**OLD RULE: (Shall vs Must)**

4.5.5 If Personal Watercraft are used with a diver for rescue purposes, then the Personal Watercraft ***shall*** remain in the safety zones at either end of the course until the race boats have cleared the one minute pin. At this point they may idle to the center……

**NEW RULE:**

4.5.5 If Personal Watercraft are used with a diver for rescue purposes, then the Personal Watercraft**MUST** remain in the safety zones at either end of the course until the race boats have cleared the one minute pin. At this point they may idle to the center ………

**OLD RULE: (Shall vs Must)**

Start and Finish - GENERAL RACING

General Racing Rules take precedence over those written…….

13.2 If the race course allows, the following guidelines will be used: A safety zone will be established encompassing each turn, bordered by the turn buoy and an imaginary line drawn from the entrance to the exit buoy. Milling during the 5 minute period will not be allowed in these zones. Competitors may only enter these safety zones in the event of an emergency or an equipment malfunction. Boats with race support personnel ***shall***, whenever possible, stay in the safety zone during the 5 minute warmup period.

**NEW RULE:**

13.2 If the race course allows, the following guidelines will be used: A safety zone will be established encompassing each turn, bordered by the turn buoy and an imaginary line drawn from the entrance to the exit buoy. Milling during the 5 minute period will not be allowed in these zones. Competitors may only enter these safety zones in the event of an emergency or an equipment malfunction. Boats with race support personnel **MUST** stay in the safety zone until the race boats have cleared the one minute pin. At this point they may idle to the center. The referee may grant exceptions based on special needs of the race course.

**OLD RULE: (13 Yr Old to Drive)**

RULE 42 - 1.5 LITRE STOCK

42.1 The purpose of these rules is to promote an entry level class of Inboard hydroplane racing for drivers ***14*** years of age or older, who will be attracted by relatively low initial cost and economy of operation. It shall be the responsibility of the 1.5 Litre Stock Technical Committee to make technical rule recommendations pertaining to the class to the Inboard Racing Commission.

**NEW RULE:**

RULE 42 - 1.5 LITRE STOCK

42.1 The purpose of these rules is to promote an entry level class of Inboard hydroplane racing for drivers **13** years of age or older, who will be attracted by relatively low initial cost and economy of operation.

**OLD RULE: (Garrantano retirement of Number)**

9.9 Guidelines for the Retirement of Hull Numbers

9.9.1 Must have had an outstanding boat racing career.

9.9.2 The individual must meet six (6) or more of the following items to be considered and this does not guarantee retirement of hull number:

|  |  |  |  |
| --- | --- | --- | --- |
| Driver or Owner | Club Officer | Contributor | National or Divisional Champion |
| Promoter | Official | Supporter |  |
| Commission Member | National High Point Winner | National Record |  |

**NEW RULE: REMOVE ALL**

**OLD RULE: (JSS – Stewart)**

**54.3.4 Pistons and Rods - Pistons must be original GM or TRW and are not to be machined in any way other than for clearancing of wrist pins or balancing (wrist pin bosses or back side of piston tops). In addition to the GM and TRW pistons, Venolia pistons, PN 2810 may be used. Venolia pistons may be purchased through the Jersey Speed Skiff Association, or by contacting the Class Representative. Tops of pistons may be machined to obtain minimum deck height of .020 thousandths. (Top of piston to top of first ring, not to be less than .245 thousandths.) Pistons shall have flat tops, four (4) valve recesses, stock dimensions and weights of wrist pins. Any full complement of rings may be used provided no alteration is done to the ring grooves in pistons. Pistons may be rotated 180 degrees in the cylinder. Rods must be stock forged steel (5.7 inches in length). Flashing removal, shot-peening and polishing rods is permitted. Any stock replacement rod bolt and nut that fits without machining or drilling may be used. Any replacement bearings, rod and main may be used. In addition to the above, the Manley Connecting Rod #14109A-8 may also be used. No changes or alterations can be made to this Manley Rod. This includes balancing. These parts must be embossed with the APBA logo.**

**NEW RULE:**

**54.3.4 Pistons and Rods - Pistons must be original GM or TRW and are not to be machined in any way other than for clearance of wrist pins or balancing (wrist pin bosses or back side of piston tops). In addition to the GM and TRW pistons, Venolia pistons, PN 2810 may be used. Tops of pistons may be machined to obtain minimum deck height of .020 thousandths. (Top of piston to top of first ring, not to be less than .245 thousandths.) Pistons shall have flat tops, four (4) valve recesses, stock dimensions and weights of wrist pins. Any full complement of rings may be used provided no alteration is done to the ring grooves in pistons. Pistons may be rotated 180 degrees in the cylinder. Rods must be stock forged steel (5.7 inches in length). Flashing removal, shot-peening and polishing rods is permitted. Any stock replacement rod bolt and nut that fits without machining or drilling may be used. Any replacement bearing, rod and main may be used. In addition to the above, the Manley Connecting Rod #14109A-8, Scat Pro Stock Rod # 2-ICR5700-2000P, Eagle SIR # SIR5700SPLW may also be used. No changes or alterations can be made to the Manley, Scat or Eagle rods. This includes balancing.**

**OLD RULE: (JSS - Stewart)**

54.4.4 Pistons and Rods - Pistons must be cast or forged replacement parts and are not to be machined in any way other than for clearancing of wrist pins or balancing (wrist pin bosses or back side of piston tops). Tops of pistons may be machined, but the distance from the top of the piston to the top of the first ring minimum of .245 thousandths. Pistons shall have flat tops, four (4) valve recesses, stock dimensions and weights of wrist pins.

Any full complement of rings may be used provided no alteration is done to the ring grooves in pistons. Pistons may be rotated 180 degrees in cylinder. Rods must be stock forged steel (5.7 inches in length). Flashing removal, shot-peening and polishing rods is permitted. Any stock replacement rod bolt and nut that fits without machining or drilling may be used. Any replacement bearings, rod and main may be used.In addition to the above, the J/E Piston Part #174004, Pin #9272850-1551S and Manley Connecting Rod #14112A-8 may be used. No changes or alterations can be made to these parts. This includes balancing. These parts must be embossed with the APBA logo.

**NEW RULE:**

54.4.4 Pistons and Rods - Pistons must be cast or forged replacement parts and are not to be machined in any way other than for clearance of wrist pins or balancing (wrist pin bosses or back side of piston tops). Tops of pistons may be machined, but the distance from the top of the piston to the top of the first ring minimum of .245 thousandths. Pistons shall have flat tops, four (4) valve recesses, stock dimensions and weights of wrist pins.

Any full complement of rings may be used provided no alteration is done to the ring grooves in pistons. Pistons may be rotated 180 degrees in the cylinder. Rods must be stock forged steel (5.7 inches in length). Flashing removal, shot-peening and polishing rods is permitted. Any stock replacement rod bolt and nut that fits without machining or drilling may be used. Any replacement bearings, rod and main may be used.

In addition to the above, the J/E Piston Part #174004, Pin #9272850-1551S, Manley Connecting Rod #14112A-8, Scat Pro Stock Rod # 2-ICR5700P, Eagle SIR # SIR5700BPLW may also be used. No changes or alterations can be made to the J/E, Manley, Scat or Eagle rods. This includes balancing.

**OLD RULE: ( Use of Drones NT1 and S2 Combined)**

13.3 At all Inboard regattas a minimum of two course judges shall be required whose duty it shall be to watch for and report violations of safety and racing rules. Preferably, however, there should be a course judge stationed at the entrance and exit buoys of each turn. At the discretion of the Referee a turn judge may be stationed on the outside of the race course, provided he is elevated.

**NEW RULE:**

13.3 At all Inboard regattas a minimum of two course judges shall be required whose duty it shall be to watch for and report violations of safety and racing rules. Preferably, however, there should be a course judge stationed at the entrance and exit buoys of each turn. At the discretion of the Referee a turn judge may be stationed on the outside of the race course, provided he is elevated. Video from race committee and referee approved drones may be used as an aid to race officials.

**OLD RULE: (Gildermaster)**

**44.2.2 Boats using engines with pushrods or a single overhead cam, no more than 2 valves per cylinder, and a displacement not exceeding 155.5 cubic inches, shall weigh a minimum of 1,225 pounds. Fuel shall be gasoline, methanol, or ethanol-based fuels.**

**NEW RULE:**

**44.2.2 Boats using engine with pushrods or a single overhead cam, with no more than 2 valves per cylinder and a displacement not exceeding 155.5 cubic inches, shall weigh a minimum of 1125 pounds when running only gasoline, and shall weigh a minimum of 1225 pounds if running on methanol, or ethanol- based fuels.**

Rule 44 CHART

|  |
| --- |
| **Competing boats shall be powered by one internal combustion engine of the four-cycle type, utilizing any combination of displacement, configuration and fuel as defined below. Unless otherwise noted, the engine will have no more than 6 cylinders and any block/cylinder head combination can be utilized.** |
| **Engine Configuration** | **Engine Displacement** | **Fuel** | **Minimum Weight** | **Capsule Req.** | **Pounds/Cu In Displacement** |
| **(Up to max progression** | **(Up to max noted)** |  | **(With Driver)** | **(Reg. On Capsule)** | **(Reference)** |
| **DOHC - 4 Valve** | **148.5 Cubic in.** | **Gas** | **1025 LBS** | **2.5 Stock** | **6.90 LBS** |
| **DOHC - 4 Valve\*** | **148.5 Cubic in.** | **Methanol/Ethanol** | **1125 LBS** | **2.5 Stock** | **7.57 LBS** |
| **SOHC - 2 Valve** | **155.5 Cubic in.** | **Gas** | **1125 LBS** | **2.5 Stock** | **7.23 LBS** |
| **SOHC - 2 Valve** | **155.5 Cubic in.** | **Methanol/Ethanol** | **1225 LBS** | **2.5 Mod** | **7.87 LBS** |
| **SOHC - 2 Valve** | **166 Cubic in.** | **Gas** | **1225 LBS** | **2.5 Mod** | **7.38 LBS** |
| **SOHC - 2 Valve** | **166 Cubic in.** | **Methanol/Ethanol** | **1325 LBS** | **2.5 Mod** | **7.98 LBS** |
| **Push Rod - 2 Valve\*\*** | **313 Cubic in.** | **Gas** | **1525 LBS** | **5 Litre** | **4.87 LBS** |
|  |  |  |  |  |  |
| **\* Note: Engines using methanol must use production blocks and head(s), but they may be modified.** |
| **\*\* 44.2.4 Any boat meeting Rules 45.1, 45.2, and 45.4 shall be considered legal within the 2.5 Mod. Class** |
| **Note: Engine progression: Push Rod - 2 valve, SOHC - 2 valve, SOHC - 4 valve, DOHC - 2 valve, DOHC - 4 valve** |
| **Note: Hulls using a 2.5 Stock capsule are not legal to step up to run as a National Mod.** |

**OLD RULE: ( Wilson (T7) & Sovie (T3)**

**CLASS TECHNICAL INFORMATION**

**RULE 41 - 1 LITRE CLASS**

**41.1 Competing boats will be powered by one internal combustion piston motor which complies with one of the following descriptions:**

 **41.1.1 Maximum displacement, including clearances: 4 cycle - 1030cc.**

 **Fuel: gasoline or methanol. Unlimited modifications.**

 **41.1.2 Maximum displacement, including clearances: 2 cycle - 1160cc.**

 **Fuel: gasoline, carburetors only, only a single expansion chamber exhaust system allowed. Unlimited modifications.**

 **41.1.3 Maximum displacement, including clearances: 4 cycle - 1260cc.**

 **Fuel: gasoline, carburetors only. Unlimited modifications.**

 **41.1.4 Maximum displacement, including clearances: 4 cycle - 1315cc.**

 **Fuel: gasoline, carburetors only, 1 venturi per cylinder. Unlimited modifications.**

 **41.1.5 Maximum displacement, including clearances: 124.7ci. Ford Pinto. Boats using this motor must conform to all the rules of the 2.5 Litre Stock Class.**

 **41.1.6 No multi-speed or variable speed gear box, clutch or belt drive system allowed.**

**41.2 Blowers, superchargers and outdrives are prohibited.**

**41.3 No more than 1 intake and 1 exhaust valve per cylinder.**

**NEW RULE:**

41.1 Competing boats will be powered by one internal combustion piston motor which complies with one of the following descriptions:

 41.1.1 Maximum displacement, including clearances: 4 cycle - 1030cc.

 Fuel: gasoline or methanol. Unlimited modifications.

 41.1.2 Maximum displacement, including clearances: 2 cycle - 1160cc.

 Fuel: gasoline, carburetors only, only a single expansion chamber exhaust system allowed. Unlimited modifications.

 41.1.3 Maximum displacement, including clearances: 4 cycle - 1260cc.

 Fuel: gasoline, carburetors only. Unlimited modifications.

 41.1.4 Maximum displacement, including clearances: 4 cycle - 1315cc.

 Fuel: gasoline, carburetors only, 1 venturi per cylinder. Unlimited modifications.

 41.1.5 **– Maximum Displacement, including clearances 1650CC, Limited to OEM Production Blocks, Cylinder Heads using Gasoline. 4 Cycle, Single Cam, 2 Valves Per Cylinder, may use Electronic Fuel Injection and Unlimited Modifications.**

**A. The 1650CC engine combination shall be on probation and shall be observed by the acting Technical Committee for a 2 year period (2019 & 2020) or a minimum of 20 race days from the first race it competes. During this time if it appears that the combination is over performing, a restriction in the way of hull weight or induction size can be invoked to level the field. During this period, this combination may race for points/prizes but will not be eligible for Divisional or Summer National Championship Titles along with Records.**

 41.1.6 Maximum displacement, including clearances: 124.7ci. Ford Pinto. Boats using this motor must conform to all the rules of the 2.5 Litre Stock Class.

 41.1.7 **Ford Engine 2.3 Litre with head option 2 (Cast Iron Head). Boats using this motor must conform to all the rules of the 2.5 Litre Stock Class.**

 **41.1.8** No multi-speed or variable speed gear box, clutch or belt drive system allowed.

41.2 Blowers, superchargers and outdrives are prohibited.

41.3 No more than 1 intake and 1 exhaust valve per cylinder.