



SOLAR & ENERGY OFFSHORE RACE

YCM Offshore Class

Technical Rules January 2018

The goal of the YCM offshore class is to encourage the development of boats with a more eco-responsible propulsion on the water.

Teams are encouraged to develop partnerships with universities.

1. Language

The official language for the event is English.

2. Responsibility

All participants are at all times responsible for the technical condition and safety of their vessels during the course of the race.

Approval to race or certification will, under no circumstances, exempt the participants of their responsibility.

3. Standards and Certification

All boats must be up to standard and certified by the builder in accordance to Directive 94/25/EC as amended by Directive 2003/44/EC for Recreational Craft in Category C “Inshore” (wind force up to and including 6 on the Beaufort scale and a significant wave height up to and including 2 meters) or the equivalent US Standard 6.5ft.

Boats must send their Declaration of Conformity one (1) month before the start of the race to the organising Authority.

Certified boats which have been modified to compete must submit copies of certification, declarations and supporting documentation for the modifications to the technical committee at least two (2) months in advance.

4. Maximum Size

Boats length overall shall not exceed 12 meters (40 feet approx.). There is no limit to the width.

Boats that are oversized may request to join the competition but will not be classed.

5. Eligible Classes

The boat must be a power-driven vessel, a vessel powered by a machinery.

The negative impact on the environment from the machinery must be significantly reduced compared to current standards for yachts.

Boats will be classed by the organisers as follows:

- INDEPENDENT if the boat’s energy source can be replenished using renewable resources, available around the boat & transformed on-board.
- RELIANT if they are not independent.

Each project must be submitted to the organisers when pre-registering. The organiser reserves the right to refuse a Team’s application if the standard, quality and rigour of the application are considered insufficient.

6. Minimum Payload

Boat minimum payload for the race will be three (3) passengers (including the driver) of a minimum of 80kg each (correctors may be applied to reach the 320kg required weight).

7. Safety and Craning

All passengers are required to wear bright coloured clothing and helmet, and lifejacket.

All boats must be equipped with kill cords for the driver and kill switch capable of isolating all electrics from the driving console.

All boats must have on board a means to recover a person from the water.

All boats must be fitted with a towing eye at the bow adequate for towing at 6 knots.

All boats requiring craning must be fitted with removable strops to permit single point lifting.

8. Communications

Boats must carry a marine VHF capable of transmitting DSC on channel 70, radiotelephony on marine channels and an AIS transponder.

9. Advertising and Boat Design

Any advertising and anything advertised shall meet generally accepted moral and ethical standards. Any advertising which is political, religious, racial or propaganda shall not be displayed on a boat, personal equipment or any other object on board a boat while racing. Attention is also drawn to the laws of individual nations which may restrict advertising within their territory or territorial waters.

A one-meter long area must be kept free of any advertisement at the bow to make place for event advertisement / bow numbers.

10. Questions and Contacts

All questions concerning the Technical Regulations must be submitted to the Organising Authority in writing to energychallenge@ycm.mc

If deemed necessary by the Organising Authority, these regulations may be amended.

The Technical Committee is composed as follows:

- Yacht Club de Monaco
- McFarlane Ship Design
- Vripack
- Hydros Foundation

Annex 1 - List of ISO Standards

All applications must be sent with this annex where all applicable standards for your boat must be ticked.

All applications must also be sent with the Declaration of Conformity or US equivalent and/or with the ISO declarations and supporting documents.

Reference	Title	Revision	Applicable
ISO 6185-1	Inflatable boats -- Part 1: Boats with a maximum motor power rating of 4.5 kW	2001	
ISO 6185-2	Inflatable boats -- Part 2: Boats with a maximum motor power rating of 4.5 kW to 15 kW inclusive	2001	
ISO 6185-3	Inflatable boats -- Part 3: Boats with a hull length less than 8m with a motor rating of 15 kW and greater	2014	
ISO 6185-4	Inflatable boats -- Part 4: Boats with a hull length of between 8m and 24m with a motor power rating of 15 kW and greater	2011	
ISO 8666	Small craft -- Principal data	2002	
ISO 8847	Small craft -- Steering gear -- Cable and pulley systems	2017	
ISO 9094-1	Small craft -- Fire protection -- Part 1: Craft with a hull length of up to and including 15m	2017	
ISO 10087	Small craft -- Craft identification -- Coding system	2006	
ISO 10088	Small craft -- Permanently installed fuel systems	2017	
ISO 10133	Small craft -- Electrical systems -- Extra-low-voltage d.c. installations	2017	
ISO 11591	Small craft -- Field of vision from helm position	2011	
ISO 12215-5	Small craft -- Hull construction and scantlings -- Part 5: Design pressures for monohulls, design stresses, scantlings determination	2008	
ISO 12215-5/A1	Small craft -- Hull construction and scantlings -- Part 5: Design pressures for monohulls, design stresses, scantlings determination	2014	
ISO 12215-6	Small craft -- Hull construction and scantlings -- Part 6: Structural arrangements and details	2008	
ISO 12215-7	Small craft -- Hull construction and scantlings -- Part 7: Multihulls	-	
ISO 12215-8	Small craft -- Hull construction and scantlings -- Part 8: Rudders	2009	
ISO 12217-1	Small craft -- Stability and buoyancy assessment and categorization -- Part 1: Non-sailing boats of hull length greater than or equal to 6m	2017	
ISO 15083	Small craft - Bilge-pumping systems	2003	
ISO 15084	Small craft -- Anchoring, mooring and towing -- Strong points	2003	
ISO 16180	Small craft -- Navigation lights -- Installation, placement and visibility	2013	
ISO 16315	Small craft -- Electric propulsion system	2016	