **SMOC Boat** with a **SMOC Motor** sold and badged as 175HP and which does not exceed 195HP;

### **SMOC Motor**

“SMOC Motor” means an outboard engine which meets the following criteria:

- (a) is a stock production “out of the box” (except for spark plugs, propellers, carburetor jets, timing adjusting, nose cones, torque tamers, permatrim plates and fibreglass/plastic reeds) with no additional porting, polishing, blue printing, deburring and does not have any metal removed.
- (b) Resleeving or reboring will be permitted, but will not be permitted as an aid to performance.
- (c) Replacement parts etc are to be those catalogued as such by respective outboard manufacturers for the applicable engine. In the case of an Electronic Control Unit (ECU) being fitted to the motor, the electronic identification must remain i.e. components can only be replaced with those parts applicable to that particular model.
- (d) No Modification, reprogramming or upgrading is allowed to the ECU.
- (e) Has the engine management computer, heads, and intake sealed in a manner prescribed by the **Technical Rules Committee** been and is sealed
- (f) the engine height is not adjustable during a **Race** and the height of the cavitation plate (when parallel with the bottom of the boat) does not exceed 143mm above the bottom of the boat, provided that dispensation may be given if the Technical Rules Committee accept it is impossible to comply with this rule, and the spirit of the class is maintained..
- (g) No louvered cowls allowed, except where fitted in manufacture.
- (h) Removal of fuel connection bayonet is permissible.
- (i) Electric fuel pumps are acceptable provided fuel passes through original, unaltered fuel pump on engine and is operational.
- (j) Rev limiters where fitted are to remain operational as per manufacturers specification.
- (k) All engines must have operational forward, neutral and reverse gears.
- (l) No alteration to standard Gear Box ratios is allowed.
- (m) Standard Automotive gas only to be used i.e. no aviation gas or octane boosters to be used or any other additives other than approved 2 stroke oil.
- (n) Where the factory gearbox has side water intakes of 4 holes or more, there must be a minimum of 4 holes left operational.
- (o) If the factory gearbox has forward facing water intakes, it is up to the owner whether or not these remain operational. If operational, they may not be modified in a way that could provide any additional cooling.

## **Social Ski**

“Social Ski” means a ski which:

- (a) will (when the fin is removed) fit into a box measuring 175cm long, 18cm high, 20cm wide from the front to 100cm along the box, then tapering uniformly to 7.5cm at the rear of the box
- (b) is not thicker than 2.2cm at any point
- (c) has a concave bottom at least 0.5cm deep, 7cm wide and 70cm long
- (d) does not support the heel or ankle
- (e) does not allow toes to be used for grip
- (f) the sole piece of the rear binding does not exceed 3mm thickness.

## **Standard Bottom End**

“**Standard Bottom End**” means a gearbox which has operating forward neutral, and reverse, standard ratios, and is connected to mid section at least 15 inches long;

## Appendix 3 – Scoring Examples

### Scenario One

Skier A completes a race in 22 minutes and 38 seconds (1,358 seconds).

Skier B completes the race in 23 minutes 12 seconds (1,392 seconds).

Both complete 6 laps.

Skier A's average lap time is 226.33 seconds (1358 / 6).

Skier B's average lap time is 232 seconds (1392 / 6).

Therefore, skier A is the Official Winner and receives 1,000 points.

Skier B's points are calculated by the following formula:  $1000 \times A / B$  where :

A = the Official Winner's average lap time

B = competitors average lap time

Therefore, Skier B's points are  $1,000 \times 226.33 / 232 = 975.57$

### Scenario Two

Same as Scenario One, except Skier B completed 5 laps.

Skier A's average lap time is still 226.33 seconds.

Skier B's average lap time is 278.4 seconds (1392 / 5).

Therefore, skier A is the Official Winner and receives 1,000 points.

Skier B's points are calculated by the following formula:  $1000 \times A / B$  where :

A = the Official Winners average lap time

B = competitors average lap time

Therefore, Skier B's points are  $1,000 \times 226.33 / 278.4 = 812.96$

### Scenario Three

Same as Scenario One, except Skier B received a 10% time penalty. Skier B's time is now 1,392 seconds plus 10% of the Provisional Winner's time ( $1,358 \times 10\% = 135.8$ ) = 1,527.8.

Skier A's average lap time is still 226.33 seconds (1,358 / 6). Skier B's

average lap time is now 254.63 seconds (1,527.8 / 6). Therefore, skier

A is still the Official Winner and receives 1,000 points.

Skier B's points are calculated by the following formula:  $1000 \times A / B$  where :

A = the Official Winners average lap time

B = competitors average lap time

Therefore, Skier B's points are  $1,000 \times 226.33 / 254.63 = 888.85$

#### Scenario Four

Same as Scenario Two, except Skier A received a 10% time penalty. Skier A's time is now their actual time (1,358 seconds) plus a 10% penalty (135.8 seconds) making a total time of 1,493.8 seconds. Skier B's time remains at 1,392 seconds.

Skier A's average lap time is now 248.96 ( $1493.8 / 6$ ).

Skier B's average lap time is still 278.4 seconds ( $1392 / 5$ ).

Therefore, skier A is still the Official Winner and receives 1,000 points.

Skier B's points are calculated by the following formula:  $1000 \times A / B$  where :

A = the Official Winners average lap time

B = competitors average lap time

Therefore, Skier B's points are  $1,000 \times 248.96 / 278.4 = 894.25$

#### Scenario Five

Same as Scenario One, except Skier A received a 10% time penalty. Skier A's time is now their actual time (1,358 seconds) plus a 10% penalty (135.8 seconds) making a total time of 1,493.8 seconds. Skier B's time remains at 1,392 seconds.

Skier A's average lap time is now 248.96 ( $1493.8 / 6$ ).

Skier B's average lap time is still 232 seconds ( $1392 / 6$ ).

Therefore, skier B is the Official Winner and receives 1,000 points.

Skier A's points are calculated by the following formula:  $1000 \times A / B$  where :

A = the Official Winners average lap time

B = competitors average lap time

Therefore, Skier A's points are  $1,000 \times 232 / 248.96 = 931.88$