

1 Race Duty Officer App

1.1 Introduction

This manual describes the usage of the Android app "RaceDO", short for Race Duty Officer. It is designed to be used to run races according to the rules and procedures used at the Croydon Sailing Club. It can be downloaded from <https://www.yellowwood.de/csc> and installed on Android phones with Android version 6 or higher. It is not available for iPhones.

The current version of the app is 1.61.

1.2 The Structure of the Screen Layout

Each page of the app consists of 3 elements: The header part which displays the name of the app and 3 dots at the right hand corner. Tapping on these 3 dots opens up a menu specific to the current page. Each menu has a help entry for the app.

At the bottom is the navigation line common to all Android phones: The back arrow is often used in the app to navigate back to the previous page.

All pop-up dialog / selection boxes can be closed with the back arrow at the bottom of the screen.

In between the header and the navigation line are the various pages of the app used to run a race.

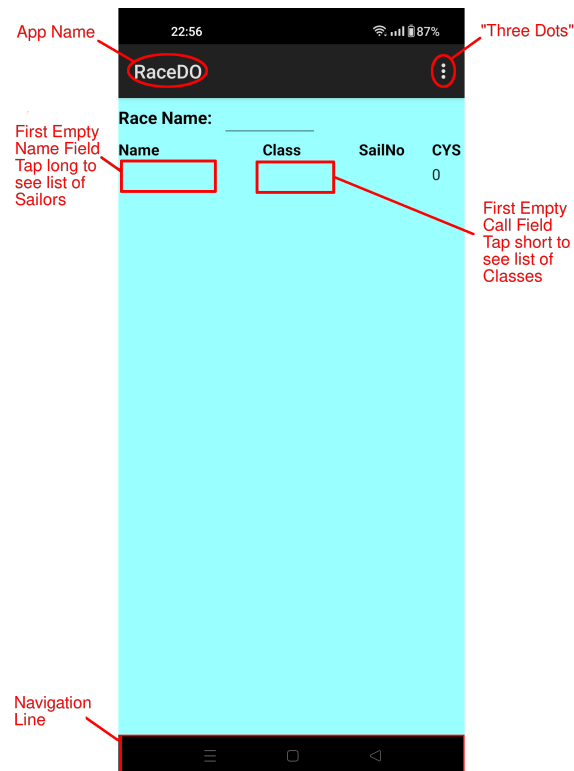


Figure 1: Main Dialog

1.3 The Main Dialog

When starting the app for the first time the main dialog page appears (fig. 1). It allows to enter all required data to run a race. Each race requires a title or name under which the race data is stored on the phone. A good format would be YYYYMMDD-A and YYYYMMDD-B for the A and B series of the Sunday races. Underneath the race name is the main table for sailor entry. Underneath the header line Name/Class/SailNo/CYS of the table the sailors who participate in the race need to be entered. There are two ways of doing this:

1. Tap on the first empty line in the table with the header line Name/Class/SailNo/CYS under the column Name. The keyboard should pop up allowing you to enter the name of the sailor. A good format would be FirstName InitialOfLastName, eg. Dirk P. Then tap on the field to the right of the Name under the column Class. A list of boat classes will pop up. Choose the one the sailor is using on this day. Next enter the sail number to the right. The CYS number in the right-most column should have been filled in automatically when the boat class was selected. The pre-filled CYS number can be overwritten.
2. For sailors who own their own boats and use them regularly the data manually provided under 1) is stored in the app. In order to select this data, tap long on a field in the column Name. A list of sailor names pops up. Select the name and the entire row of racing data for this sailor will be populated.

Any data thus entered can be modified by just tapping on the field and either enter a new boat class from the list or enter a new value manually for the name, sail number or CYS.

If you wish to remove a sailor from the list, tap long on the name of the sailor. The list of sailor names pops up. Scroll to the very bottom: There is an entry "Delete row". Tap on this and the sailor will be removed.

1.4 The Boat Class List

The list of defined boat classes that can be selected in the Main Dialog, can be viewed by tapping on the three dots and selecting "Boat Classes". You will see a list of boat classes with their CYS numbers. You can add more boat classes by tapping on the first empty line at the bottom of the list. If you tap long on a boat class a dialog box comes up that allows you to delete this boat class. When finished entering or modifying data tap on the back arrow at the bottom.

1.5 The Sailor List

The list of defined sailor data that can be selected in the Main Dialog, can be viewed by tapping on the three dots and selecting "Sailor List". Each sailor data comprises Name, boat class and sail number. You can enter additional sailors or modify / delete existing sailor data. The boat classes can be selected from the list of defined ones as in the Main Dialog. If you tap long on a sailor name a dialog box comes up that allows you to delete this sailor. When finished entering or modifying data tap on the back arrow at the bottom.

1.6 Starting the Race

The race can only be started if all sailor data is complete, ie it does not allow you to start the countdown if for example a boat class or a sail number is missing in the list of sailor. Once all sailors participating in the race have been entered in the Main Dialog box, the countdown to the race can be started by tapping

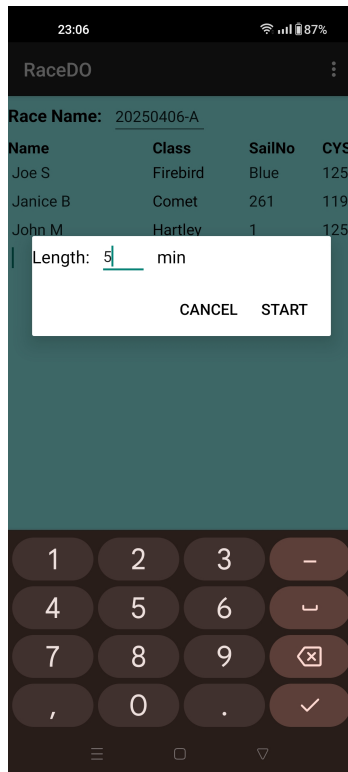


Figure 2: Starting the Race

on the three dots and selecting "Start Countdown". A dialog box pops up where you enter the length of the countdown and then tap Start (fig. 2). A new page appears that counts the seconds down to the start of the race.

If you want to stop the countdown tap on the three dots and select "Stop Countdown".

If a sailor arrives late, you can still modify the sailor list during the count down (and also when the race has already started). Tap on the three dots and select "Modify Sailor List". The page reverts back to the main dialog with the difference that you can see the countdown in the top right corner and a greyed out race name, ie you cannot change the race name. You can now modify the sailor list as described under 1.3. When done, tap on the back arrow at the bottom of the screen.

1.7 Running the Race

When the countdown has expired the racing page appears. You can see the names of the sailors, their boat classes and their sail numbers. In the right-most column are buttons labeled "LAP" to count the number of laps each sailor has completed. If a sailor completes a lap, tap the corresponding "LAP" button. The number of laps for this sailor is increased by 1 and the sailor is moved to the bottom of the list since s/he will most likely complete their second lap after all the others have completed their first.

If you made a mistake and tapped the wrong row, ie increased the lap number for the wrong sailor, tap long on the name of that sailor. A dialog box pops up that allows you to reduce the lap number of that sailor by 1. It also allows you to disqualify or mark the sailor as having abandoned the race.

If you need to restart the race tap the three dots and select "Restart Race".

If a sailor joins the race after it has started tap the three dots and select "Modify Sailor List". The Main Dialog will appear where you can add additional sailors as described under 1.3. When done tap the back arrow at the bottom of the screen.

1.8 Finishing the Race

When all sailor have completed their last lap, tap the three dots and select "Race Finished". The result will be displayed immediately. When you tap on the "Pos" column header the display switches between points awarded and position in the race.

To start a new race, tap on the three dots and select "New Race". This will display the empty Main Dialog again where you start entering data for another race as described under 1.3. To save time you can recall the sailors from the previous race by tapping on the three dots and selecting "Load Sailors from Previous Race". You still would need to enter a new race name, though.

1.9 Viewing Previous Race Results and Exporting Race Results

From the Finished Race page and from the Main Dialog page you can load the results of previous race. Tap on the three dots and select "Load Race Results" and then select the race results you want to have displayed. Once done, tap the back arrow at the bottom of the screen.

All race results are stored in the app folder on the phone in an internal format. When viewing previous race results and from the Finished Race page you can export the data to a human-readable format by tapping on the three dots and selecting "Export Race Results". A pop-up dialog box informs you where the exported results were stored. This location is phone specific.

1.10 Pursuit Races

From the Main Dialog page you can run a pursuit race by tapping on the three dots and selecting "Pursuit Race". A tri-diagonal table will appear where each boat class is listed starting with the slowest boat at the top and the fastest boat at the bottom. Enter the time of the pursuit race, ie the time the slowest boat will sail, at the top and press enter/accept on the keyboard. The numbers in the table will change according to the length of the race. In order to determine the delay for each boat class select the row with the slowest boat participating in the race, move to the right where this boat shows a delay of 0. This is the column that lists the delays for each of the faster boat classes underneath that slowest boat in the race.

There is also a start sequence that helps you to call the start for each boat class. Tap on the boat classes that participate in the race. Their names switch to an orange background. You can remove a boat class from the race by tapping the name again. The background will revert to blue.

Once you have selected all participating boat classes tap the three dots and select "Start Countdown". The countdown to the start of the slowest boat will be displayed. Once that has expired the race has started and the countdown for the second slowest boat class will be displayed and so on until all participating boat classes have started.

1.11 Tips and Tricks

After having entered race data and prepared the race on the phone switch off the screen with the button on the side of the phone in order to prevent accidental tapping on the screen. After switching the screen on again, swipe it and the app will reappear.

1.12 Bugs

- When rotating the phone with the Main Dialog on the screen the entered data disappears. Please switch screen rotation off for now until I have fixed this bug.