

# U.S. ISOTOPE CLASS RULES & SPECIFICATIONS

Effective: January 1, 2004

## ARTICLE - S1: General

1. The intent of these rules and specifications is to maintain the Isotope Class as a one-design class while providing reasonable opportunities for the continuing development of the Isotope as a high performance catamaran. Reasonable opportunities should be interpreted as innovations in the design, manufacture, and equipment of the Isotope which:
  - A. Preserve the uniformity of all submerge parts.
  - B. Encourage participation through economical ownership.
  - C. Promote safe sailing and fair racing.

The class officers should keep in mind the spirit as well as the letter of these rules and specifications when applying them.

2. The Isotope Design is the exclusive property of I.F.G. International Fiberglass; the use of the Isotope name, emblem, or design by any other person, firm, or organization without the written permission of IFG is prohibited.
3. The hull, crew, or equipment of an isotope shall conform with IYRU Rule 26 concerning advertisements except that one Isotope Class emblem shall be displayed on each side of the mainsail. The whole of such emblem shall not exceed more than 15% of the length of the luff of the mainsail.<sup>1</sup>

## ARTICLE - S2: Builder and Measurement authority

1. The builder shall be I.F.G. International Fiberglass or a manufacturer formally licensed by them.
2. IFG and its designated measurers are the measurement authority for the Isotope Class under the meaning of RRS 64.3b.

## ARTICLE - S3: Weight Criteria

1. The all-up weight of an Isotope shall not be less than 250 lbs. (113.6 kg).
2. The all-up weight shall be defined as the total weight of the hulls, centerboards, rudders, tiller assembly, running and standing rigging, mast, sails, boom, battens, sheets, flotation apparatus, and other equipment and hardware permanently attached to the boat. Not-included are life jackets, paddle, and other easily removable items.

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<sup>1</sup>The original hulls of Isotopes built before January 1, 1979 need not conform with IYRU Rule 26.

3. When sailing under the 2-Up Portsmouth, minimum weight of skipper and crew shall be 250lbs. If this weight minimum is not met, the 1-Up Portsmouth shall be used.

#### **ARTICLE - S4: Hulls and Cross Arms**

1. All hulls shall come from uniform molds of the builder.
2. Cross Arms:
  - A. Fore and Aft cross arms are to be extruded aluminum mast sections. Their position shall not be altered. The cross arms shall not be Permanently bent or raised.
  - B. A dolphin striker type reinforcer, or a reinforcing device approved by the manufacturer must be installed on the fore cross arm. The mast step shall be in the center of the fore cross arm.
3. There shall be sufficient flotation in the hulls to float a fully rigged and fully equipped Isotope with a crew of two adults when both hulls are completely flooded. Flotation apparatus shall be fully effective at all times.
4. The official registration number shall be affixed to each transom.

#### **ARTICLE - S5: Rudder & Tiller Assemblies**

1. All rudders shall come from uniform molds of the builder.
2. Tiller assemblies and tiller extensions shall not extend further than that distance necessary for the skipper to assume a normal sailing position.

#### **ARTICLE - S6: Centerboards**

1. All centerboards shall come from uniform molds of the builder.

#### **ARTICLE - S7: Spars**

1. Mast:
  - A. The mast shall be a section of extruded aluminum alloy.
  - B. The mast shall have a minimum length of 26' (792 cm.), and a maximum length of 27'2" (828 cm.); the measurements are to be taken from the top of the mast cap to the bottom of the mast base.
  - C. The total area of the mast shall not exceed 15% of the total sail area.
2. Boom:

- A. The boom is to be made of extruded aluminum alloy.
- B. The boom shall have a maximum overall length of 9'6"(290, cm.).
- C. The total area of the boom shall not exceed 5% of the total sail area.

**ARTICLE - S8: Rigging**

- 1. Standing Rigging:
  - A. Rigid rigging is prohibited.
  - B. Forestays and jibsail tacks shall be fixed approximately in the centerline of the boat.
- 2. Running Rigging shall be designed so it is possible to lower or reef all sails from the trampoline while the mast is stepped in its normal sailing position.

**ARTICLE - S9: Sails**

- 1. The total area of the working sails shall not exceed 185 ft<sup>2</sup> (17.18 m<sup>2</sup>).
- 2. When sail measurement is required, each sail shall be stamped and marked at the tack with the measured area to the nearest square foot with an approval stamp by a designated representative of the Measurement Authority prior to the first race.

**ARTICLE - S10: Prohibited items**

- 1. Whisker Poles.
- 2. Devices measuring or indicating boat speed through the water.
- 3. Electronic, hydraulic, or pneumatic devices of any kind except wind direction indicators and timepieces.

**ARTICLE - S11 : Racing Restrictions**

- 1. The 720 degree turn penalty as provided in RRS 44.2 and 44.2 is replaced by a 360 degree turns penalty. A 360 degree turns penalty consists of one tack and one gybe, or one gybe and one tack in the same direction before resuming course. Any Notice of Race and Sailing Instruction shall include this provision.
- 2. The following equipment shall be carried at all times:
  - one paddle
  - 50 ft of suitable tow line
  - one U.S.C.G. approved flotation device Type I, II, or III of appropriate size and usable condition for each person aboard.
  - one throw-able personal flotation device Type IV



Running rigging and other boat parts do not fulfill these requirements.

3. Hiking Systems are restricted to the following:
  - hiking straps fastened to the trampoline or cross arms.
  - single-person trapeze rig.
4. An Isotope Class boat shall conform with all Isotope Class Rules and specifications to be eligible to participate in events sponsored or sanctioned by the U.S. Isotope Class Association.
5. Local Isotope fleets, participating in events that are not sponsored or sanctioned by the U.S. Isotope Class Association, may establish their own racing restrictions to suit local conditions provided those additional restrictions do not conflict with or supersede the existing class rules.

