

INSTRUCTIONS FOR THE RACE OFFICER 2021 version

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Other reading

Sailing Instructions as per Club Handbook or web site (www.edyc.co.uk)



VHF Radio operation and button details:



1 Duty Nominations and Reminders

The Race Officer (RO) is responsible for confirming the other nominated duty holders (boat drivers) will attend to their duties on the race day.

The other nominees are for safety and ferrying duties (RIB and launch). Each of these duty officers is responsible for finding at least one helper each – the RIB must be manned by driver and preferably at least 1 crew member. The RO is responsible for ensuring that these officers appreciate their responsibilities for the respective duties. The RO should ring all duty members, in advance, to remind them of their tasks.

2 Preparation Time

The RO and his (committee boat) assistants (if any) should have collected and checked the required equipment, and given the safety boat crew their preliminary instructions in good time (i.e. 1 - 1.5 hours before racing)

3 RO Equipment

1. You should find everything needed - flags, hooter etc - already on board the committee boat - meaning that **the only items required to be brought out** with you will be a working **VHF hand held radio**, and the RO box (black briefcase) – check to ensure that it contains boat list/results sheets, pencils and clock/watch.

The success of this system depends on everyone leaving things as they found them!

2. Portable VHF hand held radios.

These are dropped in to chargers after drying when not in use
Use as necessary: RO and Chevy (Launch) + reserves/backup for RIBS

– before setting out please satisfy yourself that they are working by a

before setting out please satisfy yourself that they are working by a radio check)

PLEASE REMEMBER TO **TURN OFF**, RINSE IN FRESH WATER, DRY AND RECHARGE AFTER USE. FAILURE TO DO SO COULD JEOPARDISE SOMEONE'S LIFE!

- Autohoot Horn and battery box These should be left on the Committee boat. Plug into the solar panel after racing. (Any problems with this equipment should be reported to the Sailing Captain after your duty and logged in the Osprey logbook.)
- 4. You may find a pair of binoculars to be useful in RO box.



4 Weather

Obtain a current weather and inshore waters forecast

- also reconfirm the tide times for the race day at Killyleagh, approx 2hrs after Belfast http://easytide.ukho.gov.uk/EasyTide/EasyTide/ShowPrediction.aspx?PortID=0634&PredictionLength=2

5 Cancellation of Races - Code flag N

If 45 minutes before the scheduled start of the first race, the RO decides to cancel all or some classes, he must display Code flag N from the club Flagstaff. (Square flag chequered blue and white). If the cancellation is for all, display N over A, if some classes only, then their class flags should be displayed below flag N. These flags are in a pouch in the Sailing Office the RIB shed.

6 Sailing Instructions Change - Code flag L

If sailing instructions for a particular race have been amended (in accordance with EDYC Sailing Instruction (SI) 4 - eight days before - race committee responsibility) Code flag L must be displayed from the club flag staff at least 45 minutes before the scheduled, start of the first race. (Flag L is Square quartered flag, yellow and black).

7 Use of club boats

No person under 18 may be in charge of any powered craft belonging to the club. However, younger members may act as assistants in order to gain experience of safety duties.

PERSONAL FLOTATION DEVICES MUST BE WORN AT ALL TIMES BY ALL PASSENGERS AND CREW IN CLUB BOATS.

Launch ("Chevy") maximum 12 person including crew

Seaworthy, slow, powerful, load carrying, economical

Normal role includes an initial ferrying run or two; escorting, towing dinghies; and inward ferrying runs. Also used for transport to and from Osprey mooring.

Covid restrictions will dominate – eg no mixed groups and 2 m separation.

RIB Selection

In order to ensure safe use of any RIB in a rescue, it is best to be crewed by 2 persons.

The club has a number of RIBS, each of which has its features, however each of which should be capable of being used for safety cover at club events.

Choice of RIB should be left to the RIB driver, and many factors may influence choice including preference and convenience. The "fit for purpose" criteria must however be dominant.

Use a RIB for safety and laying or repositioning of Mark E (if necessary).

It is club policy that RIBs are used as appropriate, in circumstances when additional support craft are required and for dinghy assistance. A RIB is especially useful in emergency situations where speed of response and low "flexible" topsides are vital e.g. in choppy seas.

RIB ("Orange Humber") maximum 6 persons including crew. Seaworthy, fast, powerful, limited load carrying, economical Avoid using as a ferry (except for RO party)

Needs launching and recovery

RIB ("Osprey") maximum 8 persons including crew

Very seaworthy, difficult to control at slow speed, needs an experienced driver at least qualified RYA Powerboat II, fast when required, some heavy load carrying (in displacement mode) - not economical. Moored in the Dorn off the slipway, Chevy and RIB crew to co-ordinate recovery and re-mooring.

RIB ("Black Humber") maximum 6 persons including crew.

Moderately seaworthy, fast, powerful, limited load carrying, uneconomical Avoid using as a ferry (except for RO party)

Use for safety and laying or repositioning of Mark E (if necessary)

Needs launching and recovery

8 Use of Support Craft

The RO must decide to what extent (and in consultation) the RIB will be used. It may suit conditions to have the Humber RIB in use with the Osprey RIB on the pontoon. If inadequate manning is available, the RO must cancel Dinghy Classes. An under-manned safety boat is potentially just as dangerous as no safety cover.

The RO has overall responsibility for co-ordinating the use of the support craft, and maintaining radio contact using **Channel 37 (M, or also M1 on some sets).** There are sufficient handheld VHF radios to give at least 3 boat communications at race times – remember there is the club Landline 02844828375 - only useful if manned! (eg bar open times)

Before setting out, the RO must brief support crew regarding the craft to be used, the manning of each craft, the specific role to be served and be satisfied as to the competence of each to fulfil their role.

All support craft must carry a white "safety" barrel containing flares, first aid kit and reserve mobile phone, obtained from the RIB shed. The Ctee Vessel should have one which remains permanently on board and marked "committee boat".

The Sailing Committee will give advice or training on the handling and characteristics of club boats. This advice should be sought in advance.

9 Pre race preparation afloat

Aim to be on the committee boat a good 30 min before the first start.

Choose the appropriate courses bearing in mind:

- Strength and direction of the wind, especially on a Wednesday night with light winds. Sea State;
- Expected changes in any of the above;
- Set of the tide if the wind is light;
- △ Desirability of windward start, and/or a good beat to windward in the course;
- Ability of yachts to clear the line if the wind is light and the tide strong; and
- A Reasonable duration of races, bearing in mind the type of yacht and time limits.





10 Recommended Courses

This is an art in itself - more details later in charts and course list.

- Cruiser 1 prefer longer courses if good wind;
- Cruiser 2 and Leisures need smaller courses if the wind is light, L17s can be given the D1 course if a small fleet and/or conditions do not suit a small "cruiser";
- ♣ Dinghy 1 like moderate length courses (Saturdays 2 short courses, possibly with separate marks); and
- △ Dinghy 2 (inc Toppers) should be kept close to the committee boat.

11 The number of rounds to be sailed

The number of rounds to be sailed will be displayed with the course letters (EDYC SI 7.3). Courses can be changed/shortened during the race if required.

Note that courses must be displayed not later than the warning signal for the respective class, and cannot be changed after this time unless the correct postponement procedure is followed.

The changed course flag C may be flown at any time up to the starting signal, (RRS 32, 33), and you can use changed/shortened courses after the start.

12 The Start Mark E

The Start Mark E is a temporary mark which must be laid as required (EDYC SI 8.2). It is to be retrieved after racing and stored on the committee boat.

The Start mark should be positioned so that the start line is square to the wind.

The length of the start line is important.

* a small deliberate bias may be introduced by the experienced RO, to counter tidal effects and/or starboard end bunching. If you are using course for west or east winds, it is vital that you set up the start line with E placed appropriately to the committee boat to avoid end bias.

The Chevy launch is the most suitable craft if it is necessary to reposition the Start Mark E up to preparatory signal, but no later unless postponed.

If there is time it helps to try to get names and sail numbers on the result sheets in advance of the starts. If unsure of class, list in the preceding class and then check if the yacht has started in that class – if non started move to lower class.

13 Flags

There is a flag hoist system with halyards giving ample ropes to prepare all flags for hoist before the sequence is started.

In addition Flag X (Square flag St George's cross blue on white) on a stick for premature starters can be easily waved with the mandatory one sound signal.

14 Starting Sequence

The starting sequence begins 6 minutes before the first start.

The club has chosen to alter RRS 26 - starting system and use a 6-3-0 mins sequence.

If a postponement is necessary the answering pennant AP (Triangular flag with vertical red and white stripes) must be displayed and two sound signals made. When the postponement ends, the answering pennant is lowered, and one sound signal made. The warning signal (6 minutes) is made one minute after that. (RRS 27.3).



The names and sail numbers of all starters are entered on the result sheets. Note that any yacht sailing in the vicinity of the start line between the preparatory signal (3 min) and the start shall be scored. (RRS App A4.), but if not starting recorded DNS (RRS App A4.2).

Dinghy 2 class including Toppers/Optimists sailed single handed should be given a Holm Bay (Short) course only. A safety boat should keep a particular eye on them at all times.

At each start, the starting time is recorded on the result sheet in **hh:mm:ss** - 24 hour clock notation e.g. 19:30:00

Each class gets a Warning signal (6 min) – class flag displayed

Preparatory signal (3 min – flag remains displayed after first hoisted)

Start signal – class flag lowered/removed

See the Autohoot instructions for automatic sounds for starts.

NB: a sound can be made at any time by pressing the red button, which will not

affect the automated system.

Important notes:

Times are governed from the raising or lowering of flags, NOT the sound signal

The start must be 3 min after the preparatory signal, NOT 6 minutes after the warning signal (i.e. if the preparatory signal is made early or late, the start time is taken from that time, not the time of the previous warning signal).

15 Premature Starters

Code Flag X - 1 sound signal. At each start the RO must watch for premature starters. In such case, Code Flag X is displayed and a second single sound signal is made using the red button. The flag remains displayed until all premature starters have returned to restart, but removed one minute before the next class is due to start. Any yachts not returning to restart are entered as OCS on the result sheets. NB: Yachts are not required to go round the end to re-start.

16 General Recall

1st substitute, 2 sound signals.

If there are so many premature starters that it is not possible to identify all the offenders, than a general recall may be signalled by displaying the 1st substitute flag, and two sound signals, using the red button. Subsequent classes start normally on sequence and the recalled class started after the last scheduled start – see EDYC SI 8.4.

17 During Racing

Keep a close eye on all yachts, especially dinghies, and note any that retire.

Tick off and take the intermediate lap times for <u>all</u> yachts – hence allowing you to predict the finish time or a course shortening. It can also indicate, perhaps inaccurately, potential finish positions. **Note that yachts are required to pass between the committee boat and the Start Mark E at the end of each lap, <u>or be recorded DNF with no redress</u> (EDYC SI 7.4).**

Watch for and note yachts flying protest flags - red.

Keep in touch with support/safety craft, ensuring that they are performing the duties required of them and are <u>not motoring around aimlessly</u> wasting fuel (especially the RIBs).





Observe weather conditions and decide if any or all class races should be shortened or finished at another mark to avoid abandoning in the face of time limits.

After all the starts, the RO may have to arrange for Start Mark E to be repositioned to ensure alignment of the finish line. The definition of sailing the course is as stated in rule 28 (RRS). Repositioning may be necessary to ensure boats are able to cross the finish line from the course side – see RRS definitions.

18 Shortening Courses

The RO should consider the likely finishing time of the majority of yachts in a class, rather than a fast leader or a slow tail ender, but should take this into account in plenty of time.

Courses may be changed/shortened in a number of ways:

19 Finish at the end of the round being sailed

- Flag S.

Signal as the leading yacht rounds the penultimate mark. Display Flag S and the affected class flags. Class flags are not required if all classes are to finish.

20 Sail alternative round

- Code Flag C

Code Flag C displayed at the Committee Boat means; "After passing the Change Course flag, sail on the Alternative Course, as specified in the List of Courses, until finished in accordance with EDYC SI 9.2".

Signal as the leading yacht rounds the penultimate mark. Display code flag C, with the affected class flags if necessary – try to ensure all affected yachts see the C flag.

21 Finish at an indicated mark of the course

- Blue flag.

The blue flag meaning this race committee vessel is in a position at the finish line. Signal as the leading yacht rounds the mark before the nominated finishing mark. The blue flag and class flags are flown from the support vessel being used to finish the race. The finish line is between the mark and the support craft. It is obvious that this method requires planning, especially if different classes are using different marks.

The RO must use discretion as to exactly when signals for shortening courses are displayed. It is unfair to delay the signal until the leading yacht is busy rounding the mark, since it may miss the signal. It is within the spirit of the rules to confirm the receipt of the message with the yachts affected, but only if all yachts are contacted in this way.

22 Finishing Races

A yacht finishes when any part of her hull, crew or equipment in normal position crosses the finish line from the course side in accordance with the sailing instructions and having completed the prescribed number of rounds. Touching a finishing mark before the yacht is completely clear of the finish line, or otherwise breaking a rule requires an exoneration before recording as a finisher.

A sound signal should be given when each yacht finishes correctly.

NB: Record the finishing time of day in hh:mm:ss for all classes – not elapsed time.



For each yacht that started the finishing time and reason for not finishing if applicable (retired, premature starter (OCS), did not finish etc.) must be noted on the result sheet. In brief the RO must account for all the yachts in the race.

The time limits for races are given in the sailing instructions. Any boat not finished by this time is recorded DNF. If possible, as a safety and courtesy issue, inform boats still on the course that the time limit has been reached.

23 Protests

Yachts with a hull length less than 6 metres need not display a red flag when protesting. RRS 61.1 (2)

Protest forms are readily available (although not essential) and if a completed one, or other written protest is received please place the date and time of receipt on it, EDYC SI 12).

24 Abandoning Races

Code Flag N, 3 sound signals.

The RO has the discretion to abandon the race at any time, and must do so if no yachts have crossed the finish line before the time limit has been reached.

The signal for abandonment is Code Flag N and 3 sound signals, along with class flags for the affected classes. If all classes are to be abandoned, it is not necessary to hoist class flags.

In all cases of abandonment, the RO is responsible for ensuring positively that all yachts are properly aware of his decision, and that they are all able to return safely ashore or to moorings.

The RO should not go ashore until completely satisfied as to the safety of all those afloat.



25 Race Recording

The RO record sheet is the OFFICIAL record of the days racing. It is not just seen by the results officer - in the case of a Protest or a Request for Redress it may be used by:

- 1. A Protest Committee.
- 2. If a Request for Redress goes to Appeal, copies may have to be sent to the RYA in Hamble. (This is not unknown even for EDYC points racing).

Therefore it must be legible and have the following information:

- Date.
- 2. Race Officer's name.
- 3. Wind direction and force if wind variable in either please state.
- 4. Course to sailed for each class and any shortening details.
- 5. Start time of day for every Class.
- 6. The name and sail number of any yacht over the start line at the start signal for that class (OCS). Record if they subsequently returned following the display of code flag X, and re-started correctly.
- 7. The intermediate lap times and finish times for <u>all</u> yachts. This is useful to help the RO gauge if another round is achievable before the time limit expires. No times means no results!

 The time of the last finisher in <u>every</u> class is required to calculate the time limit
 - for Protests for that class (EDYC SI 12 states one hour from the time of the last finisher in the class).
- 9. The name and sail number of yachts that retire.
- 10. The name and sail number of any yacht that has informed the RO of their intention to protest.
- 11. The RO must report any yacht that they witness breaking a rule that is not exonerated e.g. OCS, not completing the course correctly (RRS 28), especially if no competing yacht protests the alleged rule breaker. The alleged breach of rules is reported to the race committee who will decide whether to protest the yacht. If they attempt to finish, the yacht should be told of the alleged breach of rules and they may be able to exonerate themselves e.g. by "unwinding" and resailing the course within the time limit, or retire, or retire after finishing if he/she cannot or does not exonerate themselves, in which case record as such.
- Yachts requiring compensation points must claim these on the RO Record sheet (EDYC SI 13.3) The results officer is not always present at EDYC and this SI will be applied - NO exceptions.



26 After Racing

The RO must make sure that all dinghies are safely ashore and that support craft finish towing dinghies and ferrying all crews ashore, before properly mooring or recovering the club craft.

The committee boat must be left tidy and secure – mark E recovered, Autohoot plugged in to solar panel, bilges pumped out if possible.

Back at the club, ensure that all is well, the support craft are properly moored or recovered, (the Osprey requires the assistance of the Chevy), thank and formally dismiss the crew.

Equipment should be left back in the sailing store. The VHF hand held radios must be switched off, wiped dry and reconnected to their correct chargers. Any deficiencies noticed with the equipment afloat including launch or safety boats should be noted in the relevant log book and reported to the sailing captain, so that they can be made good before the next race.

If your boat or that of any duty officer was unable to race because of race duties, then it can be awarded "compensation points". Make the appropriate declaration on the result sheet (EDYC SI 13.3).

The completed and signed results sheets along with any protest forms which may have been received, should be given to one of the following (in order of preference):-

Results officer Rodney Hall/TBA Sailing captain David Maxwell

Any other officer of the club

It will be excellent if the RO confirms all equipment, keys etc. have been returned to store or other location and are ready for the next event.

Breakages and/or loss should be reported directly to the sailing committee (and notice board and a log book) so that they may be corrected / remedied before the next event.

The Race Officer must record any appropriate comments in the RO Log Book and sign off.



1. RO Quick View Timetable

27 Preceding Fortnight

The Officer of the Day (RO) is responsible for finding at least two (committee boat) assistants for this duty and to familiarise himself with the full requirements of the duty. Changes to the sailing instructions (posted 8 days before on notice board) (EDYC SI 3) should be noted if in effect.

28 On The Day

Obtain a current forecast from the WEB at www.metoffice.gov.uk

Met Office Inshore Waters Forecast Lough Foyle to Carlingford Lough area 13: http://www.metoffice.gov.uk/public/weather/marine-inshore-waters/#?tab=map

29 1.5 hours before racing

The RO and his assistants should collect and check the RO Box and equipment, and give the Safety crews their preliminary instructions in good time (i.e. 1 - 1.5 hours before racing).

30 45 minutes before the scheduled start

If 45 minutes before the scheduled start of the first race the RO decides to cancel all or some classes, he must fly Code flag N from the club flagstaff. If the cancellation is for some classes only, then their class flags should be flown below flag N, if all classes, display N over A.

If sailing instructions for a particular race have been amended (in accordance EDYC SI 3) Code flag L must be flown from the club flag staff at least 45 minutes before the scheduled start of the first class.

31 Committee boat - a good 30 min before the first start

The RIB should transport you and your crew to the Ctee Boat. Choose the appropriate courses bearing in mind all factors and put up course boards/cards

Have Start Mark E laid by one of your support boats

Record the boats likely to race/in the vicinity of the start on the results sheets

Prepare flags and sound signals as per the schedule

32 Race Schedule

The schedule of dates is incorporated in the attached Sailing Calendar.

NB: start sequence of D1 and L17 classes has changed for 2019 Classes Time of warning signal Sat Wed

Cruiser 1 Handicap (NHC 0.880 & over)	14.20 19.20
Cruiser 2 Handicap (NHC 0.879 & under)	14.23 19.23
Dinghy 1 Handicap (PYS 1140 & under)	14.26 19.26
Leisure 17	14.29 19.29
Dinghy 2 Handicap (PYS 1141 & over)	14.32 19.32

NB: Autumn Series Wednesdays, starts and time limits 30 minutes earlier.

Start Races as appropriate, noting yacht names and sail numbers also premature starters. For time limits see EDYC SI 10. See SIs for Dinghy 2nd race start times when possible on Saturdays.





2. DECISION TO RACE

Generally it is a skipper's decision on whether or not to race his or her boat.

However, Dinghy 2 class boats should not race in winds over 20 knots.

In high winds and especially strong gusting conditions, dinghies should be set courses to stay west of Dun O'Neil and Long Rock and within sight of the Ctee Boat.

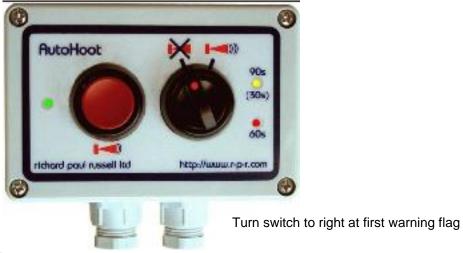
The Race Officer should assess the wind and weather state assisted by use of the anemometer, his/her own observations and advice if necessary from experienced skippers and others in the decision to race. If in doubt and conditions are suitable, the RO should consider going out to the Committee Boat with the safety boat crew and assessing open water conditions there.

REMEMBER:

No safety boat – driver and preferably a minimum one crew member = no dinghy racing



3. Autohoot



Press red button at any time to hoot

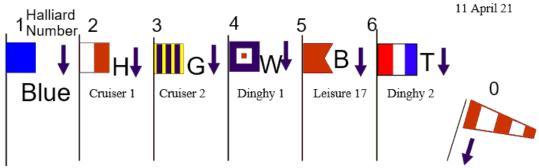
Leave in position until start sequence finished, then turn to left.

Autohoot will sound on turning switch to right at first warning flag and every 3 minutes until switched to left.

NB: red button can be used at any time to signal.



EDYC 2021 RO FLAG CHART STARTS



Warning Signal Times and Start Times

Ref - SI 5 and 6

WED	WED	SAT
7 19:17 Sequence start AP lowered	19:17	14:17
0 19:20 CRUISER 1 warning Blue lowered	19:20	14:20
3 19:23 CRUISER 1 start CRUISER 2 warning H lowered	19:23	14:23
6 19:26 CRUISER 2 start DINGHY I WARNING G lowered	19:26	14:26
9 19:29 DINGHY I start L17 warning W lowered	19:29	14:29
2 19:32 L17 START Dinghy II warning B lowered	19:32	14:32

The above flags may be supplemented by the following as required





Now means be alert for communication of Search and Rescue Instructions



14:35 19:35 Dinghy 2 start T lowered



Flag C - change - course change

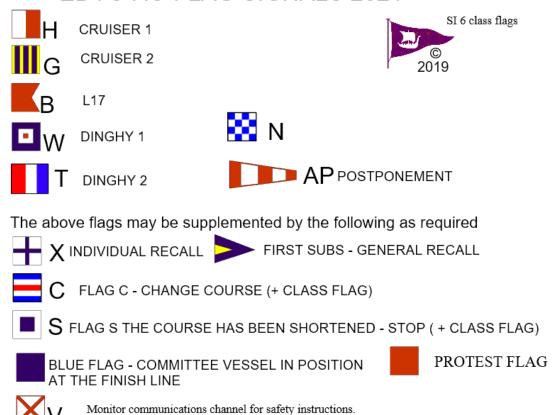


11/4/21 NB The 2021 SIs are the definitive source for all race instructions.



11 Apr 21

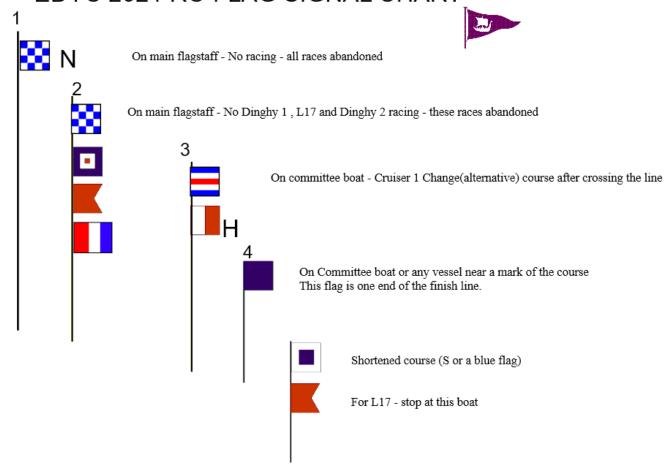
EDYC RO FLAG SIGNALS 2021



NB The SIs are the definitive source for all club race rules



EDYC 2021 RO FLAG SIGNAL CHART



Instructions for the RO 2019



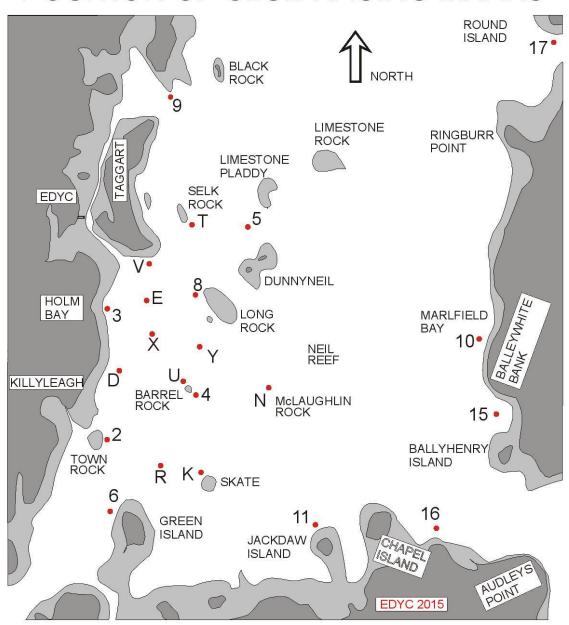
4. Courses

	- Jul 303				
course	wind	marks to	course	changed cour	se
code	Directio	n			
AA	N	varies	9s 10s 2s Up	Ts Ns 2s Up	
AB	N	Star	9 N 2	T N 2	T.
AC	N	Star	T N 6	T U D	
AD	N	Star	T N D	T 8 X	
AE	N	Star	V 8 U D	V 8 X	
AF	VARIES		R O instructs		·
BA	NE	Star	5 N 2	5 U 3	
BB	NE	Star	8 U 3	8 3	
CA	E	Star	10 11 3	5 U 3	
СВ	Е	Star	5 N 3	5 3	
CC	E	Star	Y 2 3	Y D 3	Dinghy only
DA	SE	Port	11 10 T	N 5 T	
DB	SE	Port	11 5 V	5 V	
DC	SE	Port	N 5 V	U 5 V	
DD	SE	Port	X 8 V		
EA	S	varies	Us 2p 10p 9p	Us 2p Np Tp	
EB	S	Port	6 N T	UT	
EC	S	Port	U 8 T	X 8 V	
ED	S	Port	X 8 V		
FA	SW	Port	2 11 5	2 N 5	
FB	SW	Port	2 N 5	2 U 8	
FC	SW	Port	D U 8		Dinghy only
GA	W	Port	3 11 10	3 U T	
GB	W	Port	3 N 5	3 5	
GC	W	Port	3 N		
GD	W	Port	3 2 Y	3 D Y	Dinghy only
НА	NW	Star	V 10 11	V N U	
НВ	NW	Star	V 5 11	V 5 N	



5. Chart of Marks





This sketch is intended only to indicate the approximate normal location of the racing marks used by EDYC. It is not suitable for navigation purposes and is not to scale.

A copy may be downloaded from www.edyc.co.uk





6. Beaufort Scale

Beaufort	Wind Barb	Mean Wind Speed		Limits of wind speed		Wind	Probable	Probable		
wind scale		Knots	m/s	Knots	m/s	descriptive terms	wave height in metres	maximum wave height in metres	Seastate	Sea descriptive terms
0	\Diamond	0	0	<1	0-0.2	Calm	¥	82	0	Calm (glassy)
1	\Diamond	2	0.8	1-3	0.3-1.5	Light air	0.1	0.1	1	Calm (rippled)
2	/	5	2.4	4-6	1.6-3.3	Light breeze	0.2	0/3	2	Smooth (wavelets)
3	\nearrow	9	4.3	7-10	3,4-5,4	Gentle breeze	0.6	1.0	3	Slight
4	^	13	6.7	11-16	5.5-7.9	Moderate breeze	1.0	1.5	3-4	Slight-Moderate
5	^	19	9.3	17-21	8.0-10.7	Fresh breeze	2.0	2.5	4	Moderate
6	~	24	12.3	22-27	10.8-13.8	Strong breeze	3.0	4.0	5	Rough
7	1	30	15.5	28-33	13.9-17.1	Near gale	4.0	5.5	5-6	Rough-Very rough
8	A	37	18.9	34-40	17.2-20.7	Gale	5.5	7.5	6-7	Very rough-High
9		44	22.6	41-47	20.8-24.4	Severe gale	7.0	10.0	7	High
10		52	26.4	48-55	24.5-28.4	Storm	9.0	12.5	8	Very High
11		60	30.5	56-63	28.5-32.6	Violent storm	11.5	16.0	8	Very High
12		(i) (ii)	- F8	64+	32.7+	Hurricane	14+	SE	9	Phenomenal





See separate sheets for SIs and Radio instructions