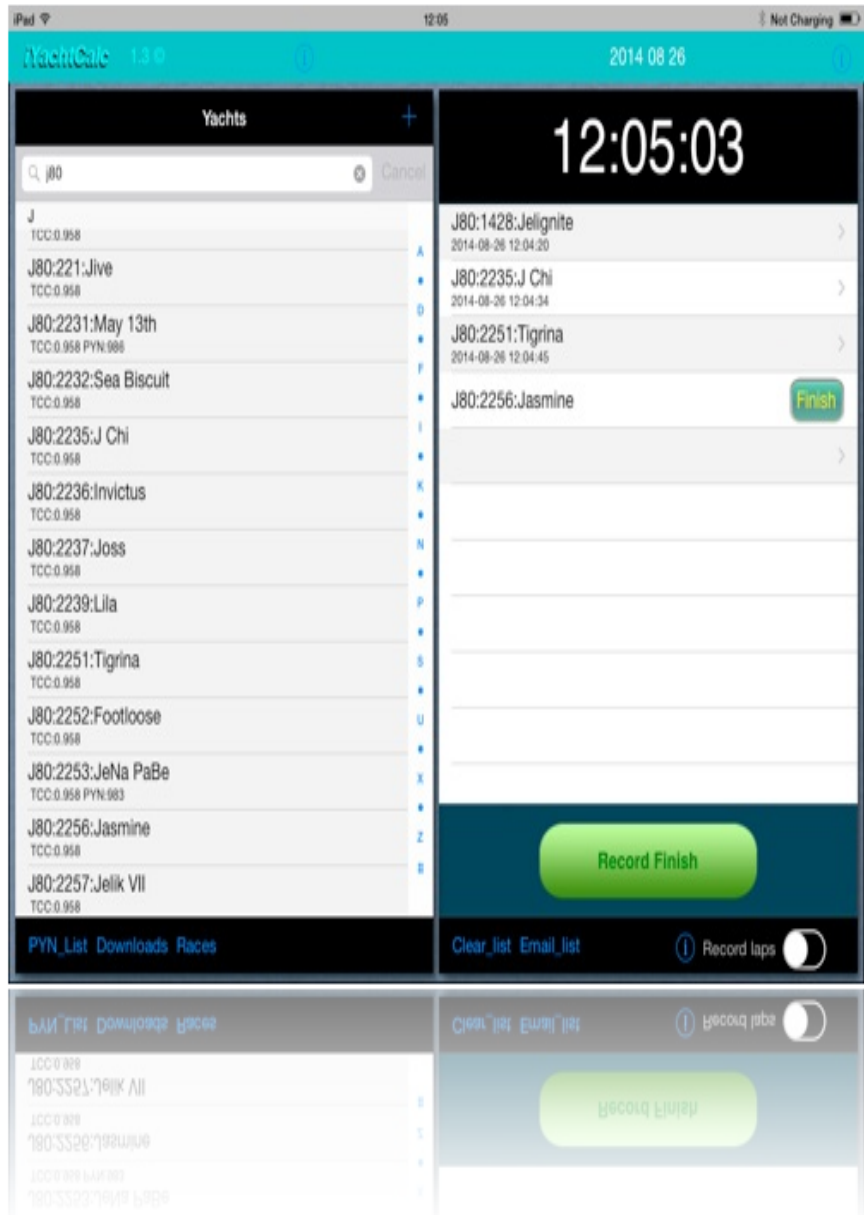iYachtCalc

Application: iYachtCalc
Last Update: 23 Jun 2014
Current Version: 1.3
Language: English

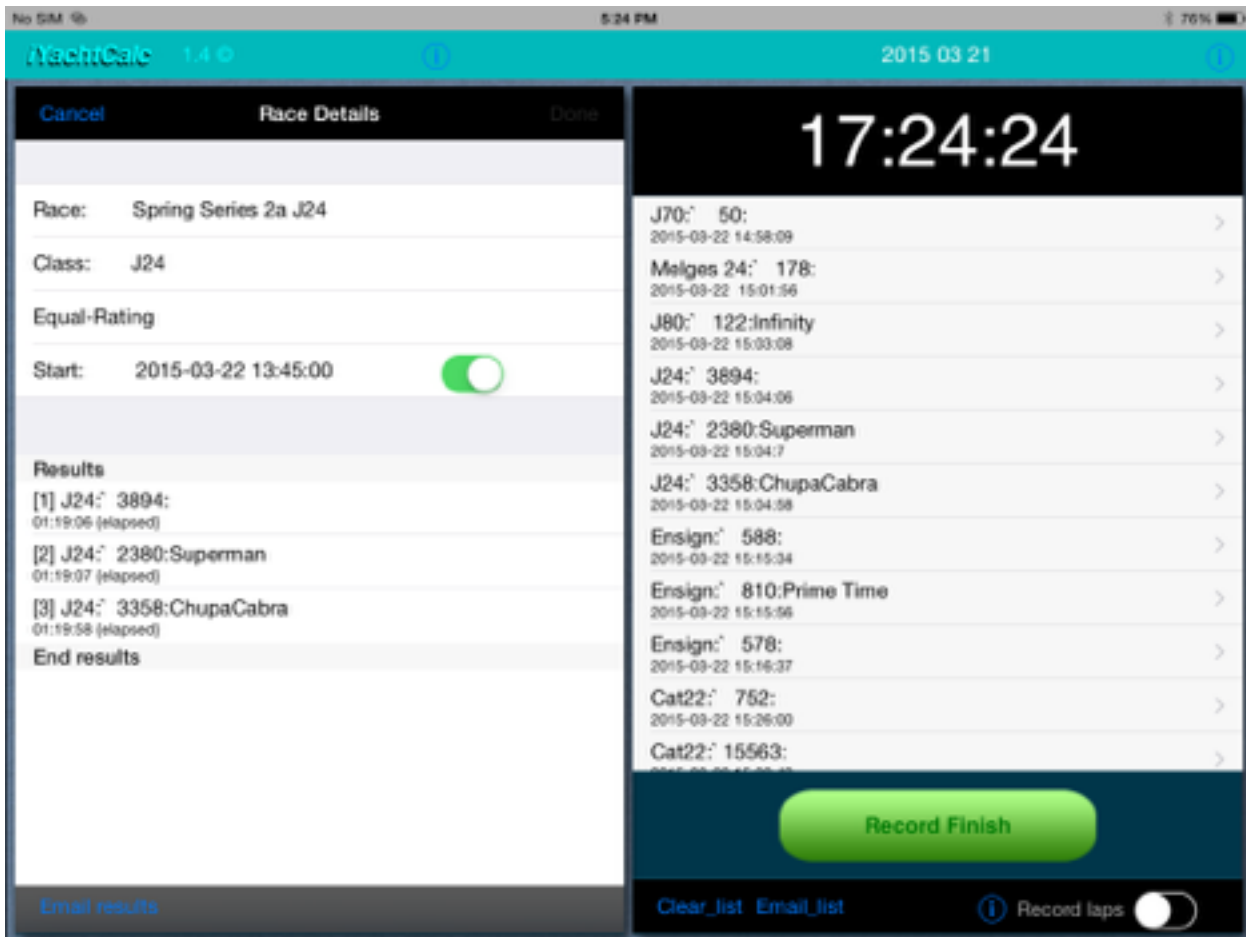**Requirements:** Compatible with iPhone 4s or later and iPad 2 or later.
Requires iOS 7.0 or later.

Available on the App Store

AUSTIN YACHT CLUB - ON the WATER SCORING
OPERATION MANUAL
May 2015

iYachtCalc User Guide for AYC

This guide is written to help AYC Race Committee provide on the water recording of racing finishes using mobile tablets or smart phones. The guidelines were developed using iPads and iPhones. The iYachtCalc (iYC) app is available from the APPLE App store as well as from Android app stores. The intended use of iYC is as a preprocessing data collection to provide machine readable data transfer to full regatta management scoring programs. Below is a screen shot showing the results of a race in the left hand screen and the captured finishes of all yachts that crossed the finish line in the right hand screen.

PROGRAM OVERVIEW

On the iPad two screens/views are visible on an iPad simultaneously. On an iPhone only one screen is visible at a time. Using an iPad is easier and faster because the important Finish capture screen is always in the right side pane.

The racing/scoring data is located in three files, the first and largest is the **Yachts** file which contains the information of potential race participants. The AYC **Yachts** file is updated, and available for download into iYC from the AYC web site and should be down loaded to the mobile device prior to heading out to the race course. This file is displayed in the lefthand screen and is displayed in Class order then ascending Sail Number order. Included in this file for each yacht is its "Class", Sail #, and Name. The racing class for OD classes that is the make / model of the yacht such as J22 or J24 or Ensign, for Keel Fleet handicap classes it is "PHRF", for Multihull classes it is "Multi". For yachts racing in handicap scored races (PHRF or Multi) the yachts Time on Time handicap rating is also included in the PHS field and the Name field is used for either the yacht name or yacht make/model. Once the Yachts file is loaded, the **Finish** data file can be created which is captured and displayed in the right hand Finish Screen. The third file **Races** is only used when creating a scored race. An iYC "Race" is fundamentally defined by the group of yachts competing for instance J24 or PHRF or Multi and provides a provisional scoring of a Race. The Races data is selectively displayed in the lefthand screen.

Capturing the racing yachts finish times is done from the righthand **Finish** screen which constantly displays running digital GPS clock at the top. The finish times captured on this screen are for all classes and races similar to the paper and pencil finish sheets currently used to capture finish times/positions. The finishes will be divided into class and scoring rule if "Races" are defined; the program will automatically collect captured finishes into the correct classes and scoring rules (ie finish order or PHRF or IRC or…) defined in **Races** file.

The mobile device (tablet/phone) used for scoring does not require internet access on the water provided the **Yachts** file is loaded prior to heading out to the race course. If internet access is available on the water (via a cellular network) the **Yachts** file can be downloaded or finishes emailed to the scorekeeper while the Race Committee is still on the water.

There are two operational modes for iYC used at AYC. The primary mode is to only collect the finish times of all racing boats. In this mode there is no need to create or display the Races data file. This mode is called "**Finish Capture**". the secondary operational mode includes both the Finish Capture mode as well as requires definition of all Races and Classes that will be provisionally scored. This is known as **"Provisional Scoring"** mode.

OPERATIONAL STEPS for "Finish Capture" mode

There are 2 basic steps to operate the Finish Capture mode.
- First step is capture the Starting times for each start
- Second step is to capture Finish times of each finishing yacht (two methods)

Step 1: Capture the Start Times

To score handicap races it is essential to know the start time of each start. To capture this time <u>at the starting gun </u>for each start press the "Record Finish" button then touch the newly created finish time entry line and select from the bottom of Yachts list the appropriate Start number (for example Start 1 Multi, or Start 3 J22&J24 etc.). Capture all starting times including those when multiple races for the same class are held. See Screen Shot of Captured Start Times below.

Step 2 Preferred: Capturing Finish Times

<u>T</u>o capture finish times is as a racing yacht crosses the finish line to simply press the "Record Finish" button at the bottom of the screen. This action will capture the exact finish time and an index number place holder to identify the yacht. If multiple boats are finishing close together simply press the "Record Finish" button for each yacht and remember (or pencil down) the order of the finishing yachts to help link the finish time to the correct yacht. See Screen Shot for Preferred Finish Capture Method below.

As soon as time permits, attach the finish time to a specific yacht by touching the line of the captured finish time and the Select Yacht arrow will appear pointing to the Yachts listing, you may scroll the list to find and select the specific yacht or do an electronic search by typing in a sail number or yacht type or yacht type or yacht name in the search field above the yacht list then select the yacht. For yachts racing 2 or more races per day when selecting the yacht the 2nd finish a prompt will appear cautioning that a finish has already been captured for that yacht, touch yes and the second finish time will be captured. See Screen Shot to Link Yacht to Finish Time below.

Step 2 Alternate: Capturing Finish Times

The second method to capture a finish time is helpful if a single identifiable yacht is approaching the finish line. When this occurs simply touch the first blank line on the finish screen which will again produce the Select Yacht allowing you to select the approaching yacht and iYC will place a Finish button for this yacht on the finish screen. When the approaching yacht crosses the finish line touch the Finish button and the finish time will be captured. You may pre-populate the finish screen with as many racing yachts as desired, however if many yachts are preset, it may be difficult to quickly locate a pre-populated yacht on the finish screen thereby making accurate finish time capture difficult. See Screen Shot for Alternative Finish Capture below.

Editing captured finish information

Once a finish is captured, it's finish time can be edited. To do so select an individual yacht from the Finish screen and an edit screen will open in the lefthand screen allowing you to edit the finish. Also on this edit screen a qualifier (ie OCS, DNF, DSQ etc) See Screen Shot for Edit Finish below.

To delete a finish, on the righthand Finish screen touch and hold the line of the yacht to be deleted then swipe left. This will open a Delete button, touch the Delete button to delete the entry.
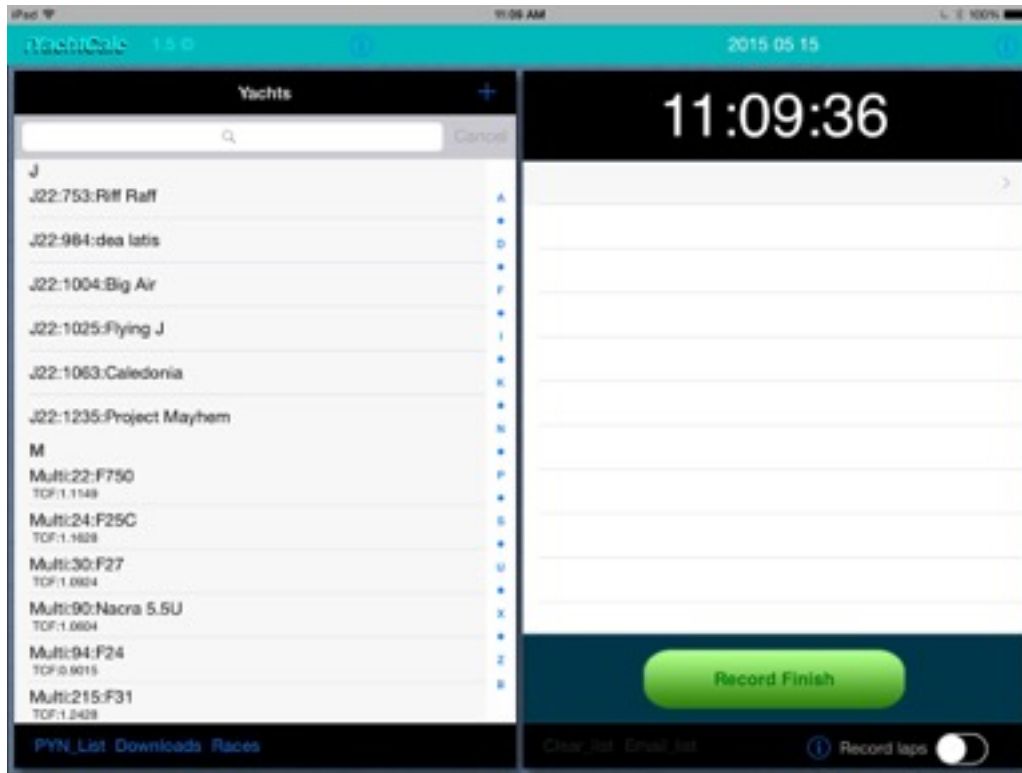
If a racing yacht is not in the preloaded Yachts File, it can be added on the water by touching the '+' symbol near the top of the lefthand Yachts screen. This will open a Yachts Details screen that allows adding the yacht. The only required fields are Class (for example Ensign or PHRF or Multi) and the Sail Number.
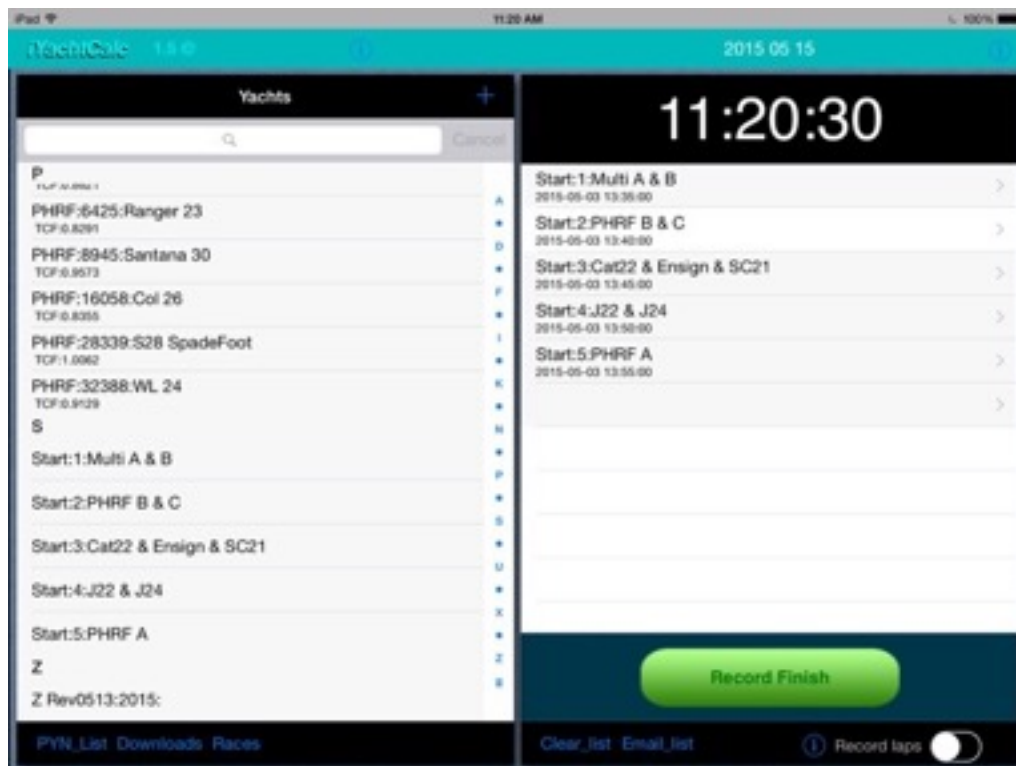
And in Conclusion

After finishing all racing yachts and an internet connection is available the finishing times of all racing yachts may be emailed by selecting the **Email_list** at the bottom of the **Finish** screen.

Be careful not to touch "Clear_List" until the complete finish list is emailed to the scorekeeper or all finish times will be cleared (and forever lost).
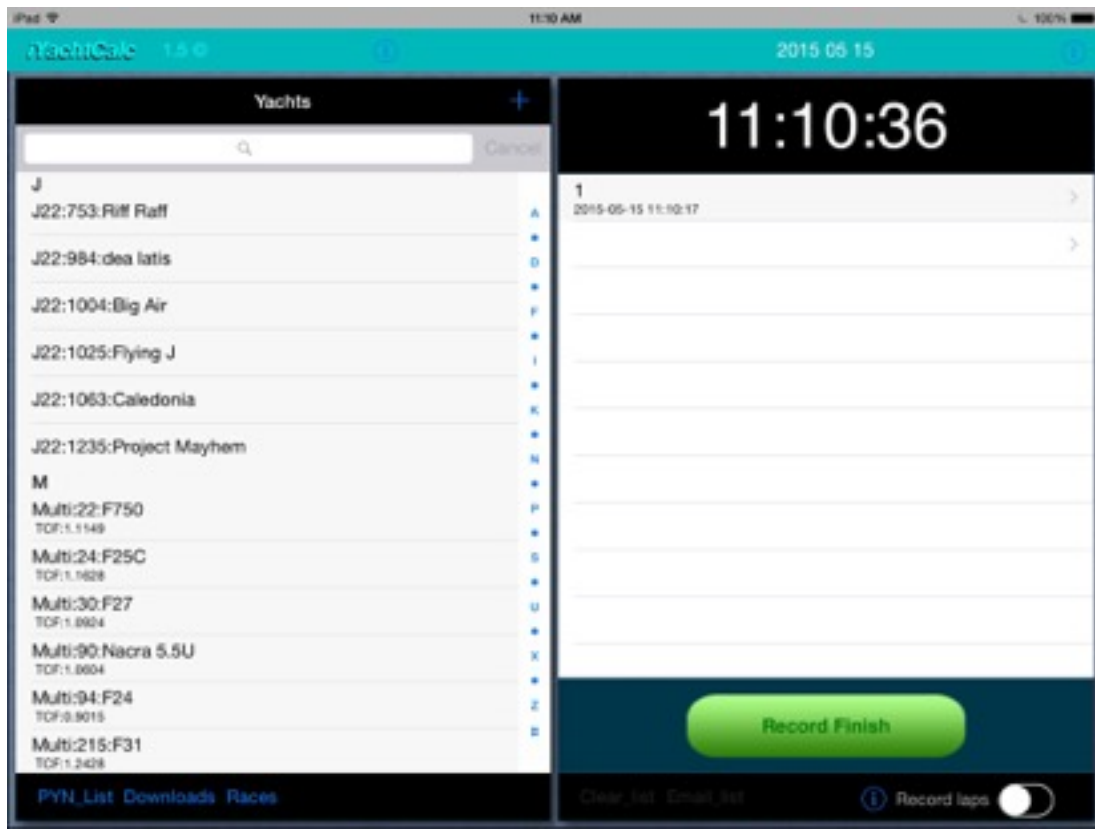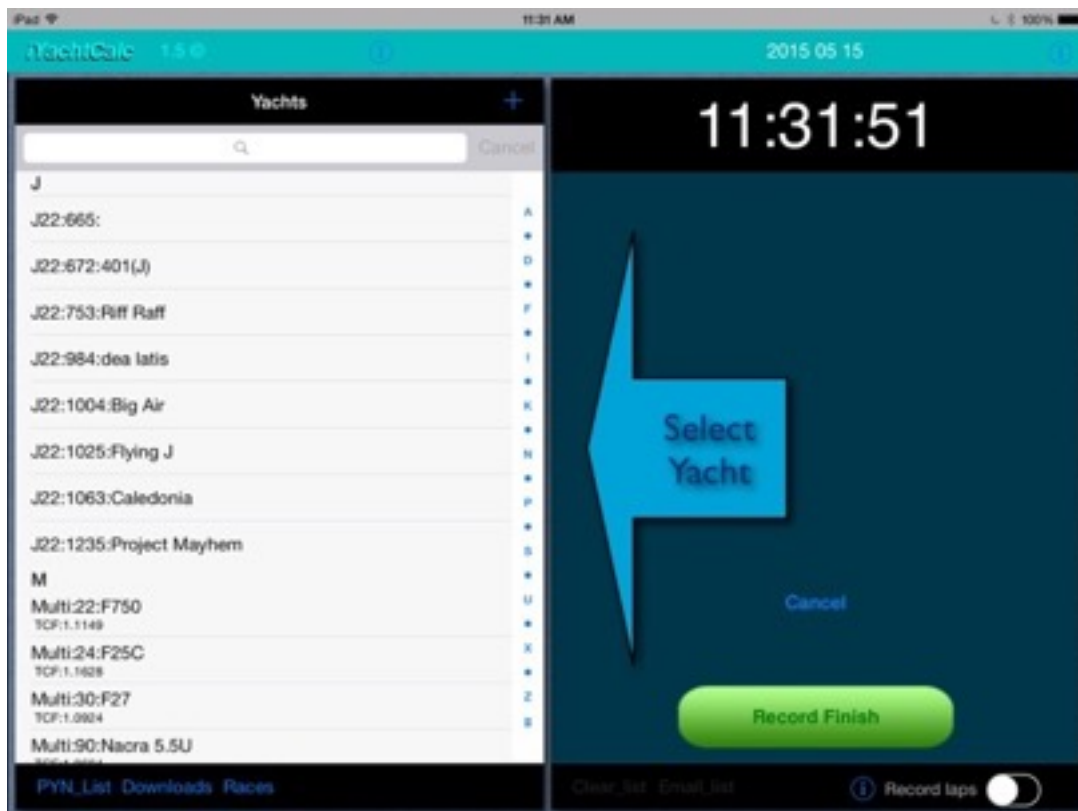
Screen Shot of Race Yachts file
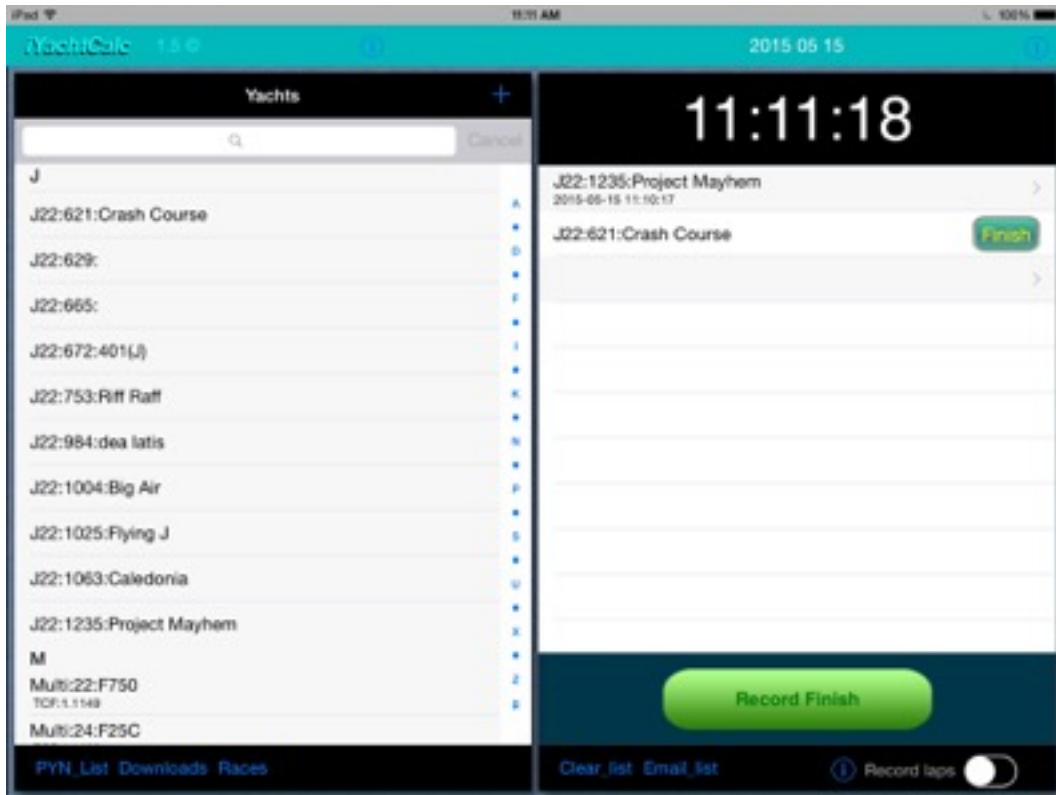

Screen Shot of Captured Start Times

Screen Shot for Preferred Finish Capture Method
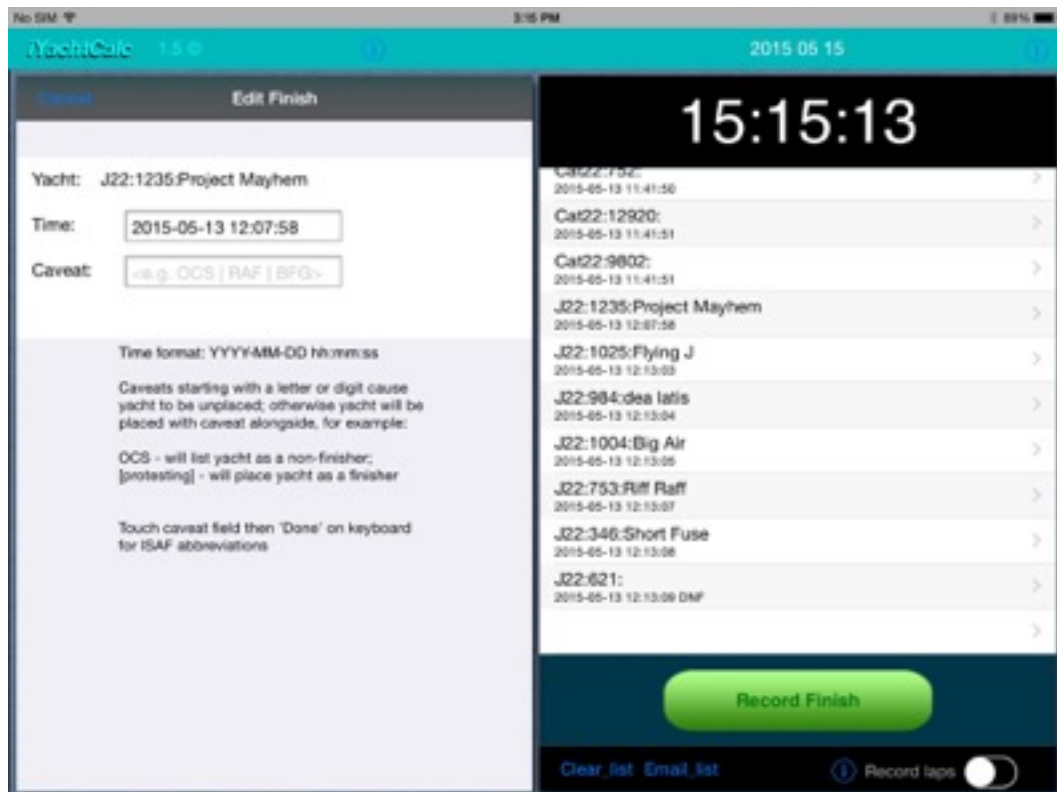

Screen Shot to Link Yacht to Finish Time

Screen Shot for Alternative Finish Capture

Screen Shot for Edit Finish

OPERATIONAL STEPS for "Provisional Scoring" mode

In addition to a list of yacht Finishes, iYachtCalc can also provide separation of classes and provisional scoring for each race. To access this function the Races must be defined. A Race is a single event where the collection of all yachts competing with each other are collected and scored. For AYC scoring can be One Design (ie equal ratings or finish order) or PHRF Time on Time scoring.

Step 1: Capture finishes as described above
To separate multiple race finishes, Races should be defined and closed before recording finishes for subsequent races.

Step 2: Enter Race Details

To enter race details, choose the "Races" button at the bottom of the left hand Yachts screen, then the "+" sign at the top right of the Races screen.

Enter the Race Name, the name should be descriptive of the event and for multiple race events should include an identifier for which race of the event and for handicap races the fleet. For example, for AYC series races, consider "Summer Series 1-2 PHRF A" which includes the event name, identifies this as the first race of the series and the second race of the day and the fleet. For OD fleets it is not necessary to include the fleet unless the fleet is divided such as Gold and Silver fleets.

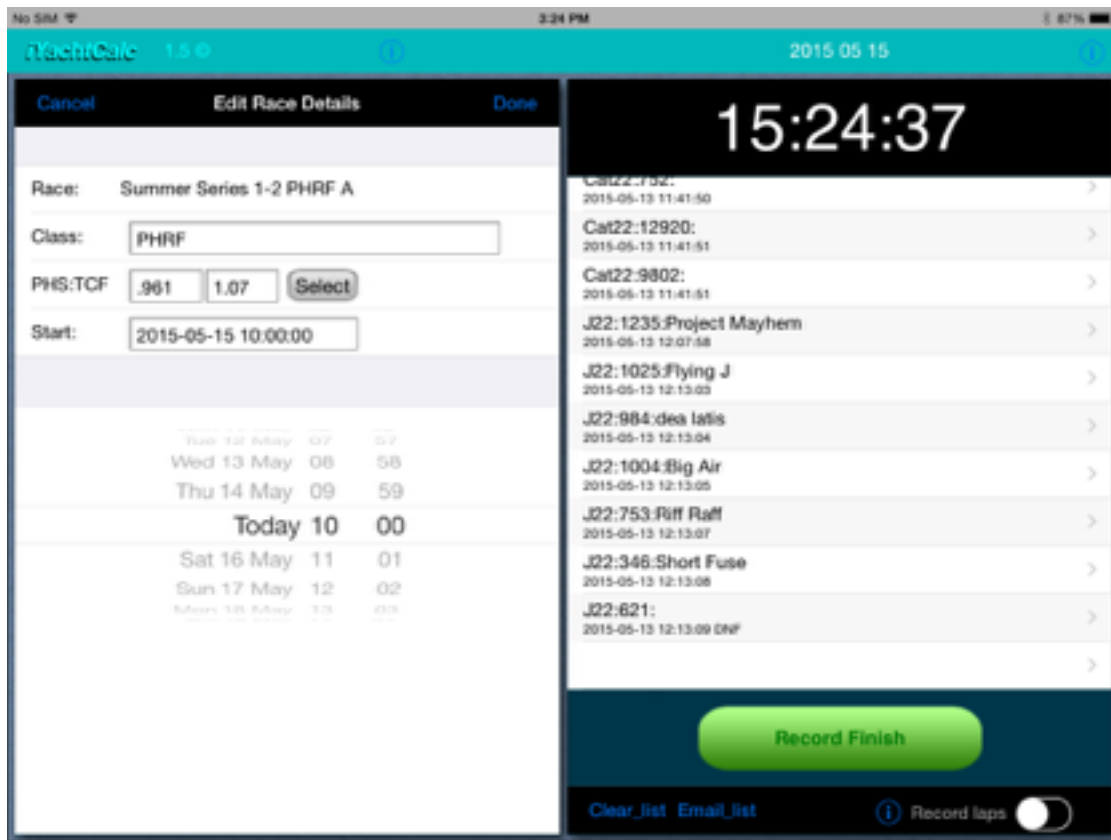The following information should be keyed into the **RACES** file:
1) "**Race**" the name should be descriptive of the event and for multiple race events should include an identifier for which race of the event and for handicap races the fleet. For example for, AYC series races, consider "Summer Series 1-2 PHRF A" which includes the event name, that it is the first race of the series and the second race of the day and the fleet. For OD fleets it is not necessary to include the fleet unless the fleet is divided and,
2) "**Class/Type**" if the race is to be scored as One Design/Equal-Rating enter the class/type as J22, J24, Ensign, Cat22 or SC21(insure no spaces and capitals as shown). For Keel Fleet races this field is must be "PHRF" and for Multihull races this field must be "Multi" and,

3) "**Scoring Rule**" the default is Equal Rating and is correct for all OD Classes. For Keel Fleet and Multihull races press the "Select" button and scroll to the third option titled PHS:TCF then finally enter the handicap range for each fleet (ie A or B OR C). For Series Races for PHRF A is 0.961- 1.07, for PHRF B 0.871 - 0.959, for PHRF C 0.764 - 0.870. For Series Races for Multi A is 1.07 - 1.30, For Multi B 0.860 - 1.07.

4) "**Start**" time for this race, this is very important. The finish sheet should have the captured Start Time for each Class. Once the Race is defined and a finisher captured the Race is not editable and must be deleted and reentered.
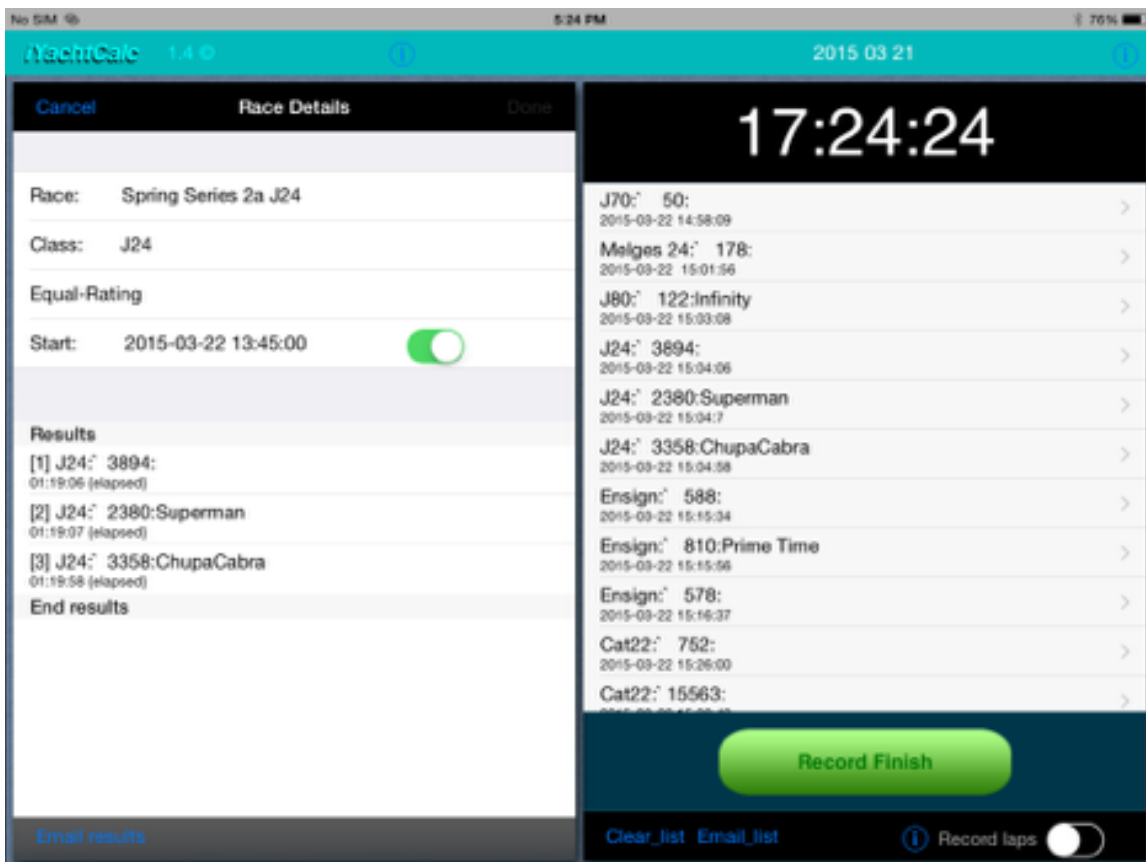
The race Start Time, Class and Scoring rule but not the Race Name are editable until the first finisher is captured. It is important to insure accuracy of these fields prior to finishing the first yacht.

Once a race is defined the last recorded finish time for a yacht after the race Start time will be automatically transferred and scored. Once scored the Race should be closed on the **Races** screen by sliding the green button on the Start line to the left, this "Closes" the race preventing inadvertent edits or subsequent finishes to be scored. When an internet connection is available the Provisional Scores may be emailed by selecting **Email results** from the bottom of a selected Race on the **Races** screen.

Screen Shot of Race Information Entry

Screen Shot of completed Finish Screen

<u>Frequently asked questions.</u>

How do you delete a single Finish or Race entry?
From the screen displaying the Finish or Race entry to be deleted, touch on the entry line then swipe to the left to expose the Delete button.

Can the finish time or Caveat (ie DNF/DNC/OCS...) be edited after finish capture?
Yes, to edit simply touch on the entry on the Finish screen and a left hand screen will open to allow editing.

Can two finish times be captured for the same yacht?
Yes, but the second captured finish will produce a prompt to insure this is the intention.

Can the iYachtCalc application be used without a paper recording backup?
No, not at this time. Capturing racing data with paper an pencil are still required until our use of this application is proven reliable.

How do I determine the revision level of the Yachts File?
Near the end of the Yachts listing, the revision date of the file is shown.

Why do I need to download the Yachts file from the AYC web site?
While it is possible to key-in a few yachts into the Yachts file directly while on the water this is very time consuming and error prone, It is essential to download the Yachts file from the AYC web site before leaving the clubhouse. Direct keying may be useful on the water for unexpected changes but the bulk of yacht data should be downloaded.

How do I Download the Yachts file form the AYC Web site?
Be sure your iPad has internet access then to download the Yachts information from the AYC web site, open the iYC app to the Yachts view and select "Downloads" at the bottom of the Yachts screen. This brings up the "Web Downloads" screen shown below. The download location for the Yachts file (do not download the PYN file) should be preset but if not key in the following URL:

<u>http://www.austinyachtclub.net/wp-content/uploads/Yachts.csv</u>

then select **Download yachts file**. All known potential AYC participants should now appear in the Yachts screen. After downloading the AYC yachts file press "Close" to display the Yachts file.