Introduction to Race Management


Modified 28 September 2009
Purpose of this Seminar

- Introduce interested volunteers to race committee duties.
- Refresh information for those already involved in race management.
- How we do the things we do.
- Why we do the things we do.
- Hopefully, learn how to do some things better!
Everyone can use a refresher
The following documents are available from US Sailing:

- **JTRCT**  Join the Race Committee Team
- **RMH**  Race Management Handbook (revised every 4 years when the Rule Book (RRS) is revised.
- **RRS**  The Racing Rules of Sailing, including US Sailing Prescriptions.
We’ll briefly cover the following topics:

- Organization of the event
- Race Committee Jobs
- Race Day Preparation
- The Start
- During the Race
- After the Race
Event Organization

Organizing Authority
Provides overall direction

Race Committee
Responsible for races

Other

Regatta Committee
Responsible for Onshore events

GYA Race Management Seminar
• Prepare the Notice of Race that conforms to Appendix J1.
• Appoint a race committee and, when appropriate, a protest committee and umpires.
is required (RRS 89.2)
- must conform to Appendix J1
- must be made available to the competitors before the first race (RRS 25)
- NOR Guide in RRS Appendix K
Appendix J1.1, requirements for contents of NOR
Appendix J1.2, shall include...information that would help
competitors decide whether to attend the event or conveys
other information they will need before the SIs become
available
The Notice of Race must include a list of other documents
that will govern the event and state where the competitors
may obtain them. For example:
(Appendix J1.1(3))

This event will be governed by the rules as defined in the
RRS and the GYA regulations for sanctioned events
(available at www.GYA.org).
RC Responsibilities RRS 90

- Publish written sailing instructions that conform to RRS Appendix J2. (RRS 90.2a)
- Conduct races as directed by the OA (RRS 90.1) and in accordance with the rules (RRS 90.1).
- Score the event (RRS 90.3).
- Safety. RRS 32.1e, J2.2(12)
- Provide required equipment. (JTRCT) RMH Chapter 8
- Provide required personnel. (JTRCT)
Competition Formats (RMH Chapter 5)

Fleet Racing – Bring your own boat
  ♦ Vast Majority of racing in our area
  ♦ Normally no significant issues, everyone competes

Fleet Racing – Supplied boats
Match Racing
Team Racing
What do the Competitors Expect?

PERFECTION!
Race Committee Jobs
Race Committee Jobs (JTRCT)

Recorder/Spotter (pg 25)
Sounder (pg 23)
Signaller (pg 21)
Line Sighter (pg 14)
Timer (pg 27)
Boat Operator (pg 13)
Scorer (pg 20)
Wind Reader (pg 30)
Mark Setter (pg 16)
Principal Race Officer (pg 19)

All should be:
- Reliable
- Friendly
- Compatible
- Fun

Page references from JTRCT
Recorder/Spotter (pg 25)

- Should keep a record of each race, including:
  - Date, time, race number, wind direction and speed of each start
  - Number of starters in each class and combined total
  - Competitors to be scored DNS, DNC, OCS
  - Competitors to be scored DNF or RAF
  - Finish position of each boat
  - Times for first and last boats to finish (one design) – All for handicapped classes
  - Rule infringements seen
  - Protest flags, “I” flags or other flags flown by competitors
  - Docking time of RC boat
  - Receives and logs in protests
  - Records name of PRO and other recorders.
Race Committee Jobs (cont.)

Sounder (pg 23)
- Takes cue from the timer
- Be prepared to make up to three sounds in succession
- May use different sounds (Gun/Horn) for different signals

Signaller (pg 21)
- Know the signals as defined in the RRS Race Signals (JTRCT Appendix)
- Make sure all flags and shapes, number boards, halyards, and poles are available
- Signaller takes cues from the PRO and the timer
- Flags & Shapes should be hoisted and dropped briskly.
- Don’t forget blue shape when on station to finish.
Line Sighter (pg 14)

- Prior to the start get a comfortable position to sight the line
- Start calling & recording OCS boats at one minute before the start
- At the start call numbers of each OCS boat
- Hail OCS boats if allowed by Sailing Instructions
- Hail boats that have returned if allowed by Sailing Instructions
- PRO will decide if recall is individual or general
Timer (pg 27)

- Get a list of classes and starting sequence from SIs
- Be familiar with the clock. Have a backup available!!!
- Keep the RC team advised of time remaining to first signal
- Announce time at regular intervals
- Count loudly, clearly, and accurately
- Report any errors to the PRO immediately
- Announce next class to start as each class starts
- At the finish, record times for first and last boats (one-design) or all boats for handicap races.
- Watch for expiration of time limit (if applicable)
Race Committee Jobs (cont.)

Boat Operator (pg 13)

- Prepare for departure at the scheduled time
- Check for more than enough fuel on board
- Check that all equipment is on board and that everything is operational. Use a checklist
- Proceed to starting area per direction of PRO.
- Stop and let wind reader get accurate wind readings
- Anchor at direction of PRO
- Provide radio contact with other boats as instructed by PRO
- Follow instructions of PRO to position boat during race
- Be aware of boats wake and wind shadow while underway
Scorer (pg 20)

- Prior to the start, get a “scratch sheet” for each class
- During the race help recorder/spotter or other RC as needed
- After the race:
  - Calculate position for each boat in each class (handicap)
  - Score each race
  - Calculate series standings
  - Have PRO check results
  - Post results on official notice board (note if protests pending)
  - Adjust results based on protest/redress hearings.
  - Prepare list of winners for trophy presentation
Race Committee Jobs (cont.)

Wind Reader (pg 30)
- Observes and records wind direction (& speed) for PRO at regular time intervals
- Know the difference between a wind shift and an oscillation
- During the race, keeps taking readings to determine if course change may be required; make reports to PRO

Mark Setter (pg 16)
- Use checklist to make sure proper equipment is on board
- Review with PRO the types of marks to be used for each course
- With the PRO, make certain that the starting line is square to the wind.
- Set additional marks as directed by the PRO. Use of GPS or good handbearing compass is extremely useful
Principal Race Officer (pg 19)

- Write or review the Sailing Instructions
- Post notices to competitors
- Conduct competitors meeting (if required)
- Assume direction & responsibility for personnel, equipment and assignments
- Determine course location and course selection in accordance with the sailing instructions
- Respond to changes in weather conditions
- Assure RC compliance with all rules (RRS, class & SIs)
- Make or approve all RC decisions
- Act as communications link to competitors, organizers and protest committee
Race Day Preparation
Race Day Preparations (RMH Chapter 9)

Check the weather:

- Newspaper
- Weather Channel
- Local television station
- VHF marine weather channel
- Internet ([http://www.intellicast.com](http://www.intellicast.com))
- Look out the window
- Send a boat to the course area
Check your equipment

◆ Each boat’s captain does his/her own
◆ Use checklists (RMH 8)
◆ Keep track of borrowed equipment
◆ Check each boat’s systems:
  ★ Fuel
  ★ Engine
  ★ Electronics (VHF, GPS, etc.)
  ★ Food and drink

Check the OFFICIAL NOTICE BOARD.
RC meeting ashore:

- Early enough to get racing started on time
- Verify personnel availability, change as necessary
- Verify equipment checked; solve any problems
- Verify food and beverage for RC (& sailors)
- Review solutions to yesterday’s problems
- Briefly review today’s plan (# races, courses, etc.)
- Check and synchronize watches (or use GPS)
- Remind all boats to check radios/cell phones.
Race Day Preparations (cont.)

Check on signals made ashore (RRS Race Signals):

- AP (postpone) ●●
- AP over numeral (postpone for <numeral> hours) ●●
- AP over A (no more racing today) ●●
- AP over H (further signals made ashore ●●
- N (race abandoned) ●●●
- N over A (racing abandoned for today) ●●●
- N over H (racing abandoned – further signals ashore) ●●●
- L (Notice has been posted) ●
- Y (Competitors wear PFDs) ●
- Others only if defined in Sailing Instructions.
The Start
Most common system used
Good for small and medium sized fleets
All signals from the signal boat
A mid-line buoy can be set as a guide if stated in Sailing Instructions
In shifty winds, use a pin boat as port end to simplify line adjustments
Use of a weight on the anchor lines is recommended.
RC Signal Boat Anchored Mid-Line

Good for larger fleets (over 50 boats)
Good for aggressive fleets. Observed length is ½ line.
Best with anchored boat at each end
End boats should have tall mast for line flag and long anchor rodes
Signal boat does have to be on the line between the end boats
Sailing Instructions need to be explicit regarding the definition of the line
Sailing Instructions need to change RRS 30.1 (around the ends rule)
Avoids bias from signals only at starboard end of line.
Where is PRO? (on the signal boat)
Also good for large and very large fleets

Signal boat’s egress needs to be understood by all

Avoids bias from signals only at starboard end

Permits use of larger boat for better signal visibility

Where is PRO? (on the starboard end boat)
This is, by far, the most important job for the RC!

- Too Short and you have many recalls and protests.
- Not square to the wind and you have all boats bunched up at one end, again, many recalls and protests.
- Too long tends to magnify any error in “squareness” of the line.
TOO SHORT; <1 X AGGREGATE LENGTH
Starting Line

NOT SQUARE LINE
SQUARE LINE; 1.5 X AGGREGATE LENGTH
Setting the Windward Mark

Goal: equal time on each tack
Effects of a Wind Shift

% Field of Play Left

Wind Shift in Degrees

% Field Left

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Effects of a Wind Shift (cont.)

Effect of a windshift (Wind clocks at the start)

Percent of time on each tack

Port
Starboard
Course Example

CLASSES A & B

Course 1 - Icosceles
Right Triangle W-L-W

Course 2
W-Offset-L-W-Offset-L-W
Pre-Start Procedures RMH Chapter 11

Well before the warning signal:

- Take continuous wind readings
- Boat Check-in:
  - Important for safety
  - Requires Sailing Instruction
  - Use code flag “L” (come within hail)
Prior to the warning signal:

- Review starting procedure, including pin/signal boats
- Make sure all support boats are ready to set the course
- Set the starting mark
- Have the necessary signals ready to use.
Pre-Start Procedures (cont.)

At the warning signal:

- Designate the course (RRS 27.1) What is to be designated and how it is specified in the SIs
- Set the course marks starting with the windward mark.
- Take wind information only by exception.
- Monitor the wind, weather and course
- Be prepared to postpone, if necessary
Pre-Start Procedures (cont.)

Before the preparatory signal:

- Verify that the starting mark is set (RRS 27.2)
- Decide if penalty flag is needed (RRS 30)
- Boats will begin *racing* and several rules will go into effect at the preparatory signal (e.g. RRS 31, contact with a mark and RRS 45, being “off moorings”)
- Take wind information only by exception.
- Monitor the wind, weather and course
- Be prepared to postpone, if necessary
Before the start:

- RC can postpone or abandon for ANY reason (RRS 27.3)
- Review recall procedures
- Minimize conversation and radio communication
- Turn on the tape recorder
- Verify that all possible signals are ready, including recalls
- Start recording line sighter’s observations at one minute to start.
- Remind recall signaler who will decide on the type of recall
The postponement flag (code flag “AP” – the “answering pennant”) is the Principal Race Officer’s best friend.

Keep it ready to use at any time before the start!
When to postpone:

- If the RC is not ready at the scheduled time for the warning (bad outcome)
- If the RC discovers, during the starting sequence, that it has made an error
- If there is insufficient wind to race
- If there is a significant wind shift during the starting sequence
- If either end of the starting line comes adrift during the starting sequence
- If the competitors are, UNAVOIDABLY, not going to be in the racing area by the starting signal
Postponement (cont.)

When **NOT** to postpone:

- When the sound signal to accompany a starting flag fails (RRS 26)
- When some competitors are not in the starting area, but could have been
# The Starting Sequence

<table>
<thead>
<tr>
<th>Title</th>
<th>Visual Signal</th>
<th>Sound Signal</th>
<th>Time to Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning</td>
<td>Class Flag(s) Displayed</td>
<td>1</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Preparatory</td>
<td>&quot;P&quot; Flag or &quot;I&quot; Flag or &quot;Z&quot; Flag or &quot;Z&quot; Flag or Black Flag</td>
<td>1</td>
<td>4 minutes</td>
</tr>
<tr>
<td></td>
<td>Preparatory Flag(s) Removed</td>
<td>1</td>
<td>1 minute</td>
</tr>
<tr>
<td>Start</td>
<td>Class Flag(s) Removed</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

* or as stated in the sailing instructions

The warning signal for each succeeding class shall be made with or after the starting signal of the preceding class.
Advantages to this system

- Can adjust the line between classes with no postponement required.
- R/C can adjust time between successive starts at will.
- Horn at lowering of preparatory signal provides additional notification of impending starting signal.
Advantages to this system (cont)

- Some flag is up throughout the sequence.
- Flags provide flexibility for display.
- Flags can be raised and lowered quickly.
Advantages to this system (cont)

- Class flags identify which class is currently starting.
- The same procedure is used for normal and “penalty” starts.
- There is less wasted time between warning and starting signals.
Starting Penalties
Starting Penalties – RRS Race Signals

I “India” Flag (RRS 30.1):
★ “around an end”

Z “Zulu” Flag (RRS 30.2):
• 20% scoring penalty

Black Flag (RRS 30.3):
• disqualification
RRS 26 Starting Sequence
With Starting Penalties

Warning  
• -5 minutes

Preparatory  
• -4 minutes

1 Minute  
• -1 minute

Start  
• 0 minutes
Flag I (RRS 30.1)

Applies to boats on the course side of the starting line or its extensions during the last minute before the starting signal.

Penalty is to sail around either end of the starting line before starting.

Discourages boats from starting aggressively in the middle of the line.
Flag I (RRS 30.1) continued

Is “graduated”: more severe penalty for OCS boats in the middle of the line, and with longer lines

Usually works well

RC must watch carefully, and record which OCS boats go “around an end” and start
Flag Z (RRS 30.2)

Applies to boats in “the triangle” during the last minute before the starting signal
Applies with no recall, individual recall, and general recall
Penalty is usually 20%
Flag Z (RRS 30.2) continued

Penalty goes away only if the race is “postponed or abandoned before the starting signal”

Less harsh than black flag; keeps boats racing

Scoring code is ZFP (RRS A11); no hearing required (RRS A5 & 63.1)

Can be used with flag I
Black Flag (RRS 30.3)

Does not need to be authorized by the SIs

Normally not used until I or Z have been unsuccessful

Applies to boats in “the triangle” during the minute before the starting signal

Boats subject to this rule that are “over early” are NOT subject to rule 29.1. (may not return and start correctly, individual recall is NOT signaled.)
Penalty is DSQ by RC; scored **BFD** (RRS A11)
Usually works very well
Good idea to display numbers of BFD boats at the windward mark, if no general recall (put intent in SIs)
Displaying BFD sail numbers is required after a general recall or abandonment after the start (RRS 30.3)
BFDs go away if the race is “postponed or abandoned before the start”
BFDs remains in effect if race is “restarted, resailed or rescheduled”
A BFD boat that sails in the restart or resail of the race cannot exclude her disqualification; score is DNE (RRS A11)
Recalls
When to Signal an Individual Recall - RRS 29.1

Required when boats are subject to RRS 29.1 (OCS) or 30.1 (I flag penalty)

Not permitted for boats subject to RRS 30.2 (Z flag penalty, unless they are OCS at the starting signal) and never for boats subject to RRS 30.3 (black flag DSQ)
Individual Recall Signals

Individual recall - flag X:
- one sound signal required when displayed
- no sound when lowered
Individual Recall Notification

Notify OCS boats only if specified in the SIs; default is no notification

If notifying OCS boats, get data from the pin boat if needed
After an Individual Recall

Keep track of all OCS boats, recording when they start
Leave flag X up until all OCS boats have started, or for 4 minutes, whichever is sooner (RRS 29.1)
No sound when X is lowered
Signal a general recall if appropriate
“When at the starting signal...
the RC is unable to identify boats that are on
the course side...
or to which rule 30 applies
or there has been an error in the starting
procedure...
the RC may signal a general recall...”
General recall (1st substitute):
  – two sounds required when displayed
  – one sound when lowered
After a General Recall

Verify that the proper signals were made
Check with the mark boats for wind shifts
Decide what starting line adjustments, if any, are necessary
Make the necessary adjustments
Decide what you will use for the preparatory signal for the next start.
After a General Recall - continued

Restart the sequence by lowering the general recall signal with one sound

Next signal, one minute later, is a **warning** signal for the class that was recalled (RRS 29.2); display the class flag with one sound

Do not wait any longer than necessary
Individual vs. General Recall Decisions

Basic philosophy: avoid general recalls
RRS 29.2 says “unable to identify boats” for a general recall
RRS 29.2 says “may signal a general recall”
General recalls are not fair to the boats that start properly
Individual vs. General Recall Decisions - continued

Individual recall when there are some unidentified OCS boats is also unfair; the unidentified go unpenalized for being OCS.

PRO must weigh the disadvantages of each type of unfairness.
Individual vs. General Recall Decisions - continued

In general, if most OCS boats have been identified, use the individual recall.

Racing is better than a succession of general recalls.
Avoiding General Recalls

- Set good starting lines
- Postpone before the start if you see that the line is not square
During the Race
Accounting for starters:
- Sometimes easier to count after the start
- Ask windward mark boat to verify the number of boats on the course as they round the weather mark
- Check at subsequent marks

Observing the course:
- Continue to take wind readings
- Have support boats report changes in conditions
- Record times of first and last boats at each mark
- Mark boats should record mark roundings
- Give adequate notice to support boats to implement a change of course
Changing the course (RRS 33 and RRS Race Signals):
- Changing is permitted even if SIs are silent.
- Avoid changes due merely to oscillations
- Square runs are most important so be prepared to move leeward marks
- Length can be adjusted (+ or -) with or without a direction change
- Change is signaled at the beginning of the leg being changed
- Signaling boat displays code flag “C”, makes repetitive sounds and posts a red, rectangular board (if changing to the right), a green triangular board if changing to the left, or the direction to the new mark.) (RRS 33)
- Position of boat signaling change.
- How much of a shift justifies changing the course?
Reasons to shorten or abandon (RRS 32):

- Because of an error in the starting procedure
- Because of foul weather
- Because of insufficient wind making it unlikely that the race will finish within the time limit
- Because a mark is missing or out of position
- For any other reason directly affecting the safety or fairness of the competition
Procedure for shortening (RRS 32.1):

- Check SIs and Class Rules for (valid) additional restrictions!
- No advance notice
- Code flag “S” with two sounds as first boat approaches
- Class flag(s) if necessary
- Note that finish line is between mark and the staff that is used to display the “S” flag when finishing at a rounding mark. (see RRS 32.2 for other cases.)
Abandonment (RRS 32.1 and RRS Race Signals)

- Abandon and resail
- Abandon and go to shore
- Abandon for the day
Procedure for abandonment:

- Code flag “N” (or N over H or N over A) with three sounds
- Class flags if necessary
- Very difficult for fewer than all classes
- Required when no boat sails the course and finishes within the time limit (RRS 35)
- At any time, but RRS 32 requires RC to consider “the consequences for all boats in the race or series” before abandoning after a boat has finished
Sailing the Course (RRS 28):

- **RC is NOT permitted to DSQ a boat for breaking RRS 28.1**
- **RC is permitted to protest a boat for breaking any rule (RRS 60.2)**
- **RC is required to notify any boat it intends to protest, within the protest time (RRS 61.1b)**
- **A boat can correct a RRS 28.1 problem until she finishes (or even after finishing if she finishes again)**
During the Race – RMH Chapter 12 (cont.)

Touching a Mark (RRS 31):
- Only applies when “racing”
- Only applies at marks that begin, bound, or end the leg on which the boat is sailing
- Know the definition of “mark” (RRS Definitions), i.e. not the ground tackle or temporarily attached objects
- RC may protest (RRS 60.2) but cannot DSQ without a hearing (RRS 63.1)
- RC does not have to hail or display a protest flag (RRS 61.1(b))
Outside help (RRS 41):

- What is “outside help”?
- Exceptions to RRS 41:
  - Help under RRS 1,
  - An ill or injured crew member,
  - After a collision help from the other boat’s crew,
  - Information freely available to all boats,
  - Unsolicited information from a disinterested source.
Missing or out of position mark (RRS 34):

- Best alternative is replacing it in its correct position (RRS 34(a))
- Second choice is using boat with code flag “M” (RRS 34(b))
- Repeated sound signals are required with code flag “M” (RRS Race Signals)
After the Race
These abbreviations are recommended:
DNC Did not \textit{start}; did not come to the starting area
DNS Did not \textit{start} (other than DNC and OCS)
OCS Did not \textit{start}; on the course side of the starting line at her starting signal and failed to \textit{start} or broke rule 30.1
ZFP 20\% penalty under rule 30.2
BFD Disqualification under rule 30.3
SCP Took a scoring penalty under rule 44.3
DNF Did not \textit{finish}
RAF Retired after \textit{finishing}
DSQ Disqualification
DNE Disqualification (other than DGM) not excludable under rule 89.3(b)
DGM Disqualification under rule 69.1(b)(2); not excludable
RDG Redress given
Post Race – RMH Chapter 9

- Account for all boats (safety and scoring)
- Retrieve all marks and ground tackle
- Post protest time limits (or RC docking time)
- RC report to the protest committee (protest flags observed, etc.) Note: more than one scoring penalty per boat is possible (RRS 44.3)
- RC Actions report (DNC, DNS, OCS, …)
  * RC can score a boat DNF without a hearing (RRS A5)
  * RC can score a boat ZFP without a hearing (RRS 63.1 and A5)
Post Race – RMH Chapter 9 (cont.)

- Post preliminary results, if necessary
- Give results to scorer
  - Include DNE, (e.g. RRS 2, RRS A5, RRS 90.3b)
- Scoring inquiries
  - RC can either correct errors, or ask the PC to consider giving redress (RRS 62.1 or 60.2)
- Collect written rounding and finishing data from mark boats
- Identify and solve any equipment problems
- Identify and solve any personnel problems
- Identify and solve any operational problems
Post Race – RMH Chapter 9 (cont.)

- Make any necessary changes to the Sailing Instructions or schedule; consult SIs, Appendix L3
- Post any necessary notices to competitors
Redress hearings (RRS 62):

To be entitled to redress, the boat’s finishing position in a race or series must have been made significantly worse by an improper action or omission of the RC (or for other reasons not involving the RC) and it must be through no fault of her own.

- Who represents the RC?
- Witnesses
- OCS hearings
- Tape recordings
- RC can ask the PC to consider granting redress (RRS 60.2(b))
Update the scoring to include protest committee decisions

- RC must accept protest committee decisions and update the scoring (RRS 85) but can appeal the decision of a protest committee if it feels that it is incorrect.
- If PC DSQ’s a boat, others move up (RRS A6.1)
- Then …
Post Race – RMH Chapter 9 (cont.)

Enjoy
(What’s left of)
The Party!
This seminar was developed by the GYA Race Management Committee 2009 to improve all levels of race management within the GYA. Contact any member if you have questions or need assistance.

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