


OFFICIAL RULE BOOK



North American Model Boat
Association International

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A. NAME AND DEDICATION

1. This association will be known as the North American Model Boat Association International hereinafter called NAMBA International.
2. NAMBA will be dedicated to the progress and expansion of model boating and the aid and development of youth and youth activities through fellowship, sportsmanship, and competition.

B. CLUBS

1. A group of members may register to become a NAMBA club by completing the appropriate form, and sending it with the applicable fee to the NAMBA office.
2. The Secretary and the President of a NAMBA club must be members of NAMBA.

C. MEMBERSHIP

1. The membership will consist of clubs and individuals interested in the advancement and enjoyment of model boating through test running, sport running, and/or racing at organized club, district, or national events.
2. Each member will automatically become a member of the district in which they reside.
3. Membership in NAMBA will be obtained online via the Membership Portal or via paper by completing the Membership Application form and mailing it to the NAMBA office. The member will not be insured until all needed information has been provided and applicable fees paid to NAMBA.
4. In order to retain the same NAMBA number each year, the member must renew before January 1 of the following year. After January 1, all numbers are declared open and may be re-issued.
5. Membership in NAMBA is proof of a right to enter any NAMBA sanctioned contest.
6. The current membership fee will be paid per calendar year and will not be prorated for a portion of a year.
7. Dues will include insurance under the auspices of the current NAMBA insurance plan.
8. Changes in dues will be included in renewal notices each year and will not necessitate a constitutional amendment.
9. Single Event Membership

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- a. This special membership is offered for non-NAMBA members attending a NAMBA event.
- b. The boater desiring this membership will apply for it online via the Membership Portal providing the needed member and event information and paying the applicable single event fee. This will need to be completed prior to the start of the event.
- c. Single event insurance is valid for the dates of the event only and only on the site indicated.
- d. Single event insurance may only be used once in any calendar year by a specific individual. Should that individual desire to participate in a second event in a calendar year, a full membership will be required.
- e. The single event fee paid at one event will be credited to the price of the full membership should that membership be consummated within the same calendar year.

D. MEMBER CONDUCT

1. GENERAL

- a. NAMBA activities are intended to be enjoyed with conduct from its members that displays proper consideration for fairness, ethics, respect, and a sense of fellowship among the participants and spectators. The purpose of this section is to define terms used in the NAMBA Official Rule Book relating to member conduct, as well as list the specific actions that will be taken when violations occur.

2. DEFINITIONS

- a. **Unsportsmanlike Conduct:** Conduct that is not fair, respectful, and polite toward other NAMBA members or the public when attending an Event. Examples include, but are not limited to: vulgarity; use of language that is disparaging to race, religion, gender, or sexuality; verbal abuse; physical abuse; and taunting.
- b. **Conduct Unbecoming a NAMBA Official:** Conduct on the part of an elected NAMBA Official that is detrimental or contrary to the best interests of NAMBA, or which may harm his or her standing as a NAMBA Official in the eyes of its members or members of the public in the execution of his or her duties.
- c. **Event:** Any NAMBA National, District, or Club organized activity.
- d. **Offense:** Disqualification from an Event as a result of Unsportsmanlike Conduct.

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- e. **NAMBA Member in Good Standing:** Any person who has fulfilled the requirements for membership in NAMBA, and who has neither voluntarily withdrawn from NAMBA nor has been suspended or placed on Probation.
- f. **Letter of Reprimand:** A letter sent via Certified Mail with return receipt requested from the District Director or other NAMBA Official to a member outlining the issues(s) of unsatisfactory performance or misconduct and action(s) taken as a result. A copy of which will send to the NAMBA Executive Secretary, who will then forward to the Board of Directors.
- g. **Probation:** The process or period of testing or observing the character, conduct, or abilities of a member.
- h. **Suspension:** The temporary removal of a member emphasizing the seriousness of the misconduct.
- i. **Calendar Year:** The space of 12 calendar months calculated from any point.

3. ZERO TOLERANCE CONDUCT

- a. **Verbal threats, physical threats, taunting, causing of bodily harm, or non-competition damage to the property of a NAMBA member or spectator is not acceptable at any NAMBA Event. If such zero tolerance conduct occurs:**
 - i) The member will be disqualified from the remainder of the Event and must leave the Event site immediately and may not return to the Event site until the conclusion of the Event.
 - ii) If the disqualified member does not leave the Event site, the Contest Director, District Director, or organizer of the Event must contact the local authorities to have the member removed.
 - iii) The disqualified member will be placed on Suspension for no less than three months and may exceed 12 months depending on the severity of the infraction.
 - iv) The member will receive a Letter of Reprimand that includes the term of the Suspension with start and end dates, and advisement of their opportunity to be heard as provided in this section.
 - v) The member will receive at least 15 days prior notice of the Suspension.
 - vi) The member will have the opportunity to be heard, orally or in writing, not less than five days before the effective date of Suspension, by a person or body authorized by the NAMBA Board of Directors for additional consideration of the Suspension.

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- vii) If a NAMBA member is disqualified for zero tolerance conduct under this Section twice in a 24-month span, he or she will have their NAMBA membership revoked for the remainder of that year and will not be eligible to renew their membership for an additional 12 months.
- viii) Due to the higher standard of conduct expected of an elected NAMBA Official, Conduct Unbecoming a NAMBA Official may result in a more punitive application of the disciplinary measures.

4. DISCIPLINARY ACTIONS FOR UNSPORTSMANLIKE CONDUCT

- a. Should Unsportsmanlike Conduct occur at a NAMBA Event, the member will be provided a verbal warning from the Contest Director, District Director, or the organizer of the Event to correct the conduct and advised that any further Unsportsmanlike Conduct at the Event will be deemed an Offense.
- b. First Offense within a calendar year
 - i) The member will be disqualified from the remainder of the Event and must leave the Event site immediately and may not return to the Event site until the conclusion of the Event.
 - ii) If the disqualified member does not leave the Event site, the Contest Director, District Director, or organizer of the Event must contact the local authorities to have the member removed.
 - iii) The member will receive a Letter of Reprimand.
- c. Second Offense within a calendar year
 - i) The member will be disqualified from the remainder of the Event and must leave the Event site immediately and may not return to the Event site until the conclusion of the Event.
 - ii) If the disqualified member does not leave the Event site, the Contest Director, District Director, or organizer of the Event must contact the local authorities to have the member removed.
 - iii) The member will be placed on Probation for a term of no less than one month and not to exceed one Calendar Year.
 - iv) The member will receive a Letter of Reprimand.
 - v) During the member's probationary period he or she will not be considered a NAMBA Member in Good Standing.
 - vi) Once the Probation term has been fulfilled the member's full privileges will be restored.

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- d. Third Offense within a calendar year
- i) The member will be disqualified from the remainder of the Event and must leave the Event site immediately and may not return to the Event site until the conclusion of the Event.
 - ii) If the disqualified member does not leave the Event site, the Contest Director, District Director, or organizer of the Event must contact the local authorities to have the member removed.
 - iii) The member will be placed on Suspension for a term of no less than one month and not to exceed one calendar year.
 - iv) The member will receive a Letter of Reprimand.
 - v) The member will receive at least 15 days prior notice of the Suspension.
 - vi) The member will have the opportunity to be heard, orally or in writing, not less than five days before the effective date of Suspension, by a person or body authorized by the NAMBA Board of Directors for additional consideration of the Suspension.
 - vii) During the member's Suspension period he or she will not be considered a NAMBA Member in Good Standing and will NOT be allowed any of the privileges NAMBA offers.
 - viii) Once the suspension term has been fulfilled the member will be placed on Probation for one Calendar Year. During the member's Probation term he or she will not be considered a NAMBA Member in Good Standing.
 - ix) Once the Probation term has been fulfilled the member's full privileges will be restored.
- e. Due to the higher standard of conduct expected of an elected NAMBA Official, Conduct Unbecoming a NAMBA Official may result in a more punitive application of the disciplinary measures prescribed in this section.

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A. GENERAL

1. Districts are generally organized along state and/or geographical lines. (see Table A and map at the end of this section for current district breakdown)
2. District lines may be altered by the Board of Directors after due notice to the members in districts affected by the change. The Board may elect to have district membership vote on any such changes.
3. A district must have at least one club before it can have its Director seated on the Board of Directors.

B. FINANCES

1. Nothing in this document will prohibit any district from raising and maintaining their own funds.
2. Fee schedules for events will be set by the district and will be uniform throughout the district.
3. Districts are allowed a maximum of \$500.00 reimbursement per calendar year for the promotion of model boating and NAMBA to the general public, in their district. Examples include: ads in publications, trade shows, district web pages, flyers, etc. Use of funds for parties, banquets, and normal district expenses is prohibited. Expenses must be approved by the district director prior to use. Receipts for reimbursement must be submitted to the NAMBA Secretary, thru the district director, in the same calendar year as the expense was incurred.

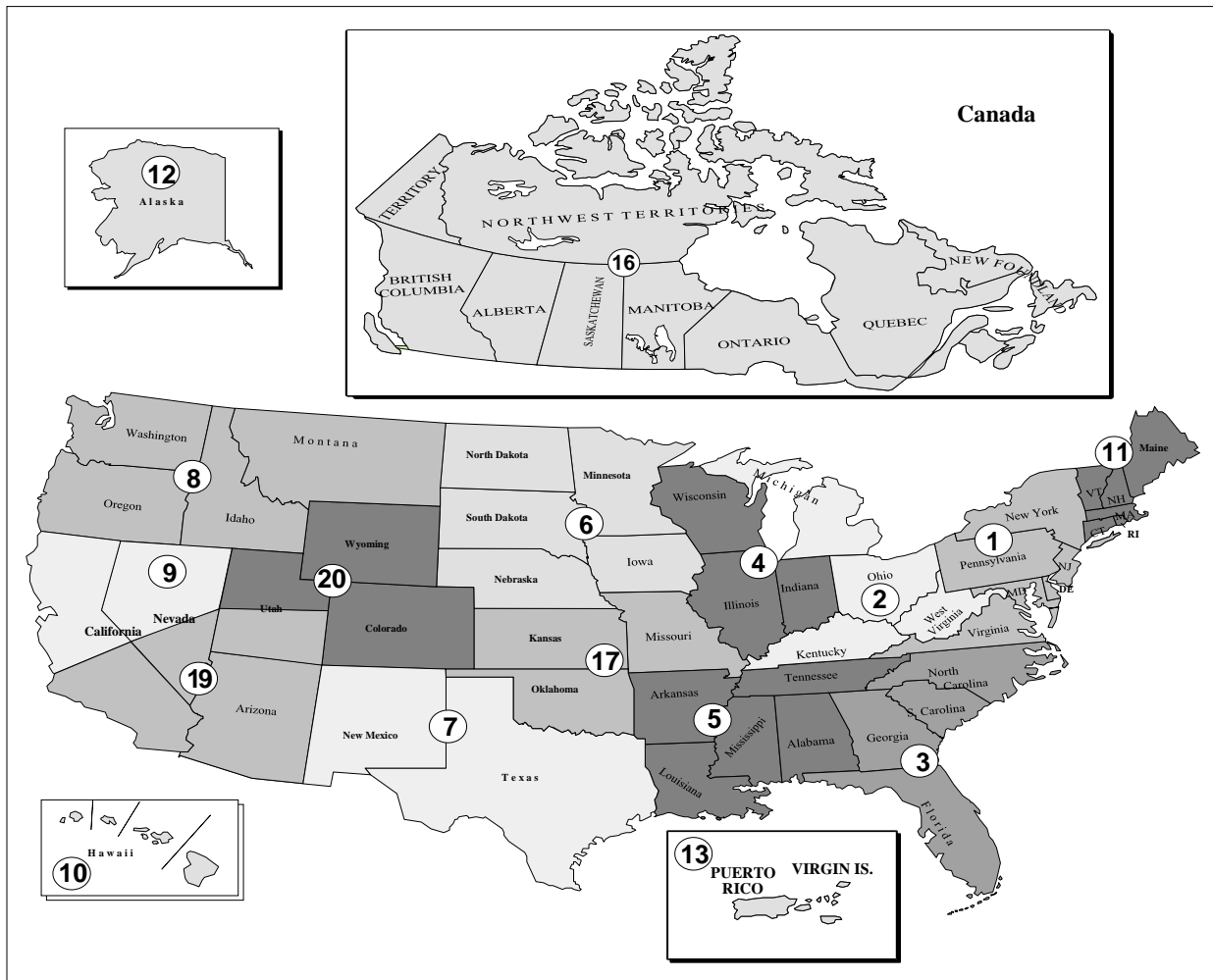
C. MEETINGS


1. Each club having a minimum of five NAMBA members will have two votes at a district meeting, to be cast by the club's secretary and/or delegate in person. A representative can only represent one club and cannot be counted as a member of other clubs for membership minimums.
2. Each district will hold at least one annual meeting of its members for the purpose of transacting business pertaining to its district and/or NAMBA organization.
3. At the district meeting, agenda items will take precedence over business presented from the floor.
4. Classes and events will be approved at the district meeting held the prior year.
5. Points received at district points races may, at the option of the district, be doubled.

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Table A

District 1 Delaware Maryland New Jersey New York Pennsylvania Virginia Washington D.C.	District 3 Florida Georgia North Carolina South Carolina	District 6 Iowa Minnesota Nebraska North Dakota South Dakota	District 9 No. California No. Nevada	District 12 Alaska	District 19 Arizona So. California So. Nevada So. Utah
District 2 Kentucky Michigan Ohio West Virginia	District 4 Illinois Indiana Wisconsin	District 7 New Mexico Texas	District 10 Hawaii	District 13 Puerto Rico Virgin Islands	District 20 Colorado No. Utah Wyoming
	District 5 Alabama Arkansas Louisiana Mississippi Tennessee	District 8 Idaho Montana Oregon Washington	District 11 Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	District 16 Canada	District 17 Kansas Missouri Oklahoma



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A. GENERAL AND ELIGIBILITY

1. Any member in good standing, except those of minor age (17 or under), may hold an elected office.
2. An elected officer's term of office will begin November 1 following the election.
3. No NAMBA District Director or National Chairman will also be a Director or National Chairman of another model boating organization, due to the potential conflict of interest.
4. The NAMBA President and Vice-President will hold office for a term of two years, and must have been a District Director for at least one term, but not necessarily immediately prior to taking office.
5. A Director's term of office will be two years. District Directors of odd-numbered districts will be elected in odd-numbered years, and Directors of even-numbered districts will be elected in even-numbered years.

B. NOMINATIONS

1. The Executive Secretary will receive the nominations for all elected offices no later than September 1st.
2. Nominations for President and Vice President will be accompanied by a petition signed by 10 members in good standing and a declaration of acceptance by the nominee.
3. Nominations for District Director will be accompanied by a petition signed by 10 members in good standing from that district and a declaration of acceptance by the nominee. In the event there are not 10 members in a district who can sign the nomination papers, signatures of 50 percent of the members from that district will be required.
4. In the event no nominations are received for an expiring elective office, the incumbent will retain his office until such time as one nomination can be obtained and an election held or a replacement is appointed by the President.

C. ELECTIONS

1. The members of each district may vote for President, Vice President, and the Director for their district.
2. Only members in good standing at the time of the vote will be permitted to vote. All classifications of members will be permitted to vote, including adult members, family members, and junior members.

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3. Members will submit their vote electronically using the NAMBA Membership Portal, or a comparable electronic voting system approved by the Board of Directors.
4. The NAMBA office will receive and compile the votes. The NAMBA office may designate another entity to receive and compile the votes should this be deemed necessary.
5. All voting will end by Midnight PST October 25th.
6. Obtaining a simple majority of all votes cast will be necessary to be elected.

D. VACANCY


1. In the event of the resignation or incapacity of the President to act in his office, the Vice-President will act as President Pro Tem for the remainder of the term. In the event of the incapacity of the President and Vice President to act in their offices, the Board of Directors will elect one of their members to act as President Pro Tem until an election can be held to fill one or both vacancies.
2. In the event that a District Director resigns or is impeached, the President may either appoint a replacement or instruct the Executive Secretary to set up new elections for that office, at the earliest possible time, to fulfill the remaining portion of the term.
3. For any position filled mid-term due to a vacancy, the term will expire at the same time it normally would have had the office been filled in the normal manner.

E. IMPEACHMENT

1. An elected officer may be removed from office in the following manner:
 - a. A petition for impeachment must be signed by at least 20 NAMBA members in good standing (only one signature per family). In the case of impeachment of a District Director all signatures must be from that district.
 - b. The petition must list the reasons, problems, or other violations involved.
 - c. The petition will be filed with the Executive Secretary.
 - d. The petition is then forwarded to the NAMBA Board of Directors. If the Board agrees with the reasons for impeachment, they will authorize the Executive Secretary to conduct a vote, as per the following procedure:
 - i) The Executive Secretary will mail ballots to all members involved (i.e., if it applies to a District Director, the petition and all voting signatures will be from members of only that district). If it applies to the President or Vice President, then ballots will be mailed to all NAMBA members in good standing.

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- ii) Ballots will be returned to the Executive Secretary for tabulation.
 - iii) Ballots will then be sent to the Board of Directors for verification.
 - iv) In the case of a majority vote for dismissal of the officer, the officer will be informed of the results of the vote by the Executive Secretary.
2. The dismissed officer will turn over all funds, an accounting statement of funds received and expended, plus any items such as equipment, hats, patches, etc., that may be in his/her possession.

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A. PRESIDENT AND VICE PRESIDENT

1. Duties

- a. The President will be the presiding member of the Board of Directors. The Vice President will assist the President in his executive duties.
- b. The President will call Board of Director meetings as required.

2. Reimbursement

- a. The President will be allowed up to \$400 per year, and the Vice President up to \$200 per year, to make telephone calls for official NAMBA business, which will be paid upon presentation of telephone bills to the NAMBA office.
- b. The President will be allotted \$1000 toward expenses for attending the NAMBA Nationals. The Vice-President and Executive Secretary will be allotted \$750 toward expenses for attending the NAMBA Nationals. In the event that the President is unable to attend and the Vice President attends in his place, the Vice President will be reimbursed the amount dedicated for the President.

B. DISTRICT DIRECTORS

1. Duties

- a. Have a working knowledge of all clubs in the district.
- b. Act as coordinator of all activities in the district.
- c. Review all contest date requests and resolve conflicting dates within the district.
- d. Have the power to suspend or revoke a sanction at a contest for safety violations, and reinstate it when the situation is rectified. Will submit a complete report in writing to the President on all such threatened or actual action taken at a contest.
- e. Develop and institute a continuous recruitment program for members and clubs, and provide advice for new clubs.
- f. Call at least one meeting per calendar year of all delegates in the district.

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C. ASSISTANT DISTRICT DIRECTORS

1. Duties

- a. Will be appointed by the District Director to assist or to act on his behalf at a contest he cannot attend.
- b. Any Assistant Director so appointed will have the same powers as the District Director.

D. BOARD OF DIRECTORS

1. Members

- a. Will consist of the President, Vice President, Executive Secretary, immediate Past President, and all of the District Directors.

2. Duties

- a. Review/vote on NAMBA business topics not voted on by the general membership.
- b. Withdraw membership from anyone guilty of unsportsmanlike conduct.
- c. Voting power will be limited to one vote per member. A simple majority vote will constitute a Board of Directors decision unless otherwise set out in the NAMBA Official Rule Book.

3. Board Meetings

- a. The President may call Board of Directors meetings at any time deemed necessary, or 1/3 (one-third) of the Board members may request a special meeting. If necessary, such business may be conducted by mail, email, or telephone call. If conducted by mail or email, all members of the Board must receive exact copies of all correspondence.
- b. The annual meeting of the Board of Directors will be held during the NAMBA Nationals.
- c. At a minimum, the President, Vice President, or Executive Secretary will be present during the Nationals meeting. One or two representatives from each district, along with the National Chairmen, are also encouraged to attend.
- d. The Board of Directors will vote on NAMBA business, Nationals rules, Nationals bids, and all NAMBA organization business issues above and beyond the NAMBA general racing rules.
- e. Parliamentary Law will be in accordance with Roberts Rules of Order. The NAMBA Official Rule Book will supersede any such parliamentary law.

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E. EXECUTIVE SECRETARY

1. General and Eligibility

- a. Must be a NAMBA member.
- b. Can not be related to the NAMBA President, Vice President, or any of the District Directors.
- c. Reports to the NAMBA President.
- d. The Executive Secretary will server a twelve month term from November 1st through October 31st.
- e. Must give 30 days notification of intention to resign.

2. Appointment

- a. If the President requests to make a change to the position, the President will submit a candidate's name along with the current Executive Secretary's name to the Board of Directors. The Board of Directors will then vote on who will hold the position.
- b. If no change is requested in a given term the Executive Secretary position will be automatically approved for the following 12 month term.
- c. If at any time the Executive Secretary position is open, the President can assign the Executive Secretary's duties to himself or another Board of Director for up to three months.

3. Salary

- a. Will be paid on a per membership basis as approved by the Board of Directors.

4. Duties

- a. Responsible for running the NAMBA office, including but not limited to membership communications, banking, and day to day communications with insurance carriers.
- b. Receive all correspondence directed to NAMBA and route to the proper officials.
- c. Issue memberships, sanctions, insurance, accept dues, keep records, issue certificates of recognition.

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- d. Give a quarterly financial report reflecting the distribution of all dues and monies received.
- e. Provide a copy of the "Declaration" (summary) page(s) of the NAMBA insurance policy signed by the insurance company to the President and the District Directors each year.
- f. Oversee the development and maintenance of the NAMBA Official Rule Book and web page.
- g. Oversee the production and dissemination of the official NAMBA newsletter, the Propwash.

F. NATIONAL AND DISTRICT CHAIRMEN

1. Appointments


- a. The President will appoint all national chairmen to serve during his/her term.
- b. District Directors will appoint district chairmen from within the district to link the national chairmen to the various districts.

2. Duties

- a. The national chairmen have no vote on the Board of Directors, but will provide facts, attitudes, and advice to the President and Board in order to inform the elected officials of "grass roots" desires from the members who actually take part in the area of question.
- b. The national chairmen are encouraged to attend the annual board meeting to offer specific input prior to voting. The President will consider the chairmen as the link between the elected officials and those members interested in the subject.

G. COMMITTEES

- 1. The President may establish any committee and appoint the members thereon to serve during his term of office as may be required. All persons so appointed must be members of NAMBA in good standing.

 North American Model Boat Association Official Rule Book	Section Name	PUBLICATIONS
	Section #	5
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A. RULE BOOK

1. Each new member will receive a complete printed copy of the NAMBA Official Rule Book when they first join. Second adult and/or junior members at the same address will not receive an additional rule book.
2. The Executive Secretary will update the appropriate sections of the rule book as needed and amended pages will be distributed to each current NAMBA household at least once a year. Duplicate mailings will not be sent to other adult and/or junior members residing at the same address.
3. The web version of the NAMBA Official Rule Book will be updated immediately upon passage of rule changes and/or corrections.

B. NEWSLETTER


1. The official NAMBA newsletter, the Propwash, will be published quarterly insofar as possible and will be distributed to each current NAMBA household. Duplicate mailings will not be sent to other adult and/or junior members residing at the same address.
2. Official NAMBA information published in said newsletter such as records, amendments, etc., will be considered official notification to the general membership.

C. WEB PAGE

1. The official NAMBA web page will be www.namba.com.
2. The web page will be maintained by a person or company hired by NAMBA.
3. The web page will include, but not be limited to, publication of the most up to date NAMBA Official Rule Book, past and present newsletters, a listing of current NAMBA contacts, upcoming events, and current records.

D. MISCELLANEOUS

1. Additional mailings such as Nationals entry forms, ballots, rule book updates, etc. will be sent as needed to the same mailing list that receives the newsletter.

 North American Model Boat Association Official Rule Book	Section Name	NATIONALS
	Section #	6
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A. GENERAL

1. There will be a NAMBA Nationals held each calendar year. It will be a minimum of six-day to a maximum of eight-day meet and offer four rounds per class.
2. An additional NAMBA Electric Nationals can also be held each calendar year, where only electric classes are offered. When held it will be a minimum of three-day to maximum of four-day meet and offer four rounds per class.
 - a. This event will be separated from the NAMBA Nationals by 30 calendar days, unless both event CD's and a majority consensus of the Executive Board decide otherwise.
 - b. When a separate NAMBA Electric Nationals is held, any electric classes offered at the NAMBA Nationals that year will be considered as exhibition only and the winner not be recorded as a National Champion
3. Overall CD, Assistant CD, and all individual event CDs will meet the minimum requirements for a CD as set forth in Section 16 whenever possible. In addition, the District Director for the club or district holding the annual Nationals will certify that these persons are capable of performing the required duties.
4. To be classified as a Nationals a diversified selection of classes will be presented, which will adequately offer as many nationally approved classes that can be run during the event. Emphasis will be made on the classes which are popular in the area/district in which that Nationals is held.
5. Milling procedures will be advertised on the entry form and will be half mill, full mill, or both. One-quarter mill will not be allowed.
6. In case of any controversy involving the Nationals, the Contest Director or President will have the final authority in its disposition.
7. All events, etc. associated with the Nationals will meet all NAMBA requirements.
8. Vendors are not permitted to sell or advertise without the approval of the hosting club/district and payment of the appropriate fee.
9. There must be a minimum of five prepaid entries to make a class, if there are less the class can still be run at the discretion of the host club as exhibition only. In addition to be considered for a national championship there must be at least five boats that attempt to run in round 1 of the class, if less it will be an exhibition class.

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B. BIDS

1. Bids for the next annual Nationals should be received by the President no later than the start of the current year's Nationals.
2. Clubs/districts bidding for the annual Nationals who have never hosted a Nationals should receive preferential consideration.
3. The next NAMBA Nationals will be announced at the current awards banquet whenever possible.

C. FINANCES

1. General

- a. The hosting club/district will remit all single event entry fees and applications to the NAMBA office within 30 days of the end of the Nationals.
- b. Any racer who does not provide adequate funds for payment of entries or fees will be held financially liable and not allowed to compete in any future NAMBA event, district or national, until such debt is paid. This includes bank fees, interest, and any applicable late charges.

2. Loan

- a. NAMBA will provide an interest free loan to the hosting club/district of \$2,000 for use in preparing for the NAMBA Nationals.
- b. Every hosting club/district that accepts the Nationals loan will pay one half back to the NAMBA office prior to the start of the event.
- c. Every hosting club/district that accepts the Nationals loan will pay the balance back to the NAMBA office within 30 days of the end of the event.
- d. If the hosting club/district is unable to repay the loan, they must provide a comprehensive expense report to the NAMBA office within 90 days of the end of the Nationals, to show why they are unable to do so.

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D. SPECIAL CLASS CONSIDERATIONS

1. Scale Unlimited Hydroplane

- a. All unlimited boats entered will have a photograph showing the general configuration and paint scheme of the boat being modeled when it ran.
- b. Any exception to the above must be approved in writing by the National Scale Chairman prior to the event being run.
- c. Any unlimited boat that does not comply with a. or b. above will not be allowed to race and will forfeit the entry fee.

2. Kids "R" Boaters, Too

- a. Because the Kids "R" Boaters, Too class is designed for the beginner with little or no previous model boating experience, entrants in this class will not be permitted to enter any other class at the Nationals.

3. Stock and G-Limited classes

- a. Engines may be torn down and inspected following the conclusion of heat racing on that day. Only the top three finishers may be torn down for inspection. If any of the top three finishers are found to be in violation of rules those finishing below them will be moved up accordingly.

E. AWARDS

1. General

- a. One award will be given per each five entries, always rounding up to the next multiple of five, with a minimum of three awards given in each class. (see chart below for examples)

Number of Entries	Number of Awards
up to 15	3
16 – 20	4
21 – 25	5
26 – 30	6
31 – 35	7
36 – up	etc.

- b. The hosting club/district will provide a list of the top three finishers in each class to the NAMBA office within 30 days of the end of the Nationals.

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2. Kids “R” Boaters, Too

- a. All entrants will receive a trophy that is equally representative in size and quality of the other class awards.

3. Scale Unlimited Hydroplane

- a. Trophies will be awarded to all entrants who qualify and compete in the Unlimited Finals heat (main).

4. High Points Champion


- a. The High Point Champion award, if presented, will be given to the contestant who has accumulated the most points based on all the classes he entered.
 - i) For those classes that run a ‘Love Plan’ (where a concluding round which consist of a Consolation and Main is run) only the points earned in the previous four rounds will be added to the points.
 - ii) No points will be added for participation and/or finishing order for any Team Marathon class.
- b. No contestant may use any points accumulated from any class which he entered after the start of the first heat of the Nationals.
- c. No contestant may use any points accumulated from any class that he has switched names with a fellow contestant in order to increase the number of classes entered.

5. District Club Team

- a. Teams will be limited to a minimum of four and a maximum of eight members. They must all be from the same district. They must be registered as a team before the beginning of the first race.
- b. The entry fee for the team will be \$2 per member.
- c. Districts may enter as many teams as they wish.
- d. The winning team will be the one with the highest average points per boat. Average is determined by taking the total number of points earned by all boats entered and dividing it by the number of boats entered.
 - i) For those classes that run a ‘Love Plan’ (where a concluding round which consist of a Consolation and Main is run) only the points earned in the previous four rounds will be added to the points.

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- ii) No points will be added for participation and/or finishing order for any Team Marathon class.
- e. No team may use any points accumulated from any class which they have entered after the start of the first heat race of the Nationals.
- f. NAMBA will present the District Club Team patch to each member of the winning team.

 North American Model Boat Association Official Rule Book	Section Name	RULE CHANGES
	Section #	7
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A. RULE MODIFICATIONS

1. Non-Racing Rules and Safety Regulations

- a. May be amended by the Board of Directors as deemed necessary to provide for the smooth operation of NAMBA and for the safety of its members as well as compliance with current insurance guidelines.
- b. This action by the Board of Directors can be accomplished by a vote by phone, mail, or email, and may occur at any time during the year.
- c. All board members must be notified of any proposed changes prior to a vote, and must be given ample opportunity to cast their vote. Proposals will be approved by a simple majority of the Board.
- d. Should the Board decide that the change under contemplation has a significant effect on the day to day boating of the members, they may elect to place the item before the membership for a general vote.

2. Racing Rule Additions, Deletions, or Changes

- a. The NAMBA General Membership shall vote by ballot on proposals regarding Racing, Racing related issues, or Competition topics.
- b. Proposed rule changes must be submitted to the District Director in the district in which the submitting member resides.
- c. Upon receipt of said proposal, the District Director will put the matter to a vote within his district. This vote can occur at any time during the year as deemed appropriate by the Director but should be handled in a timely manner. The exact method of said vote can be handled in whatever manner is normally followed for voting within that particular district.
- d. Upon successful passage of the proposal within the district, the district director will forward the proposal to the NAMBA office along with a statement by the District Director that the proposal has passed within his district and that the district desires to have the proposal sent to the general membership for voting.
- e. Proposals may be submitted to the NAMBA office at any time during the year as long as the previous three steps have been adhered to.
- f. After receipt of a proposal by the NAMBA office, it will be sent to the NAMBA Board of Directors. The Board will review the proposal to insure proper wording and consistency with other already existing rules.

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- g. Once the NAMBA Board of Directors has reviewed and approved the proposal, the Executive Secretary will send a copy of that proposal to the appropriate Class Chairman/Chairmen for further review.
 - i) The Class Chairman/Chairmen will review the proposal and determine if it is proper in scope as to being verified and enforced capably.
 - ii) Once the Class Chairman/Chairmen has reviewed the proposal he/they will file a report to the Executive Secretary.
 - (a) If the report supports the rule, the Executive Secretary will send it to the membership for a vote via process described in rule A.2.h below.
 - (b) If the report finds that the proposal cannot be properly verified or enforced, the original proposal along with the report will be sent to the NAMBA Board of Directors for further review. The rule may be then returned to the District proposing the rule change and that District will have the opportunity to revise the proposal and make it workable.
- h. After the Board of Directors and Class Chariman/Chairmen have reviewed the proposal the NAMBA office will send out the proposal to the membership for voting. The proposal will normally be sent out with the next regular mailing of the newsletter, but special mailings may be utilized if deemed necessary. In addition, the proposals and ballots may be made available to the membership by publication on the NAMBA web page.
- i. Members will be given adequate time to receive the ballot, consider the propositions, and cast their votes. Normally a period of 45 days from the date mailed would be considered ample time for this to take place.
- j. Only members in good standing at the time of the vote will be permitted to vote. All classifications of members will be permitted to vote, including adult members, family members, and junior members.
- k. Members will be permitted to return their votes to the NAMBA office by mail, fax, or email as long as it is able to be adequately determined that the vote is coming from a member in good standing and as long as the vote is received by the voting deadline.
- l. The NAMBA office will receive and compile the votes. The NAMBA office may designate another entity to receive and compile the votes should this be deemed necessary.


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B. MEMBER NOTIFICATIONS

1. The NAMBA office will inform the membership of the result of the vote by publication in the next newsletter and by publication on the NAMBA web page.
2. Updated rules will be posted on the NAMBA web page and updated pages of the rule book will be sent as defined in Section 5 - rule A.2.

C. EFFECTIVE DATES

1. Proposals which have been approved will take effect immediately after they are published by NAMBA on the web page or in the Propwash, unless it is deemed by the Board of Directors that such immediate action will have an unfair effect on the members. In such cases, ample time will be given before implementation for the members to comply with the new requirements.
2. New classes will be eligible for inclusion in district and national events as soon as they have been approved by the membership and published by NAMBA. All categories of NAMBA records may be set in these new classes as soon as the rules have officially been implemented.

 North American Model Boat Association Official Rule Book	Section Name	SAFETY
	Section #	8
	Page #	1 of 4
	Revised	3/1/20

A. GENERAL SAFETY REGULATIONS

1. NAMBA members must have their NAMBA numbers on their boats and their backs for easy identification. Minimum number sizes will be 1-1/2" on the back and 1" on the boat, except where noted in specific class rules. R/C Combat ships do not require numbers on boats or members.
2. Every contestant entering NAMBA competition must show proper evidence of current NAMBA membership.
3. Every driver must have a pit person at all times, whether in practice or during a contest, who is also a NAMBA member and who is aware of all course conditions and NAMBA regulations. R/C Combat ships do not require a pit person or separate observer.
4. Only NAMBA members are allowed in the hot pit area. No persons other than those running a boat, those assisting with the running of a boat, or contest officials will be permitted in the pit area. For R/C Combat the pit is defined as the shoreline of the pond/lake. Other specific crowd control requirements are contained in the specific R/C Combat rules listed below.
5. All persons in the hot pit area, those driving a boat, or those launching or retrieving a boat, must at all times wear shoes which cover the entire foot.
6. At NAMBA events, no smoking will be allowed in the drivers stand area or hot pit area. The hot pit area is defined as the area where boats are started and launched.
7. At NAMBA events, the host club will provide a fire extinguisher in the hot pit area. The hot pit area is defined as the area where boats are started and launched. It is the Contest Director's responsibility to insure that the fire extinguisher is in place, readily available, and meets the following requirements. The fire extinguisher must be at a minimum BC rated and legally operational.
8. No alcoholic beverage consumption or illegal drug use is permitted while a NAMBA member is operating or assisting in the operation of a model boat, whether in practice or during a contest. Use of these substances by contest officials is also strictly prohibited.
9. Reasonable and proper provisions will be made for crowd control and for the safety of other members and spectators. Model boats will not be operated when anyone is in the water, except for those members who may be in the launch area in the hot pit area to launch or retrieve a boat. R/C Combat members may be in the water under certain circumstances. See specific rules regarding this in the specific R/C Combat rules listed below.

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- a. Anyone operating a radio controlled model boat in an area designated for swimming (such as a swimming pool, wading pool, and/or public beach) when people and/or animals are in the water (except as noted above) will forfeit NAMBA membership and will be barred from rejoining NAMBA for a period of 60 months.
10. No buoys will be set on the course closer than 50 feet to any shoreline. This may be reduced to 30 feet when the adjacent shoreline is such that a boat cannot travel more than its own length out of the water. This rule does not apply to R/C Combat.
11. A retrieve boat may not be in the water at any time when a model boat is running in the water. For R/C Combat, all other combat ships must stop and/or clear the area while another ship is being retrieved. They do not need to be removed from the water.
12. All rules, laws, ordinances, and regulations of any federal, state, county, and/or municipality will be observed at all times.

B. BOAT/RADIO OPERATION SAFETY REGULATIONS

1. No boat which has been run aground will be permitted to re-enter the water until the driver has demonstrated to the contest officials that the boat has not been damaged to the point where it might not operate safely. This rule does not apply to R/C Combat.
2. No boats will be started on tables or in the working pits with prop attached, unless it is properly shrouded and protected from accidental contact. No boats will be started in the working pits and then carried to the launching area.
3. Method of propulsion will be of the type that functions by propeller contact with the water or air. Air prop driven boats will be limited to "1/2 A" or "A" class engines only, see Section 10 – rule A.1. Boats propelled with air props must have the prop shrouded, and must have an underwater rudder or skeg of at least one inch square. Inertia reaction devices such as rockets or jets are prohibited.
4. A positive means of engine shut-off and/or positive throttle control is required of all boats.
5. Radio on/off switches will be positioned in such a manner as to prevent accidental shut off if bumped during handling, launching, or running.
6. Boats will have some means of positive buoyancy when open compartments are filled with water. Boats should only be retrieved by means of a retrieve boat or use of a retrieve ball. Under no circumstances should a person swim or dive to retrieve a boat. R/C Combat boats are designed to sink and must not have positive buoyancy. All other combat boats must stop and/or clear the area while a R/C Combat boat is retrieved.
7. The maximum size of boat will be 60". R/C Combat ships are not restricted in size.

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8. The maximum allowable weight for any boat shall not exceed 35 pounds. Any class may have its own maximum or minimum weight requirements as long as the maximum weight does not exceed 35 pounds. The 35 pound weight limit is “ready to run” before fuel or gas is added. This weight limit applies to all boats except legal R/C Combat classes. A boat can be weighed at the discretion of a club official, contest official or through the protest process already defined by NAMBA rules in Section 16 - rule G.
9. A frequency board will be provided if any contestant has entered an event using a frequency other than non frequency determinate radios (such as 2.4GHz radios). All frequency determinate transmitters will have the appropriate pin attached any time they are transmitting. During practice running, members are responsible for the safe operation of their radio equipment, including checking for conflicting frequencies before turning on transmitters


C. R/C COMBAT SPECIFIC SAFETY REGULATIONS

1. Safety shields and/or safety glasses are required for all combatants and guests.
2. Gun safety devices (such as barrel pins or shut-off valves/switches) are required to render the guns inoperative when they are in the working pit area or otherwise not engaged in combat or combat preparation.
3. The primary (unregulated) CO₂, HPA or Nitrogen supply vessel, whether refillable bottle or disposable cartridge, and any components between the CO₂, HPA or Nitrogen supply and the regulator, as well as the regulator that controls the pressure from the primary CO₂, HPA or Nitrogen supply vessel, must be commercially manufactured. In addition, if any part of the gas system after the regulator exceeds 200 psi, then those components must be commercially manufactured also.
4. The combat area (pond) and some area (dependant upon terrain features) around it should be sectioned off so that spectators can be controlled and kept within safe areas.
5. The by-laws and constitution of the specific club involved in the event may apply additional safety requirements as required.

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D. DISREGARD OF SAFETY REGULATIONS

1. Disregard of these safety regulations will cause the loss of insurance eligibility for the member should an accident occur. Disregard of these safety regulations can also result in the member being ejected from an event by the contest officials, or can cause the member to lose use of a particular racing site.

 North American Model Boat Association Official Rule Book	Section Name	INSURANCE
	Section #	9
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	Revised	1/18/16

A. GENERAL

1. NAMBA insurance is provided to members upon payment of the appropriate fees.
2. NAMBA membership provides coverage for the calendar year. It is not prorated.
3. Single event members are covered to the same extent as full members during the event for which they have paid the single event membership fee.

B. LIABILITY AND PROPERTY DAMAGE INSURANCE

1. NAMBA insurance provides the member with \$1,000,000 per occurrence/\$2,000,000 aggregate in liability and property damage coverage in the event that they should be involved in an accident in which a spectator is injured or damage is done to a NAMBA insured site. NAMBA insurance also includes a \$1,000,000 umbrella policy to provide additional coverage per occurrence.
2. NAMBA property damage insurance does not cover damage done to another model boat in the normal course of running.
3. NAMBA liability insurance is primary coverage.
4. NAMBA liability insurance is for both the individual member and the owner of insured sites. To ensure coverage, NAMBA members may only participate in running boats at NAMBA insured sites.
5. NAMBA liability/property damage insurance is in effect any time a member is running a boat at a NAMBA insured site, not just during sanctioned events, as long as the member is observing all the NAMBA safety rules.
6. A member is not covered under NAMBA insurance when participating in an event which is sanctioned by another organization which also provides liability and property damage insurance for its members. This restriction applies whether this other insurance is of a primary or secondary nature.
7. NAMBA liability/property damage insurance has a \$500 deductible. This deductible may be paid by NAMBA.

C. PERSONAL ACCIDENT INSURANCE


1. NAMBA personal accident insurance provides a member with a \$500,000 personal accident policy which covers injuries which may occur while running a boat or while assisting someone else with their boat.

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2. NAMBA personal accident insurance is secondary insurance. The member must utilize any other health or accident insurance that they have available before the NAMBA insurance can be accessed.
3. NAMBA personal accident insurance has a \$100 deductible. This deductible may be paid by NAMBA.

D. SITE INSURANCE

1. Additional site insurance is available to protect the owner of the running site with the same coverage as is afforded the individual member under the liability/property damage policy.
2. NAMBA site insurance provides insurance for, and names as an additional insured, the site owner only when the accident involves a NAMBA member.
3. Site insurance may be obtained by a registered NAMBA club by completing the appropriate form and sending it with the applicable fee to the NAMBA office.

 North American Model Boat Association Official Rule Book	Section Name	ENGINES
	Section #	10
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	Revised	5/28/13

A. ENGINE CLASSIFICATION

1. Internal combustion glow engines:


<u>Class</u>	<u>Displacement</u>
1/2 A	0 - 2.115 cc (0 - 0.129 cu.in.)
A	2.116 - 3.509 cc (0.130 - 0.214 cu. in.)
B	3.51 - 7.509 cc (0.215 - 0.458 cu. in.)
C	7.51 - 11.009 cc (0.459 - 0.671 cu. in.)
X	11.01 – 35.000 cc (0.672 – 2.136 cu. in.)

2. Internal combustion spark engines - see Section 27

3. Electric Motors – see Section 28

B. NOISE ABATEMENT

1. All boats must meet a maximum of 95dB measured by a dB meter placed 50 feet back from the shoreline.
2. For correct readings there should be no obstructions between the meter and the shoreline, the meter should not be set up under an awning or overhang, and the meter should not be handheld.
3. It will be up to the discretion of the Contest Director to disqualify a boat from a heat in which a boat was measured over 95 dB, or allow the driver to make the appropriate changes so as to meet the noise limit, and continue in the next heat. If the boat exceeds the 95 dB limit in the subsequent heat the driver will be disqualified, and be awarded zero points for both heats in question.

 North American Model Boat Association Official Rule Book	Section Name	HULLS
	Section #	11
	Page #	1 of 2
	Revised	6/30/19

A. GENERAL

1. All hulls will be classed in one of two basic hull classifications: Monoplane or Hydroplane. Once a hull has been classed, no non-permanent modifications can be made to change its basic classification. Within each basic classification, specialty sub-classes may exist with specific design characteristics, limitations, and additional rules (found elsewhere within the NAMBA Official Rule Book). Examples of specialty classes are as follows:

Monoplane

Deep Vee
Crackerbox

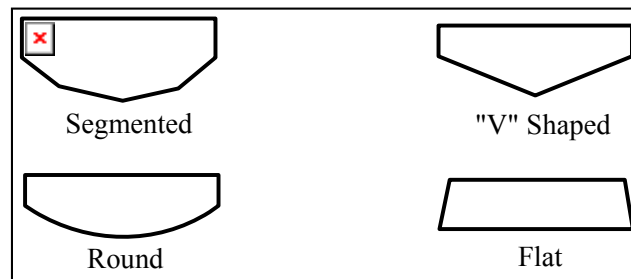
Hydroplane

Scale Unlimited
Sport
Tunnel

2. Specialty classes may compete within their basic classification as well as their specialty class.
3. The maximum hull length will be 60 inches. Any reference in this section regarding hull length does not include hardware (i.e. strut, rudder/bracket, trim plates, turn fin, tuned pipe, stub shaft and propeller).
4. Protests of hulls will be handled in accordance with Section 16 - rule H.

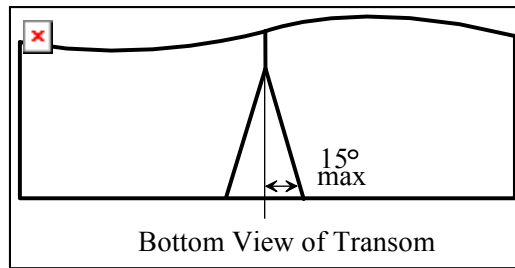
B. MONOPLANE HULL

1. A hull that has a single riding surface at planing speeds (i.e. predominately rides on the keel line or surface). The riding surface cross section may be flat, "V" shaped, segmented, or round as long as it incorporates the following design characteristics and doesn't exceed any of the dimensional limitations.

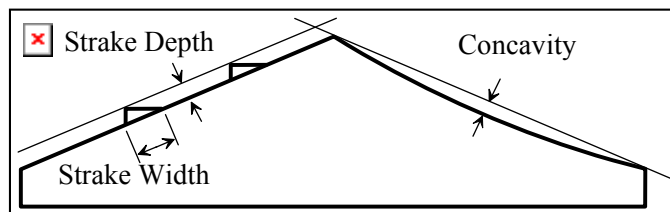


2. A hull which has no lateral side-to-side breaks, discontinuities, or steps in the wetted surface running at more than a 15° angle with the keel (in bottom view).

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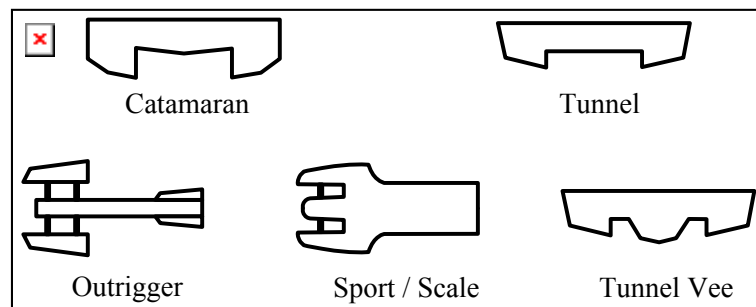


3. No point on a hull cross section will be below the keel line or surface. (Prop shaft logs, turn fins and ride plate fins, i.e. hardware, excepted)
4. Concavity – When checked with a straight edge at right angles to the keel at any point between the transom and the mid-point of the hull length, no depression, step or concavity will exceed the dimensional limits for strakes.
5. Strakes - Regardless of the type or purpose, must conform to the following rules:
 - a. Strakes will be no more than 3/4" wide and 5/16" deep. For hulls over 46" long and a beam width over 15", strakes will be no more than 3/4" wide and 1/2" deep.
 - b. Strakes that extend into the area between the transom and the mid-point of the hull length must be parallel with the keel.



C. HYDROPLANE HULL

1. If a hull does not meet the requirements to be classified as a monoplane then it is automatically classified as a hydroplane. Examples of hydroplanes:





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A. GENERAL

1. Radio control, commonly known as R/C, will be defined as a method by which a model boat is operated.
2. All radio equipment will be in accordance with and operated in compliance with rules and regulations of the communications governing body (FCC).
3. There will be no discrimination between types of radio control; single, multi, and proportional will run in the same class.

B. FREQUENCIES

1. It is the responsibility of the individual member to insure that the frequency requirements are met.
2. The following are legal for R/C boat operation:
 - a. 27 MHz:

Frequency	Color	Channel
26.995	Brown	1
27.045	Red	2
27.095	Orange	3
27.145	Yellow	4
27.195	Green	5
27.255	Blue	6

- b. 50 MHz – The following require an FCC amateur license:

Frequency	Channel
50.800	RC00
50.820	RC01
50.840	RC02
50.860	RC03
50.880	RC04
50.900	RC05
50.920	RC06
50.940	RC07
50.960	RC08
50.980	RC09

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c. 53 MHz - The following require an FCC amateur license:

Frequency	Color	Channel
53.100	Black / Brown	B1
53.200	Black / Red	B2
53.300	Black / Orange	B3
53.400	Black / Yellow	B4
53.500	Black / Green	B5
53.600	Black / Blue	B6
53.700	Black / Purple	B7
53.800	Black / Gray	B8

d. 75 MHz – The following must be narrow band:

Frequency	Color	Channel
75.410	Blue / Brown	61
75.430	Blue / Red	62
75.450	Blue / Orange	63
75.470	Blue / Yellow	64
75.490	Blue / Green	65
75.510	Blue / Blue	66
75.530	Blue / Purple	67
75.550	Blue / Gray	68
75.570	Blue / White	69
75.590	Purple / Black	70
75.610	Purple / Brown	71
75.630	Purple / Red	72
75.650	Purple / Orange	73
75.670	Purple / Yellow	74
75.690	Purple / Green	75
75.710	Purple / Blue	76
75.730	Purple / Purple	77
75.750	Purple / Gray	78
75.770	Purple / White	79
75.790	Gray / Black	80
75.810	Gray / Brown	81
75.830	Gray / Red	82
75.850	Gray / Orange	83
75.870	Gray / Yellow	84
75.890	Gray / Green	85
75.910	Gray / Blue	86
75.930	Gray / Purple	87
75.950	Gray / Gray	88
75.970	Gray / White	89
75.990	White / Black	90

e. 2.4 GHz ISM (80 channels)

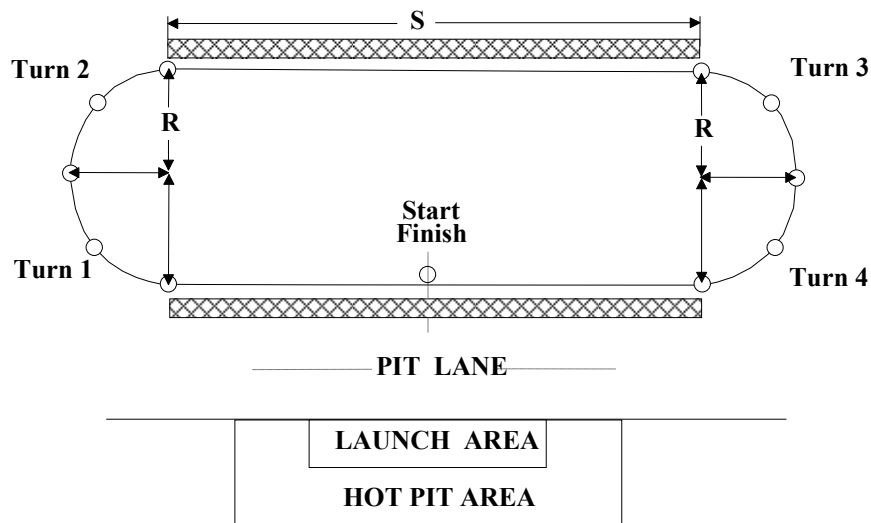
	North American Model Boat Association Official Rule Book	Section Name	OFFICIAL COURSES
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A. BUOYS

1. Buoys will be any object non-injurious to boat hulls such as styrofoam or plastic that floats at least 50% out of the water, is clearly visible, brightly colored (red, orange, or yellow), and securely fastened to their position. In no event will a buoy be less than six inches or more than 12 inches in diameter. Buoys must float a minimum of five inches above the water.

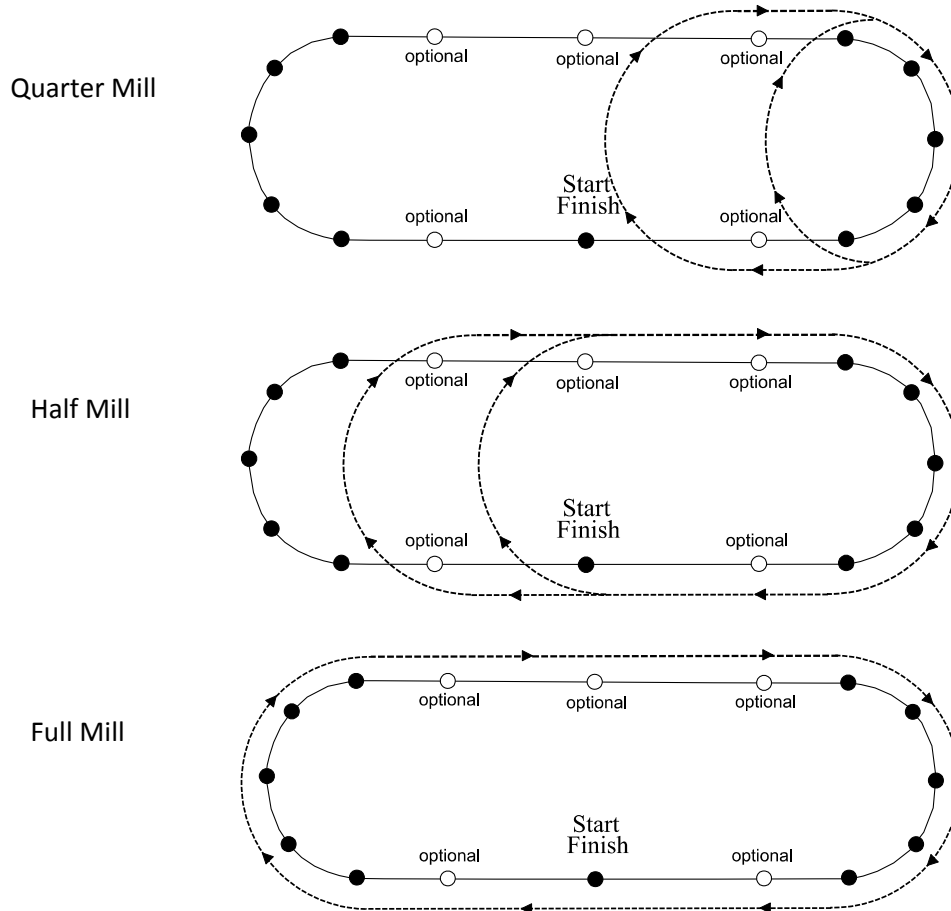
B. TERMINOLOGY

1. The area between the shore and the front straight is known as the pit lane. This lane should be considered present during all events, whether marker buoys are set up or not and the drivers entering or leaving the launch area are encouraged to drive their boats in this lane.
2. The shaded area between the turns will be referred to as the front and back "straights" or "chutes" respectively.
3. The section within the course marker buoys is referred to as "within the course" or as the infield.
4. The buoys at each end of the straights/chutes are referred to as the "entrance buoys" of the turns. The buoys at the beginning of the straights/chutes are referred to as the "exit buoys" of the turns.



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5. Mill patterns will be Quarter, Half, Full, or a combination of these (see diagrams below).



C. REGULATION COURSES

1. General

- a. The course will be defined and measured as follows:
 - i) There will be a minimum of three laps required in the total race distance for all classes.
- b. The turns will be clockwise and be defined as follows:
 - i) Turns of 90 degrees and 135 degrees which have a 15 foot to 30 foot radius must be marked by a minimum of two buoys. Radius turns of 30 feet or larger must have additional buoys to a maximum of five being used to adequately define the turn.

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- ii) Turns of 135 degrees or more will be marked by a minimum of three buoys for radii between 15 feet and 30 feet. For radii over 30 feet, additional buoys to a maximum of five to adequately define the turn will be used.
 - c. A legal course for NAMBA Heat Racing and Oval Time Trial records must be either one in which each buoy is surveyed and placed in a fixed position, or one which is measured and has the straightaway marked by a solid fixture on each end. This fixture can either be on the water or on two sides of the lake so that a line can be drawn across to set the straightaway end positions. The radius will then be measured from these fixed straightaway end positions, and will apply to all turn buoys. The lines or devices that are used for measuring will be at the site during a race in the event that anyone should desire to verify the measurements or placement of a buoy.
- 2. One Mile - Six Lap Record Course
 - a. The course will be one mile in total length for all classes.
 - b. The course will be six laps for all classes.
 - c. The radii used when establishing this course will not exceed 50 feet or be less than 15 feet.
 - d. Five buoys will be used to define the turn, except on 15 foot radii turns which may use three buoys.
 - e. When optional straightaway buoys are used, a maximum of three buoys will be used for each straightaway.
- 3. Other Courses
 - a. There may be special courses listed within specific class/racing type sections (e.g. electric, offshore, etc.). See individual sections for details.

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D. COURSE MEASUREMENT

1. Mathematics of course

Course length **C** = number of laps **N** x lap length **L**

Lap length **L** = 2 x length of straight **S** + total length of turns **T**

Total length of turns **T** = $\text{Pie} \times (2 \times \text{radius of turn } \mathbf{R} + \text{buoy width } \mathbf{B})$

Radius of turn **R** (to center of buoy)

2. Formulas

a. Length of course

$$C = N \times ((2 \times S) + 3.1416 \times (2 \times R + B))$$

b. Length of straight

$$S = .5 \times ((C / N) - 3.1416 \times (2 \times R + B))$$

c. Radius of turns


$$R = .5 \times (((C / N) - (2 \times S)) / 3.1416) - B)$$

d. Examples

One mile - Six lap course (all measurements in feet):

$$5280' = 6 \times ((2 \times 318.12') + 3.1416 \times (2 \times 38.42' + .75'))$$

Course length (C)	Laps (N)	Turn Radius (R)	Buoy Width (B)	Straight (S)
1 mile (5280')	6	15'	6" (.5')	392.1'
	6	30'	9" (.75')	344.6'
	6	38.42'	9" (.75')	318.12'
	6	50'	9" (.75')	281.74'
	6	50'	12" (1')	281.35'

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A. GENERAL

1. Records will be established for each hull type and engine class in each approved event.
2. Will be open to all legal NAMBA classes.
3. NAMBA will recognize only records made at sanctioned record trials and sanctioned racing events.
4. To be eligible for record recognition, the contestant must be a member in good standing. This includes single event members.
5. NAMBA reserves the right to withhold or withdraw recognition for any record at any time, upon proof of falsification or error.
6. Speed conversion of record times to equivalent statute miles per hour will be the responsibility of the contest officials.
7. Records must be applied for using the official NAMBA record forms. It the responsibility of the contest director to have these forms available at the event.
8. Individual record forms are available for both electric and nitro/gas. Forms are available on the NAMBA web page or from the NAMBA office.
9. Application for recognition of records must be accompanied by the signature of three judges, one of whom may be the Contest Director, and one of whom must be from a club other than the sponsoring club. All judges must be NAMBA members in good standing.
10. Any member applying for a record will notify the CD immediately following the boat's record breaking run. The CD or his designate will seal the engine in question, At the end of the race day, the engine will be subject to an engine displacement inspection. If the seal has been broken or removed prior to the inspection, the record will be disallowed. If the engine, or engines, is found to be out of the limits set forth in the rule book for that class, or if the record-breaking driver will not submit his engine for inspection, the new record will be disallowed.
11. When applying for records, the District Director or his/her appointed alternate from the district in which the contest is held must:
 - a. certify the course is in compliance with regulation course requirements;
 - b. provide the course specifications - radius and straight-away;
 - c. have a device(s) which meet timing equipment requirements.

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B. TIMING EQUIPMENT REQUIREMENTS

1. The device or devices used to time record runs will be, in all cases, capable of measuring the run to the nearest 1/100th second. Devices capable of measuring runs to a small fraction of a second may also be accepted. But no device of any kind will be accepted for record purposes unless it is listed by NAMBA as an approved timing device. All timing equipment must meet specifications set up by the Record Chairman, copies of which will be furnished upon request.
2. Special timing equipment considerations may apply to specific record types as specified in individual sections.
3. Timing equipment specifications must accompany the first sanction application for record trials and/or racing competition.

C. RECORD TYPES

1. Heat Racing
 - a. Set during regular heat racing events on the six lap - one mile course.
 - b. Must comply with regulation courses, as described in Section 13.
 - c. The course must be "legal" as defined in Section 13 - rule C.2.
 - d. The Start Time will commence at the expiration of course or Mill Time and such time will end when the lead boat in the heat completes the required number of laps.
 - e. All Contest Directors should time the lead boat and the time recorded, as the potential for a record to be set is available during every heat race.
 - f. Time may be determined using hand held stopwatches.
 - g. All records set in this category will expire three years from the date the record was set, due to the inherent inaccuracies in hand held equipment.
2. 1/16th Mile Straight-line
 - a. A 1/16th mile straight-line speed will be for a measured distance of 1/16th mile (330 feet) and will consist of an average of two consecutive passes through the course. These two passes must be made on a continuous run, with no physical intervention by the operator or any other persons between such passes. It is thus required that the craft execute at least a 180 degree turn between passes.

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b. Timing Equipment Specifications

- i) The device or devices used to time and record 1/16th mile straightaway record runs will be automatic infrared equipment, and will be capable of timing to the nearest 1/100th second
- ii) The equipment used to trigger the timing equipment must have the differences between the trigger points, when tracking from opposite directions, of no more than four feet when checked at a distance of 300 feet. In addition, the measured difference for each piece of tracking equipment will be within plus or minus six inches of each other. Example: at 100 MPH, the boat will cover 1.47 feet in 0.01 seconds, thus the plus or minus six inches will still give accurate results even at this speed.

c. Any 1/16th mile straight-line record which has been set on a NAMBA legal course using fixed infrared sights coupled to digital automatically actuated timing devices will not be removed from the books after a three year time period.

d. For record purposes, a lake must have a minimum of 300 feet clear for shut off and for acceleration and must be certified.

e. Pit Time

- i) Starting and launching time, otherwise known as Pit Time, will be determined by the host club with a two minute minimum. Pit Time will commence upon a signal from the starting judge.

f. Engine Starting

- i) If the engine of the contestant's boat is running at the expiration of Pit Time and the boat is up off the starting stand, the boat will be permitted to be launched. If a contestant has failed to start the engine in the allotted Pit Time, failure to start will be considered as a run and will be recorded as scratched on the time sheet.

g. Running Time

- i) Speed running time will commence when a boat is released from the pit and will not exceed five minutes.

3. Two Lap Oval Time Trials


- a. At the Contest Director's discretion, Pit Time and Run Time will be a minimum of five minutes.

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- b. Two-lap 1/3 mile oval record attempts will consist of two consecutive laps around a standard six lap – one mile course, as described in Section 13 – rule C.2. These two laps must be made on a continuous run with no physical intervention by the operator or any other person between laps. A cut buoy(s) during a lap will disqualify the lap. Contestants may make as many laps as possible in their allotted time.
- c. To be recognized as an official record, all two lap 1/3 mile records must be measured by use of infrared equipment. No records will be set if timed by the use of manually operated scanning devices or stopwatches.
- d. Any record which has been set using fixed infrared sights coupled to digital automatically actuated timing devices will not be removed from the books after a three year time period.

D. AWARDS AND RECOGNITION

1. Any person whose boat sets a NAMBA record will be given his signed record application and is responsible for sending it to the NAMBA office accompanied by the designated fee within two working days after the meet. It is the responsibility of the contestant to verify that the record application is correctly completed in ink or indelible pencil. Record applications sent anywhere other than to the NAMBA office may be delayed.
2. Record applications which are not submitted on the appropriate form or are missing the necessary signatures will be denied.
3. Upon receipt of the completed record application, the Executive Secretary will update the appropriate record listing. Periodic updates of all records will be posted on the web page.
4. Any record applicant who so desires may, with the payment of the applicable fee, request an engraved record shield to commemorate the record. The Executive Secretary will send all record applications to the Records Chairmen for preparation of the record shield.

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A. GENERAL

1. A sanction is a protection to the contestants and an assurance that the rules and regulations of NAMBA will be impartially enforced.
2. A sanction is an authorization or approval of a certain event which binds the holders of the event to comply with NAMBA rules and regulations, and guarantees that the result of said event will be recognized as official.
3. Sanctions must be accompanied by the appropriate fee, and be on proper forms.

B. NATIONALS

1. No other sanction is to be issued during a Nationals or the week after. Exceptions may be granted with the approval of the Board of Directors. In an effort to facilitate scheduling, the dates for a Nationals should be determined as soon as possible.


C. DISTRICT

1. District sanctions will be granted only for holidays or weekends so that all members may have a chance to attend.
2. In general, sanctions will be limited to one per year, per club for races for district points, with dates spaced to ensure optimum attendance. Exceptions to this limit may be granted by the District Director.
3. It will be customary to protect a club's race dates in subsequent years if said club has fulfilled all sanction obligations.
4. Sanctions will not be granted on the same dates for events within such distance of each other that the sanctioning officials have reason to believe that the success of either contest or race might be jeopardized. Sanctioned district point contests will take precedence over all others.
5. Sanctions will be granted when approved and signed by the District Director and sent to the NAMBA office not less than 90 days prior to a contest, insofar as possible. Exceptions to this may be granted at the discretion of the District Director. Sanctions for a district points contest must be applied for prior to January 1 of the year in which it is to be held.

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D. OTHER

1. Sanctions for record trials only will be granted by the Executive Secretary not less than 30 days prior to event.
2. Sanctioned club contests or other special events will be defined as a race or series of races where prizes or awards are given to competitors for participation in a race in accordance with the general racing rules of NAMBA.

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A. RACE OFFICIALS AND DUTIES

1. General

- a. All race officials will have competed in the event/contest they are to manage before being qualified for these positions wherever possible.

2. Contest Director

- a. The Contest Director must be a NAMBA member in good standing.
- b. The Event/Contest Director is the primary official of an event or contest. Their duties and responsibilities include, but are not limited to the following:
 - i) ensuring that all contestants understand the event by conducting a driver's meeting 15 minutes prior to the start of the event/contest;
 - ii) fair and expeditious progress of the event;
 - iii) smooth and efficient pit operations;
 - iv) accurate entry and result tabulations and accounting;
 - v) resolving arbitration arising over the interpretation of rules, starts, retrieval of boats, and assessments of penalties and/or disqualifications;
 - vi) disqualification of a contestant for unsportsmanlike conduct when necessary.

3. Assistant Event/Contest Director

- a. The Assistant Event/Contest Director is the alternate to the Event/Contest Director. Their duties and responsibilities include, but are not limited to the following:
 - i) constant monitoring of the orderly and timely progression of the contestants and/or races in the hot pit area;
 - ii) ruling on the start and finish of each run/race;
 - iii) starting Pit Time and starting clock on signal from the Pit Manager.

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4. Pit Manager

a. The Pit Manager is responsible for the overall management of the hot pits. His duties and responsibilities include, but are not limited to:

- i) maintaining a checklist of contestants in the designated pits and informing the contest officials of missing entries;
- ii) insuring that only drivers and their helpers/pit crews are in the Hot Pit;
- iii) calling for the Pit Time;
- iv) constant monitoring of the boat traffic in the Pit Lane and ruling on infractions.

5. Course Judges/Referees

a. Course Judges/Referees will be responsible for the constant monitoring of their assigned course area/boat and note infractions of the rules and procedures. They will have competed in the event/contest they are to judge/referee before being qualified for this position wherever possible. Their duties and responsibilities include, but are not be limited to:

- i) noting the infraction, the lap number and boat(s) involved;
- ii) judging the severity of the infraction and assessing a just penalty, if necessary, under these rules;
- iii) informing the proper contest official of the infractions immediately;
- iv) constant monitoring of his assigned part of the course for unnatural obstacles or hazards (i.e., cans, paper, sticks, plastic bags, etc.) and for alerting the proper official.

B. SCHEDULING OF RACES/HEATS

1. Drawing for races will generally be done by random selection of compatible frequencies and with no regard to specific entries, contestants, and/or boats. Some types of racing, however, require special techniques which may be followed at the discretion of the contest officials.
2. During the course of a race, when the number of boats in any scheduled heat has been reduced to one or two boats, the Contest Director may move the remaining boats to another heat barring frequency conflict.

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3. The contestant is responsible for notifying the contest officials for their event in case of "back-to-back" races involving his entries and will receive a maximum of five minutes for "get ready" purposes.
4. There must be a minimum of three prepaid entries on compatible frequencies to make a class and/or race.

C. ENTRY LIMITATIONS AND QUALIFICATIONS

1. Contestants will be limited to one entry per hull/engine class at each sanctioned event, as to not increase their chances of winning an award or trophy in the class.
2. There shall be no switching of hulls in a class during a sanctioned event regardless of the circumstance (i.e. hull damage, current water conditions, etc.) after the start of round 1. For outriggers, the sponsons are not considered part of the hull and thus can be changed.
3. Two or more entrants may not race the same hull in the same class.
4. There will be no proxy entries in R/C competition unless the contestant is physically handicapped or aged. No proxy driver may enter a boat in the competition in which he is proxying. Proxy drivers must be members of NAMBA.

D. FREQUENCY CHANGES

1. Contestants will be held responsible for the correct frequency of their entry and the contest official will not be responsible for rescheduling, rearranging, or juggling of scheduled heats due to incorrect frequency on entry forms, unless such rescheduling is done at the discretion of the contest officials.
2. Frequency changes due to equipment failure will receive sympathetic treatment provided:
 - a. the proper contest official is notified immediately upon discovery of the necessity of a change and the frequency to which it will be changed;
 - b. that the entry has not been called to a stand-by status.

E. PRACTICE RUNNING

1. There will be no "open water" periods during the contest as all practice running will be controlled by a contest official. Procedures for controlled practice and test operations will be left to the discretion of the sponsoring club, but the following procedures are recommended:
 - a. Water or course time will be limited by the contest officials.

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- b. Only boats of compatible speed and maneuverability will be allowed on the water at one time.
- c. All practice running will be in a clockwise direction around the course set on the water at that time, boats may utilize the water available provided each "pass" is on the proper side of the course.
- d. Boats that obviously do not need practice may, at the discretion of the contest official, not be allowed to run, (i.e., boats that have finished their event).
- e. During open water, all drivers must have a pit person to call hazards and ensure proper safety during operation of a model boat.

F. DRIVERS' MEETINGS

1. Drivers' meetings will be held prior to each event or at any time the contest officials may deem necessary. It is the contestant's responsibility to attend these meetings.
2. A primary purpose of the drivers' meeting is for interpretation and clarification of rules and procedures, and any questions regarding said rules should be asked at this time.
3. Once an event is underway, the contest officials should not be distracted from their duties by questions that could or should have been asked at the drivers' meeting.

G. INSPECTIONS

1. The Contest Director has the authority to implement pre-race and/or spot inspections as they see fit on hulls and engines.
 - a. Engine inspections can only include visual inspections and/or inspections performed by removing the spark/glow plug and using an instrument to check stroke.
 - b. Hull Inspections may use various measuring tools as required.
2. If a racer is to be found to be in violation of rules, they can be disqualified for the remainder of race in the class where the violation occurred. All points earned in that class will be null and void. If a disqualification occurs, no other racer will move up in heat race position to receive additional points. For example: If a racer took 1st place in a heat and was disqualified, the 2nd place racer would not move up to 1st place.

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H. PROTESTS

1. In all sporting events, situations develop that require judgment calls or decisions on the part of contest officials and all such decisions made herein will be final and may not be protested.
2. Continued verbal protests, harangues and/or other abuse, either direct or indirect of any contest officials will be considered unsportsmanlike conduct and will be just cause to bar that contestant or crew person from any further participation in that contest.
3. All protests for engines and hulls must be accompanied by a \$25 protest fee. If the protest is found to be invalid, \$10 will go to NAMBA and \$15 will go to the owner of the protested boat. If the protest is found to be valid, the fee is to be returned to the protester.
4. A protested hull or engine will be measured by a committee made up of the Contest Director, the District Director or his authorized representative present at the event, and one other NAMBA member other than the protester or owner of the protested engine or hull. Measurements will be made in the presence of the owner and results thereof will be made known in writing and signed by each member of the three person committee and be forwarded with their decision to the Executive Secretary, the Board of Directors, and the President of NAMBA.
5. A protested hull or engine will be allowed to run in the event(s) entered. However, any points, records, places, etc. won will be held pending the resolution of the protest.
6. Protests on the legality of a boat's engine will be done after the 4th round of the class. A boater that has an engine under protest will be allowed to complete the racing for the day.
7. Protests on the legality of a boat itself, will be done prior to the start of the 2nd round. When the 2nd round of racing begins, the opportunity to examine every boat in that class will have occurred, thus allowing the CD the opportunity to determine if it meets the minimum requirements to continue.
8. A protest of any kind must be made at the contest so all factors can be available.

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I. AWARDS

1. The members of NAMBA will be allowed to accept merchandise, merchandise gift certificates, and trophies as competitive awards. Any NAMBA member can receive earned racing awards. However, the awarding of district points will be left to the discretion of the district in which the race is held. Cash and cash equivalent awards are not permitted.
 - a. Examples of cash equivalent awards would be but are not limited to: pre-paid debit cards, money orders, cashier's checks, and other items that are directly redeemed in cash.

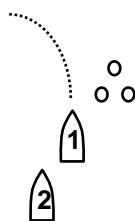
 North American Model Boat Association Official Rule Book	Section Name	DRIVING RULES AND REGULATIONS
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A. GENERAL

1. Each contestant must have one helper to assist in pit handling of a boat. A second helper may be used in order to assist in starting. Once the boat is launched, the second helper must promptly leave the hot pits.
2. Contestants must remain within the specified area when competing.

B. DRIVING ETIQUETTE

1. Driver safety will be defined as the necessary techniques for running a race so that all boats may compete fairly with maximum assurance of finishing safely and without damage. Mastery and application of these techniques, even though the driver is separated from the boat, are the very essence of competitive skill (as in real racing) and will go far in increasing the pleasure and challenge of model racing competition. Driving a model boat should require the same care, precaution, and consideration for safety as is necessary in driving a life size boat, where lack of these factors could result in physical injury as well as boat damage.
2. The following techniques are illustrated and are either suggested or mandatory techniques in racing as noted:
 - a. In using a lane of travel around the course, do not follow the wake of the boat ahead. If its engine quits, the boat following could ram due to lack of coasting of a boat without power. This is a suggested rule and not grounds for a driver infraction.
 - b. Never go left on the course unless on obvious grounds of acute emergency or directed by a contest official. Left corrections are necessary and may be required for as much as 30-45 degrees from the path of the course. A left turn into the course of more than 45 degrees is grounds for an infraction and any left turn endangering another boat will automatically draw an infraction.



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- c. Right-of-way is maintained by the driver closest to the course outline as in Section 17 - rule B.4. Passing is permitted anywhere on the course with this in mind.

	<p>Driver #1 has chute. Driver #2 and #3 are attempting to over- take improperly. Infraction.</p> <p>Driver #2 is in trouble because, being within the course he will have to block #1 to keep from touching a buoy.</p>
	<p>Driver #2 is overtaking properly.</p> <p>If a driver passes and stays in his lane and does not attempt to take over the next inner lane, he is acting properly.</p>
	<p>These same procedures pertain to the turns: #2 is asking to be penalized. Note that #1 is being forced into the buoy to avoid possible collision.</p>
	<p>#2 is clear. #1 is not being forced into the buoy</p>
	<p>In this instance, the driver in the chute (or any lane) abandons it by turning too wide allowing another driver to take over the lane on a pass with a shorter turn.</p> <p>#2 at point X has the right of way.</p>

- d. Launching or releasing a boat requires it to be released as much in the direction of the course as possible, unless otherwise directed by the contest officials.
3. A boat operating in a lane of travel around the course has the right to maintain that lane of travel without undue interference. Any boat desiring to pass in order to choose an occupied lane of travel must establish a reasonable safe interval before gaining that right.

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4. In racing, the natural lane of choice is the lane nearest the course outline. This lane will have the right-of-way over other lanes of travel and will take precedence over Section 17 - rule B.2.c.
5. The above right-of-ways also apply in the turns.
6. Good driving techniques and sportsmanship decree that a relatively straight course be driven. Fishtailing, "s" turns, or other such tactics to prevent or hinder an overtaking boat are prohibited.
7. Violations of right-of-way will draw a driver's infraction.
8. A driving infraction that results in another boat to not finish that heat, will result in the offending driver being disqualified from that heat and receive zero points.

C. BOAT OPERATION GUIDELINES

1. Normally drivers enter into a race with all systems operable and with firm control of their boats. Frequently, however, a driver after launching or during a heat will discover that he is having difficulties in steering due to a fault with radio, servo, linkage, or other gear. This could cause other boats to be destroyed, run ashore, and otherwise damaged. Such practices will not be tolerated in any NAMBA sanctioned event.
2. It will be the driver's responsibility upon experiencing any sign of inability to control his boat while on course to immediately notify the Pit Manager and at the first opportunity bring the boat to shore while any vestige of control exists. His first action will be to attempt to steer the boat away from the active part of the course, or if possible, to another part of the water. The Pit Manager will then warn other drivers and officials when possible.
3. Should a boat show erratic, random, or other behavior indicating possible control problems, a contest official will warn the driver. Should the behavior continue, the boat will be ordered off the course and given points for a "Did Not Finish."
4. Should a driver, after showing marked signs of control inability, and after being warned and given opportunity to leave the course, not comply with the order to cease operation, he will be banned from participation in any further heats and be given zero points for the heat in question.
5. A driver experiencing control problems will not be allowed to enter another heat unless he can demonstrate that the problem has been corrected.
6. Should a driver re-enter a heat after establishing controllability and should he continue to show erratic operation, his aimless maneuvers will be termed inability to drive properly and he will be ordered from the course.

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D. PENALTIES

1. General Penalties

- a. A driver who accumulates three "driver infractions" or "buoy infractions" will be automatically ordered off the course and awarded a "Did Not Finish."


2. Driving Infractions

- a. A driver's fault or infraction will be called by the designated contest official should any driver operate a boat in violation of the general racing rules of NAMBA or in an unsafe manner as outlined above.
- b. Driver infractions will be penalized as follows:
 - i) Normally, an infraction will draw a penalty of one extra lap over those required to complete the heat.
 - ii) Should the infraction be of a serious enough nature as to endanger others (boats, contestants, spectators) or a flagrant violation of these rules (in the opinion of a contest official) the offender may be ordered off the course and disqualified from that event. This disqualification would result in all the points for the offending driver being taken away for the event and them not being able to continue racing in the event.
 - iii) All infractions must be called within one lap of their occurrence to have a penalty assessed against the driver.
 - iv) If a driver hits a called dead boat, that driver will be disqualified for that heat and will receive zero points.
 - v) If a driver finishes a race and then hits a dead boat. that driver will be disqualified from that heat and will lose the points which he has earned for that heat. The remaining drivers, if any, will not advance a position when they finish the heat. The points that the offending driver lost due to the disqualification will not be awarded to the next driver who finishes.

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3. Buoy Infractions

- a. A one lap penalty will be assessed when a boat cuts inside a course marker or when the boat jumps over or makes an obvious hit on a buoy. No penalty will be assessed for a boat that touches a buoy on the outside causing no damage or displacement.
- b. A one lap penalty occurs when one or more buoys are cut on a turn or when a straight-away marker is cut. Offending boats must yield right-of-way to others on the course when re-entering.
- c. Lap penalties will be assessed during Pit Time, Mill Time, and Race Time. If a buoy is cut after the boat has finished its part of the race, then the boat will receive a 100 point reduction in earned points in the heat. If the driver has completed the heat in 5th, 6th, 7th or 8th place, he will be awarded 50 points for that heat.
- d. Buoy infractions will be called by a duly named official and any decision made will be final.

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A. GENERAL

1. An R/C model powerboat heat will consist of the simultaneous scheduling of two or more boats for a race. The number of heats constituting a race is determined by the number of entries and time available, however, a minimum of three rounds is required with ties to be broken by the fastest time.

B. HEAT RACING PROCEDURES

1. Each heat race will consist of three distinct phases:
 - a. Pit Time
 - b. Clock Time or Mill Time
 - c. Course Time or Race Time
2. The heat starts with the first phase: a two-minute period or Pit Time for starting engines, launching and releasing boats. A starting clock, placed in full view of all drivers (or and adequate audio system) and requiring no less than 30 seconds to complete one sweep, will be started. If all boats are on the water you can go onto the 30-second clock with drivers approval. Contestants will mill on the course in a designated milling pattern until the end of Clock Time. Drivers should pace their boats during Clock Time so as to arrive at the starting line at full throttle simultaneously with the expiration of the Clock Time which constitutes the start of Course Time.
3. There must be a minimum of three prepaid entries on compatible frequencies to make a class and/or race. There will be no more than eight boats in one heat.
4. Heat racing records can only be set at and during NAMBA sanctioned heat races.
5. At any time during the event, the Contest Director may move contestants in a particular class with no bias to fix unbalanced boats per heats due to scratches and/or no shows. This includes the combining of small heats into one, as long as the combined heat is similar in size to any remaining heats for that class in that same round.

C. PIT TIME

1. A Pit Time of two minutes is allowed for the starting of all engines and to allow all boats to be launched.

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2. If no entrants have started engines and are under way at the expiration of Pit Time, the heat will be declared “No Contest”. All drivers will be awarded zero points, a DNS.
3. Boaters who are in the hot pits will not be permitted to pre-start their motors prior to the start of Pit Time. Once the heat is in progress, boaters that did not get started and boaters not participating in that heat will not be permitted to start their motors in the hot pit area.

D. CLOCK TIME (MILL TIME)

1. Clock Time will be initiated at the expiration of Pit Time and no boats may be launched or released after commencement of Clock Time.
2. Milling procedures during Pit Time and Clock Time:
 - a. Boats on the course awaiting the expiration of Clock Time will follow the mill pattern in a clockwise direction and around the course buoys in the specified milling pattern, to be set at the discretion of the contest officials (see Rule 13.B.2). Not following the mill pattern will draw a driver infraction with a one lap penalty being assessed.
 - b. During the last five seconds of Clock Time (aka "committed"), all boats must adhere to the lane they are currently established in. They must maintain a straight course or established lane if in a turn. Zigzagging, "S" turns, or fishtailing to delay crossing the start line will draw a driver infraction with a one lap penalty being assessed. Boats will not cut thru the course (continue milling course) during the last 5 seconds to delay in jumping the start or a 1 lap penalty will be assessed. During mill time boats can be assessed a lane infraction for blatant lane violations as described in Rule 17.B.3, regardless of boat speed.

E. COURSE TIME (RACE TIME)

1. Course Time will commence with the expiration of Clock Time and will not exceed five minutes. Any boat not completing the required number of laps in this time will receive a DNF and be ordered off the course.
 - a. The exception to this is where there is active racing between two or more boats, and adverse course and/or weather conditions exist that would prevent normal racing speeds for most boats in that class. In such cases at the sole discretion of the CD, “Course Time” may be extended to eight minutes

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F. START

1. The expiration of Clock Time signifies the start of the heat regardless of the position of entrants and also starts timing of the heat.
2. Boats crossing the start line prior to the expiration of Clock Time will be ruled as jumping the gun and will be required to complete an extra lap, (i.e.. complete a circuit of the course and re-cross the start line for a legal start).
3. A heat may be considered officially started when one boat legally crosses the start line at the termination of Clock Time. If no boat legally crosses the start line, all drivers will be awarded zero points, a DNS.

G. THE RACE

1. Laps are counted with the first crossing of the start line counted as zero and with each consecutive crossing of this line counted as an additional lap until the required number of consecutive laps are completed. This constitutes the finish of the race. The first boat to legitimately complete the final lap is declared the winner.
2. In the event that no boat finishes the required number of laps, the heat will be considered complete and will not be re-run. All boats that have legally started the race will get 25 points, a DNF.
3. Following an official start, the course will be run clockwise (right-hand turns) for the required number of laps to designate a heat. In order to be counted as legitimate, a clean lap must be run without penalty. Laps may be counted legitimate after penalty has been assessed and cleared.
4. The Course Time will not be considered a "right" to remain on the course. The contest officials may order a boat(s) off the course any time after completion of the race by the winning boat. Boats travelling at reduced speed, but obviously capable of finishing the required laps, will be awarded points according to their position at the time they are ordered off the course. If, in the judgement of the contest official, boats remaining on the course are incapable of finishing the race, they will be ordered off the course and scored "Did Not Finish."

H. RE-STARTS AND RE-RUNS

1. Since each boat must cope equally with the same probabilities for all circumstances (course obstacles, radio interference, shoring or collisions etc.) in any given heat, no re-runs or re-starts will be allowed, unless the safety of the drivers, contestants, or spectators are in jeopardy.

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I. HEAT DELAYS


1. It will be the policy of the contest officials to maintain a sympathetic and helpful attitude toward contestants and their problems in the conduct of a race, and will do their utmost to help drivers with their problems. The contest official should be notified immediately of any major equipment problems discovered by the contestant before reaching the hot pits. Re-scheduling may be done if, in the discretion of the contest official, it is advisable and fair to all other contestants.
2. Delay or cancellation of Pit Time will not be allowed under any circumstances other than course problems and will be called by the proper contest official.

J. POINTS AND AWARDS

1. Boats will score and accumulate points in order of their finish positions according to the following table:

1 st Place - 400 points	6 th Place - 96 points
2 nd Place - 300 points	7 th Place - 72 points
3 rd Place - 225 points	8 th Place - 54 points
4 th Place - 169 points	Did Not Finish (DNF) - 25 points
5 th Place - 127 points	Did Not Start (DNS) - 0 points

2. At the discretion of the individual district, contestants will carry over points toward the year end champion either as determined by their overall class finishing position (for example, the first place finisher for the day carries over 400 point for the year end totals) or by the total points earned in the class for that day.
3. Points will be awarded in order of finish and the entries then placed in order of total accumulated points for the ultimate class and race results.
4. In case of point ties, the boat with the fastest heat time will take precedence.
5. A boat that fails to complete the heat due to the actions of another boat, that results in the disqualification of the offending boat, will receive 4th place points (169 points). This rule will be in effect from the beginning of Pit time until the end of Course time (Race Time). This does not affect the place of finish or points awarded to other boats finishing the heat.

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A. GENERAL RULES

1. Outboard racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Outboard racing rules will prevail.

B. RACE FORMAT

1. The format of the race will be left to the discretion of the Contest Director.

C. ENGINE SPECIFICATIONS

1. General

- a. An outboard motor is defined as a complete internal combustion power and propulsion unit that can be attached to and removed from the hull as one unit.
- b. The outboard will be the single means of controlling the direction of the boat.

2. Stock

- a. Stock class engine rules are designed to forbid the racing of special, experimental, or custom built engines regardless of whether or not they qualify under the other sections of these rules.
- b. A manufacturer of outboard motors for NAMBA stock outboard racing is one who is responsible for the original design and manufacture of the following: crank shafts, connecting rods, cylinder heads, pistons and sleeves, crank cases, drive shafts, drive shaft housing, swivel and stern brackets, propeller shafts, and who has complied with any other requirements which are provided for in these rules.
- c. No motor will be eligible for NAMBA outboard racing until such time as the motor has been advertised for sale to the general public and is available for purchase through retail dealers for national distribution.
- d. Stock class engines as referred to in these rules are defined as outboard engines which are:
 - i) Manufactured in quantities greater than 500 units.
 - ii) Intended for sale to and to be used by the general model boater.
 - iii) Advertised through the same media and in the same publications and given the same prominence as the manufacturers of other engines.
 - iv) Distributed through the manufacturer's normal channels.

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- e. For the stock classes, the engine's parts must remain as originally manufactured for that brand, size, and style engine. No modifications are permitted. Interchanging of parts from one series or edition to another is legal as long as the parts used were made by the manufacturer of the engine and were used on their outboard engines.
- f. No replacement parts for current production motors will be considered as a standard production part until this part appears on the current production motors which can be purchased through normal channels.
- g. Motor changes and/or modifications may be made to enhance safety and reliability and, except as otherwise provided for herein, they will not be made to enhance performance. The following changes and/or modifications are permissible:
 - i) The use of Loctite or longer replacement bolts with locking nuts to secure carburetors, steering arms, or servo savers.
 - ii) After market or homemade carburetor linkages (arms).
 - iii) Return springs for carburetors or exhaust throttles.
 - iv) Replacement of stock hinge plate to accommodate after market engine trim assembly.
 - v) Any type of flywheel nut may be used.
 - vi) Any type of prop nut may be used.
 - vii) Any type of steering arm may be used.
 - viii) Servo savers may be used.
 - ix) Cowlings, shrouds, or painting of the engine case to resemble full-sized outboard engines will be allowed to promote a more scale-like appearance.
 - x) The lower unit may be externally polished or painted, but must otherwise remain unchanged from the prop shaft housing up. However, the skeg may be trimmed, thinned, shortened, or removed. The skeg may not be lengthened or widened.
 - xi) A single hole will be allowed for the specific purpose of lubrication of the flex shaft and/or PTO bearing. This hole must be located on the lower unit along the shaft line but will not be allowed to enter the exhaust cavity.
 - xii) The plastic flex shaft tube may be replaced with a metal one.

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xiii) Glow plugs and propellers by any manufacturer may be used.

xiv) Any fuel brand or mixture is permissible.

xv) The use of radio controlled remote needle valves is permissible in addition to the stock needle valve.

h. Any other changes and/or modifications, including the use of external after market parts or accessories to include, but not be limited to, on board glow plug igniters (glow drivers), not specifically permitted herein, are considered illegal and will result in disqualification from that class for that event with all points taken away in that class.

i. Effective in January 1993, the AMPS engine was no longer allowed to compete in any of the stock classes. However, these engines are still considered legal for the modified outboard classes.

3. Modified

a. Modified class engines must meet general outboard engine specifications and the engine classifications as defined in Section 10 - rule A.1.

D. HULL SPECIFICATIONS

1. Any hull currently recognized by the existing NAMBA Official Rule Book will be eligible for outboard racing. At the discretion of the Contest Director, all hull classes may be run together. At the Contest Director's discretion, such classes may be run under either stock or modified engine rules.

2. The outboard racing class called Model Outboard Performance Craft Tunnel (OPC), was established to race model outboard tunnel boats that resemble those participating in Outboard Performance Craft Tunnel races as sanctioned by the American Power Boat Association.

3. Tunnel hulls will be of a tunnel configuration with no restriction as to size, weight, or type of construction. A hull will be classified as a tunnel if it meets the following requirements:

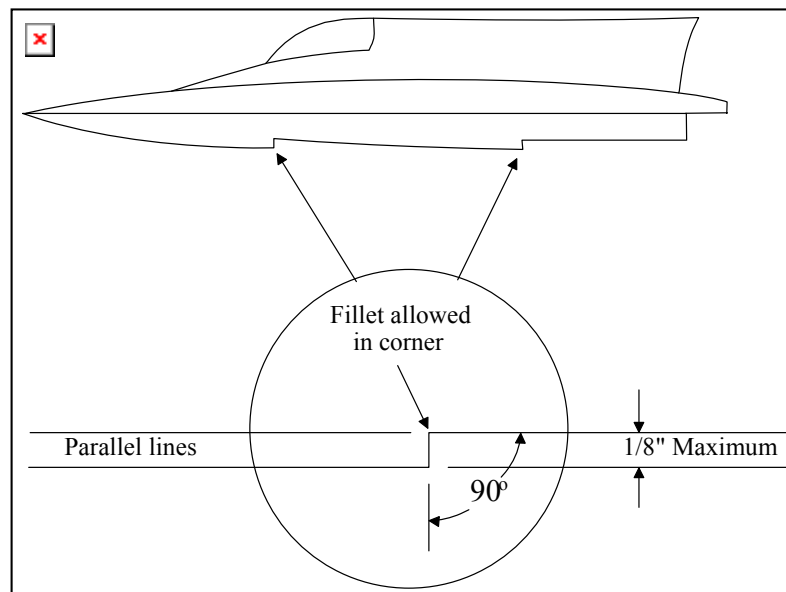
a. The general design of the tunnel hull should follow as closely as possible to the design of the full sized OPC tunnel hulls.

b. The hulls will be stand-off scale, with no restrictions as to canted sponsons, tunnel dihedral, air traps, strakes, stern stabilizing fins, etc.

c. Imaginative painting, striping, company logos, and lettering schemes may be added and are encouraged.

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- d. A close to scale driver with at least the head and shoulders must be provided unless proof of a reclining driver is offered as in OPC hulls. Boats without drivers must be painted to include a darkened windshield to resemble a closed-in cowl appearance.
- e. The tunnel may be of any design, width, or depth, but must run the full length of the hull.
- f. The tunnel must connect two outer hulls or sponsons which are unbroken and must also run the full length of the hull. Picklefork designs are acceptable. Outrigger configurations are not acceptable.
- g. Sponsons may be of any design and may include stepped surfaces on the wetted running sponson bottom of not more than 1/8" in depth. The 1/8" steps may not be less than 5" apart if used across the sponson. Only one step may be used if used lengthwise on the sponson.



- h. No hull will be allowed to have a recessed or picklefork bow which exceeds 30 percent of the overall boat length. Airslots in the center hull must be subtracted from the overall hull length.

E. SPECIALTY CLASSES

1. Quarter Scale Tunnel

a. General Rules

- i) The class will utilize all existing outboard tunnel rules unless otherwise specified.

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b. Hull Specifications

- i) Minimum hull length will be 44 inches.
- ii) Steps on the riding surfaces will not exceed 1/4 inch.


c. Engine Specifications

- i) Any engine from and including .67 (11cc) through 1.8 (30 cc) will be permitted. Multiple engines will be permitted.
- ii) There will be no restrictions as to either stock or modified engines.
- iii) Engines will use nitro fuel. No gasoline engines will be permitted.

F. OUTBOARD RECORDS

1. Outboard records can be set in the following hull types:

- a. Stock Tunnel
- b. Modified Tunnel
- c. Outboard Mono
- d. Outboard Hydro
- e. Outboard Deep Vee

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A. GENERAL RULES

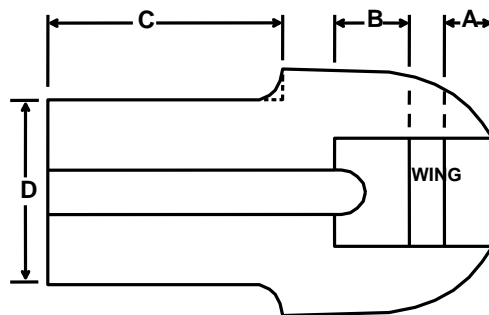
1. Sport Hydroplane racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Sport Hydroplane racing rules will prevail.
2. Boats will be checked for appearance prior to racing or at any time during the event.
3. Any boat not passing the technical inspection will be disqualified and forfeit the entry fee for that race.
4. A driver of scale like appearance must be used and must be of shoulder height except where a boat has an enclosed cockpit design. In this case, a visible driver will not be needed as long as a simulation of a windshield is part of the paint scheme.

B. BOAT SPECIFICATIONS

1. The boat may be purchased ready built, modified from an existing hull, or scratch built from any suitable material generally used in model boat construction.
2. The deck, cockpit, tail, or fin configuration may be changed to keep boats interesting.
3. Hulls must be of Unlimited and/or Limited design, with all riding surfaces (drive train and prop not included) in front 50% of hull length.
4. The boat must be attractively painted in the spirit of Limited or Unlimited inboard hydroplane racing. Each boat must have a sponsor's name or logo affixed to the hull. The sponsor may be of the builder's choice: a hobby shop, gas station, local business, fictitious sponsor, etc. The boat must have the driver's NAMBA number on it preceded by the letter "U, UL, GP, J" or any other limited or unlimited inboard hydroplane racing designator past or present used by a major full sized sanctioning body such as but not limited to the APBA. The number can be on the hull or tail. In cases where the boater uses the real Unlimited Hydroplane's "U" number, the driver's NAMBA number must appear somewhere on the visible portion of the boat in numbers at least 1/4" in height.
5. There will be no exposed tuned pipes allowed. Tuned pipes will be covered by a deck, a cowl, or an exhaust shroud. That portion of a tuned pipe which is confined to the engine compartment will be exempt.
6. Engine compartment covers and fake engines are not mandatory. Driver's cockpit, cowls, and tail fin sections are mandatory.
7. Outdrive assemblies will be allowed.

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8. No twin rudders are allowed.
9. No twin propellers will be allowed, unless otherwise specified in specific class rules.
10. No boat will have an after plane greater than 60% of the total length of the hull.
Length "C" will be measured from the transom to the point where the sponson is attached to the hull (Figure 1).
11. In determining width "D", the rear sponson width will not be included in the minimum measurement (Figure 1). The minimum tub widths will be as shown in Table 1.
12. On pickle fork hulls length A plus B (Figure 1) must not exceed 25% of total hull length, unless otherwise specified in specific class rules.



(Figure 1)

(Table 1)

Class	Tub Width (D)
Sport 12	4"
Sport 21	4"
Sport 40-I, II	5 1/2"
Sport 60	7"
Sport X	7 1/2"

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C. CLASS SPECIFICATIONS

1. Sport 12 Hydroplane

- a. The class will be named Sport 12.
- b. Minimum hull length will be 24”.
- c. The engine must conform to Class 1/2 A specifications, see Section 10 - rule A.1

2. Sport 21 Hydroplane

- a. The class will be named Sport 21.
- b. Minimum hull length will be 27”.
- c. The engine must conform to Class A specifications, see Section 10 – rule A.1.

3. Sport 40 Hydroplane

- a. Minimum hull length will be 35”.
- b. Engine Specifications
 - i) Division 1
 - (a) 5.74 to 6.56 cc (.35 to .40 cubic inch), front intake, side exhaust, no full wave tuned pipes. Speed control must be by rotating barrel carburetors. Carburetor bore diameter is limited to 7.67 mm (.302”) for all engines except for non-schneurle ported engines, which may use rotating barrel carburetors of up to 7.92 mm (.312”) bore diameter. All carburetors must have needle valve and/or fuel discharge nozzle extending into the carburetor bore for a minimum of 3.04mm (.120”).
 - (b) The carburetor will be physically and dimensionally checked. Winning boats may be checked at the completion of day’s racing. If infractions are found, the boat will be disqualified and the next boat moved up.
 - (c) A visual inspection by a race official for compliance to these rules will be made any time during the event. Boats not complying with rules will not be allowed to run until corrected.

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ii) Division 2


(a) The engine must conform to NAMBA Class B Specifications, see Section 10 – rule A.1. Tuned pipes are allowed.

4. Sport 60 Hydroplane

- a. The class will be named Sport 60.
- b. Minimum hull length will be 42”.
- c. The engine must conform to Class C specifications, see Section 10 – rule A.1.
- d. Hulls must either meet rule B.3 in this section, or be models of past or present American Power Boat Association Unlimited Hydroplanes that are listed on the R/C Unlimited Hull Roster. However, they may be painted as specified in rule B.4 in this section.
- e. Any boat, which normally competes in the Unlimited Hydroplane class will be permitted in the Sport 60 class.
- f. Rule B.12 in this section does not apply to this class.

5. Sport X Hydroplane

- a. The class will be named Sport X Hydroplane.
- b. Minimum hull length will be 40”.
- c. The engine must conform to Class X specifications, see Section 10 – rule A.1.
- d. The use of twin props and drives will be permitted.

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A. GENERAL RULES

1. Scale Unlimited Hydroplane racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Scale Unlimited Hydroplane racing rules will prevail.
2. The purpose of the class is to duplicate the unlimited class of hydroplanes as closely as possible.
3. The National Scale Unlimited Hydroplane Chairman will coordinate and communicate the business of Scale Unlimited Hydroplane competition with the individual district Scale Unlimited Hydroplane Chairmen.
4. The Scale Unlimited Hydroplane Contest Board will be made up of the National Scale Unlimited Hydroplane Chairman and a representative from each NAMBA district. The Scale Unlimited Hydroplane Contest Board reserves unto itself the power of decision in all matters of duplication or conflict.
5. It is the responsibility of the Contest Director to ensure that the spirit of racing an Unlimited Hydroplane boat is enforced. Some examples that may not be allowed include: adding weights to the top of the hull, removing undamaged parts/features, or entering a boat that has not been painted to conceal prior damage.

B. RACE FORMAT

1. At the discretion of the Contest Director, races will be run either under the NAMBA Heat Racing format or the “love plan” which is run as follows:
 - a. The event must consist of four preliminary rounds of heats and one final round of concluding heats. The concluding round of heats must consist of one final heat sometimes called the “main” and may include a maximum of two semi-final heats sometimes called the “semi-main” and/or “consolation/trophy” heats.
 - b. The division of boats into heats for the four preliminary rounds will occur by random draw. The drawing of boats into heats for round one will occur immediately following the driver’s meeting and before heat racing begins. A drawing of boats into heats for rounds two through four will occur in the presence of owners and drivers, if possible.
 - c. The boats with the highest points after the four preliminary rounds will be eligible for the final heats. The number of boats eligible for the final heats is six. If a frequency conflict exists between two or more boats eligible for the final heats, preference goes to the boat that has accumulated the most points in the preliminary rounds, or to the boat with the fastest time should a tie in

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points occur. The other boat will have the option to change to any other available frequency.

- d. After the final field has been set, the next lower boat will be designated as an alternate starter for the final heat should one of the boats in the final heat field fail to start.
- e. After the final heat field has been set, the boats not qualified for the final heat will be used to fill the “semi-main” and/or “consolation/trophy” heat(s).
- f. The outcome of any of the “semi-main” and/or “consolation/trophy” heats will not affect the overall standings or points for the day.
- g. Final race standings will be determined by order of finish in the final.

C. HULL SPECIFICATIONS

1. All boats will be models of past or present Unlimited Hydroplanes that are listed on the Scale Unlimited Hydroplane Master Hull Roster.
2. Boats are to be built on a scale of 1½ inches equals 1 foot of the actual boat (1/8th Scale).
3. The true scale dimensions of any Scale Unlimited Hydroplane will be derived from the unlimited dimensions listed on the Scale Unlimited Hydroplane Master Hull Roster. Boats will measure within the following tolerances of the true scale size, excluding appendages.
 - a. Overall Length ± 1 inch
 - b. Beam.....± 10%
 - c. Maximum Depth.....± 10%
 - d. Afterplane Length (three point design).....± 10%
 - e. Tunnel Width.....± 10%
4. Boats will be painted, configured, and detailed like the actual unlimited as it ran on the water. The acquisition of documentation validating a paint scheme, cowling configuration, engine configuration, or other scale details will be the responsibility of the boat’s owner. Photographs of the boat are an acceptable form of documentation.
5. Boats will enter competition complete with cowlings(s) and driver(s). If any of the removable parts fall off the boat during competition, except as a result of a collision, that boat will be awarded no higher than sixth place points in that round upon completion of the heat. This penalization only affects the points that are awarded and not the finishing placement of the boat which incurred the infraction. The placement of and points awarded to other boats in the heat are not affected by this ruling.

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6. The boat's engine, tuned pipe and muffler must be concealed within the boat as well as possible while not deviating from scale appearance. Scale engine cowls, fake engines, painted screen, etc. are permitted.
7. The number of props and rudders will coincide with that of the original full sized unlimited hydroplane.
8. Outdrive units and outdrive engine(s) are prohibited unless the full sized boat after which the boat is being modeled had an outdrive or outdrive engine(s), in which case the model must be configured like the full sized boat.
9. The propeller drive dog may extend one drive dog length beyond the transom.
10. The boat bottom/sponson profile will be the same general appearance as that of the full sized unlimited hull it represents with the following exceptions:
 - a. Sponson riding surfaces may be modified.
 - b. Propeller shafts may be articulated.
 - c. Rudders and skid fins may be configured and located as desired.

D. ENGINE SPECIFICATIONS

1. The engine must conform to NAMBA Class C specifications, see Section 10 – rule A.1.

E. MASTER HULL ROSTER

1. The Scale Unlimited Hydroplane Master Hull Roster will contain the name and details that identify each boat that may be built for Scale Unlimited Hydroplane competition. It will contain the principle dimensions of each boat that is listed, if known.
2. The National Scale Unlimited Hydroplane Chairman will be responsible for compiling, interpreting, updating, and distributing the official Scale Unlimited Hydroplane Master Hull Roster. The official Scale Unlimited Hydroplane Master Hull Roster may be purchased for \$5 and must be signed and dated by the National Scale Unlimited Hydroplane Chairman. He will make an updated roster available by January 31st of each year. The updated Master Hull Roster will be posted on the NAMBA web page.
3. Boats must meet the following criteria to be placed on the Scale Unlimited Hydroplane Master Hull Roster:
 - a. The full sized boat must have been registered with an unlimited hydroplane racing association.

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- b. The registered boat must have made at least one verifiable test run in the water.
4. The Scale Unlimited Hydroplane Master Hull Roster will include the name, address, and telephone number of the National Scale Unlimited Hydroplane Chairman, all District Scale Unlimited Hydroplane Chairmen, and all known manufacturers, builders, photographers, plan makers, etc. which are helpful in building Scale Unlimited Hydroplanes.

F. SCALE CONCOURS JUDGING

1. All boats are to be judged from six feet off (stand off scale). A picture must be supplied to the contest director for each boat entered in the concours judging.
2. To be eligible for the Concours Award, the boat must be at least start in one heat race with its appearance/configuration as presented at the Concours Judging. No substitution or replacement of cowl, fake engine, wing(s) or other scale items will be allowed.
3. Judging will be based upon a point system as follows:
 - a. Documentation
 - i) 0-20 points - Photograph(s)/Presentation
 - ii) General Appearance
 - iii) 0-10 points - Workmanship
 - iv) 0-10 points - Engine, exhaust, and radio gear concealment
 - b. Detail
 - i) 0-10 points - Engine/cowl detail
 - ii) 0-10 points - Driver detail
 - iii) 0-10 points - Cockpit detail
 - c. Paint Job, Markings, Etc.
 - i) 0-10 points - True colors
 - ii) 0-10 points - Scale of markings, decals, lines, numbers
 - iii) 0-10 points - Overall finish

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G. SPECIALTY CLASSES


1. Vintage Unlimited

a. General Rules

- i) The class will utilize all existing Scale Unlimited Hydroplane rules unless otherwise specified.

b. Hull Specifications

- i) Boats will be a round nose or similar hull with no picklefork, wings, or outrigger hulls allowed.


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A. ENDURANCE

- 1) An endurance (Enduro) race will consist of a minimum of two or more boats simultaneously running a prescribed course for a specified length of time to be no less than 1/2 hour. The number of entries will be determined only by compatible frequencies in order of entry.

B. RULES

- 1) Any boat not running on the course at the end of 1/2 hour is ineligible for a finish position higher than any boat still running, regardless of their respective lap counts. Finish positions will be awarded to the boats completing the most laps and running on the course at the end of the 1/2 hour. The lower finish positions will be awarded to those boats not running at the end of the 1/2 hour, also based on the number of laps completed. A boat must be running at least the last minute of the race.
- 2) At five minutes prior to the start, all entrants must have boats in the hot pit area assigned. Engines cannot be started, or attempted to be started, in the 30 seconds prior to the start.
- 3) The race will start on signal. Contestants may then start engines and enter the course, Le Mans style. The race will end on signal exactly the prescribed length of time later. The contestant must run at least one lap in the first five minutes of a 1/2 hour enduro, ten minutes for all others longer.
- 4) Driving will be in accordance with all NAMBA Rules of Racing.
- 5) One pit stop is required during which the engine must be shut down and fuel added.
- 6) Unlimited equipment repairs and parts replacement is allowed, provided the original hull and frequency remains the same.
- 7) Records for 1/2 hour enduros will be kept, with longer enduros records being set up as needed. For record purposes, a course must be set up and measured in accordance with Racing Rules courses, must be certified as to length, and must be on a one mile - six lap course.
- 8) Entries will be placed in the order of receipt of compatible frequencies. The first entry on a given frequency will be in the first race, the second entry on the same frequency will be in the second race, and so on.
- 9) Where possible entries will be classed according to engine size then drawn at random for subsequent races.
- 10) Should time allow after all entries have competed in one race, all entries will be drawn at random for subsequent races.

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A. GENERAL RULES

1. Deep Vee racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Deep Vee racing rules will prevail.

B. RACE FORMAT

1. The start will be a “Le Mans” style start. No engine will be started before the beginning of the time period. A one lap penalty will be assessed if an engine is started within 30 seconds prior to the start of the heat.
2. The time period of the event must be in increments of five minutes (i.e., 5, 10, 15 minutes). The time period being used must be clearly stated in the pre-race flyer or entry form.
3. Events may be conducted with or without mandatory pit stops. The pre-race flyer or entry form must state which way the event will be conducted. If pit stops are required, the engine must be stopped and then re-started in the hot pits.
4. As per the NAMBA Safety Regulations, there will be no retrieving of boats by the retrieve boat while there is any boat running on the water.
5. Total laps will be counted to the nearest 1/4 lap. The winner will be determined by the most laps completed.
6. The type of course may be irregular, M type, or the standard NAMBA one mile six lap course.
7. Deep Vee records must be set on the one mile six lap regulation course.

C. HULL SPECIFICATIONS


1. The angle of the V bottom must be a minimum of 16 degrees and a maximum of 28 degrees measured at the transom.
2. The angle at the bottom of the keel line must be a V from transom to bow. No flat pads are permitted on the keel line.
3. The intersection of the bottom and the side at the chine must not exceed 125 degrees measured at the transom.
4. Longitudinal bottom strakes may be up to 1/4 inch deep and may not exceed 3/4 inch in width, with a minimum of two and a maximum of eight strakes total. Spacing of the strakes must be reasonably equal and must run parallel to the keel for at least the rear 1/3 of the hull.

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5. Gull wing or tunnel hulls are not allowed.
6. Hatch covers, drivers, and scale paint jobs are optional.

D. ENGINE SPECIFICATIONS

1. All engine classes may be run as listed in Section 10 – rule A.1.
2. The Contest Director may combine classes as necessary or may run the event as “Open Deep Vee” and run all classes together.

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A. GENERAL RULES

1. Offshore racing rules are intended as a supplement to the general racing rules of NAMBA. In case of a conflict, Offshore racing rules will prevail.

B. HULL SPECIFICATIONS

1. Boat hull may resemble an authentic Offshore APBA/UIM hull from a distance of 10 feet or must be a Deep-Vee or Catamaran (Tunnel) type hull.
2. Paint scheme may be authentic or reflect an attempt to make the hull appear like a typical full-size Offshore race boat.
3. If the model hull bottom has an angle less than 16 degrees the bottom must be within + or – five degrees of the actual hull copies. Proof of authenticity must be documented by actual hull photos or drawings.
4. Hatch covers with cockpit area for driver (two minimum) are required. Boats will enter competition complete with drivers, cowlings, and hatches. Hatches must cover a minimum of 75% of the deck opening. Hatches which are not part of the original hull must be in the spirit of the Offshore class. Hatch with an open cockpit configuration must have drivers painted to represent scale-like drivers. Hatches with an enclosed cockpit configuration must be darkened (painted black) in order to represent a canopy and will not need drivers.
5. Variations from rule B.4 in this section must be documented by race photos, magazine art, or other pictures.
6. Rudders, turnfins, struts, and ride plates may be configured and located as desired.
7. Tuned pipes will be concealed under the deck, cowl, or hatch as completely as possible.

C. ENGINE SPECIFICATIONS

1. Engine size to comply with NAMBA A, B, C, and X displacement limits, see Section 10 – rule A.1.
2. Mode of propulsion: Inboard or Outboard hulls do not need to be propelled by the same mode as the real boat, (Multi-engined hulls may use single engines: i.e. number of engines in model does not have to comply with original.)
3. No restriction on engine modification to either inboard or outboards.
4. Outboard powered Offshore racers are permitted no external steering rudders mounted on boat hull. The engine must steer boat.

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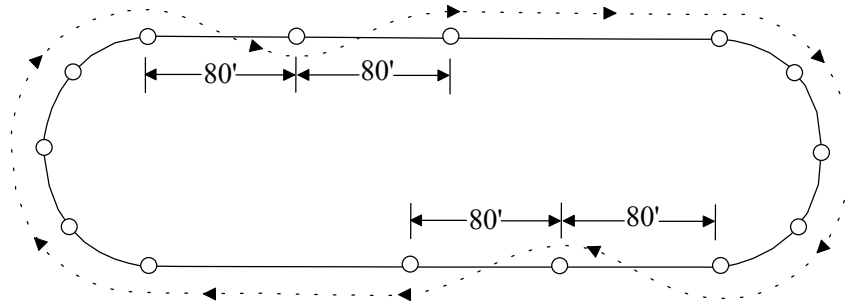
D. RACE FORMAT

1. All Offshore races are to be run as Enduro type using an irregular course.
2. Length of each heat will be in five-minute increments (i.e., 5, 10, 15, etc.).
3. One-minute pre-start countdown will be used. Shorter pre-start countdown based on five-second intervals (i.e., 15 seconds, 20 seconds, etc.) are optional.
 - a. Engines cannot be started or attempted to be started during the pre-start countdown. Boats "jumping the starting gun" will be assessed a one-lap penalty.
 - b. Boats may be launched at any time (per NAMBA course entrance procedure) after the pre-start countdown and throughout the heat.
4. Offshore classes may be combined at the Contest Director's discretion.
5. All boats must start each heat meeting minimum requirements regarding hatches and drivers.
 - a. If any part of the boat (i.e., hatch, drivers) falls off during the heat, except for collision, the boat will receive the number of laps up to that point and will be called off the course.
 - b. If a boat is not able to meet minimum Offshore requirements due to a collision, that boat will be allowed to finish the event.
6. Buoy cuts will be determined by NAMBA rules.
 - a. There will be no disqualification for three or more buoy cuts. Negative scores will not be allowed.
 - b. The cause of excessive cuts during a heat will be reviewed by the Contest Director during the heat and the boat may be called off the course.

E. RACE COURSES


1. Clubs may use any irregular shaped course for Offshore racing.
2. Record courses:
 - a. Must be a NAMBA record legal oval course.
 - b. Two left turns are required.
 - c. "Left turn" entrance buoy is to be located 80 feet from each turn exit buoy.
 - d. "Left turn" exit buoy is to be located 80 feet from left turn entrance buoy.

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F. CONCOURS JUDGING

1. Models to be detailed and painted as the actual APBA/UIM Offshore Racer.
2. Color photographs or color magazine pictures must be presented at the time of judging.
3. Judging to be a distance of six feet. Scoring is as follows:
 - a. 0 to 10 points General Appearance
 - b. 0 to 10 points Paint Job, Markings & Decals
 - c. 0 to 10 points Proof Of Documentation / Authenticity
4. Recognition to be given through 3rd Place.

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A. GENERAL RULES

1. Team Marathon racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Team Marathon racing rules will prevail.
2. Team Marathon competition will consist of a minimum of two boats simultaneously running a prescribed course for a specified distance or number of laps.
3. Teams will consist of two boats and four team members.

B. RACE FORMAT

1. The competition will consist of 100 laps run in a clockwise direction over a standard NAMBA oval course.
2. The competition will commence with a “Le Mans” start.
3. Each team boat will run 10 laps alternately until 100 laps have been completed. The first team completing 100 laps will be declared the winner. Points for completing the course will be allotted in order of finish.
4. A flag or baton will be attached to the “running” boat and must be transferred to the “relief” or “alternate” boat in the assigned hot pit area before the relay or pass is considered complete. Laps run without the flag will not be counted. Flags lost while running due to collision or other circumstances will require that the boat return to the hot pits to have the flag replaced.
5. If each legal team had one boat dead on the course, the retrieve boat can be sent out to gather all legal boats. Each legal boat will be returned to the teams starting table and the contest director shall signal the re-start.

C. HULL SPECIFICATIONS

1. There will be no restrictions on hull type except that both boats must be of the same type (i.e. two deep vees, two tunnel hulls, or two catamarans, etc.). The length of each boat must be within 10 percent of each other.
2. Boats should be attractively painted in team colors.

D. ENGINE SPECIFICATIONS

1. For Nitro Team Marathon engines must conform to NAMBA Class B specifications, see Section 10 – rule A.1.
2. For Gas Team Marathon engines must conform to NAMBA Class G-1 specifications, see Section 27 – rule B.1.a.

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3. All boats must have excellent idling characteristics. A demonstration of each boat's idle may be requested prior to the start of the race. Teams with a boat(s) not idling satisfactorily will not be allowed to compete unless repaired.
4. Boats losing idling capability during the race will be required to demonstrate that the idle has been repaired before being allowed to leave the hot pits and resume competition.

E. LAP COUNTING

1. The Start/Finish line will be set out by the contest officials. Likewise, a "Lap Line" will be set out in the right area of the hot pit, so that a boat coming into the hot pit will complete its full lap, and the relief boat leaving the hot pits will be starting its first lap.
2. Each boat must run exactly 10 laps each time it is in the water. Additional laps per boat over 10 will not be counted. If less than 10 laps are run, the boat in question must return to the course and complete the deficit.
3. All lap penalties assessed a team must be made up after the last relay set is completed. However, these laps may be picked up and completed by the boat running the last relay set, without a pit stop or a relay transfer.

F. EQUIPMENT REPAIR AND PARTS REPLACEMENT

1. There is no restriction on the repairs allowed or the parts replaced as long as the original hulls and frequencies are used.

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A. ENTRY SPECIFICATIONS

1. Entries will be limited to junior NAMBA members, ages 12 years and younger. This class is designed for the beginner with little or no previous model boat racing experience.

B. QUALIFYING BOATS

1. Boats will be limited to those qualifying as A Mono, A Outboard Mono, or A OPC Tunnel.
2. No hydros or modified tunnels are allowed.
3. Two or more entrants may race the same boat in the event providing they are members of the same family.

C. ENTRY FEES

1. Entry fees will be waived for this class.

D. RACE SPECIFICATIONS

1. Heats will be of either a three- or five-minute enduro type with distance counted in quarter-lap increments.
2. Number of rounds offered will be consistent with other classes offered at the contest.
3. The driver must have a pit person at all times. A second pit person will launch the boat.

E. DRIVER ASSISTANCE

1. The pit person may assist the driver with the handling of boat should the driver need assistance avoiding another boat, the shoreline, or waterfowl.
2. The Contest Director will assign special judge(s) to monitor those pit persons assisting with driving.
3. In the interest of sportsmanlike conduct and in fairness to each child entered, it is the responsibility of each pit person to report to the judge or Contest Director immediately following the heat, the approximate number of laps that the driver required assistance.
4. Decisions regarding loss of laps due to the pit person's assisting will be decided between the Contest Director and/or judge and the pit person. The driver will not be involved.

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5. Adjustment of trim by the pit person is permitted.

F. SCORING

1. A 1/2 lap penalty will be assessed for infractions such as cut buoys.
2. The Contest Director will announce all cuts or infractions on the P/A system.
3. Disqualification from a heat for any reasons other than unsportsmanlike conduct is not advised.
4. Lane infractions and other driving violation penalties are discouraged, but left to the discretion of the Contest Director, dependent upon circumstances and the severity of the infraction.

G. AWARDS

1. Consistent with other classes offered at the contest, ribbons will be awarded to all places in all heats with first place awarded to the driver of the boat with the highest number of laps completed, etc.
2. Trophies should be awarded to all positions. Trophies need not be of a quality consistent with others presented at the contest.

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A. GENERAL RULES

1. Gas racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Gas racing rules will prevail.

B. CLASS SPECIFICATIONS

1. G Class Rules

a. General Engine Specifications

- i) Engines in this class shall be highly mass-produced as evidenced by the process used to manufacture the major components. The cylinders and crankcases shall be die-castings, with cylinder and head as a one-piece unit. Examples of such engines are Zenoah, Chung Yang, Kawasaki, Homelite, and U.S. Engines.
- ii) Secondary parts such as water jackets, nose cones, drive components, shim plates, intake manifolds, carburetors, headers, pipes, etc. do not come under the “highly mass produced” rule. Major components such as cranks, rods, pistons, cases, ignition systems, cylinders, and cylinder heads do fall under the rule and must be parts of the original motor manufacturer. Interchanging of major parts from one engine series to another is legal as long as the parts used were available on another engine from the same manufacturer
- iii) Modifications are allowed to major and minor components. However, major components may only be modified by removing material. Adding material or parts to modify an engine's major components will be illegal. The only exception to this rule is that a cylinder may be modified to accept (add-on) a water jacket.
- iv) Induction systems must be piston-ported. Modifications incorporating induction systems other than piston-ported systems are illegal. Engines must be naturally aspirated. Tuned exhaust and intake systems are the only allowed method of altering cylinder pressures.
- v) Engines in this class must employ spark-induced combustion. Glow plug or compression-induced combustion is illegal.
- vi) Recoil starters must be included on the original engine and must be retained on engines in this class.

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vii) Displacement is the swept volume of the engine, which is the cross sectional area of the cylinder multiplied by the stroke of the engine and two displacement ranges will be offered within this class:

(a) G-1 will include engines from 15 to 25.99 cubic centimeters.

(b) G-2 will include engines from 26 to 35.99 cubic centimeters.

b. Fuel Specifications

i) Gasoline having an octane rating no higher than 100 must be used in this class. Gasoline is a mixture of hydrocarbons with no nitrogen bearing compounds. Ethers or alcohols may be added commercially as oxygenating agents. It can be mixed with oil in any proportion for lubrication, but no other additives are allowed that were not in the fuel as originally manufactured.

ii) To enforce this rule, a protest may be made to the contest director any time during the contest. Protests must be accompanied by a \$10.00 protest fee that will be awarded to the sponsoring club. The offending racer will be made to use the protesting racer's fuel for the duration of the contest. If the fuel is unacceptable to the offending racer, fuel from a neutral party must then be used by both the offending racer and the protesting racer. In this situation, the neutral party would be awarded the protest fee in payment for the fuel.

2. GX Class Rules

a. General Engine Specifications

i) Engines running in this class will not be required to fall under the "industrial" rule. Displacement is the swept volume of the engine, which is the cross sectional area of the cylinder multiplied by the stroke of the engine and three displacement ranges will be offered within this class:

(a) GX-1 will include engines from 15 to 25.99 cubic centimeters.

(b) GX-2 will include engines from 15 to 35.99 cubic centimeters.

(c) GX-Twin will include two engines or an engine with two cylinders with a maximum displacement of 64.00 cubic centimeters.

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- ii) Engines in this class must employ spark-induced combustion. Glow plug or compression-induced combustion is illegal.
- iii) Induction systems may include piston port induction, reed valve induction, rotor-valve induction and drum valve induction

b. Fuel Specifications

- i) Gasoline having an octane rating no higher than 117 must be used in this class. Gasoline is a mixture of hydrocarbons with no nitrogen bearing compounds. Ethers or alcohols may be added commercially as oxygenating agents. It can be mixed with oil in any proportion for lubrication, but no other additives are allowed that were not in the fuel as originally manufactured
- ii) To enforce this rule, a protest may be made to the contest director any time during the contest. Protests must be accompanied by a \$10.00 protest fee that will be awarded to the sponsoring club. At this point the offending racer will be made to use the protesting racer's fuel for the duration of the contest. If the fuel is unacceptable to the offending racer, fuel from a neutral party must then be used by both the offending racer and the protesting racer. In this situation, the neutral party would be awarded the protest fee in payment for the fuel.

3. G-Limited Class Rules

a. General Engine Specifications

- i) Engines will be a Zenoah G260 PUM with no modifications allowed except those noted below.
- ii) All replacement parts must be from the original manufacturer and the same type engine (Zenoah G260 PUM to Zenoah G260 PUM). No part swapping from other manufacturers or engine types is permitted.
- iii) The carburetor must be one of the following: Walbro WT-257, Walbro WT-644 or Zenoah WT-1027.
- iv) All carburetors will be stock with no modifications other than those noted below:
 - (a) The velocity stack/Air Funnel (part #848ES08300) may or may not be used.
 - (b) Any type of bolts may be used to mount the carburetor.
 - (c) The idle stop screw may be removed.

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- (d) A needle stop device may be used, to keep needle from turning/vibrating lose (i.e. fuel tubing, an aluminum clamp, etc.).
- (e) The exterior length of the needle may be shortened to fit under cowlings when necessary.
- (f) Any fuel pump diaphragm may be used.
- (g) Any metering diaphragm may be used
- v) Any exhaust manifold, header, and pipe may be used.
- vi) The spark plug must be one of the following: Champion RZ7C spark plug or a NGK CMR7H spark plug. Both must retain the factor seal washer.
- vii) Zenoah EZ Starter Kit (part #GR26099) will be allowed. The pulley assembly (part #848-ESZ-7520) of the pull starter may be modified for the purpose of not using the spacers (part #848-8Y4-6100) or the space plate (part #580-44-79-01).
- viii) The Mount Plate (part #1155-74110) may or may not be used.
- ix) Any standard type of shaft collet nut may be used. No geezer wheel, belt starting pulley, or extra weighted shaft collet nuts are allowed.
- x) The Zenoah water jacket (part #T2076-12210) may be modified on the outside by changing the color, and/or machining in a design. Stock M5 x.8 water fitting thread must be retained.
- xi) Any type of water jacket cooling nipples are allowed (i.e. 90 degree, drilled out, etc.).
- xii) Any type of replacement engine bolts may be used (i.e. stainless, chrome, etc.).
- xiii) The ignition coil (gray, part # 2629-71311) may be relocated using any type of bracket, but no shortening of the plug wire.
- xiv) If any updates are made to the standard G260 PUM motor by Zenoah, the Board of Directors can vote to allow or disallow the additional parts to the above rules by a simple majority vote.

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C. HULL SPECIFICATIONS

1. General

- a. All hulls will be limited to a maximum length of 60" and a maximum width of 30".
- b. Primary propulsion must be by a propeller making contact with the water. No air drive or jet drive propulsion is permitted.

2. Monoplane

- a. Mono hulls must have a single riding surface at planing speeds. This planing surface may be flat or a V configuration.
- b. No lateral side to side breaks are permitted.
- c. Lap strakes may be used. If used, they must be parallel to the keel for a minimum of 60 percent of the hull length, measuring from the transom forward. The strakes may merge to the keel after the 60 percent minimum has been exceeded.
- d. Lap strakes on hulls 46" long and under and with a beam width of 15" and under may have a maximum lap strake width of $\frac{3}{4}$ inch and depth of $\frac{1}{4}$ inch.
- e. Lap strakes on hulls over 46" long and with a beam width over 15" may have a maximum lap strake width of $\frac{3}{4}$ inch and a depth of $\frac{1}{2}$ inch.
- f. The depth of the lap strakes is measured from the bottom (primary running surface) to the lowest point on the lap strake.

3. Outrigger Hydroplane

- a. Outriggers may have more than two planing surfaces.
- b. General design will consist of two forward sponsons connected to the tub by booms.
- c. This class is an open design class.

4. Sport Hydroplane

- a. Sport hydroplanes may have more than two riding surfaces touching the water at planing speeds.
- b. This class will include both three-point hydros and canards.

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- c. All sport hydros must resemble full scale racing boats and may be of current or historical design.
- d. The sponsons may have pads or breaks that contact the water at planing speeds.
- e. Exposed exhaust systems are allowed.

5. Catamaran

- a. Catamarans have two sponsons that normally run the full length of the hull.
- b. Sponsons are separated and connected together by a tunnel.
- c. Sponsons may have lateral breaks.

6. Crackerbox

- a. All boats will be models of full sized crackerboxes.
- b. The letter "P" must precede or follow the NAMBA number on each side of the hull.
- c. The minimum length will be 43.5 inches and maximum length will be 49 inches.
- d. Minimum beam width will be 16.5 inches.
- e. The bottom must be generally flat with a maximum of a three-degree V across the full width of the transom and refer to rule C.6.a. There may not be any pads or lap strakes.
- f. The deck and hatch must resemble that of a full sized crackerbox.
- g. Two drivers of ¼ scale size and appearance, wearing helmets and life preservers must be used. A steering wheel, instrument panel, and other detailing is encouraged.
- h. No parts (rudder, prop, plates, etc.) may be more than four inches behind the transom.
- i. The exhaust system must be enclosed by the hull. No part of the exhaust system may extend beyond the transom with the exception of a small pipe muffler or transom exhaust flange.
- j. No servo adjusted trim tabs are permitted.

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7. Classic Crackerbox

- a. All general Crackerbox rules apply with the following exceptions:
- b. The hull must be made completely of wood. It is permissible to cover the hull with fiberglass and resin. The minimum running weight will be 15 pounds.
- c. Classic Crackerboxes may run in the general Crackerbox class but not on the same day.

D. SPECIALITY CLASSES

1. CLASSIC THUNDERBOAT

a. Hull Specifications

- i) The boat may be of wood or fiberglass construction.
- ii) The hull length will be between 48" – 56".
- iii) The hull width will be a minimum of 24".
- iv) The transom will be a minimum of 10" in width.
- v) The hull design will only be one of the following types: round nose, step deck, or chisel nose.
- vi) Nothing on the boat may be further than 5 1/4" behind the transom.

b. Motor Specifications

- i) Engines must conform to NAMBA Class G-Limited specifications, see rule B.3.a in this section.
- ii) The pipe and muffler must be inside the boat and exit through the transom.

c. Appearance

- i) The boat must have a sponsored paint scheme with sponsored IDs and U numbers on the boat.
- ii) The boat must have a human driver figure in a front or rear cockpit. The driver must be a scale of 1/8 to 1/6 in relationship to the size of the boat and wearing a life vest and helmet.
- iii) The boat must run with an engine cowling or dummy engine to cover as much of the boat's engine as possible.

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d. Race Format

- i) At the discretion of the Contest Director, races will be run either under the NAMBA Heat Racing Format or the “Love Plan” which is run as follows:
 - (a) The event must consist of four preliminary rounds of heats and one final round of concluding heats. The concluding round of heats must consist of one final heat and a consolation heat.
 - (b) The maximum number of boats in the final heat is six. The top five boats with the highest points after the four preliminary rounds will be eligible for the final heat. If a frequency conflict exists between two or more boats eligible for the final heat, preference goes to the boat that has accumulated the most points in the preliminary rounds, or to the boat with the fastest time should a tie in points occur. The other boat will have the option to change to any other available frequency.
 - (c) After the final heat field has been set, boats accumulating points in the four preliminary rounds after the fifth position will be used to fill the consolation heat. The winner of this heat will be used to fill the six boat final heat.
 - (d) The outcome of the consolation heat will not affect the overall standings or points for the day.
 - (e) Final race standings will be determined by order of finish in the final.

2. JERSEY SKIFF

a. General Specifications

- i) Prop shaft and tube must pass thru the bottom of the boat.
- ii) No fairing on top of prop shaft tube.
- iii) No hardware will extend beyond 4” from transom.
- iv) No skegs or turn fins.
- v) Strut must be rounded on bottom.

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- vi) Tuned pipes are allowed. Exhaust must exit thru transom and not extend more than 1 ½” past transom.
- vii) Motor will be covered; hood scoops and air vents are allowed.
- viii) Trim tabs allowed. No trim tabs with fins or skegs on bottom. Trim tabs can be angled up to prevent hooking.
- ix) Engines must confirm to NAMBA Class G-1 specifications, see rule B.1.a in this section.
- x) Boat must have numbers on both sides of hull in the following format - JS followed by NAMBA number. Minimum height of 3 inches.
- xi) Strakes or riding pads are NOT LEGAL. No keels or chines on bottom, bottom of hull is flat and smooth.
- xii) Must have two scale like drivers located at or near transom. Minimum height 3 ½” and maximum of 4”. Drivers must have life jacket and helmet.
- xiii) Wood/scratch builds are permitted, must simulate the lap strake construction.

b. Hull Specifications

- i) The hull length will be between 49”-51”.
- ii) Minimum width at center of hull 17”.
- iii) Maximum width of bottom at transom 11”.
- iv) Hull bottom maximum degree of at center of hull 1 degree.
- v) Hull bottom maximum degree of V at transom 1 degree.
- vi) Minimum transom height 5 ½” from bottom of hull to top of deck.
- vii) Minimum height of freeboard (bottom of hull to top of deck) at center of hull 5 ½”.
- viii) Minimum height of freeboard (bottom of hull to top of deck) at 10” from bow 5 ½”.

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3. GAS SCALE UNLIMITED HYDROPLANE

a. General

- i) Gas Scale Unlimited Hydroplane racing will follow Scale Unlimited Hydroplane rules in Section 21 with the exception of items listed below.

b. Hull Specifications

- i) All boats will be models of past or present Unlimited Hydroplanes that are listed on the Gas Scale Unlimited Hydroplane Master Hull Roster. The true scale dimensions of any Gas Scale Unlimited Hydroplane will be derived from the unlimited dimensions listed on the Gas Scale Unlimited Hydroplane Master Hull Roster.
- ii) Boats are to be built on a scale of 1.80 inches equals 1 foot of the actual boat (1/6.667 scale).
- iii) Boats will measure within the following tolerances of the true scale size, excluding appendages.
 - (a) Overall Length.....± 1 1/4 inches
 - (b) Beam.....± 12%
 - (c) Maximum Depth.....± 10%
 - (d) Afterplane Length (three point design).....± 10%
 - (e) Tunnel Width.....± 10%
- iv) Motor belly pan for motor and flywheel only. If applicable, the dimensions will not exceed five inches in width, nine inches in length, and one inch in depth. The belly pan can not exceed the depth of any riding surface or recovery surface. If the real boat had a full length belly pan, the model must conform.

c. Engine Specifications

- i) G or GX Class engines from 15 to 31 cubic centimeters.

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4. GAS OUTBOARD TUNNEL

a. Hull Specifications


- i) The tunnel must connect two outer hulls or sponsons which are unbroken and must also run the full length of the hull. Picklefork designs are acceptable. Outrigger configurations are not acceptable.
- ii) Length must be between 40 and 55 inches, which does not include the motor or hardware.
- iii) No hull will be allowed to have a recessed or picklefork bow which exceeds 30 percent of the overall boat length. Airslots in the center hull must be subtracted from the overall hull length.

b. Engine Specification

- i) Engines must conform to NAMBA Class GX-2 specifications (see rule B.2 in this section) except those noted below.
- ii) The engine must be two-stroke and naturally aspirated.
- iii) Any method of starting the engine is allowed, i.e. pull-start, electric starters, or belt start.
- iv) All engines must have a canister muffler, tuned pipe, or custom exhaust that meets the current NAMBA Db levels, as defined in Section 10 – Rule B.
- v) Engine, drive shaft, propeller, and single skeg/rudder will be defined as a complete unit that can be attached to and removed from the hull as one unit and must pivot together as the only means of steering the boat. No secondary rudder allowed.
- vi) Engine must be mounted to transom which must be 90 degrees to the tunnel.

c. Appearance:

- i) A close to scale driver with at least the head and shoulders must be provided unless proof of a reclining driver is offered as in OPC hulls. Boats without drivers must be painted to include a darkened windshield to resemble a closed-in cowl appearance.
- ii) Real or fictitious sponsor name on each side of deck or cowling is required

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A. GENERAL RULES

1. Electric racing rules are intended as a supplement to the general racing rules of NAMBA. In the case of a conflict, the Electric racing rules will prevail.
2. A positive method of speed control must be used. On/Off micro or variable speed controls are allowed.
3. Battery Guidelines
 - a. The following battery chemistries will be considered official for electric racing in NAMBA:
 - i) Ni-chemistry: maximum of Sub-C sized cells with nominal 1.2 volt per cell.
 - ii) Li-polymer chemistry: nominal 3.7 volts per cell.
 - iii) Li-ion chemistry: nominal 3.3 volts per cell.
 - b. Racers wishing to run alternative chemistries to those listed will be required to provide data to the contest official to verify the chemistry's volts per cell and any special safety requirements. Allowing alternative chemistries will be at the discretion of the Contest Director based on the data provided.
 - c. For the purposes of determining maximum allowances, a "pack" will be considered any number of cells in series whose min/max nominal voltage falls within the allowed nominal voltage range for the designated class.
 - d. It is recognized that the high energy potential of modern cells can pose a potential for danger to racers, fellow members, spectators, as well as to racers pit equipment. It is therefore required that each racer keep in their charging area appropriate safety equipment. This may include fire extinguishers, safe charging enclosures, sand buckets, etc. Additionally, the hosting clubs may provide additional equipment, charging procedures, and/or charging areas as they see fit.
 - e. Chargers must be used that are specifically designed for the chemistry of cell being charged, with strict adherence on charger settings that are within manufacturers specifications (charger and cells) for charge voltage, amperage and capacity. Any racer found not in compliance will be withdrawn from the class and may be banned from competition for the remainder of the event by the Contest Director.

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4. Hull Measurement Guidelines

- a. When a hull minimum or maximum length measurement is specified for any class, that hull will be measured by placing two vertical straight edges at the furthest points fore and aft of the bow and transom of the hull. The distance between those two vertical straight edges will be measured. Hardware will not be included in the measurement.
 - b. The hull will be placed between those two vertical edges and situated in the same horizontal position in which the hull would ride on the water. Any flanges, “shoebox” overhangs or other parts of the hull that are part of the original manufacturing process will be included in the measurement.
 - c. A hull may be lengthened to comply, but material additions must become an integral part of the hull structure. If for instance, material is added to the transom, the entire transom must be lengthened and the addition must be blended in to the rest of the hull.
5. With the exception of boats run in the ECO Specialty Class, boats that are capable of self-righting are not eligible for competition. If the boats self-righting design can be disabled or otherwise rendered useless, then the Contest Director may allow it to compete.

B. OFFICIAL COURSES

1. Oval

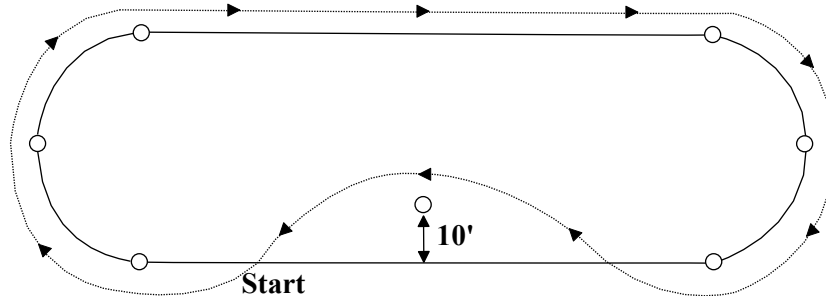
- a. Fast Electric will follow the Official Course outlined in Section 13.
- b. NAMBA Fast Electric Heat Racing records will be maintained for the N-1 Power Parameter and 1/10th Scale Crackerbox for 3 laps on an Official Course.
- c. If a host club of a sanctioned NAMBA event has a pond that cannot fit an official course, they are allowed to use a course dimension of their choice. This information shall be listed on the race flyer and heat racing shall remain 1 mile in length, unless otherwise specified in the rulebook. No records are allowed.

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2. M Offshore

- a. Course will be a standard oval with a left turn buoy which will be placed halfway down the middle of either the front or back straightaway and 10 feet inside the course (see diagram).

“M” Offshore Course

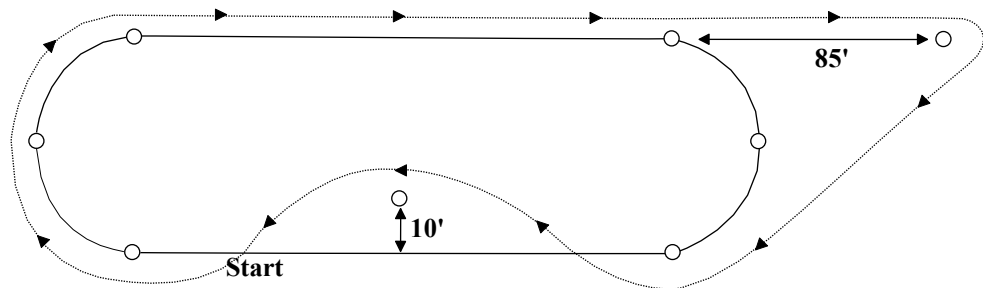


3. Offset Offshore

- a. Same as the “M” course with the addition of an “Offset Buoy”. The Offset Buoy will be positioned in line with either the front or back straightaway, and 85 ft. from any of the course's 4 outside turn buoys.

This diagram is provided as example and illustrates the right rear offset with the left turn buoy in the front straightaway.

Offset Offshore Course



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C. RACE FORMAT

1. Launches - Hand launching or dead-in-the-water launching will be at the driver's discretion.
2. Starts - Two types of starts will be permissible for heat racing. The choice of start format is up to the individual district or Contest Director.
 - a. Flying Clock Start
 - i) The clock system used may be a visual clock or an audio tape type clock.
 - ii) An audible sound or statement will start the Pit Time. Pit Time will be one minute, and a horn or audible sound will signal the end of this time period.
 - iii) Clock Time (Mill Time) will commence immediately upon the expiration of Pit Time, and will last for 30 seconds. At 10 seconds, no more boats will be allowed to be launched. Any boat launched after this time will be ordered off the course and will receive a "Did Not Start" for that heat.
 - iv) All boats will leave the launch area and will go to the left of the start buoy and to the right of the buoys in the left end of the course. All boats will then utilize a 3/4 mill during Pit Time and during Clock Time.
 - v) The start of the race will be at the end of Clock Time when the countdown reaches zero. All stop watches will be started at this point, and will be stopped when the driver finishes the required laps.
 - vi) All boats coming from the right turn at the start of the race will adhere to the five second rule (as defined in Section 18 - rule D.2.c). All boats jumping the start will proceed around the complete course to the start line for a legal start. No boat may be stopped on the course for the purpose of waiting in order to better time the start. A disqualification from the heat will be given for this infraction resulting in zero points.
 - b. LeMans Start
 - i) The official start of the heat will be a signal from the Contest Director.
 - ii) All stop watches will be started at the signal, and will be stopped when the driver finishes the required laps.

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- iii) All boats will race toward buoy one and two on the left end of the course, and will continue around the course to the start/finish line. This will constitute the completion of the first lap under power.

D. CLASS SPECIFICATIONS

1. POWER SPECIFICATIONS

- a. The following motor and cell configurations will be considered official for electric racing in NAMBA:

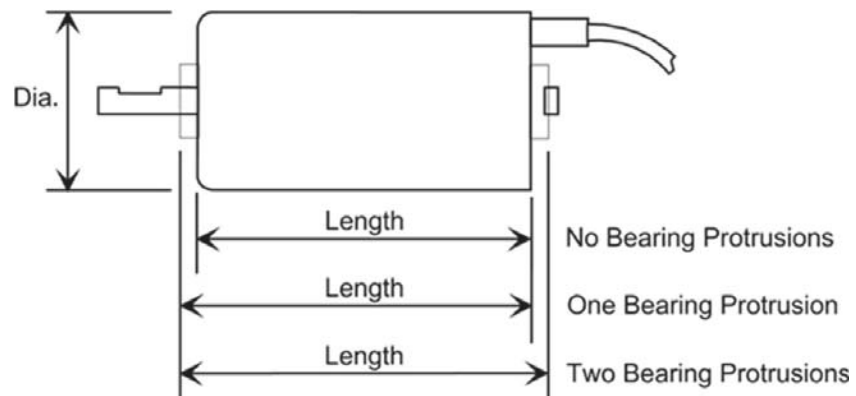
Class	Motor Type	Actual Voltage Limits	Capacity (mAh)
M-2*	Any single motor.	0 - 4.23 V	10,000 max
N-1	Any current ROAR approved stock .05 motor.	0 - 8.46 V	
N-2	Any single motor.		
P-Limited	Any single motor that meets the P-Limited requirements, see rule D.1.d below.	11.10 - 16.92 V	
P	Any amount and/or size of motors	18.5 - 25.38 V	12,000 max
Q		25.90 - 33.84 V	
S*		18.50 - 42.30 V	
T			

** Note: Classes M-2 and S will be allowed for SAW and 2-Lap Competition only.*

- i) The Actual Voltage limits are pre-run/race limits.
- ii) For all sanctioned events, the Contest Director shall designate digital voltage meter equipment for technical inspections.
- iii) For SAW/2-Lap record events, The Contest Director shall establish protocol for a voltage check technical inspection before a boat makes a record attempt.
- iv) For Heat Racing, the Contest Director has the authority to implement pre-race inspections and/or spot inspections as they see fit.
- v) NAMBA Protest Rules shall apply (Section 16, Page 4, G. 1-3), with “cells” being an included item under #3. If the cells are found to be non-compliant by the Contest Director, the racer will be withdrawn from the class. The Contest Director also has the authority to ban the member for the remainder of the event.

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- b. All of the above Power Specification may be further divided into various hull types. For specifications on these hull types see Section 11, as well as rule E in this section.
- c. There are two acceptable multi-motor configurations for the Power Specifications that allow multiple motors:
 - i) Each motor must see a nominal voltage within the Power Specification. The mAh capacity maximum within the same Power Specification is for all motors combined.
 - ii) The sum of the nominal voltages powering each motor must be within the Power Specification. The mAh capacity maximum within the same Power Specification is for each motor.
- d. P-Limited Approved Motors
 - i) Motors shall be of an inrunner design and shall not exceed the following dimensions:
 - (a) Length: 60mm (2.362 in.), this includes any bearing protrusion
 - (b) Diameter: 37 mm (1.457 in.)



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2. HULL LENGTH MEASUREMENTS

- a. Hulls in each class will not exceed the length given in the following table:

Class	Maximum
M-2	27"
N-1	N/A
N-2	27"
P-Limited	34"
P	34"
Q	40"
S	60"
T	60"

- b. See Rule A.4 in this section for measurement guidelines.

E. SPECIALITY CLASSES

1. SPORT HYDRO CLASSES

a. GENERAL RULES

- i) This SPORT HYDROPLANE section as it pertains to the fast electric rules takes precedence over any other reference to sport or scale hydroplane specifications in any other areas of the NAMBA rulebook.
- ii) Boats will be checked for rule compliance prior to racing.
- iii) Any boat not passing the technical inspection or violating the spirit of the rule will be disqualified.

b. APPEARANCE AND INTENT

- i) The intent of this class is to simulate or resemble the appearance of Unlimited and/or Limited three-point, full-bodied hydroplanes as raced full scale.
- ii) Boats which do not resemble real full-scale designs (i.e. outriggers, modified outriggers, canards, tunnels or catamarans) will not be allowed to race as Sport Hydroplanes.
- iii) Exceptions to paragraph 2b as well as the technical specifications of paragraph 3 will be allowed if a hull is a commercially available scale model or a model closely resembling a full scale hydroplane that raced for more than one season. Examples: Proboat Miss Budweiser, H&M Bud Twin Wing, BBY War Eagle, DPI and H&M T-Plus.

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- iv) The deck, cockpit, tail and/or fin configuration may be changed to keep the boats interesting. Fictitious teams may be created within the spirit of the past and present Limited and Unlimited Hydroplanes.
- v) The boat shall have a painted driver figure in open cockpits, or a real or simulated windshield for enclosed cockpits.
- vi) The boat must be painted in the spirit of Limited/Unlimited racing. Each boat must have a sponsor's name or logo affixed to the hull. This sponsor will be of the builder's choice and can be a fictitious entity. Each boat will also display race numbers of the driver's choice affixed to each side of the hull or deck.
- vii) The boat must have the driver's NAMBA membership number displayed above the at-rest waterline on the hull in numbers a minimum of 1/4" tall in a manner so as to be visible to an onlooker.
- viii) The boat may be purchased ready built, modified from an existing hull, or scratch built from any suitable material generally used in model boat construction.

c. HULL SPECIFICATIONS

- i) Hulls shall conform to the hull length measurements in rule D.2.a in this section.
- ii) All riding surfaces (drive train and prop not included) must be in the front 50% of the total hull length.
- iii) A single triangular (from side profile) stuffing box for the driveline will be allowed as long as its primary purpose is to house the driveline and dimensions don't unreasonably exceed that purpose.
- iv) Ride pads and/or steps are allowed but must be an integral part of the sponson design.
- v) Picklefork hulls shall not have open areas ahead of the aft edge of the sponson riding surface totaling more than 25% of the total hull length.
- vi) No boat shall have an afterplane* greater than 60% of the total length of the boat. The afterplane will be measured from the back of the front sponson planing surface to the transom. Note: The afterplane is the entire main hull aft of the sponsons; i.e. the "fuselage".

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vii) The width of the transom bottom shall be no less than 65% of the width between the inside edges of the front sponson planing surfaces. An exception to this will apply to scratch build scale designs of full sized boats that are full bodied 3 points hydroplanes but have an afterplane that tapers sharply at the transom. Example: Lauterbach shovel-noses.

d. DRIVE TRAIN

i) The drive train is entirely at the modeler's discretion, including location of the drive dog and strut, if used.

2. OFFSHORE CLASSES

a. General Rules

i) Electric Offshore racing rules are intended as a supplement to the general racing rules of NAMBA. In case of a conflict the Electric Offshore racing rules will prevail.

b. Hull Specifications

i) Offshore hulls must be a Deep-Vee (16 to 28 degree "V" angle) or Offshore Catamaran type hull.

If a hull is not a Deep Vee or a Catamaran, then there must be proof that the hull type it resembles actually did race as a full scale offshore boat. The boat must look like an authentic Offshore APBA / SBI / UIM hull from a distance of 10 ft. (See rule E.2.b.iii in this section below for guidelines.) Photographic proof will be the required as evidence that the hull complies with guidelines set forth in this paragraph.

ii) Stepped hulls and flat keel ride pads will be allowed on both Deep Vee and Catamaran type hulls.

iii) Closed cockpits must have windshields. Windshields can either be clear, tinted or colored. Open cockpits must have drivers. Boats are to be decorated with paint and or by graphic applications (decals) which must include at least two real or fictitious sponsors.

iv) All boats must have numbers printed or painted on the hulls above the waterline. They can be either fictitious race numbers or NAMBA membership numbers. They should be as clearly visible in relation to the size of the hull as they would be on a full-size race boat.

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c. Race Format

- i) The length of each heat will be in two minute increments. For NAMBA record purposes the standard length will be four minutes.
- ii) A flying clock start as described in rule C.2.a in this section or Le Mans start as described in rule C.2.b in this section.

If a Le Mans start is the chosen method, all boats in the heat are to be lined up in the water, at the shore, pointed at the first buoy. The Contest Director will insure that all boats are equally spaced parallel to each other so that no boat has an advantage over another.

Each driver's pit person will keep a minimum of one hand on the boat until the CD starts the heat with a short verbal or recorded countdown. (3, 2, 1, Start!, for example.) The pit person will keep the boat stationary and is not allowed to generate ANY forward motion either before or after the official start.

- iii) Driving will be in accordance with all NAMBA Rules of Racing.

d. Penalties

- i) Jump starts will incur a one lap penalty. One lap will be deducted from the total lap count of the offending racer.
- ii) If a Le Mans start is used, any boat that is in forward motion and not manually restrained and kept stationary before the start will be assessed a one lap deduction from that boat's total lap count.
- iii) If a boat passes another boat after the official time has expired, the pass will not count. This includes passes caused by any movement including drifting and/or coasting

e. Race Courses

- i) Clubs and events may choose between two offshore courses:
 - (a) Offset Offshore Course - see rule B.3 in this section
 - (b) M Offshore Course - see rule B.2 in this section
- ii) Record Courses
 - (a) No records are allowed for Offshore Classes.

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iii) Awards

- (a) Awards will be presented in each class based on the total number of laps accumulated.
- (b) Offshore points may be used for team points and high points awards at the discretion of the host club.
- (c) At the hosting club's discretion, Offshore Team Points may be awarded as follows:
 - (i) Boats will be awarded points based on where the boat is positioned on the course when the official time expires. Points schedule will be as described in the Section 18 - rule J.1. The lead boat will receive 400 points, 2nd 300, 3rd 225, etc.
 - (d) Also at the hosting club's discretion, an "Offshore Champion" award may be awarded to the individual racer with the most accumulated laps over all Offshore classes run. In the event there is a tie then it will be awarded based on point system for team points (rule E.2.e.iii.c in this section – right above).

3. 1/10 SCALE CRACKERBOX

- a. Purpose - To duplicate in 1/10 scale the American Power Boat Association Crackerbox One Design Runabout.
- b. Hull Specifications
 - i) Hulls must be within 1/8 inch of the appropriate hull.
 - ii) The deck/hatch must resemble that of the full scale hull.
 - iii) The boat must be painted in the spirit of a racing scale model. Each boat will have the driver's NAMBA number preceded by the letter "P".
 - iv) Two drivers of scale-like appearance must be used in the driver/rider compartment. The driver must have orange colored helmets and live jackets.
 - v) The dead rise of the transom will be 3/8 of an inch in total (3/16 of an inch per side), with a transom width of 6 3/8 inches.

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vi) Drive Train

- (a) A single motor will be coupled directly to a straight drive shaft. A flex shaft may be used in a straight tube.
- (b) The propeller may not extend beyond the back edge of the transom.
- (c) Steering will be by a rudder mounted under the hull or attached to the transom.

c. Motor Specifications

- i) Power parameters for this class will comply with class “N-1” specifications, as noted in rule D.1.a in this section.

d. Race Format

- i) Heat racing format will be used.
- ii) The Contest Director will determine the scoring format, i.e. total points or a “winner take all” final heat format.

4. OPC TUNNEL

a. General Rules

- i) Electric Outboard Racing Rules are intended as a supplement to the general racing rules of NAMBA. In the case of conflict the Electric Outboard racing rules will prevail.

b. Hull Specifications

- i) Hull specifications are the same as those for standard Outboard tunnels, as defined in Section 19 - Rules D.2 and D.3, except for a limit on length.
- ii) Hull length must conform to those listed in Rule D.2.a in this section for each Power Specification.

c. Motor Specifications

- i) An “outboard” is defined as a complete motor and propulsion unit that can be attached to and removed from the outside of the hull as one unit.
- ii) The outboard will be the single means of controlling the direction of the boat.

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d. Records

- i) OPC records can be set in the P-Limited, P and T Power Specifications.

5. ECO

- a. Purpose - to provide an “economical” electric class utilizing affordable and readily available 05 motors and economical hardware.

b. General Rules

- i) These ECO Class electric racing rules are intended as a supplement to the general and Electric racing rules of NAMBA. In the case of a conflict, ECO class rules will prevail.
- ii) This class will comply with the existing rules for electric Offshore with exceptions as specified below.

c. Hull Specifications

- i) This class will comply with the existing rules NAVIGA ECO class.
- ii) Boats must use a submerged drive with the rudder pivot forward of the transom.
- iii) There is no minimum or maximum hull length.

d. Motor Specifications

- i) A Limited Modified class utilizing any NORCA approved motor as defined by current NORCA 19T Limited Modified rules. 1-6 cells are permitted.
- ii) Any ROAR-approved stock motor as defined by current ROAR parameters. 1-6 cells are permitted.
- iii) Motors must be in accordance with current NORCA rules for 19T Limited Modified Motors, or with ROAR motor rules for stock motors. From 1 to 6 Sub-C cells only are permitted; any battery chemistry is allowed.

e. Official Courses

- i) The course size for records will be the standard electric Offshore course.
- ii) In the absence of a legal Offshore course, the host club may use any oval format desired. Records may not be set on such a course.

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- iii) The host club may elect to use a NAVIGA Triangle course as defined in current NAVIGA rules.
- iv) Straight-line racing will utilize the standard NAMBA 1/16 mile straight-line course. Straight-line records must be set using cells described above.
- v) Record Courses
 - (a) Must be a NAMBA 1/10 mile electric course.
 - (b) The left turn entrance buoy is to be located 45 feet from each turn exit buoy.
 - (c) The left turn exit buoy is to be located 45 feet from the left turn entrance buoy.

f. Race Format

- i) The length of each heat will be in two minute increments (i.e. four, six, eight, etc). When time is called, boats will race to the Start/Finish line to determine the final positions.
- ii) A flying clock start or a Le Mans type start may be used.

6. ELECTRIC 1/8 SCALE UNLIMITED HYDROPLANE

a. General Rules

- i) Electric Scale Unlimited Hydroplane rules will follow the Scale Unlimited Hydroplane rules (see Section 21) with the exception of the following:
- ii) Electric Scale Unlimited Hydroplane rules are intended as a supplement to the Electric general rules. In the case of a conflict with the Scale Unlimited Hydroplane rules (see Section 21), the Electric rules will prevail.

b. Power Specifications

- i) Approved Motors
 - (a) NEU 1527 1.5Y 850KV
 - (b) HET Typhoon 700-98 840KV
 - (c) Turnigy SK3-3994 850KV
- ii) Twin motors are not allowed.

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c. Drivetrain Specifications

- i) Either a cable or hard shafts may be used, no gear boxes allowed.
- ii) Any propeller may be used up to maximum of 57mm in diameter.

d. Electronic Speed Controls (ESC)

- i) Any ESC may be used as long as it is rated to a minimum 130 Amps and rated to handle a minimum of 8S battery configuration.
- ii) Anti-spark resistors are advised on all speed controllers.

e. Batteries

- i) A maximum capacity of 8S Lithium Polymer (LiPo) batteries are allowed. The maximum mAh capacity of the battery pack(s) will not exceed 6000 mAh. Only LiPo batteries with a cell rating of 4.20 or less volts per cell are allowed.
- ii) LiHV batteries with per cell capacities to 4.35 volts or higher are not allowed.
- iii) Manufacturer's minimum discharge of 30C constant but no higher than 65C constant is allowed.

7. ELECTRIC 1/10 SCALE UNLIMITED HYDROPLANE

a. General Rules

- i) The intent of this class is to replicate the look and competition of real unlimited hydroplane racing. Boats are 1/10-scale replicas (one inch equals 10 inches) of the real boats that have raced on the unlimited circuit. This class shall emphasize scale accuracy.
- ii) Electric 1/10 Scale Unlimited Hydroplane rules will follow the Scale Unlimited Hydroplane rules (see Section 21) with the exception of the following.
- iii) Electric 1/10 Scale Unlimited Hydroplane rules are intended as a supplement to the Electric General and Sport Hydro rules. In the case of a conflict with the Scale Unlimited Hydroplane rules (see Section 21) the Electric rules will prevail.

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b. Hull Specifications:

- i) Belly pans or blisters, if added, must be no larger than 2.5 inches wide by 4 inches long.
- ii) Air dams, if installed, must be below the deck line and unobtrusive and not extend beyond the bow.
- iii) Anhedraled left sponsons and modern style sponsons are not allowed on boats running in the vintage class.
- iv) Boats shall use a single rudder at any mounting location on the transom. The center of the rudder post shall not be located more than 1.75 inches behind the transom.

c. Drive Train

- i) Any shaft may be used provided it maintains a straight line from hull exit through the strut.
- ii) No gearbox of any configuration is allowed.
- iii) Any single propeller may be used, and a portion of the propeller must be under the transom. The drive dog is defined as not a part of the propeller

d. Motor Specifications

i) Currently approved motors

Brand	Model	Description
AquaCraft	AQUG7000	L36/56 7.2-18V – 6 pole brushless
Himax	HB3630	1500 brushless – 6 pole brushless
ProBoat	PRB3310	A3630-1500 – 6 pole brushless
	DYNM3835	A3630-1500kv – 6 pole brushless, water cooled, marine motor

- ii) No modifications may be made to the motor. Except for normal wear, drive flats or keys, electrical connectors and water cooling, it must be run as shipped from the manufacturer.
- iii) Power Limits: 10.1 to 15 Volts nominal, any chemistry. Maximum of 2 packs in parallel. Maximum total capacity shall be 10,000 mAh.

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e. Class Specifications

i) Vintage Class

(a) Defined as those boats conforming to NAMBA Master Hull Roster (MHR) numbers 2730 through 7008 inclusive, and MHR numbers: 7102, 7132, 7171, 7206, 7221, 7422, 7499 and 7505.

(b) Skid/turn fin shall be mounted to the inside of the left sponson and shall not extend beyond the back of the sponson. The size is limited to a maximum of 2 inches wide by 1 inch deep measured from the sponson riding surface. No hook shaped skid fins are allowed

ii) Modern Class

(a) Defined as those boats conforming to NAMBA Master Hull Roster numbers 7025, 7029, 7175, 7177, 7207, 7251, 7325, 7402, 7441, 7455, 7495, and numbers 7571 through 0717 and beyond.

(b) Follows all rules listed above except:

(c) Any shaft may be used.

(d) Sponson design shall be up to the builder as long as it does not change the outline shape of the hull.

(e) Skid/turn fin shall be similar in appearance and location to the full size boat (mounted to the back of the sponson). The size, shape and precise location shall be determined at the discretion of the owner. No hook-shaped skid fins are allowed.

f. Race Format

i) Shall be as set forth in Section 21 Rule B plus the following:

ii) All boats shall travel COUNTER-CLOCKWISE around the course turning LEFT.

iii) A one minute countdown procedure using an audio countdown clock shall be used to start each heat. The start of the race is at the initial sound of the horn/gun.

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- iv) A boat must be in the water and running at the 30-second mark. Once running, a boat must remain in constant forward motion or be assessed a one lap penalty.
- v) All boats must fully circle the right and left hand turns (in that order) before being allowed to start.


8. CATAMARAN

a. General Rules

- i) Catamaran rules are intended as a supplement to the General Racing rules of NAMBA. In the case of conflict, the Electric Catamaran rules will prevail.

b. Hull Specifications

- i) Catamarans shall be a stand-off scale version of an Offshore Catamaran style of hull, with two sponsons that normally run the full length of the hull.
- ii) Sponsons are separated and connected together by a tunnel.
- iii) Sponsons may have lateral breaks.
- iv) Inboard or outboard mounting of the motor(s) is permissible
- v) Hull length must conform to those listed in Rule D.2.a in this section for each Power Specification

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A. BACKGROUND

NAMBA International is a non-profit association of radio-controlled model boat clubs. A President, Vice President, and a number of District Directors are elected by the members, and serve a two-year term. The President also appoints knowledgeable chairmen in such areas as Electric, Offshore, Sport Hydro, Outboard, and Unlimited Hydro.

In 1959, the Westcoast Council of Model Boaters was formed. This group of boaters raced under the basic rules of the International Model Power Boat Association, and obtained insurance through the Western Associated Modelers (WAM), headed up by Don and Myrtle Coad. During 1969-1970, a group of these West Coast boaters saw the need for a new, national R/C boat association. Working in conjunction with WAM, Bill Young of Bakersfield set up a committee consisting of Ira McKay and Jim Riccio of Arcadia, Sally Stewart Komich, Russ Kominitsky, Wally Stewart, and Bill Young of Bakersfield, and Griff Parker of San Diego. They met on many occasions in Pasadena, decided on the name of North American Model Boat Association (NAMBA), and proceeded to come up with a basic set of rules, copies of which were sent to everyone who had indicated a desire for the national organization. From the replies received came the first official set of rules. NAMBA was enthusiastically adopted under the auspices of WAM by Executive Secretary, Myrtle "Mom" Coad. To give the West Coast group a national feeling, Gary Johnson, formerly of California but currently living in Honolulu, HI and racing with the popular "Hawaiian Horde," was appointed as the first President by the original committee.

In 1974, NAMBA expanded beyond the bounds of North America to include foreign countries, and became NAMBA International. Al Metelak of Chicago, IL was elected President in 1974 and served until 1980 when Stuart Russell of Wichita Falls, TX was elected. In 1985, Wally Stewart, one of NAMBA's founders was elected to the position, and served until 1987, when Gary Johnson was again elected to serve as President. James Henry was elected in 1989, and served until 1991. At that time, Doug Twaits was elected and served until 1993. Alan Hobbs was elected in 1993, and served until 2005. Al Waters was elected in 2005 and is currently serving in this position.

"Mom" Coad remained in the position of Executive Secretary until late 1988, when she decided to retire. At that time, Cathie Galbraith of San Diego, CA was appointed to take over the duties of this position, and is still serving in that capacity.

Ten years after the founding of NAMBA, the NAMBA Hall of Fame was introduced to honor those who had unselfishly contributed towards the growth and improvement of NAMBA over the years.

Each year, NAMBA holds a week long regatta in a different locale, so that all members may have the opportunity to participate with competitors from all over the country and the world. Past Nationals have been held in various cities throughout the United States and Canada, see

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table later in this section.

With the increasing interest in Electric racing it was decided to offer some electric racing at the nationals in Bristol PA in 1993. In 1996 it was decided to hold an all Electric Nationals each year. This event is drawing more and more boaters each time it is held, see table later in this section.

Our history is one of tremendous growth for NAMBA, from West Coast to National to International interest and participation. We eagerly anticipate equal growth in the coming years. We know that with model boating and with NAMBA, THE BEST IS YET TO COME!


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B. NATIONALS LOCATIONS

Year	Nitro/Gas	Electric
1972	Los Angeles, CA	
1973	Seattle, WA	
1974	San Diego, CA	
1975	Tulsa, OK	
1976	Baltimore, MD	
1977	Reno, NV	
1978	Naples, FL	
1979	Seaside, CA	
1980	Tacoma, WA	
1981	Amarillo, TX	
1982	Los Angeles, CA	
1983	Vancouver, British Columbia, CAN	
1984	Newark, NJ	
1985	Reno, NV	
1986	Fort Worth, TX	
1987	San Diego, CA	
1988	Wichita, KS	
1989	Camarillo, CA	
1990	Springfield, VA	
1991	Los Angeles, CA	
1992	Sacramento, CA	
1993	Bristol, PA	Bristol, PA
1994	San Diego, CA	
1995	Camarillo, CA	
1996	Los Angeles, CA	Randolph, NJ
1997	Manteca, CA	Tacoma, WA
1998	Springfield, OR	Los Angeles, CA
1999	Sayerville, NJ	Kissimee, FL
2000	Greeley, CO	Randolph, NJ
2001	Manteca, CA	Anchorage, AK
2002	Springfield, OR	Seattle, WA
2003	Carlsbad, NM	Fremont, CA
2004	Los Angeles, CA	Sanford, FL
2005	Rollingsford, NH	Milford, MI
2006	Fort Lauderdale, FL	Randolph, NJ
2007	San Jose, CA	Munroe, WA
2008	Greeley, CO	Nicolaus, CA
2009	Marysville, WA	Brighton, MI
2010	Reserve, LA	Greeley, CO
2011	Los Angeles, CA	Fort Pierce, FL

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Year	Nitro/Gas	Electric
2012	Rollingsford, NH	Los Angeles, CA
2013	Salt Lake City, UT	Nicolaus, CA
2014	Marysville, WA	Leonard, MI
2015	Nicolaus, CA	Greeley, CO
2016	Wichita, KS	Marysville, WA
2017	Las Vegas, NV	<i>*combined with Nitro/Gas</i>
2018	Carrollton, TX	<i>*combined with Nitro/Gas</i>
2019	Salt Lake City, UT	<i>*combined with Nitro/Gas</i>

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A. PURPOSE

NAMBA International continues to grow with the efforts of dedicated people who are willing to sacrifice their time, talent, and ideas for the promotion of model boating. Many people in NAMBA's history have shown outstanding leadership, devotion, and expertise in keeping NAMBA the great organization that it is. The Hall of Fame is not a popularity contest and is not politically motivated.

The NAMBA Hall of Fame was the brainchild of Al Metelak, NAMBA's second President. He requested that Gary Johnson create a program that would spell out the requirements for being a Hall of Fame member. The first nominees were inducted in 1981 at the Nationals in Amarillo, TX. Five inductees were honored with beautiful brass emblems mounted on a walnut and brass plaque. They also received a beautiful embroidered Hall of Fame jacket patch.

It is hoped that this special honor and thank you will make all of the time spent worthwhile, and encourage other members to strive and look forward to being honored in the Hall of Fame.

NAMBA International is proud to honor its members who serve and promote the hobby/sport of model boating. Included at the end of this section are brief resumes of the current members of the Hall of Fame. Their contributions are varied, and encompass all areas of the hobby. They have helped make model boating and NAMBA what it is today.

B. CHAIRMAN

1. The Chairman of the Hall of Fame shall be a current Hall of Fame member.
2. The position will have a term of two years.
3. Hall of Fame members will vote on this Chairman for each term.

C. PROCESS FOR NOMINATION AND INDUCTION

1. Qualifications

- a) Nominee must be a current NAMBA member, unless deceased, who has been a member for at least ten years.
- b) Nominee should have held some of the items listed on the nomination form. These items include, but are not limited to: national/district offices, national/district chairmanships, national/district championships, national records (oval and/or straight-line), and experience as a district/national contest director.

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2. Nomination

- a) Nomination must be made by a current adult NAMBA member, who has been a member for at least five years.
- b) The deadline for a nomination will be eight weeks prior to a scheduled induction ceremony.
- c) Must be made on the appropriate form, which can be received from the NAMBA office or from the Hall of Fame Chairman. Once completed the form must be returned to the Hall of Fame Chairman.

3. Voting

- a) The Chairman forwards copies of all nomination forms received by the deadline to all the current Hall of Fame members for voting.
- b) Nominees will be voted on by a simple majority of the returned votes from current Hall of Fame members.
- c) Only one person can be voted in during any given year.
- d) If a nominee fails to be voted in during a particular year, their name and application must be resubmitted for consideration in a following year.

4. Induction

- a) The induction ceremony is normally done at the banquet at the end of the Nationals.
- b) Each new inductee will receive a plaque and embroidered patch to commemorate their induction into the Hall of Fame.

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D. MEMBERS



Myrtle "Mom" Coad – Inducted 1981

Mom Coad started model boating in 1943, and ran her first R/C boat in 1959. Her real value to NAMBA was the hundreds of unselfish hours spent in the creation, administration, and operation as the Executive Secretary to the organization from 1971 to 1988. During that time, she was truly the backbone and conscience of NAMBA. She is also a member of the Hall of Fame of the Academy of Model Aeronautics.



Donald C. Coad - Inducted 1981

Don ran his first R/C boat on Lake Merritt in 1931. Radios were scratch built in those days. He helped start the Richmond Model Boat Club in the 1950's, and was President of WAM in 1959 and 1960. Don spent countless hours helping his wife, Mom Coad, with the administrative functions of NAMBA for over 17 years. Don was also responsible for the die work on the NAMBA pins, and manufactured and engraved the beautiful brass record shields for many years.



Gary L. Johnson – Inducted 1981

Gary was the President of seven different model boating clubs, starting in 1953. He was active in power, sail, and scale model boating, and was a Contest Director for over 100 model boating events. Gary served as NAMBA's first President from 1971 to 1973, and again from 1987 to 1989. He designed over 20 patches for various regattas, and his organizational leadership gave NAMBA its firm foundation from the beginning.



Al Metelak – Inducted 1981

Al started in model boating by operating a retrieve boat at a local contest in the late 1960's. He became President of the Racing Dolphins Model Boat Club, and was a NAMBA District Director from 1971 to 1973. He then served as NAMBA President from 1974 to 1980. One of Al's greatest values to NAMBA was his public relations activities at the many hobby trade shows throughout the country. He also represented NAMBA at FCC frequency meetings to make sure that model boating was not forgotten.

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George Campbell – Inducted 1981

George got involved in organized model boating in 1967. He was one of the founding members and past officers of the Modeleers in the San Fernando Valley area of California. He held several speed records, and was the district A Mono champion in 1974. George designed model boats for several different manufacturers over the years. George was a true pioneer in hull design, and was always ready to help a fellow model boater.



John Brodbeck, Sr. – Inducted 1982

John spent the better part of his life promoting modeling and manufacturing hobby related items. John was one of the nation's leaders in supporting the development of model marine products. He could always be counted on to support model boating. John's years of work and enthusiasm gave us many fine products that make it possible for model boating to be what it is today. John is also a member of the Hall of Fame of the Academy of Model Aeronautics.



Jerry Dunlap – Inducted 1982

Jerry started model boating in the 1950's running small outboards, and his first R/C boat was built in 1966. Since that time, Jerry has authored many articles on model boating in the consumer hobby magazines. He has also designed several boats for various manufacturers. Jerry's NAMBA involvements are many. He has served as District Director, Nationals Contest Director, Technical Committee member, and various class chairman. Jerry is a real spark plug in promoting model boating in the northwest.



Chuck McGaughy – Inducted 1983

Chuck started his model boating with a tether boat in 1947. Twenty years later he saw a B Hydro running, and has been hooked ever since. He was largely responsible for NAMBA's initial success on the east coast, serving as District One Director for several years. After moving to the west coast, he also served as Commodore of the San Diego Argonauts. Chuck's hard work and enthusiasm have led to his success both on and off the water.

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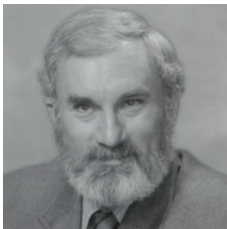
Wally Stewart - Inducted 1983

Wally's first contact with model boating was at the family owned hobby shop in the 1960's. He was on the original Rules Committee during the formation of NAMBA, and helped with the first rule book. Wally has served as a District Director, Nationals Contest Director, and President of NAMBA from 1985 to 1987. Wally has also won several national championships, and has always had very competitive boats.



Edward Fisher - Inducted 1984

Ed was a member of the Seattle Model Yacht Club for many years, as well as being a member of the Technical Committee. He helped organize and run the 1973 NAMBA Nationals. He designed at least 90 percent of the boats that he has run, and does all of his own work. Ed was the first member to run over 80 miles per hour, and the first and only NAMBA member to have set over 100 records. In 1983 he received the Presidential Award for outstanding achievement.



Stuart Russell - Inducted 1985

Stuart attended his first Nationals in Florida in 1977, and attended many more since then. As a native Texan, he was always there with a big Texas hat and a bigger smile to greet you. In his line of work, he was always able to take along a model boat to attend races on weekends, and did a good job of promoting NAMBA. Stuart served as NAMBA President from 1980 to 1984. His "notable quotes" at the end of his President's Message each month were always worth reading and remembering.



Gary Jeffery - Inducted 1986

Gary started in model boating in 1972 when he became involved with the Stampede City Model Boat Club, now known as the Calgary Model Boat Racing Association. He served as Commodore during 1973, and held various other positions over the years, including Contest Director. He was involved in the organization of the first truly international event in NAMBA, the 1983 Nationals in Vancouver, British Columbia. He served as the District Director for Canada for several years, and held several Canadian speed records.

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Douglas Twaits, Sr. - Inducted 1986

Doug first ran small outboards in the early 1950's, and ran his first R/C sport boat in 1976. He served several terms as District One Director, and served as NAMBA President from 1991 to 1993. Doug has promoted NAMBA with booths at trade shows over the years, and served as Contest Director for the 1984 Nationals held in New Jersey. Doug has held many district records and class championships, and has been instrumental in getting electric racing going in District One and in NAMBA.



James Henry - Inducted 1987

James started his model boating career in San Diego, being one of the early members of the San Diego Argonauts R/C Boat club. He also served as Commodore for that club, as well as a stint as District Nine Director. He was also on several Nationals Committees, and did much to promote model boating in Southern California. He served as NAMBA President from 1989 to 1991. He passed his legacy of model boating on to his son and grandsons, who are still actively racing today.



Jay Brandon - Inducted 1987

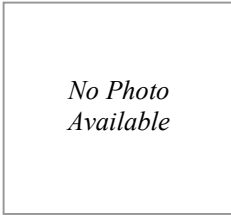
Jay's contributions to model boating cover a span of many years. Purchasing Dumas Boats in 1964, Jay has provided quality model boating equipment to the hobbyist for over 30 years. Jay has actively promoted NAMBA by including NAMBA membership in every boat kit that he sells. He has always contributed generously to the Nationals and district events over the years with class sponsorships and raffle donations.



Buzz Passarino - Inducted 1988

Buzz started modeling in 1931 by constructing rubber powered model airplanes. By 1938 he had graduated to gas powered planes, and in 1940 he switched to U-control planes and tether speed boats. In 1970 he switched to R/C sailboats, and with the appearance of K&B's outboard, he started designing and building tunnelhulls. He has also run hydros, monos, deep vees, and scale unlimiteds. He served for many years on the Technical Committee, and has introduced countless boaters to NAMBA.

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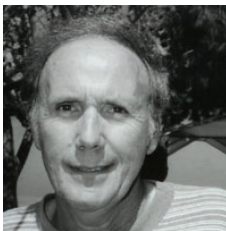
Bob Plumley - Inducted 1989

Bob spent many years in model boating in the Los Angeles area, being one of the founding members of one of the first organized clubs in that district, the Pirates Model Boat Club. Bob always supported NAMBA events, and participated in various classes throughout the years. Even after Bob stopped running boats actively, he always took an interest in local events, and came to help out when needed.



Frank Hu - Inducted 1989

Frank started in model boating while living in Hawaii and was one of the original members of the Hawaiian Horde. Frank also attended races in Japan, and was responsible for getting the Japanese team to attend several of our Nationals. He served as an assistant to the first President of NAMBA, Gary Johnson, and represented NAMBA at events throughout the country.



Steve Muck - Inducted 1990

Steve Muck started in his model boating career in the Los Angeles area, and was one of the original members of NAMBA. He later left Los Angeles and moved to Dallas, Texas, but his participation in boating did not stop. Long a model boating competitor, he then became a manufacturer, providing competitive boats and hardware to model boaters around the country.



Richard Hazlewood - Inducted 1990

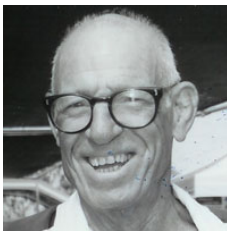
When one thinks of outboards, one thinks of Richard Hazlewood. Getting started in model boating in Needles, California isn't easy, but Richard did it in a big way. He has numerous National Championships to his credit, either as a driver or as the mechanic and pitperson to his family members. Richard served several terms as NAMBA's Outboard Chairman.

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Al Prather - Inducted 1991

Al's first introduction to model boating was in the late 1970's, when his son Terry received a model boat hull from Bill Bennett. From that point on, Al was hooked, and was instrumental in the design and marketing of numerous model boat hulls and related equipment. Al raced actively for many years in District 19, and spearheaded the campaign to raise money and gain permission to build a permanent drivers stand at Legg Lake. Many new boaters started off with a Prather boat, and their easy to follow instructions made building virtually fool-proof.



Jack Oxley - Inducted 1994

It seems like Jack Oxley has been a fixture in District 19 as long as anyone can remember. For years, his distinctive Wing Dings dominated the hydro classes. Jack has run just about every type of boat imaginable, from outboards to inboards, monos to hydros to unlimiteds, nitro to gasoline. In addition, he has held records in almost all of these classes at one time or another. Jack can be seen almost every weekend at Legg Lake, and he is still the guy to beat in most of the classes he runs.



Al Wood - Inducted 1994

Al started his model boating career in England, sailing model yachts with his father. His modeling career in this country spanned many years, mostly in the Los Angeles area. While he spent some time running tether boats, he also moved into the R/C arena. His prop designs were renowned. Al was also able to turn his hobby into a profession, making radio controlled boats and ships for the movie industry. Al could always be counted on for a helpful hint, a kind remark, and a hug.



Pat and Charlie Pottol - Inducted 1994

Charlie and Pat began model boat racing in the 1960's in northern California. Charlie saw the need for better boating hardware, and created a company called Marine Specialties. Pat served as the order desk, where she literally talked to boaters from around the world, many of whom she talked into coming to regattas in the United States.

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Cathie Galbraith - Inducted 1995

Cathie started out in model boating in the Chicago, Illinois area in the mid 1970's. Her first boat was a Dumas Hot Shot. She quickly moved into the mono classes after seeing the Prather Deep Vee run at the 1979 Nationals in Monterey. She has had stints as Secretary and Treasurer of the San Diego Argonauts for many years, has been on eight Nationals committees, and has served as NAMBA Executive Secretary since 1988.



Judi Hazlewood - Inducted 1996

Judi has been active in model boating for over 20 years. She served one term as Director of District 19 and has served as District Secretary/Treasurer for over five years. Judi is always willing to pitch in when help is needed. She has served on several Nationals committees and is one of the founding members of the Needles River Rats. While Judi is mainly an outboard enthusiast, she has been seen running some of the inboard classes from time to time.



Ernie Bob - Inducted 1996

One of the original Hawaiian Horde, Ernie has been instrumental in keeping model boating alive and well in Hawaii. He has served several stints as District Director and has helped many new boaters get started in the hobby. Ernie has attended quite a few Nationals, and can always be counted on to have a non-stop bench racing session going on in his room after the day's racing is done.



Alan Hobbs - Inducted 1997

Taking over the reigns of NAMBA President in 1993, Alan took NAMBA to a new level of independence. Prior to his term in office, our insurance was still being purchased through WAM. Alan negotiated with the insurance company, moving that responsibility completely under NAMBA's control. Alan is a very active President and can be seen attending races in all areas of the country. Alan has also attended many Nationals over the years.

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Ira Cotton - Inducted 1997

Ira was one of the early members of the San Diego Argonauts model boat club, serving several terms as their Commodore. He also served as Contest Director of two of the NAMBA Nationals which were held in San Diego and has attended all but four of the nationals held in other areas. Whenever anyone thinks of Ira they think of beautifully detailed unlimited hydroplanes. His "Oh Boy, Oberto" hulls have become legendary, taking top honors in most of the concours events in which he was a participant.



Jack Garcia - Inducted 1998

When one thinks about outboards, one thinks about Jack. Jack worked for many years with K&B Manufacturing, helping in the design and development of the outboard engine. Jack served one term as District 19 Director, and helped develop the popularity of the outboard class in that district. He served as National Outboard Chairman for NAMBA and has contributed many articles to the *Propwash* over the years. Jack is always there with a smile and a helping hand for rookie and seasoned boaters alike.



Dave Bestpitch - Inducted 1998

Dave has been a member of NAMBA since its early days. He has served terms as Director of District Nine and served as the Contest Director for the 1992 NAMBA Nationals which were held in Sacramento. Dave and his wife Bev can usually be found at all of the west coast nationals complete with their engraving equipment, personalizing plates for the trophies with the winner's name. Dave currently serves as the NAMBA Records & Awards Chairman.



Doug DeWitte - Inducted 2000

Doug started model boating in 1988 and attended his first Nationals in 1989. Since then he has attended many more Nationals and has won many National Championships. He served two terms as District 19 Director, several years as NAMBA Sport Hydro Chairman, and two terms as NAMBA Vice President. He also served on five Nationals committees. Doug says his real love in NAMBA is the people, who in his words are "my second family".

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Jim Whitlatch - Inducted 2001

Jim began running tether hydroplanes in 1951. While living in the Los Angeles area, Jim was a member of the Modeleers. In 1966, Jim became a contributing editor of *RC Modeler Magazine*, writing technical articles and coverage of NAMBA/IMPBA Nationals. After relocating in the Bay Area in the 70's, Jim became a member of the Model Mariners. Jim has won numerous National championships and has set records in straight-line speed and oval competitions.



Al Waters - Inducted 2003

Al joined NAMBA in 1989. He served two terms as District 19 Director, is currently the NAMBA Scale Hydro Chairman, and was elected NAMBA Vice President in 2002. Al created the District 19 web page and still serves as webmaster. Al was the Co-Contest Director of the 25th Anniversary Nats that boasted almost 1000 entries. Al has been an ambassador for NAMBA, attending races in different districts and different organizations.



Mark Anderson - Inducted 2004

Mark started model boating in 1977 at the age of 12 and has been going strong ever since. He served as the Director for District Eight for several terms. One of Mark's true loves is the Sport Hydro class and he has previously served as the NAMBA Sport Hydro chairman. District Championships are numerous for Mark. In addition, he has won many championships at the Nationals. Mark served as the overall CD for the 1998 and 2002 Nationals. Mark is always willing to share his boating expertise and has helped many new boaters become competitive.



Charles Fondacaro - Inducted 2004

Chuck first joined NAMBA in 1970 in Southern California. In 1972 he was part of the committee that petitioned NAMBA to hold a large national event. This event became the first NAMBA Nationals and set the stage for many more to come. In 1993 he was part of the group that held the first NAMBA sanctioned gas race. Chuck won several district gas class championships as well as winning several national championships. Chuck has also served as the District 19 Gas Chairman.

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Dave Rychalsky - Inducted 2005

Dave has served as the Director for District One and as the District One Outboard Chairman. He has also served as the Contest Director for the 1993 and 1999 NAMBA Nationals. He has won several district and national championships. Dave was recently appointed to the newly created post of Nationals Chairman. In this position he will lend his Nationals CD experience to districts hosting the Nats. Dave has also contributed many articles to the *Propwash*, and is probably best remembered for his series of humorous “My First...” articles.



Jim Wilson - Inducted 2005

Jim Wilson is a long time District Nine boater and member of the Model Mariners. He has served numerous stints as club Commodore and Contest Director. Jim has served as the District Nine Rule and Technical Chairman, and is looked to for his knowledge and understanding of our hobby. He has won numerous National Championships. He has also won over 40 district championships. He is always helpful to other boaters, doing what he can to make sure that they get on the water.



Tony Rhodes - Inducted 2006

Tony Rhodes started his model boating career in District 19 in 1990. Tony served as the District 19 Outboard Chairman for six years and as the District Director for two terms. He took on the job of NAMBA Vice President in 2006. Tony has always been competitive in any class that he entered, winning numerous district and Nationals championships. Not only has Tony attended many NAMBA Nationals, usually entering over 15 classes, but he also was the Contest Director for the 2004 Nationals that were held at Legg Lake in Los Angeles.



Joe Monohan - Inducted 2006

Joe has been racing in District 19 for over 30 years. While he is mostly known as an outboard racer, he has also had forays into the inboard and scale classes. Joe recognized the need for custom boat parts, especially for the outboards, and created 707 Specialties. His parts have helped many model boaters become more competitive. He also was active in R&D work with K&B in the development of various outboard engines. Joe has been the longtime President of the Prop Nuts Model Boat Club and has hosted many District 19 races over the years.

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Mark Grim - Inducted 2007

Mark started in model boating in 1972 as a young boy. In the mid 1980's he started helping out as a contest director at district races and continues to do so to this day. You cannot say "NAMBA Records" without thinking of Mark. Not only has he held numerous records himself, but he has also directed many straight-line and two-lap oval record events in District 19. Mark has attended many NAMBA Nationals and was on the committee that organized the 2004 Nationals in Los Angeles. Mark is viewed as an expert in engine and prop modification, and has helped many model boaters get their boats running more competitively.



Roger Newton - Inducted 2009

Roger started in model boating in 1973 when he ran a 1/8th Scale Unlimited in C Hydro. Scale was not yet an official NAMBA class, but in the years that followed, he and others worked tirelessly to make it the prestigious class it is today. Roger, lovingly known as The Czar, traveled all over the country racing in and promoting his favorite class. While he set many records, he may be best known for his extensive library of scale hydro plans, used by scale boaters worldwide to accurately build their boats. Roger passed away in 2008, but his legacy in 1/8th Scale Unlimited will live on.



Doug Twaits, Jr. - Inducted 2010

Doug Twaits, Jr. has been a prominent racer and innovator in the NAMBA Fast Electric classes over many years. Not only has he helped to develop the boats being used, he has set and holds many Fast Electric oval and straightaway records since 1991. He was the first to use piano wire drives to break some of these records. He has served twice as the Fast Electric Nationals Contest Director and has been on many Nationals committees. He has also served as the District One Fast Electric Chairman.



Lohring Miller - Inducted 2011

Lohring Miller has been actively involved in model boating for over 20 years. He has served as president of the Emerald RC Boaters. Lohring has also served several terms as District Eight Director and was the overall Contest Director for two NAMBA Nationals. He is a regular contributor of technical articles to the NAMBA newsletter. He has also spent some time helping out with a full sized hydroplane. Lohring can always be counted on to lend help and enthusiasm to any event he attends.

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Lenny Blake - Inducted 2012

Lenny Blake has been a NAMBA member since before 1986. Lenny's commonly known as Rum Racing or part of the Hey Mon Race Team in Team Marathon. Lenny won his first NAMBA Nationals Championship in 1992 and has continued to do so in both Nitro and Gas in the 20 plus Nationals that he has attended. Lenny has been the Contest Director/Race Announcer for numerous races in his district and at various Nationals. Not only has Lenny participated in many events, he has also supported them as a manufacturer of model boat hulls, hardware, and class and product sponsorships.



Robert Holland – Inducted 2013

From being a nine year old spectator at the 1974 Nationals to being the President of NAMBA, Robert has been actively committed to the future of NAMBA. Robert has held the offices of District Director, NAMBA Vice President, and Contest Director of NAMBA Nationals for Nitro, Gas, and Fast Electric. Robert's love and dedication for the sport, loyalty to local clubs, district, and generous support to other boaters make him a recognized leader. He blends sportsmanship with family values making friendships while promoting model boating.



Jerry Wright – Inducted 2016

Jerry has been a NAMBA member in District 7 since 1978. Jerry has been involved in model boating as a successful racer at district and national levels. Over the years Jerry has held every position available at the club and district level, currently serving as the NAMBA District 7 Director promoting model boating in New Mexico and Texas. He has organized large district and national events, including some where they were able to donate funds to various charitable groups in the area. He routinely makes time to travel to other districts in NAMBA as well promoting our hobby.



Karl Morse – Inducted 2017

Karl has been an influence in model boating in the Tucson AZ area since 1969, and was instrumental in obtaining a model boat pond there. He is one of the founders of the Tucson Model Boat Club and has served as its president. He organizes their club/district races, as well as being the club's statistician and organizes their end of year awards' meetings. He has won NAMBA National Championships in nitro and gas classes. He is always willing to share his knowledge with new and veteran boaters, helping to repair damaged boats and keeps parts, hardware, and engines on hand to support model boating.

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Tracy Osborne - Inducted 2018

Tracy started racing in 1982 in the Kids-R-Boaters series, and continued racing regularly at district and national through the 90s. Tracy's work for NAMBA started with helping her mom (former NAMBA Secretary and fellow HOF member Cathie Galbraith) and has continued ever since. She helped reformat our Rulebook in 2006 and continues to maintain it today. She has helped put on races at a district and national level, serving on several Nationals committees. She has maintained District 19s website and tracking their points since 2012 and currently serves as their secretary/treasurer.



Richard "Rags" Grenier – Inducted 2019

Richard has been a NAMBA member since 1995. He saw the need for a separate New England district in NAMBA and successfully petitioned for the creation of what is now District 11 and has served as its Director since. He has hosted many district races, making sure to communicate with his district via newsletters after each race, and provided several articles for NAMBA's national newsletter. He served as the contest director for the two NAMBA Nationals that District 11 has hosted.