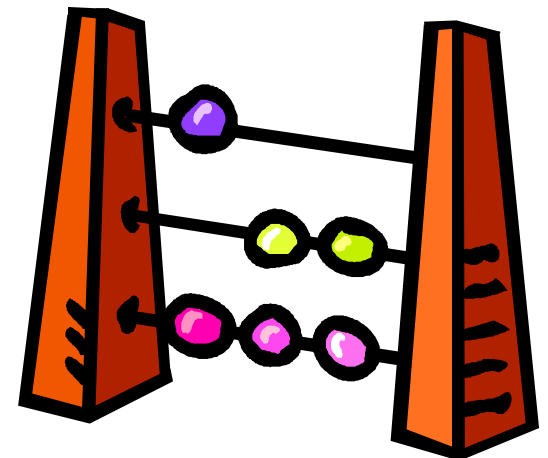**SMSA**
Race Management Training

Starting and Finishing Races
- - -
Scoring the Races

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US Sailing Certified Club Race Officer

Topics

- Importance of GPS Time
- Assignment of Responsibilities
- Course Selection
- Starting Races
- Warning Signal
- Preparatory Signal
- Classes Start Order
- Calling the Line
- Individual Recall
- General Recall
- Appendix S
- How to Record Finishes
- Determining Course Length
- Scoring

Importance of GPS Time

- Today, GPS time is the de facto time measurement system within the sailing community
  - Everyone can be on the same time-tick
- Time throughout the RC and the competitor fleet is identical
  - Wristwatch oscillators are known to drift over time
    - Some manufacturers note ±10 seconds in a 30-day period
    - **_ALWAYS_** synchronize your watch before leaving the dock
  - Very beneficial when competitors must record their own finish times, such as the Middle Distance Races
- Receivers – both ship's units & handhelds – are widely available & relatively cheap
  - Today, there are wristwatches available that synchronize nightly to the GPS time signal from Fort Collins, CO

Assignment of Responsibilities

- Assigning jobs to each member of the RC Team is one of the most important tasks
  - Need to consider each person's strengths & weaknesses
- Generally, there are more tasks than RC volunteers
  - However, people should be able to "multi-task" and cover a few jobs
  - For example, the Signaler could take wind readings before & after the start sequence
- It's important to have enough people on the RC boat to help with all the tasks
  - However, there is such as thing as "too many" helpers

Assignment of Responsibilities

- ## Committee Boat Operator
  - Responsible for operating & equipping the RC boat
  - Ensure the RC boat is ready for the day's work
- ## Line Sighter
  - Sights the starting line & identifies OCS competitors
    - Makes the call for "Individual Recall" or "General Recall"
  - Sights the finish line & determines the order of finish
- ## Mark Setter
  - Positions, sets, & relocates marks on the course
  - Monitors wind conditions (speed & direction) & keeps the PRO informed

Assignment of Responsibilities

- Principal Race Officer (PRO)
  - The "CEO" of the RC Team
  - Makes the major race management decisions, within the provisions of the RRS & SIs
  - Has overall responsibility for all aspects of the race event
- Scorer
  - Tabulates points & finishing times for all competitors
  - Calculates handicaps, if required
  - Incorporates Protest Committee results, if required

Assignment of Responsibilities

- ## Signaler
  - Verifies that all required flags/pennants are available & ready to be hoisted
    - Class flags, Prep flags, Postponement, Recall flags, Shorten Course, etc.
  - Provides visual signal information to competitors from the RC boat
    - Status within the start sequence, Follow Me, Postponement, etc.
- ## Sounder
  - Makes sound signals to draw competitors' attention to the visual signals
    - Gun, air horn, whistle, etc.
  - A hail or shout from the RC is **_NOT_** a sound signal

Assignment of Responsibilities

- Spotter-Recorder
  - Identifies & records all boats starting & finishing
  - Notes all boats who do not compete in a race
  - Records observations made/reported during the race
    - Boat X hit the leeward mark, Boat Y flying "B", Boat Z retired, etc.
    - Always record the time of the incident
- Timer
  - Ensures their watch is synchronized to GPS time
    - Using GPS receivers instead of a watch is not recommended since they are known to occasionally "skip" seconds due to signal processing
  - Calls the countdown sequence aloud for the start & the finish
- Wind Reader
  - Observes & records wind direction & speed

Course Selection

- The course – and its length – should be considered for each class that has a start
- You have the flexibility to post a different course for each starting class
  - RRS 27.1 requires the course to be posted by the Warning signal
  - There is no requirement to roll starts
  - There is no requirement to keep subsequent starts on a 5-minute "time tick"
    - Although, it can help both the timer & the competitors keep track of where they are in the countdown

Starting Races

- Races started in accordance with RRS 26
  - Also known as 5-4-1-GO!

- The Warning period begins at 5 minutes before the start

- The Preparatory period begins at 4 minutes before the start
  - Penalties signaled during the Preparatory period go into effect at 1 minute before the start

Warning Signal

- The course must be displayed no later than the warning signal

- For a race with multiple classes:

  - "The warning signal for each succeeding class shall be made with or after the starting signal of the preceding class."

  - You may roll the starts – but it is not required

  - Consider the wind & sea-state conditions when deciding whether to roll the starts

Class Flag

HOIST with **1** sound signal, 5 minutes before the start

STRIKE with **1** sound signal, at the start

Class Flag

RRS 27.1
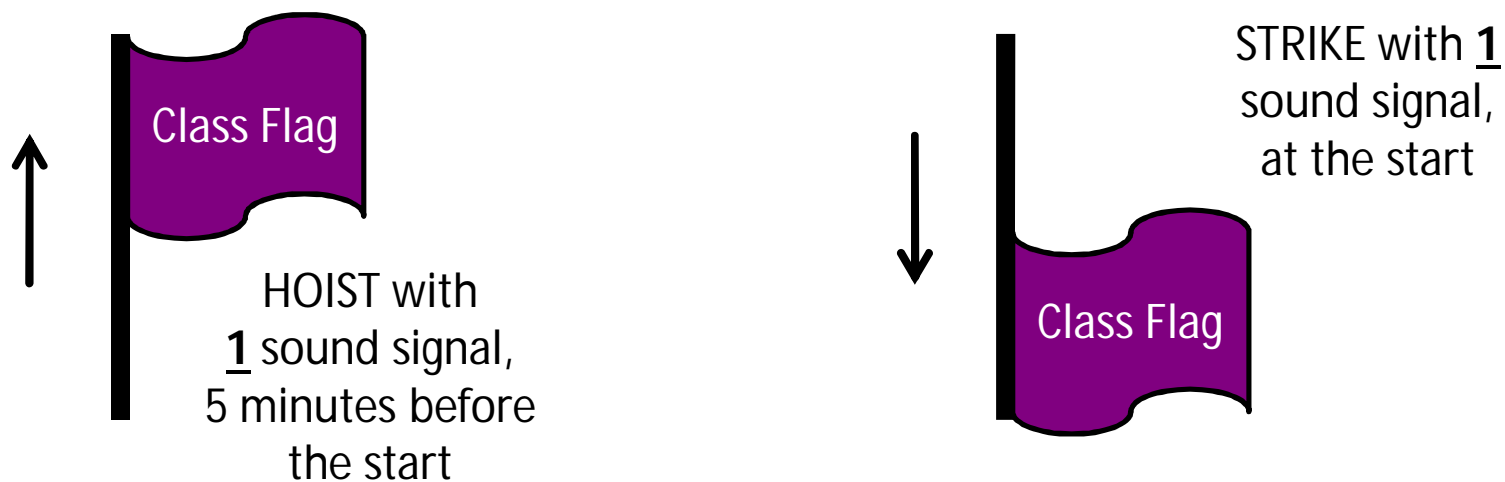
Warning Signal

Class/Warning Flags for Wednesday Night Informal Racing
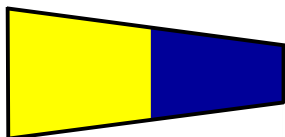
| Non-Spinnaker All PHRF Ratings | Spinnaker - C PHRF ≥146 | Spinnaker - B PHRF 110-145 | Spinnaker - A PHRF ≤109 |
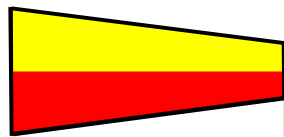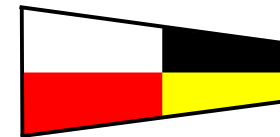
May Be Consolidated into 1 or 2 Starts, Depending Upon the Number of Boats That Show Up for That Evening

Class/Warning Flags for Weekend Formal Racing
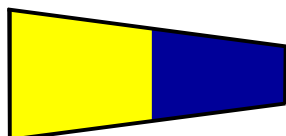
Non-Spinnaker All PHRF Ratings

Spin A-C All PHRF Ratings

SMSA Race Management Training

Preparatory Signal

- Starting marks must be set by the time of the preparatory signal
- There are 5 allowable preparatory signals
  - There are also 4 penalty signals that may be used in lieu of the "P" flag
    - Used to help control overly aggressive classes
    - Typically invoked in an ascending order of severity following General Recall(s)

HOIST with
1 sound signal,
4 minutes before
the start

STRIKE with a
long sound signal,
1 minute before
the start

"Preparatory Signal."
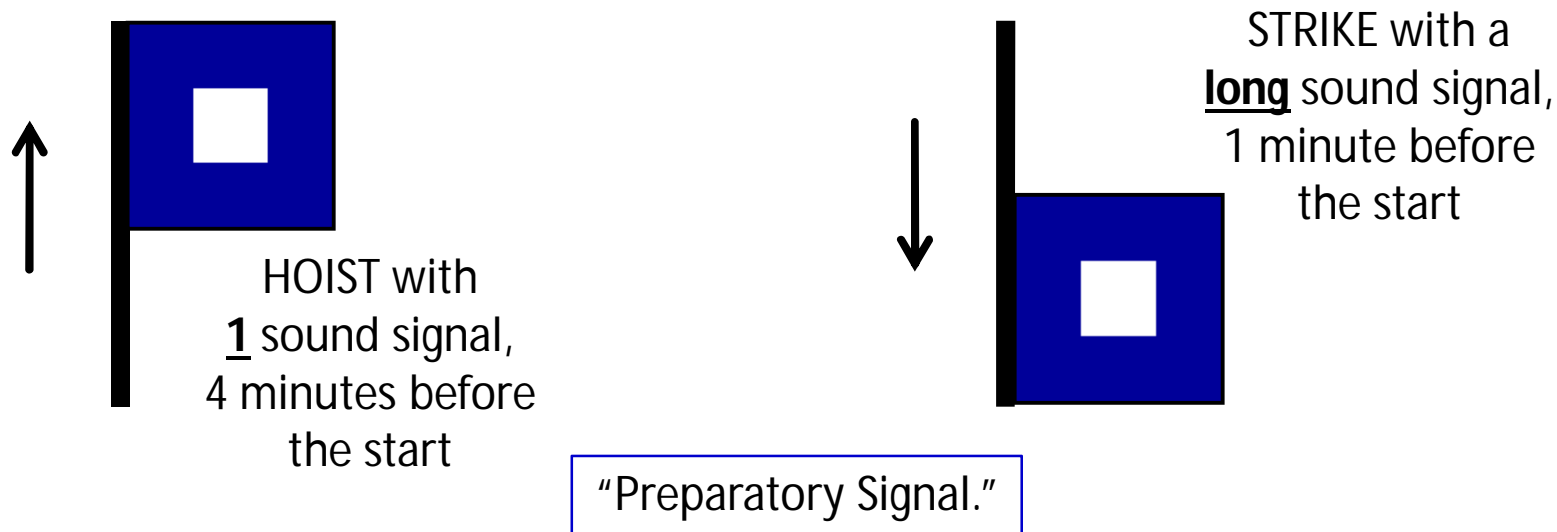
Preparatory Signal
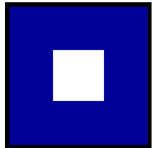
Routine Preparatory Signal. There are no penalty conditions in effect.

Penalty Preparatory Signal, RRS 30.1. The Round-An-End rule is in effect.

Penalty Preparatory Signal, RRS 30.2. The 20% Penalty is in effect.
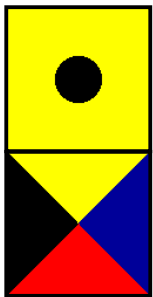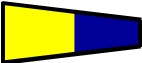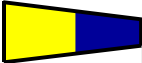
Penalty Preparatory Signal, RRS 30.1 & 30.2. Both the Round-An-End Rule & the 20% Penalty are in effect.

Penalty Preparatory Signal, RRS 30.3. The Black Flag Rule is in effect; immediate disqualification upon violation.

Classes Start Order

- ## Frostbites
  - Non-Spin   1300 Warning; 1305 Start
- ## Wednesday Nights
  - Non-Spin   1825 Warning; 1830 Start
  - Spin - C   Check SIs for times
  - Spin - B   Check SIs for times
  - Spin - A   Check SIs for times
- ## Weekend
  - Non-Spin   Check SIs for times
  - Spin (A, B, C)   Check SIs for times

Calling the Line

- ## At the START
  - The "starting line" is the plane that extends from the course-side edges of the two items marking the ends of the starting line
    - "Items" = Halyard, Pole, Inflatable Mark, Buoy, etc.
  - A boat is considered "On Course Side" when at her starting signal, "any part of her hull, crew, or equipment is on the course side of the starting line"

Calling the Line

Clear, or Pre-Start Side   **Course Side**

This is **NOT** an OCS situation since no part of the boat, crew, or equipment are on the course side of the starting line

This **IS** an OCS situation since the bow of the boat is on the course side of the starting line

Wind

SMSA Race Management Training
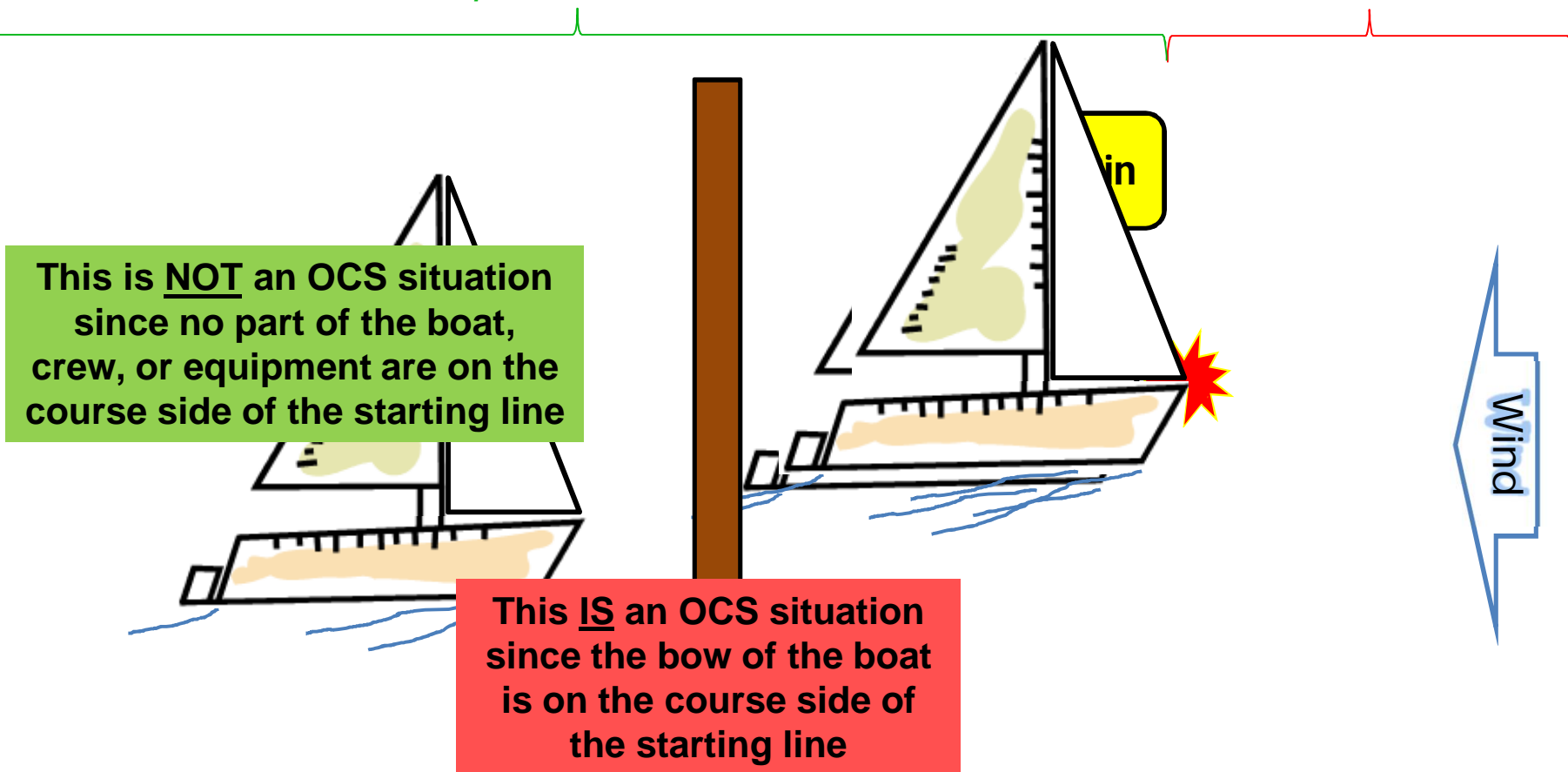
Calling the Line

- ## At the FINISH
  - The "finish line" is the plane that extends from the course-side edges of the two items marking the ends of the starting line
    - "Items" = Halyard, Pole, Inflatable Mark, Buoy, etc.
  - A boat is considered "Finished" when "any part of her hull, or crew or equipment in normal position, crosses the finishing line in the direction of the course from the last *mark*"
    - The entire boat is not required to pass through the line
    - The boat must stay clear of the RC boat, mark, & other competitors who are still racing
    - If a "finished" boat commits a foul, they are required to exonerate themselves, then refinish

Calling the Line

Wind
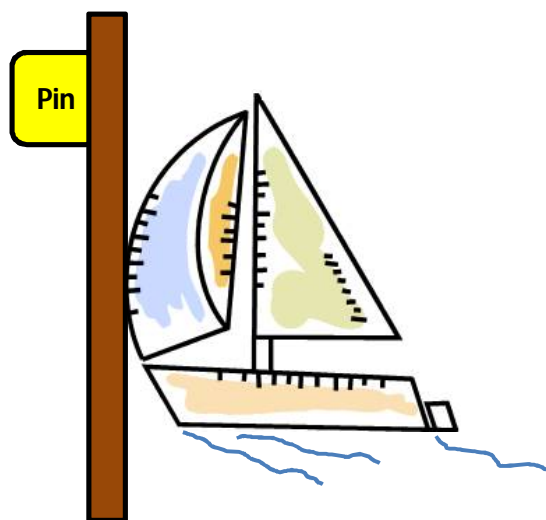
"Finish" is recorded as soon as the belly of the spinnaker touches the forward edge of the plane of the line
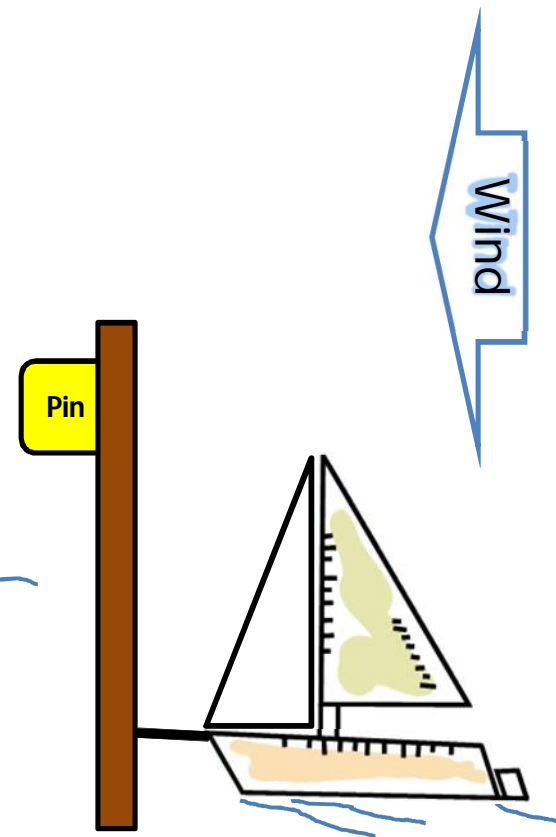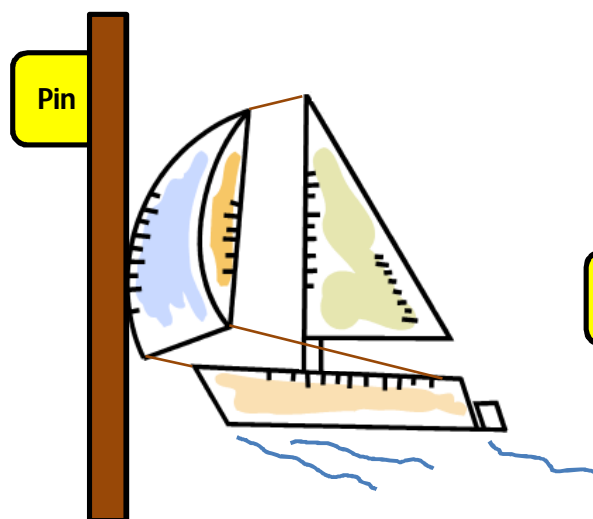
These are **NOT** legitimate finishes since gear is not in its "normal position"

Pin

Pin

Pin

Individual Recall

- ## RRS 29.1

  - "When at a boat's starting signal any part of her hull, crew or equipment is on the course side of the starting line or she must comply with rule 30.1, the race committee shall promptly display flag X with one sound."

HOIST with
1 sound signal
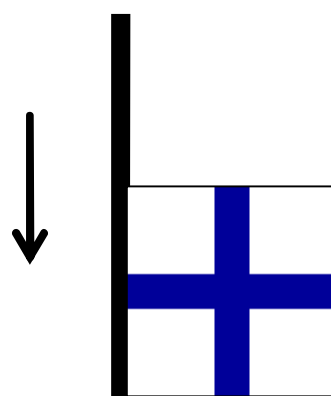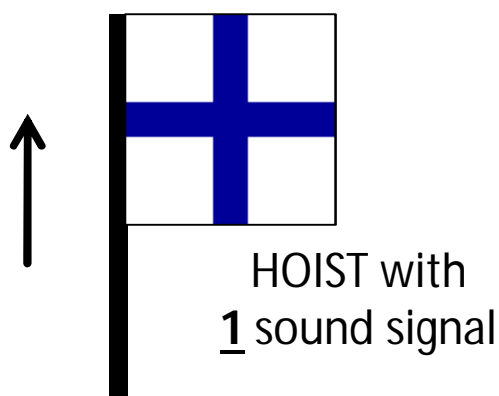
STRIKE with
no sound signal –

after the last boat has cleared or after **4** minutes, whichever occurs first

"Individual Recall."

Individual Recall

- The key requirement is for RC to "promptly" signal Individual Recall
  - "Promptly" has been left vague & undefined
  - However, you should be able to complete the signal within a few seconds
  - You do not have time to find the flag, attach it to a halyard, then hoist it
- The flag is flown until either all boats clear themselves, or **4** minutes have elapsed – whichever occurs first

Individual Recall

- The entirety of the boat, crew, & equipment must all be on the pre-start side of the line in order to clear the OCS

- **Never** dip the flag to acknowledge that an individual boat has cleared herself
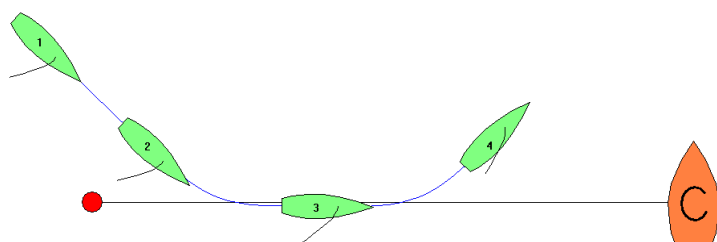
Has this boat cleared herself?
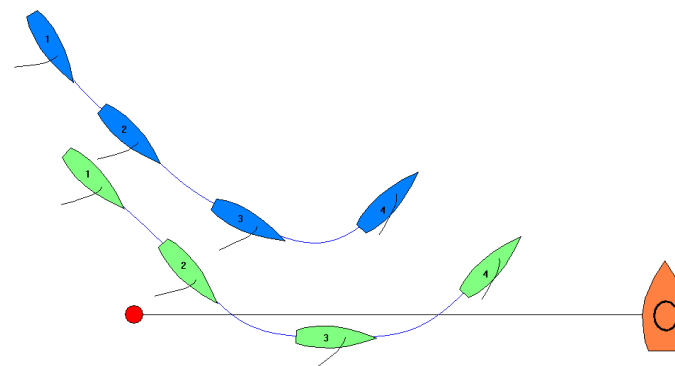
Suppose that crew on Blue saw the X flag "dip" for Green while at position 3.

Individual Recall

- Can you manage an Individual Recall from this scenario?
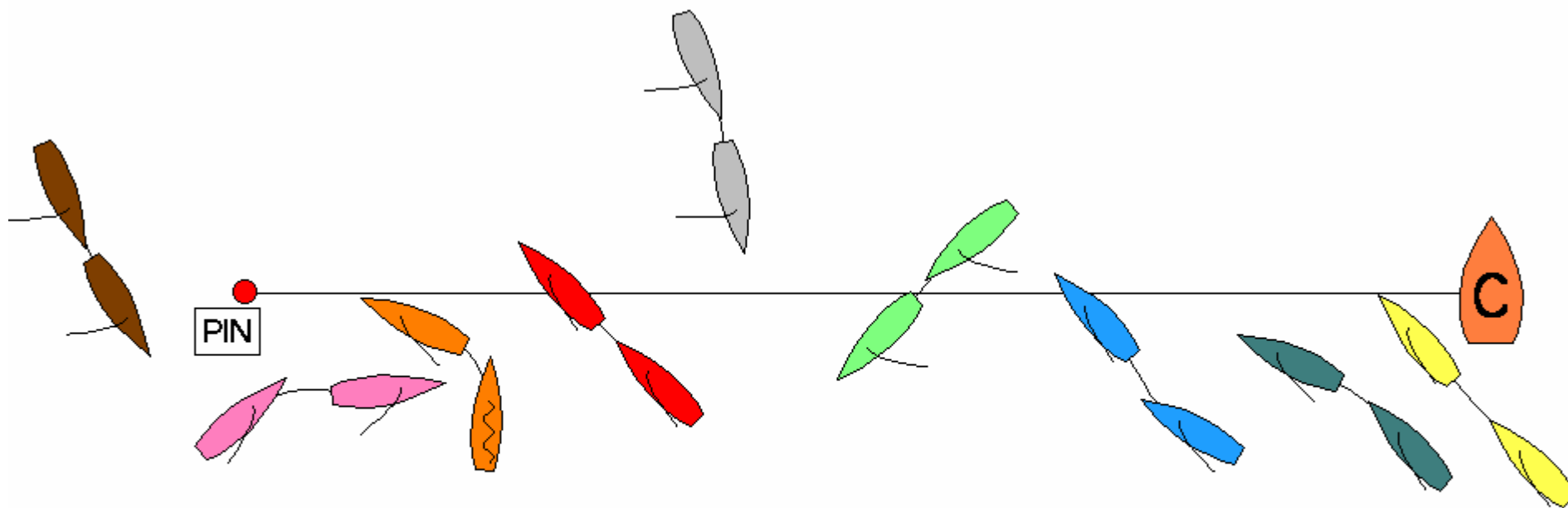
Individual Recall

- Keep an eye on all OCS boats – you must still clear them when they come back

- Keep track of how long the Individual Recall flag has been flown
  - It must be removed at T+4 minutes if all boats do not come back to clear themselves

General Recall

- RRS 29.2
  - "When at the starting signal the race committee is unable to identify boats that are on course side of the starting line or to which RRS 30 applies, or there has been an error in the starting procedure, the race committee may signal a general recall."

HOIST with
2 sound signals

STRIKE with
1 sound signal –

1 minute before WARNING signal for the class
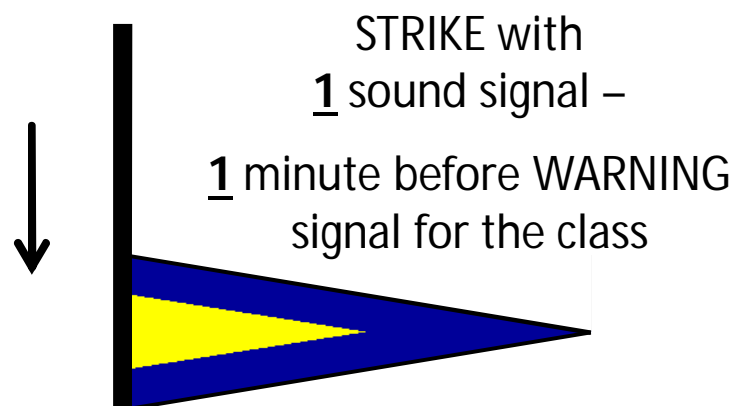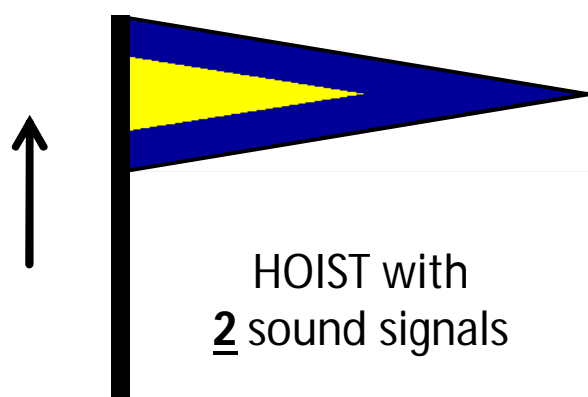
"General Recall. The warning signal will be made 1 minute after removal."

General Recall

- There may be an "unfairness" associated with a General Recall – regardless of which decision you make
  - A General Recall is not fair to the boats that started fairly
    - If you can identify every OCS boat, signal Individual Recall
  - However, an Individual Recall is unfair if OCS boats are not identified
- The PRO must weigh the disadvantages of either decision
  - Stipulates that the recalled class will be the next one to go back into the start sequence
  - Some SIs have been modified direct that the recalled class goes to the end of the remaining classes to be started

General Recall

- What does a General Recall look like?
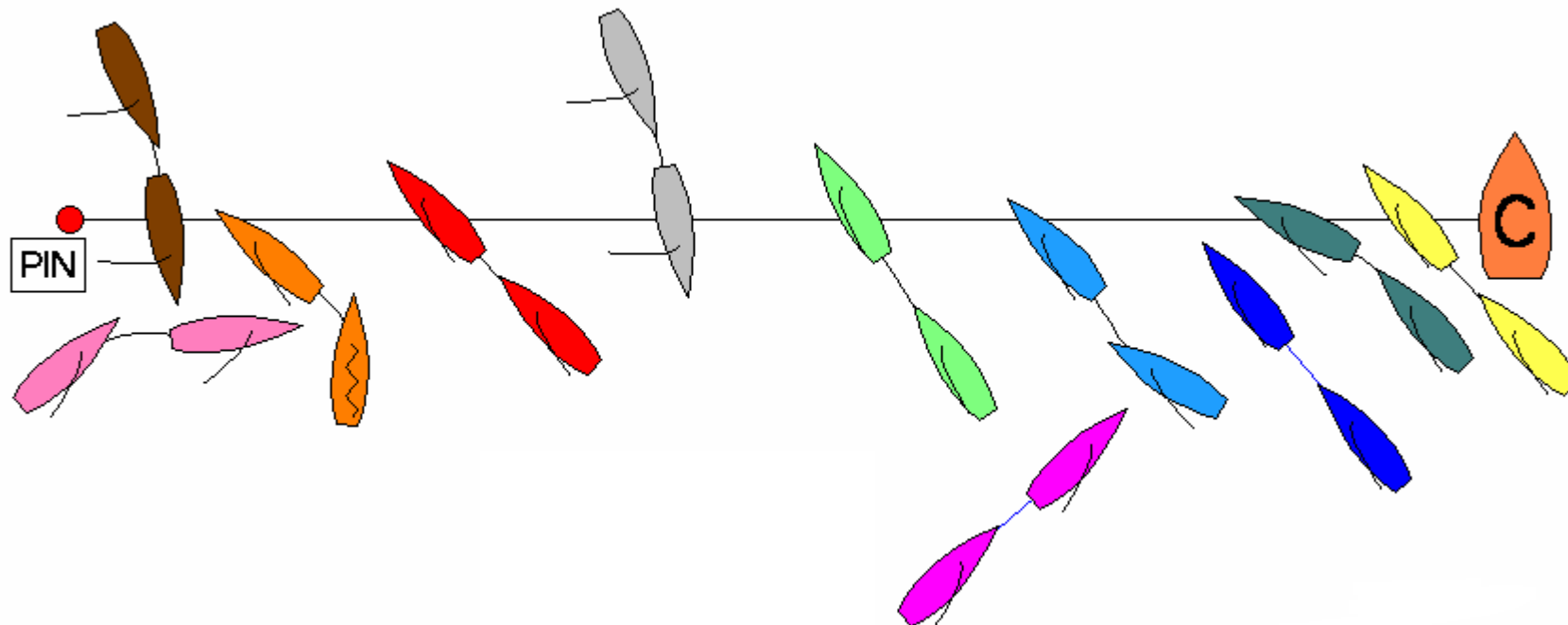
Appendix S

- ## Sound-Signal Starting System
    - Used by our Small Boat Program for Thursday night racing
    - The course & postponement signals may be made orally
    - The Individual Recall flag does not have to be displayed to indicate OCS
        - An oral hail of sail numbers or some other distinguishing features is all that is required
    - Audible signals govern over visual signals
    - 3-minute start sequence

	Warning	**Preparatory**								**Start**
TIME	3'	2'	1'30"	1'	30"	20"	10"	5" 4" 3" 2" 1"	0
SOUND	3L	2L	1L 3s	1L	3s	2s	1s	1s 1s 1s	1L
								1s 1s 1s	
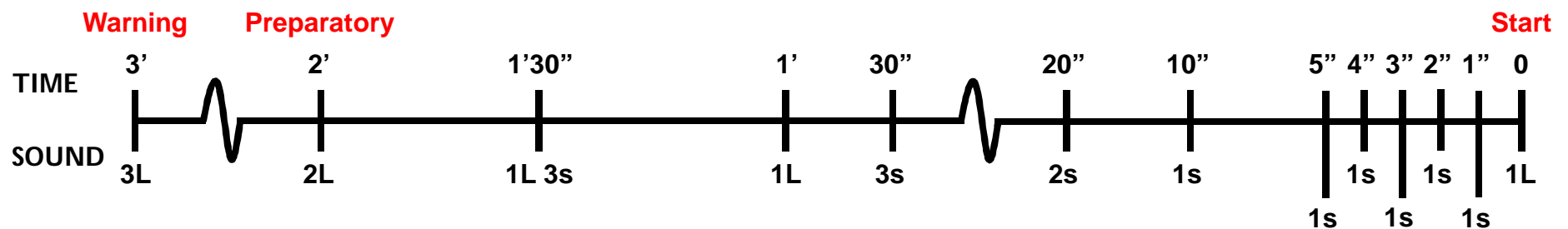
How to Record Finishes

- When possible, employ multiple recorders
  - Most smartphones have a voice recorder app
- Stay calm when things get congested
  - Record sail #, boat name, or any distinguishing feature
  - Use a recorder's shorthand to minimize how much information must be written
- Use the same watch to call finish times as was used for the start countdown
- What else?
  - Is a protest flag flying from the backstay?
  - Does the number of finishers match the number of starters?
- Double-check everything & have the recorders cross-check their sheets

How to Record Finishes

- Recorder's Shorthand

Clear, easy-to-read lettering

Don't use colons, leave a space

Don't rewrite the "hour" if it doesn't change

Don't rewrite the "minute" if it doesn't change

Determining Course Length

- For Wednesday night racing, course length will be automatically calculated in the scoring spreadsheet
  - This is possible since we utilize a fixed starting location
- Weekend racing provides some options
  - Setting the start/finish line off an existing SMSA mark allows you to utilize a scoring spreadsheet to calculate the course length
  - Setting the start/finish line away from an existing mark will require a GPS to determine your anchor point
    - You must calculate the distance from the start line to the first mark & the distance from the last mark to the finish line
    - Do not attempt this type of course configuration if you are not familiar or comfortable with use of a GPS
- For small boat racing, distance is irrelevant since it is time-on-time handicapping or one-design racing

Big Boat Scoring

- Racing is based on the Performance Handicap Racing Fleet (PHRF) Time-On-Distance handicap system
- Utilizes an Excel spreadsheet developed by Joy Dorethy
  - Be sure to download the latest version the night before/day of your race committee assignment
- Required data
  - Cumulative point-to-point distance of each leg
  - Sail number
  - Start time
  - Finish time

Big Boat Scoring

Small Boat Scoring

- Racing is based on the Portsmouth time-on-time handicap system
  - Each boat's handicap is adjusted for the measured wind strength in a given race
- Utilizes the Sailwave scoring program
- Required data
  - Average wind speed
  - Start time
  - Sail number
  - Finish time

Small Boat Scoring

Scenarios

- As the Line Spotter, you see the shoe of 1 crewmember OCS at the starting signal.
  - What does the RRS say?
  - What do you do?
- At 30 seconds from the start of the 1st class on a Wednesday night, the wind drops from 8 knots to 2 knots.
  - What does the RRS say?
  - What do you do?
- A single OCS boat is signaled properly. As the boat is coming back, the "X" flag falls to the deck.
  - What does the RRS say?
  - What do you do?