

Officer of the Day

A Best Practice Guide to OOD Duty



The following information is designed to be a rough guide to performing OOD duty at Tees & Hartlepool Yacht Club for races involving the Cruiser Section. It is not a step by step guide and it is not an instruction manual. Each OOD must use their own judgment when making decisions, based on the circumstances they find themselves in. It is hoped that this guide can be used to provide better race management for those taking part.

TEES & HARTLEPOOL YACHT CLUB

Basic Principles of OOD Duty and Race Management

- *It is the OODs task to: set the course; record competitor; start and finish the race; monitor the race and emergency frequencies; get as many boats to the finish line as possible; calculate results and pass information to the committee.*
- *The OOD will **NOT** cancel a race due to adverse weather conditions, unless those conditions prohibit the OOD from carrying out their duties e.g. start line obscured by fog.*
- *An OOD may postpone the start of race if they deem that competitors may be put in danger e.g. a large Vessel entering Hartlepool at the same time as the start or at the same time that yachts would be approaching the Bell buoy. See Appendix 3.*
- *A race may be started from the water when the OOD may be involved in the race but this will result in them being unable to monitor the race or take times at the finish and should be a last resort when access to the tower or lack of personnel dictates. See Appendix 2.*
- *The safety of the boat and her entire management including insurance is the absolute responsibility of the owner/competitor who must ensure that the boat is fully founded, thoroughly seaworthy, manned by a crew of sufficient experience and fitness for the conditions which that they may encounter during the course of the race. The owner/competitor must be satisfied as to the soundness of the hull, spars, rigging and all gear. Must ensure that all safety equipment is properly maintained, stowed, in date, that the crew know where it is kept and how it is used. The crew are advised to satisfy themselves as to the experience of the skipper and the adequacy of all safety equipment and insurance arrangements.*

The job of an OOD is difficult at the best of times with boats differing in speed and ability along with different skippers wanting different things from their racing. The job of an OOD can be broken down in several sections.

Planning & Pre-Start

1. The OOD should arrive at the race tower, giving themselves enough time before the start to monitor the weather, sea state and visibility and to consider the correct course. Roughly 45 minutes is good practice.
2. On arriving at the race tower the OOD should check the lights are working, switch on the transit light (so that competitors know there is an OOD present), switch on the 2 VHF radios, check they are working and set on the correct channels. The ICOM to Ch.M2 and the other to Ch.16. Check, with binoculars, to see if all the race marks are visible (Tees North & South may not be, even through binoculars, you'll have to take them on faith).

All THYC radio contact will be on VHF Ch.M2 hereafter referred to as VHF in this document. The second radio on Ch.16 is to monitor the emergency frequency.

Call signs for: THYC race control is "Tees Tower"; the combined race fleet is "Tees Fleet".

3. The wind should be monitored for 10 to 15 minutes to see if the strength is increasing, decreasing, oscillating or changing direction. The wind instruments in the Tower are not accurate for conditions on the water. Weather forecasts should be consulted.

The website: <https://www.metoffice.gov.uk/weather/forecast/gcxnvn1vz#> gives good hourly wind speed and direction for Tees Bay. Contacting boats already in the bay is also a good way to get more accurate wind speeds and direction.

4. Decide how long the race should be. For Wednesday night racing the boats in the middle of the fleet should complete a course of around 90 minutes, whilst for Sunday racing 120 minutes is more appropriate. Course lengths are as the crow flies, a beat will add 1/3 distance to that particular leg. A good rule of thumb is to consider a boats speed to be 5 knots in average conditions, across the whole of the course. In light airs this will be slower and in heavy airs this would be quicker.

5. Select a series of courses that suit the boat Class, the wind direction and allotted time. **It is better to pick courses with more laps if the wind is changeable or dropping. This would give the OOD a number of opportunities to shorten course, should conditions dictate that it is correct to do so.** See Appendix 1.

6. From about 30 minutes before the start competitors will radio the Tower (call sign Tees Tower) to advise the OOD of the boat name, class, use of spinnaker or not and number of people on boat. The OOD should acknowledge the call, the information and make a note of it on the result sheet (a separate piece of paper can be used and the information transferred once racing is underway). The conversation may sound something like this:

"Tees Tower, Tees Tower, this is Yacht xxxx, Yacht xxxx. Over"

"Yacht xxxx, this is Tees Tower. Over"

"Tees Tower, it's our intention to race today in Class 1, with Spinnaker and we have 3 people on board. Over"

"Yacht xxxx, this is Tees Tower. Understood, Class 1, spinnaker with 3 people on board. Over"

7. The results sheet should also include the boats sail number and their NERR Rating, sometimes called a TCF. This information can be found in the folder, kept in the Tower.

8. Approximately 15 minutes before the start announce the chosen course/set of courses over VHF, using call sign "Tees Fleet".

Example: "Tees Fleet, Tees Fleet this is Tees Tower. Your course for today will be:

Class 1 - Romeo, Delta, Bravo. Class 2 - Romeo, Bravo, Alpha.

Repeat: Class 1 - Romeo, Delta, Bravo. Class 2 - Romeo, Bravo, Alpha. "Over"

9. 10 minutes before the start have a final check on the direction and strength of the wind and the sea state. Have you picked the correct course for the conditions and will it be the correct duration?

Starting

Races are started under the RYA recognized 5 minute start procedure of 5, 4, 1, Start, minutes countdown. At THYC we use lights to signal the Warning, Preparatory and Start. Usually with a countdown on VHF. See Appendix 3.

The Start / Finish Line

Is a transit between the white line on the clubhouse window and the white pole on the

breakwater. The Inner and Outer are not part of the line but form inner and outer distance marks that boats must pass between as they start, finish or complete a course.

1. Prior to 5 minutes before to the start a 10 second countdown on VHF and then No1 light should be turned on. This the "Warning" signal.
2. Prior to 4 minutes before to the start a 10 second countdown on VHF and then No2 light should be turned on, making 2 lights in total. This the "Preparatory" signal. All competitors must now have engines off.
3. Prior to 1 minutes before to the start a 10 second countdown on VHF using and then No3 light should be turned on, making 3 lights in total.
4. Prior to start, the OOD should sight down the transit line, a 10 second countdown on VHF and then all lights off. "Start".
5. If any boats are over the line (called OCS – on course side) One light should stay on. The offending boat name should be announced on VHF. Once the boat or boats have wholly re-crossed the start line, the light can be extinguished and "All Clear" announced on the radio. In the event of the OODs view being blocked and the boat OCS cannot be identified or a large proportion of boats are OSC then a General Recall can be announce by switching on 4 lights and announcing "General Recall" on VHF. The new start would be in 10 minutes.

Race Management – Race Underway

The OOD should monitor the progress of the race fleet, taking note of how quickly boats are reaching designated race marks to decide if a course can be completed or may need shortening. Also keep an eye on sea and weather conditions.

With a combination of courses together to make up the race it's important to consider what the options are as the boats reach the Bell Buoy. Will boats complete the course or do conditions dictate that the course should be shortened? If shortened course is the answer then 2 lights should be displayed as the first boat approaches H (half way down the leg from Hartlepool HP2 to H is ideal). The shortened course should be announced on VHF including which class the shortened course relates to.

Lights should be extinguished before the 1st boat approaches the finish.

Note: Switch off shortened course lights before using finishing lights.

The OOD may alter a course as well as shorten the course. This may be done if conditions change after the start and it becomes apparent that the course set is wholly inappropriate. This might be because the wind has dropped significantly and it becomes apparent that the course set will not be completed. Any change of course should be done so that no boat is disadvantaged must be before the first boat has committed to the original course. A course alteration can only be done by making an announcement on VHF. Boats should be invited to respond to confirm that they have understood the new course.

A course alteration should only be done with great care and in exceptional circumstances.

If the boats are carrying on it is good practice to make a note of the time as each boat comes across the Finish line to start the next lap. Should a race have to be abandoned it is possible to go back to the last completed lap to get a result. It is also useful, in the event that, a boat goes missing in bad fog, the relevant authorities can be told the exact time a boat was at a particular point.

Protests

If a boat is protested during the race the protester should show a red flag and inform the Tower on VHF. The OOD should make note of the protester, protested, details of the offence and watch to see if the protested takes penalty action turns or retires.

If there is a dispute the protester must submit a protest form to the OOD or the race committee within 2 hours of the last boat finishing.

Finishing

A boat having completed the courses is deemed to be finished when any part of the hull of that boat crosses the finish line. In the case of a finish all 4 lights should be flashed on/off as each boat crosses the line sighted from the white line on the Tower window.

The OOD should pause the clock and take the time at which the boat finishes and make a note of this on the results sheet. Don't forget to restart the clock.

Emergency

The OOD should monitor the VHF in case of an emergency. In the rare event of an emergency the OOD may be asked to liaise with the emergency services to provide visual and communication support.

Telephone 999 "Coastguard". VHF Ch.16 "Humber Coastguard".

Results

Having already filled in the Boat Name, Sail No., TCF, finish time for each boat and split them into classes, it is now time to work out who won.

Finish Time needs to be converted to Elapsed time which is in minutes and decimals of (not seconds). This Elapsed time is then multiplied by the TCF to give a Corrected Time.

The boat with the lowest Corrected Time is the winner.

Example: Start time 10:30; Boat finish time 12:35.15; Boat TCF 0.8744.

Elapsed time of 2 hours, 5 minutes and 15 seconds = 125.25 minutes

To convert seconds to decimal of a minute divide by 60. There is a conversion chart for easy reference in the folder along with the course sheets.

Elapsed time of 125.25 minutes x TCF of 0.8744.

*Corrected Time 125.25 x 0.8744 = 109.52 = **109mins 31secs***

This should be done for every boat. Boats that do not finish, should be marked as DNF, boats that retire marked as RET.

Post race

The result sheet copy should be filed in the Tower folder and the top copy displayed with the clipboard on the noticeboard. The results and any protests should be passed to a committee member.

Appendix 1 Choosing the Right Course

THYC have a number of race marks set out around Tees Bay, these are usually mid-sized round yellow or orange marks and occasionally Navigational Marks are used. Racing take place using these marks by listing these marks in the order that they are to be sailed and the direction of rounding, either to port or starboard.

Combinations of these marks are in the course sheets set out in the folder in the Tower. Each course is designated with a letter and lists the marks and direction they should be rounded in order. There is a pictorial diagram of each course and an indication of which wind direction suits that particular course. There will also be a time limit for each course.

Time limits should not be used to calculate course length but they are a good indication of suitability, you wouldn't pick a course with a 6 hour time limit for a Wednesday night race regardless of conditions. When shortening course the combined time limits for the course set is still valid even though boats may not complete the full course.

An OOD should pick a course or combination of courses that suit wind direction, wind strength and the allotted time. It is always good practice to do a combination of courses that will then allow an OOD to shorten course if conditions change. Longer courses first followed by shorter ones that can be cut if necessary.

Courses should have at least one good beat and one good run, whenever possible to allow boats with differing performance abilities to make the most of the course. Courses that involve boats reaching around an entire course should be avoided if possible.

Class 1 boats are 25% faster than Class 2 so the course set should allow for each class to finish as near to the allotted time as possible either by giving each class a different course and/or a combination of courses that can be shortened as the race nears the end allowing the OOD to finish boats near the allotted time. Notice must be taken of how long the slowest boat will take to finish.

Appendix 2 Starting from the water

The OOD must inform competitors that it is a water start. This should be a last resort when there is no access to the tower or lack of personnel dictates. There are several problems:

- unable to monitor the race or emergency frequencies
- unable to sight the start line to identify OCS
- unable to shorten courses or finish boats
- different start/finish line transit

The start and finish line on the water is a transit between the line inner marker buoy and the white post on the south harbor wall. All boats must pass between the inner and outer marker buoys.

OCS and finish times become the responsibility of each competitor. Finish times should be self-taken from a GPS.

Finish times must be informed to the OOD within 2 hour of the last boat finishing or a DNF will be recorded.

Appendix 3 Tower Lights Signals

THYC uses lights to signal to competitors the intention of the race officer, or to convey information to competitors about the race. These signals are accompanied by announcements on VHF Ch.M2.

Lights Available

Transit light - White light, below the Tower window, forming the Start/Finish line transit with the white pole on the breakwater. Switched on prior to and throughout the race.

Switch 1 – **Light 1** of the bank of 4 lights at the top of the middle window in the Tower

Switch 2 – **Light 2** of the bank of 4 lights at the top of the middle window in the Tower

Switch 3 – **Light 3** of the bank of 4 lights at the top of the middle window in the Tower

Switch 4 – **Light 4** of the bank of 4 lights at the top of the middle window in the Tower

Pre-start

Prior to and during race - **Transit light**

Race Postponed - **4 lights** shown

Starting sequence

5 minutes to start - VHF 10 sec countdown + **Light 1** - **warning**

4 minutes to start - VHF 10 sec countdown + **Light 1 & 2** - **preparatory**

1 minutes to start - VHF 10 sec countdown + **Lights 1, 2 & 3**

Start All Clear - VHF 10 sec countdown + **All 3 lights extinguished**

Boat/s OCS - **Light 1 remains lit** + VHF warning to named boats

General Recall - **All 4 lights remain lit** + VHF warning to boats

OCS – boat or boats on the course side of the line.

Shortened Course - **Lights 1 & 2** shown before 1st boat reaches H

All lights extinguished before 1st boat reaches finish line

Finish

- **All 4 lights** flashed as each boat crosses line.

Lights may be omitted if OOD too busy taking times.

Note: Switch off shortened course lights before using finishing lights.

If the 2 shortened course lights are left on when the 4 finishing lights are used they will not then switch off until you switch everything off and start again.

Appendix 4 Race Marks

M (Middleton) - Yellow Spherical Buoy situated about 400m South of Middleton Harbour entrance *Approx. Position 54° 40' 86N 001° 11' 112W*

B (Bell) - Longscar Bell Buoy. Cardinal Mark about ½ mile South of Hartlepool Harbour Entrance. *Approx. Position 54° 40' 86N 001° 09' 92W*

D (Dolphin) - Yellow Spherical Buoy south of Longscar Rocks, towards Seaton Carew. *Approx. Position 54° 39' 801N 001° 10' 109W*

N (North) - Yellow Spherical Buoy, 500m NW of Tees channel mark, Tees North. *Approx. Position 54° 40' 413N 001° 07' 434W*

S (South) - Yellow Spherical Buoy, 200m NW of Tees channel mark, Tees 3. *Approx. Position 54° 39' 425N 001° 08' 598W*

H (Hartlepool) - Yellow Spherical Buoy, 100m West of H4 (Hartlepool channel Mark). *Approx. Position 54° 41' 388N 001° 11' 096W*

HP2 - Red Hartlepool, Port, Outer Channel Mark

I (Inner)- Yellow Spherical Buoy, 200m East of Middleton Harbour Entrance. Inner distance mark of the start/finish line.

O (Outer) - Yellow Spherical Buoy, 400m East of Middleton Harbour Entrance. Outer distance mark of the start/finish line.

SC (Saltscar Buoy) - North cardinal marking safe distance from rocks at Saltscar *Approx. Position 54° 38' N 001° W*

Appendix 5 Instructions for ICOM Radio

SWITCH ON – Press and HOLD Power knob until display lit
CLEAR mmsi number – Press CLEAR twice

Levels should already be set but always check

HIGH POWER – Press Hi/Low button, check display

VOLUME – Press Power knob once and turn to adjust (3/4 level)

SQUELCH – Press Power knob twice, turn down until screech and then 2 up

CHANNEL – Press Power knob thrice, turn to select **CHANNEL P4 = M2**

KEEP THIS RADIO ON P4 – MONITOR CH16 ON THE OTHER RADIO

SWITCH OFF AT DUTY END – press and hold power knob until display out