

# AUTUMN LEAGUE 2013

## COURSE CARD

### OFFSHORE COMMITTEE BOAT STARTS



|    | 1   | 2  | 3  | 4  | 5  | 6  | 7  |
|----|---|--|--|--|--|--|--|
| 00 | Z H I H <span style="border: 1px solid black; padding: 0 2px;">K</span> | Z H D A <span style="border: 1px solid black; padding: 0 2px;">K</span>  | Z H K A <span style="border: 1px solid black; padding: 0 2px;">K</span>  | Z H K A O A<br><span style="border: 1px solid black; padding: 0 2px;">K</span> F   | Z H K A H K<br>A <span style="border: 1px solid black; padding: 0 2px;">K</span> F   | Z H K N K<br>A <span style="border: 1px solid black; padding: 0 2px;">K</span> F   | Z H K N G<br>N <span style="border: 1px solid black; padding: 0 2px;">K</span> F |
| 01 | Z H I H <span style="border: 1px solid black; padding: 0 2px;">K</span> | Z H D A <span style="border: 1px solid black; padding: 0 2px;">K</span>  | Z H K A <span style="border: 1px solid black; padding: 0 2px;">K</span>  | Z H D A O A<br><span style="border: 1px solid black; padding: 0 2px;">K</span> F   | Z H K A H O<br>A <span style="border: 1px solid black; padding: 0 2px;">K</span> F   | Z H K A H K<br>A <span style="border: 1px solid black; padding: 0 2px;">K</span> F   | Z H K N K<br>A <span style="border: 1px solid black; padding: 0 2px;">K</span> F |
| 02 | Z H D O F   | Z H K E K F  | Z H K E K E  | Z H D A H K<br>E F   | Z H G T G T  | Z H K T K T<br>F   |  |
| 03 | Z H D O F   | Z H K E F  | Z H K E D O<br>F   | Z H K E K E<br>K F   | Z H K T K E<br>F   | Z H K T A G T<br>F   | Z H D T A K<br>T F   |
| 04 | Z A F   | Z A D E F  | Z A D E D E  | Z A D T A  | Z A D E D<br>T F   | Z P N D T<br>F   |  |
| 05 | <span style="border: 1px solid black; padding: 0 2px;">Z</span> T G F   | Z A H A U<br>E F   | Z A H T G<br>F   | <span style="border: 1px solid black; padding: 0 2px;">Z</span> T N H T<br>G F     | Z A H T H T<br>G F   | Z U N P N M<br>E F   |  |
| 06 | Z H K G<br>F  | Z P A E F  | Z P T E<br>F   | Z H T U A E<br>F   | Z P T U A E<br>F   | Z P T U T E<br>F   | Z P T P T E<br>F   |
| 07 | Z A H E F   | Z A H E K G<br>F   | Z P A U H E<br>F   | Z A U T H E<br>F   | Z A P T H E<br>F   | Z A P T U A<br>U H E F   |  |
| 08 | Z A H E F   | Z A P<br>E F   | Z U A P E<br>F   | Z A P A P<br>E F   | Z U T M P E<br>F   | Z A P T M P<br>E F   |  |
| 09 | Z A H E F   | Z A P<br>E F   | Z A U T H E<br>F   | Z M T U H E<br>F   | Z M T P E<br>F   | Z A U T M T<br>U H E F   |  |
| 10 | Z A H O F   | Z A P O F  | Z A P E H<br>O F   | Z A U E P O<br>F   | Z A P E P<br>O G F   | Z M T U E H<br>O F   | Z M T U E P<br>O F   |
| 11 | Z E P O F   | Z E P H P<br>O F   | Z A U E P O<br>F   | Z A U E P G<br>F   | Z A U E U E P<br>O F   | Z M T U E P<br>O F   |  |
| 12 | Z O U G F   | Z O U O H<br>G F   | Z A U O U G<br>F   | Z O M E U G<br>F   | Z O M E U O<br>U G F   | Z A M E M<br>E U G F   |  |
| 13 | Z O H G F   | Z E U G F  | Z E U O U<br>G F   | Z O U G U<br>G F   | Z E M E A U<br>G F   | Z E M E A U<br>O U G F   |  |
| 14 | Z O H K F   | Z O U G F  | Z E M G F  | Z E A E M<br>G F   | Z E M O M<br>F   | Z E M O M O<br>U G F   |  |
| 15 | Z O H K F   | Z O U F  | Z O M G<br>F   | Z O M O U G<br>F   | Z O M O M G<br>F   | Z E M O A M<br>G F   |  |
| 16 | Z O U F   | Z O U K H F  | Z O U K E U<br>F   | Z A M K U<br>F   | Z E N E A U K<br>H F   | Z E N E A M<br>O U F   |  |
| 17 | Z O U F   | Z O U D O<br>U F   | Z E A G A<br>F   | Z E N G A<br>F   | Z E A G A G<br>E A F   | Z E N G N<br>F   |  |
| 18 | Z O A F   | Z O A O A<br>F   | Z O A K A<br>F   | Z O N G A<br>F   | Z E A G A G E<br>A F   | Z E N G N<br>F   |  |
| 19 | Z O A F   | Z O A O A<br>F   | Z O A K A<br>F   | Z O N O A<br>F   | Z O N O E<br>T F   | Z O E T G E A<br>O E A F   | Z O E T G T<br>G E A F   |
| 20 | Z O A F   | Z O A O A<br>F   | Z O A K A<br>F   | Z O N O A<br>F   | Z O N O E<br>T F   | Z O E T G E A<br>O E A F   | Z O E T G T<br>G E A F   |
| 21 | Z G E F   | Z G E K E F  | Z G T O E F  | Z G T K G E<br>F   | Z G T O G T<br>F   | Z G E K G T K<br>E F   | Z G T O G T<br>O G E F   |
| 22 | Z G E F   | Z G E K E F  | Z G T O E F  | Z G T K G E<br>F   | Z G T O G T<br>F   | Z G E K G T K<br>E F   | Z G T O G T<br>O G E F   |
| 23 | Z G F   | Z E K G F  | Z E K E F  | Z O T O E<br>K G F   | Z O T O T<br>G F   | Z O T K T<br>G F   | Z E N P N P<br>E F   |
| 24 | Z E I F   | Z E I G F  | Z G A P E G<br>F   | Z G T P<br>G F   | Z G A P A P<br>E G F   | Z G T P A P<br>E G F   |  |
| 25 | Z H E V Y F   | Z H A P<br>Y F   | Z H T U K<br>F   | Z H T P K<br>F   | Z H T U A P<br>K F   | Z H T P H T<br>U K F   |  |
| 26 | Z E H K F   | Z G E V G F  | Z G A P K<br>F   | Z G E V E V<br>K F   | Z G A P A P<br>K F   | Z G T P V E<br>V K F   | Z G T U T P<br>K F   |
| 27 | Z E H K F   | Z V E H<br>K F   | Z V E P G F  | Z V E P E H<br>K F   | Z V E P E P<br>K F   | Z V E T M U<br>E P K F   |  |
| 28 | Z V G V G F   | Z V O P<br>G F   | Z V E P G<br>F   | Z V E U E U<br>G F   | Z V E U E P<br>G F   | Z V E P V E<br>P G F   | Z V E P O T M<br>K F   |
| 29 | Z V G H K F   | Z V O P G F  | Z V O P G H<br>K F   | Z V E U E U<br>G F   | Z V O P O P<br>G F   | Z V E U V O<br>P O H G F   | Z V O P V O P<br>E U K F   |
| 30 | Z V O U G F   | Z V O P G F  | Z V O U G H<br>G F   | Z V G P G H<br>G F   | Z V G U O E<br>M G F   | Z V E M E M<br>G F   | Z V E M P<br>G P G F   |
| 31 | Z K G H<br>F  | Z G H G H<br>F   | Z K G U G H<br>F   | Z K G U O M<br>F   | Z K G U H E M<br>F   | Z K E M E M<br>F   |  |
| 32 | Z H O V F   | Z H K U F  | <span style="border: 1px solid black; padding: 0 2px;">Z</span> M K U F  | Z H G U G U<br>F   | Z H G M U K U<br>F   | Z H G M G<br>M F   |  |
| 33 | Z H O V F   | Z H K U F  | <span style="border: 1px solid black; padding: 0 2px;">Z</span> M K U F  | Z H G U G U<br>F   | Z H G M U K U<br>F   | Z H G M G<br>M F   |  |
| 34 | Z I K H<br>F  | Z I G A<br>F   | Z I K U K H<br>F   | Z I K U V G<br>A F   | Z I G A U G A<br>F   | Z I G N G A<br>F   | Z I G M V E<br>N F   |
| 35 | Z V I U K F   | <span style="border: 1px solid black; padding: 0 2px;">Z</span> V I H I G A<br><span style="border: 1px solid black; padding: 0 2px;">K</span> F | <span style="border: 1px solid black; padding: 0 2px;">Z</span> V I U V G A<br><span style="border: 1px solid black; padding: 0 2px;">K</span> F | Z V I G A G<br>A <span style="border: 1px solid black; padding: 0 2px;">K</span> F | <span style="border: 1px solid black; padding: 0 2px;">Z</span> V I G N G A<br><span style="border: 1px solid black; padding: 0 2px;">K</span> F | <span style="border: 1px solid black; padding: 0 2px;">Z</span> V I G N G N<br><span style="border: 1px solid black; padding: 0 2px;">K</span> F |  |

All marks are rounding marks except for those in a   (box) which are passing marks

Marks coloured red shall be rounded / passed to port

Marks coloured green shall be rounded / passed to starboard

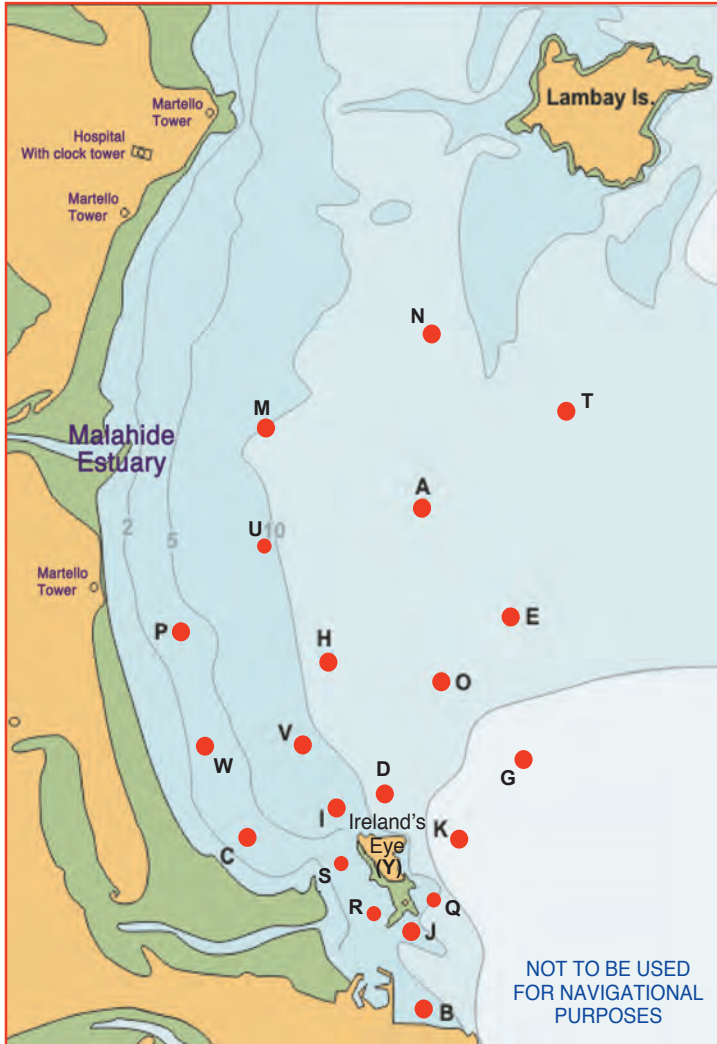
Courses were designed with the aid of Soft Touch Programmes

## 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).



## Racing Marks 2013 (Approximate)

|   | NAME          | SHAPE      | COLOUR       | DEG | MIN   | DEG | MIN                          |
|---|---------------|------------|--------------|-----|-------|-----|------------------------------|
| A | Apex          | Conical    | Black        | 53  | 26.76 | 06  | 03.26                        |
| C | Cush          | Conical    | Black        | 53  | 24.50 | 06  | 05.44                        |
| D | Dunbo         | Conical    | Yellow       | 53  | 24.73 | 06  | 03.85                        |
| E | East          | Conical    | Black        | 53  | 26.00 | 06  | 02.20                        |
| 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                        |
| N | North         | Conical    | Black        | 53  | 27.99 | 06  | 03.40                        |
| O | Osprey        | Conical    | Orange       | 53  | 25.41 | 06  | 03.52                        |
| P | Portmarnock   | Conical    | Black        | 53  | 25.89 | 06  | 06.30                        |
| Q | Rowan Rocks   | IALA       | Black/Yellow | 53  | 23.88 | 06  | 03.22                        |
| R | South Rowan   | IALA       | Green        | 53  | 23.78 | 06  | 03.88                        |
| S | Spit          | Conical    | Black        | 53  | 24.42 | 06  | 04.51                        |
| 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                        |
| Y | Ireland's Eye | Island     |              |     |       |     |                              |
| Z | Zephyr        | Inflatable | Black        |     |       |     | Approx. Upwind of Start Line |

### COURSE SELECTION

- Courses will be designated by three numeral boards.
- The first two boards will indicate the beat. ie 07 = 070°
- 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

|                        | HW    | HT    | LW    |
|------------------------|-------|-------|-------|
| Sunday, September 15th | 08.33 | 3.43m | 14.25 |
| Sunday, September 22nd | 14.03 | 4.14m | 07.31 |
| Sunday, September 29th | 07.55 | 3.02m | 13.48 |
| Sunday, October 6th    | 13.02 | 4.24m | 06.30 |
| Sunday, October 13th   | 07.05 | 3.33m | 12.56 |
| Saturday, October 19th | 12.24 | 4.22m | 05.51 |

## 2013 Race Marks - Relative Bearings Table - Magnetic (Approx.)

|   | A    | B    | C    | D    | E    | G    | H    | I    | J    | K    | M    | N    | O    | P    | Q    | S    | T    | U    | V    | W    |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| A |      | 186° | 216° | 196° | 146° | 168° | 220° | 207° | 188° | 184° | 295° | 002° | 192° | 250° | 185° | 203° | 071° | 248° | 215° | 229° |
| B | 006° |      | 319° | 352° | 019° | 024° | 350° | 336° | 357° | 010° | 347° | 005° | 002° | 331° | 010° | 331° | 022° | 347° | 340° | 321° |
| C | 036° | 139° |      | 084° | 058° | 081° | 032° | 077° | 126° | 092° | 004° | 025° | 058° | 346° | 121° | 111° | 047° | 015° | 038° | 327° |
| D | 016° | 172° | 264° |      | 043° | 078° | 347° | 272° | 170° | 110° | 344° | 011° | 023° | 315° | 161° | 233° | 036° | 342° | 312° | 287° |
| E | 326° | 199° | 238° | 223° |      | 190° | 264° | 233° | 204° | 207° | 307° | 346° | 238° | 273° | 202° | 225° | 028° | 284° | 246° | 252° |
| G | 348° | 204° | 261° | 258° | 010° |      | 305° | 214° | 236° | 325° | 325° | 354° | 306° | 297° | 211° | 249° | 021° | 314° | 281° | 275° |
| H | 040° | 170° | 212° | 167° | 084° | 125° |      | 191° | 168° | 151° | 342° | 021° | 125° | 285° | 164° | 187° | 055° | 334° | 205° | 238° |
| I | 027° | 156° | 257° | 092° | 053° | 083° | 011° |      | 148° | 101° | 353° | 018° | 048° | 326° | 140° | 177° | 043° | 357° | 350° | 293° |
| J | 008° | 177° | 306° | 350° | 024° | 034° | 348° | 328° |      | 018° | 345° | 006° | 004° | 326° | 062° | 317° | 026° | 345° | 334° | 312° |
| K | 004° | 190° | 272° | 290° | 027° | 056° | 331° | 281° | 198° |      | 337° | 003° | 350° | 310° | 190° | 259° | 028° | 332° | 304° | 288° |
| M | 115° | 167° | 184° | 164° | 127° | 145° | 162° | 173° | 165° | 157° |      | 066° | 152° | 204° | 163° | 173° | 094° | 166° | 173° | 193° |
| N | 182° | 185° | 205° | 191° | 166° | 174° | 201° | 198° | 186° | 183° | 246° |      | 187° | 225° | 184° | 196° | 125° | 214° | 202° | 214° |
| O | 012° | 182° | 238° | 203° | 058° | 126° | 305° | 228° | 184° | 170° | 332° | 007° |      | 292° | 180° | 215° | 040° | 319° | 256° | 260° |
| P | 070° | 151° | 166° | 135° | 093° | 117° | 105° | 146° | 146° | 130° | 024° | 045° | 112° |      | 143° | 151° | 071° | 073° | 136° | 178° |
| Q | 005° | 190° | 301° | 341° | 022° | 031° | 344° | 320° | 242° | 010° | 343° | 004° | 360° | 323° |      | 308° | 024° | 342° | 329° | 308° |
| S | 023° | 151° | 272° | 061° | 045° | 069° | 007° | 024° | 137° | 079° | 353° | 016° | 035° | 327° | 128° |      | 039° | 357° | 353° | 304° |
| T | 251° | 202° | 227° | 216° | 208° | 201° | 235° | 223° | 206° | 208° | 274° | 305° | 220° | 251° | 204° | 219° |      | 249° | 229° | 236° |
| U | 068° | 167° | 195° | 162° | 104° | 134° | 154° | 177° | 165° | 152° | 346° | 034° | 139° | 253° | 162° | 177° | 069° |      | 180° | 213° |
| V | 035° | 160° | 218° | 132° | 066° | 101° | 025° | 170° | 154° | 124° | 353° | 022° | 076° | 316° | 149° | 173° | 049° | 000° |      | 264° |
| W | 049° | 141° | 147° | 107° | 072° | 095° | 058° | 113° | 132° | 108° | 013° | 034° | 080° | 358° | 128° | 129° | 056° | 033° | 084° |      |