

CORDER RACE OFFICIAL EQUIPMENT LIST

SIGNAL / MARKSET BOAT

Quest 18ft 18ft center console powerboat with Johnson 150hp outboard & EZ Loader trailer
Raymarine depth, speed and water temp
many OEM and custom rod holders for displaying signal flags
1 15lb Danforth anchor with chain, 5lb mushroom counter weight and 200ft 3/8 line
1 5lb mushroom kettle weight with line/shackle to keep centerboards from snagging anchor
1 Extra 50ft 3/8 anchor line with thimble
1 10lb coated Danforth anchor with 100ft 3/8 line
2 telescoping boat hooks

RACE MARKS

6 3ft tall x 2 ft diameter orange ETP cylinders with 4ft anti-chafe wrapped counter weight chains
2 3ft tall x 2 ft diameter yellow ETP cylinder with 4ft anti-chafe wrapped counter weight chain
2 22in diameter Taylor Made red round tender style marks
2 22in red bouncy balls with 4ft anti-chafe wrapped counter weight chains
1 22in blue bouncy ball with 4ft anti-chafe wrapped counter weight chain
5 2ft diameter 2ft tall orange APS pumpkin marks
1 Lithium powered handheld inflator with multiple nozzles, 2 batteries & charger in Pelican case
2 12v cigarette outlet wired inflators with multiple nozzles

ANCHORS

6 10lb river anchors with 32in of 3/8in chain
3 10lb mushroom anchors with 32in of 3/8in chain
2 5lb mushroom anchors with small chains and galvanized clip shackles

CHUNKY PENCILS

10 100ft x 1/4 inch reflective orange anchor lines with threaded shackles on adjustable line keepers
4 75ft x 3/16 inch white anchor lines on small line keepers
2 60ft 1/4in lines with shackles at the end
2 75ft 3/8 in lines
3 25ft 3/8 in lines for shallow water or towing dinghy sailboats

SIGNAL BOARDS

1 single digital course number board
1 3-digit course direction board
1 3-digit course distance board
2 Charlie "change" boards
1 Team Race starting signal board with 10 different sail color squares
1 Custom Team racing Race Number signal board
1 white board with markers

SIGNAL FLAGS

FLAG	PURPOSE	12x16	12x24	18x24	22x22	24x24	24x26	35x35
RC blue	Race Committee	5ft pole			4ft pole			no pole
RC yellow	Mark Set Boat					4ft pole		10ft pole
orange	start line				no pole	5ft pole		10ft pole
orange	start line pin end					10ft pole		
P (Papa)	prep					7ft pole		10ft pole
I (India)	starts							7ft pole
Z (Zulu)	starts					5ft pole		no pole
U (Uniform)	starts						7ft pole	10ft pole
BLACK	starts						no pole	10ft pole
X (X ray)	indiv recall					6ft pole		no pole
1st SUB	gen recall		6ft pole				7ft pole	no pole
X & 1st SUB	double-ended							10ft pole
C (Charlie)	change course							4ft pole
C (Charlie)	change course							7ft pole
S (Sierra)	shorten course					7ft pole		10ft pole
AP	postpone		5ft pole	5ft pole				10ft pole
N (November)	abandon			5ft pole		7ft pole		10ft pole
H (Hotel)	N + signals ashore					no pole		
A (Alpha)	N + end of day					7ft pole		
blue	finish line						5ft pole	5ft pole
M (Mike)	missing mark							8ft pole
yellow	misc	no pole	no pole					
F (Foxtrot)	match racing						7ft pole	
V (Victor)	monitor radio					7ft pole		
L (Lima)	hail, follow-me			5ft pole				10ft pole
Pennant 1				6ft pole				
Pennant 2				6ft pole				no pole
Pennant 3				6ft pole				no pole
Pennant 4				6ft pole				
Opti Green	Class flag						5ft pole	
Optimist	Class flag			5ft pole				
Butterfly	Class flag						5ft pole	
Radial ILCA 6	Class flag							5ft pole
Laser ILCA 7	Class flag						5ft pole	5ft pole
Club 420	Class flag						5ft pole	
pink	coach flags (20)	5ft pole						
extra poles	long & short							

TEAM RACING SIGNAL BOARDS & FLAGS

1 Team Race starting signal board with 10 different sail color squares
1 Custom Race Number signal board

WATCH RACING SIGNAL FLAGS & SIGNAL BOARDS

1 24x24 Foxtrot "F" flag on 7ft pole
1 24x24 Papa "P" flag on 7ft pole
2 16x24 solid blue on 3ft pole
2 16x24 solid yellow on 2ft pole
1 16x36 pennant 1 on 6ft pole
1 16x36 pennant 2 on 6ft pole
1 16x36 pennant 3 on 6ft pole
1 16x36 pennant 4 on 6ft pole
1 24x24 Charlie "C" flag with 16x24 red flag on 7ft pole
1 24x24 Charlie "C" flag with 16x24 green flag on 7ft pole
1 24x24 Charlie "C" flag with 16x24 white flag on 7ft pole
1 24x24 Charlie "C" flag with 16x24 red flag on 4ft pole
1 24x24 Charlie "C" flag with 16x24 green flag on 4ft pole
1 24x24 Charlie "C" flag with 16x24 white flag on 4ft pole
1 Custom Race Number signal board

ON THE WATER JUDGING FLAGS

2 jets Green/Red/Black Team Race Umpire flags
2 yellow flags for RRS 42 Fleet Race judging/umpiring

ELECTRONICS - TIMING - INSTRUMENTS - ETC

1 permanently mounted VHF radio (on 18ft center console boat)
5 Handheld VHF radios with chargers, 2 with remote mic
7 two-way walkie-talkie radios
1 Garmin handheld GPS with mounting brackets
2 AOFAR 6x waterproof rangefinders
1 Windtronics 2 wind speed instrument w/ flex mount
2 Windre360 wind speed instruments w/ extension handles
1 Vaiaud WeatherPro Bluetooth wind meter
1 WindMate handheld wind meter
1 stopwatch
4 digital clock/countdown timers with seconds display
3 digital voice recorders on lanyards
1 Windex wind direction indicator on carbon pole
many yam windsticks
1 7x50 binoculars with integrated compass
1 Nautilus IRIS 50 hand bearing puck compass
2 handheld fluid compasses
1 Start automatic sound starter with custom rod holder mount & extra set of remote horns
4 battery powered 50 watt bullhorns with extra batteries
4 handheld air horns - variety of nozzle sizes
many cans of compressed air
1 70 db handheld electronic horn/whistle
1 Spalding Windsor electronic whistle
3 manual whistles on lanyards
1 pocket brooches
many spare batteries for all the above
3 Clipboard with document compartments

ON THE WATER APPS

iNavX	TracTrac	BuoyWhale	RadarUS+
iSailGPS	Radar Omega	BuoyData	RadarPlus
MarkSeibot	RadarScope	WindAlert	NOAA Radar
Rowy Zone	SailFlow	Windy	iTactic
Kwindoo Tracker	PredictWind	StormRadar	Lightning Pro
Kwindoo Race Committee	SailDrone	Wunderground	WindHub

ON THE WATER INFORMATION & SCORING

*All packed in a rolling Pelican case

HP laptop computer with all relevant software
HP printer w/ extra ink cartridges
stapler, pens, pencils, markers, dry-markers, etc
extension cord and power strip
pink ribbon for identifying Opti Green Fleet boats

REFERENCE, JUDGING & PROTEST HEARINGS

printed Racing Rules of Sailing	World Sailing Case Book
ISSA Procedural Rules	World Sailing Appeals Book
ISSA Dinghy Class Rules	US Sailing Judges Manual
ICSA Procedural Rules	Rule 14 Decision Tree
ICSA Dinghy Class Rules	Protest Hearing Procedures
Portsmouth DSA target time glossary	Preferred Standard Wording
Target Times Tables for numerous boat designs	Scoring Guide
Optimist Go / No-Go Table	Contact & Damage
full set of magnetic protest models	Facts & Conclusions
World Sailing Jury Policies & Discretionary Penalties	Validity Reference Page

blank Protest Forms
blank Protest Decision Forms
blank Validity Checklists
blank Hearing Checklists
blank Hearing Schedule Tables
blank Hearing Results Tables

* most of the above also on smartphone and iPad Pro