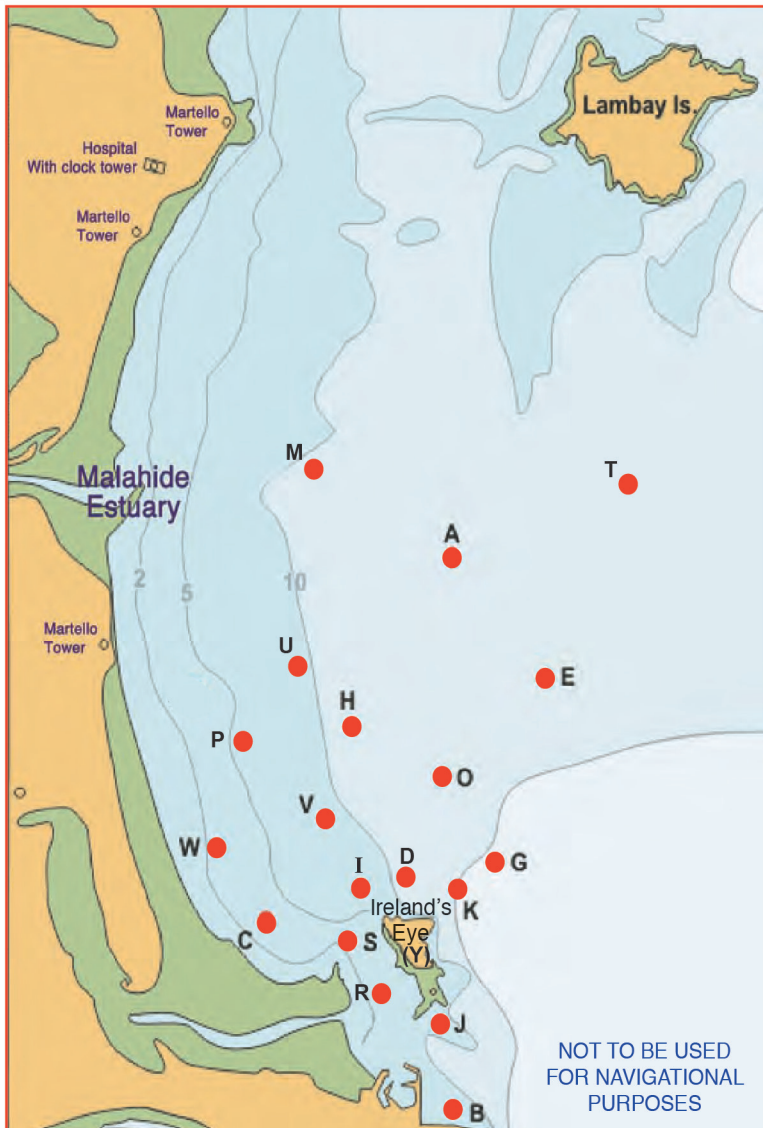


NAVIGATION MARKS AND OBSTRUCTIONS

The Navigation Marks in and around Howth Sound shall be left as follows:

South Rowan: to be passed to the West and South
Rowan Rocks: to be passed to the East and South

Any part of Ireland's Eye capable of being touched by a boat while racing is designated as an obstruction to sea room. Competitors are reminded of a trawler wreck in Howth Sound, south of the Carrgran Rocks on Ireland's Eye, which is submerged at most stages of the tide. Boats racing in the vicinity of Baldoyle Spit shall sail North and East of the Spit Mark (S).



ID	NAME	SHAPE	COLOUR	DEG	MIN	DEG	MIN
A	Apex	Conical	Black	53	26.76	06	03.26
B	Balscadden	Conical	Orange	53	23.30	06	03.26
C	Cush	Conical	Black	53	24.61	06	05.45
D	Dunbo	Conical	Yellow	53	24.73	06	03.85
E	East	Conical	Black	53	26.00	06	02.20
F	Finish	Cylindrical	Orange	Between Island Mark and Howth Sound			
G	Garbh	Conical	Black	53	25.00	06	02.32
H	Hub	Conical	Black	53	25.71	06	04.43
I	Island	Conical	Black	53	24.70	06	04.36
J	Thulla	Conical	Black	53	23.80	06	03.40
K	Stack	Conical	Black	53	24.60	06	03.11
M	Malahide	Conical	Black	53	27.23	06	05.59
O	Osprey	Conical	Orange	53	25.41	06	03.52
P	Portmarnock	Conical	Black	53	25.63	06	05.80
Q	Rowan Rocks	IALA	Black	53	23.88	06	03.22
R	South Rowan	IALA	Green	53	23.78	06	03.88
S	Spit	Conical	Black	53	24.35	06	04.48
T	Talbot	Conical	Black	53	27.31	06	01.30
U	Ulysses	Conical	Orange	53	26.22	06	04.97
V	Viceroy	Conical	Orange	53	25.12	06	04.78
W	West	Conical	Black	53	24.96	06	06.07
X	Xebec	Barrel	Black	53	24.12	06	04.33
Z	Zephyr	Inflatable	Black	Upwind of Start Line			

COURSE SELECTION

- 1). Courses will be designated by three numeral boards.
- 2). The first two boards will indicate the beat. ie 07 = 070°
- 3). The third board indicates the column number across the top of the page. Therefore Course 073 is the third course in from the left on line 07.

Tides	H.W.	Height	L.W.	Height
15/09	16.20	3.60m	09.50	0.70m
22/09	11.00	3.50m	16.50	1.00m
29/09	14.50	3.90m	08.20	0.50m
06/10	10.10	3.80m	15.50	0.80m
13/10	15.00	3.80m	08.30	0.60m
20/10	09.50	3.30m	15.40	1.30m

Race Marks 2018 - Relative Bearings Table - Magnetic (Approx.)

	A	B	C	D	E	G	H	I	J	K	M	O	P	Q	S	T	U	V	W	X
A		186	216	196	146	168	220	207	188	184	295	192	250	185	203	071	248	215	229	200
B	006		319	352	019	024	350	336	357	010	347	002	331	010	331	022	347	340	321	328
C	036	139		085	058	081	029	084	126	091	004	055	348	121	111	047	010	038	314	127
D	016	172	265		043	078	347	272	170	110	344	023	308	161	233	036	342	312	287	212
E	326	199	238	223		190	264	233	204	207	307	238	273	202	225	028	284	246	252	220
G	348	204	261	258	010		305	236	214	236	325	306	297	211	249	021	314	281	275	239
H	040	170	209	167	084	125		191	168	151	342	125	265	164	187	055	334	205	238	184
I	027	156	264	092	053	083	011		148	101	353	048	317	140	177	043	357	350	293	172
J	008	177	306	350	024	034	348	328		018	345	004	326	062	317	026	345	334	312	305
K	004	190	270	290	027	056	331	281	198		337	350	303	190	259	028	332	304	288	242
M	115	167	184	164	127	145	162	173	165	157		152	204	163	173	094	166	173	193	172
O	012	182	235	203	058	126	305	228	184	170	332		279	180	215	040	319	256	260	207
P	070	151	168	128	093	117	085	138	146	123	024	099		143	151	071	040	130	194	153
Q	005	190	301	341	022	031	344	320	242	010	343	360	323		308	024	342	329	308	295
S	023	151	282	056	045	069	007	024	137	082	353	035	327	128		039	357	342	304	160
T	251	202	227	216	208	201	235	223	206	208	274	220	251	204	219		249	229	236	215
U	068	167	190	162	104	134	154	177	165	152	346	139	220	162	177	069		180	213	176
V	035	160	218	132	066	101	025	170	154	124	353	076	310	149	173	049	000		264	171
W	049	141	136	107	072	095	058	113	132	108	013	080	013	128	129	056	033	084		135