# Race Officer Seminar

v1.3 (221119)

Australian Sailing


# Welcome

Australian Sailing

# INTRODUCTION

## Session 1

# SEMINAR PROGRAM

Day 1

| | | |
|---|---|---|
| • Introduction | (60 min) | 0900 |
| • Roles and Responsibilities | (90 min) | 1000 |
| • Break | | 1130 |
| • Safety | (45 min) | 1145 |
| • Lunch | | 1230 |
| • Race Documentation | (60 min) | 1300 |
| • Facilities and Equipment | (60 min) | 1400 |
| • Courses & Start Lines | (60 min) | 1500 |
| • Break | | 1600 |
| • Starting Procedures | (75 min) | 1615 |
| • End of Day 1 | | 1730 |

# SEMINAR PROGRAM

Day 2

| | | |
|---|---|---|
| • **Review of Day 1** | **(30 min)** | **0900** |
| • **After the Start Race Control Procedures** | **(120 min)** | **0930** |
| • **Break** | | **1130** |
| • **Finishing and Post Race Procedures** | **(90 min)** | **1145** |
| • **Lunch** | | **1315** |
| • **Questions, Review, Evaluation** | **(60 min)** | **1400** |
| • **Break** | | **1500** |
| • **Written Examination** | **(60 min)** | **1530 - latest** |

# INTRODUCTION

- NOP and Race Officer Seminar Aims
- Reference Material and Race Manual
- Race Management Structure
- Officials Code of Conduct

# NOP and Race Officer Seminar Aims

- To provide Race Officers and potential Race Officers with proper training and accreditation.
- To provide Race Officers with a structured career path within the sport from club to international level.
- To make race management a more rewarding activity for all those involved

# Race Officer Reference Material

## RACE MANAGEMENT PUBLICATIONS:

### Racing Rules of Sailing (Blue Book)

- Revision
- Special Regulations
- National Prescriptions

### World Sailing Race Management Manual

### World Sailing Racing Rules Q&A

### Australian Sailing Seminar Notes

# RACE MANAGEMENT STRUCTURE

Mark Layer,

Committee and Finish Boat,

and Scorer and Handicapper:

- Complete the role specific Australian Sailing online course.
- Possess an AS Number and a current membership of an Australian Sailing affiliated club.

# RACE MANAGEMENT STRUCTURE

## Regional Race Officer

- Attend Australian Sailing Race Officer Seminar
- Pass the Race Officer exam with a mark above 70%.
- Record an Events Log showing completion of two Level 3 events, and two Level 4 events as the Course Race Officer.
- Satisfy all the Regional Race Officer practical assessment requirements.
- Submit a completed online application form to Australian Sailing.

# RACE MANAGEMENT STRUCTURE

## National Race Officer

(As per Regional qualification plus)

- Attend Australian Sailing Race Officer Seminar
- Pass the Race Officer exam with a mark above 80%.
- Record an Events Log showing completion of two Level 1 events, and two Level 2 events as the Course Race Officer or the Principal Race Officer.
- Satisfactorily complete the National Race Officer practical assessment.
- Submit a completed online application form to Australian Sailing.

# RACE MANAGEMENT STRUCTURE

## International Race Officer

- Be a National Race Officer
- Be the Race Officer at four principal events
- Be the Race Officer in at least four other events
- Have attended a World Sailing RM seminar and passed the written assessment.
- Experience in race management training
- Letter of recommendation

# AUSTRALIAN SAILING OFFICIALS' CODE OF CONDUCT

- Compliance with the Australian Sailing Code of Conduct is a requirement for all accredited officials under the AS National Officiating Program.
- It has been covered in detail in courses leading up to this course.
- Agreeing to abide by the Code is a requirement for accreditation.

# ROLES AND RESPONSIBILITY

## Session 2

# ROLES AND RESPONSIBILITY

## Case Study 2.1

Define the areas of responsibilities of the following:

- Organising Authority
- Race Committee
- Race Office

# ROLES AND RESPONSIBILITY

## Case Study 2.2

Define the Role of the Race Officer (with respect to):

- Roles and responsibility
- Reporting and liaison
- Skills required

# ROLES AND RESPONSIBILITY

## Case Study 2.3

Construct and deliver a briefing to your Race Management team.

# ROLES AND RESPONSIBILITY

## Case Study 2.4

Construct and deliver a briefing to the competitors meeting

# ROLES AND RESPONSIBILITY

## Case Study 2.5

You are faced with a measurement problem. How would you handle the situation?

- Before the series starts
- After the series commences

# AUTHORITY AND RESPONSIBILITY

## Races shall be Organised by an Organising Authority (RRS 89.1)

- World Sailing
- A member national authority of World Sailing
- An affiliated club
- An unaffiliated organisation other than a club and if so prescribed by the national authority, with the approval of the national authority or in conjunction with an affiliated club
- An unaffiliated class association, either with the approval of Australian Sailing or in conjunction with an affiliated club

# AUTHORITY AND RESPONSIBILITY

## Races shall be Organised by an Organising Authority (RRS 89.1)

- Two or more of the above organisations
- An unaffiliated body in conjunction with an affiliated club where the body is owned and controlled by the club
- If approved by World Sailing and the national authority of the club, an unaffiliated body in conjunction with an affiliated club, where the body is not owned and controlled by the club

# AUTHORITY AND RESPONSIBILITY

## Organising Authority RRS 89.1

- One or more of the bodies listed previously may constitute the Organising Authority

## Regatta Organising Committee

- The main committee

## Race Committee RRS 89.2 (c)

- Appointed by the Organising Authority

## When appropriate appoint a protest committee (jury), umpires or Technical Committee RRS 89.2 (c)

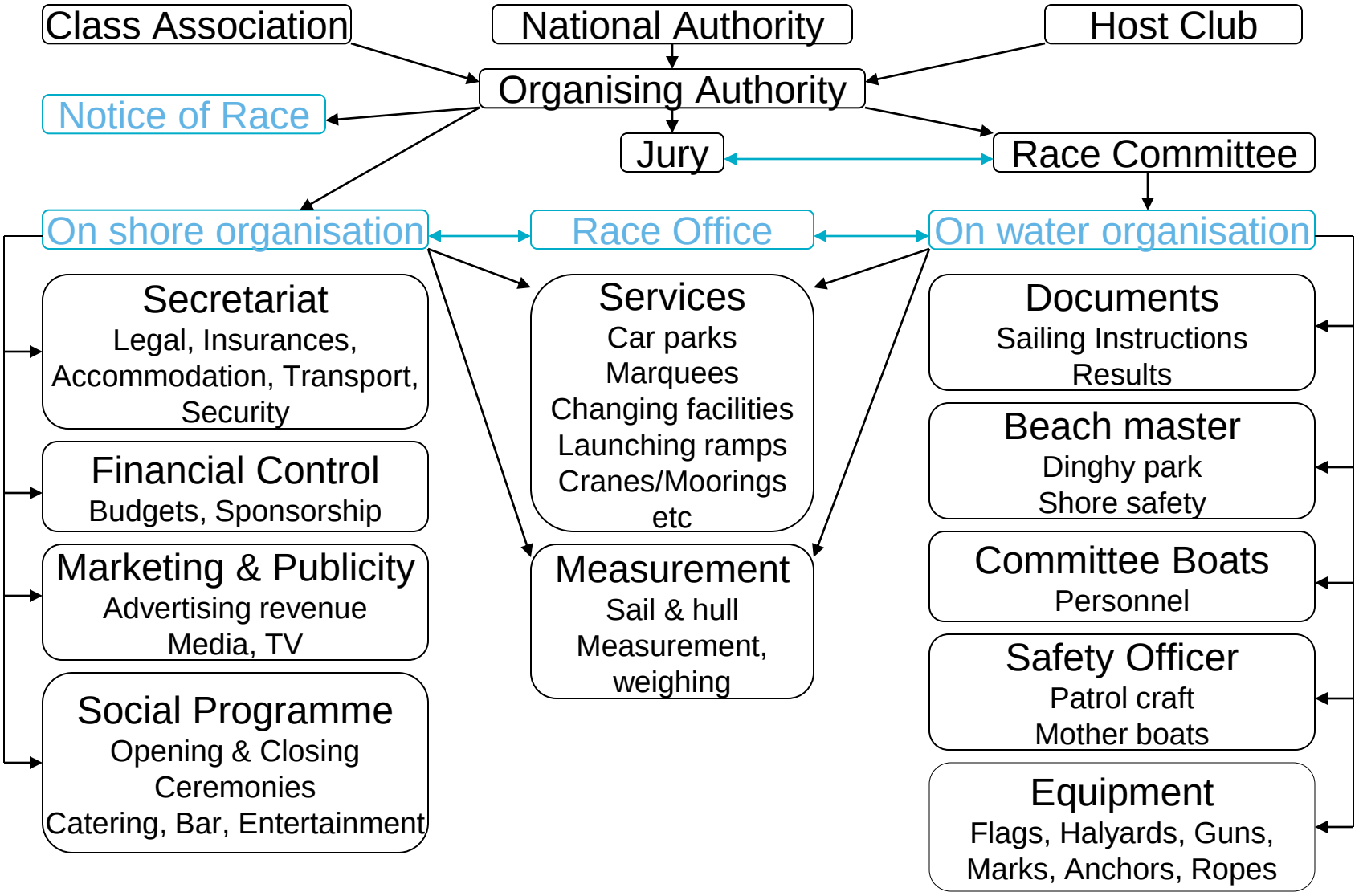
# AUTHORITY AND RESPONSIBILITY

- The safety of all competitors is a prime responsibility
- Ensuring fair competition also has high priority
- Rules compliance is of prime importance

# COMMITTEES AND KEY PERSONNEL

## Regatta Organising Committee

- Requires a good Chairperson
- Is responsible for the whole conduct of the regatta


Class Association
National Authority
Host Club
Organising Authority
Notice of Race
Jury
Race Committee
On shore organisation
Race Office
On water organisation
Secretariat
Legal, Insurances,
Accommodation, Transport,
Security
Financial Control
Budgets, Sponsorship
Marketing & Publicity
Advertising revenue
Media, TV
Social Programme
Opening & Closing
Ceremonies
Catering, Bar, Entertainment
Services
Car parks
Marquees
Changing facilities
Launching ramps
Cranes/Moorings
etc
Measurement
Sail & hull
Measurement,
weighing
Documents
Sailing Instructions
Results
Beach master
Dinghy park
Shore safety
Committee Boats
Personnel
Safety Officer
Patrol craft
Mother boats
Equipment
Flags, Halyards, Guns,
Marks, Anchors, Ropes

# THE RACE COMMITTEE (RRS 90.1)

## Chair

- Requires someone with good organisational and management skills

## Principal Race Officer (for multiple courses)

- A very experienced RO is required for this position

## Race Officer

- There may be more than one person required; for all national level events this should be a NRO or experienced SRO when there is also a PRO.

# THE RACE COMMITTEE

## Deputy Race Officer

- Able to take over Race Officer duty if the RO is not available

## Assistant Race Officer

- Normally is in charge of the Pin End line boat

## Pin End boat crew

- Assistant Race Officer calls the line from the pin end and provides timely information to RO to allow recall decisions to be made

## Beach Master

- Controls all launching and recovery of boats

# THE RACE COMMITTEE

## Visual Signals Officer

- Responsible for the display of all visual signals

## Sound Signaller

- Responsible for the safe operation of sound signals

## Timekeeper

- Responsible for the accurate calling of the time

## Recorders

- Record everything that happens on paper with the RO's voice recording as back-up

## Mark Layers

- Set the course in conjunction with the RO and provide the RO with updates about sailing conditions around the course.

# THE RACE COMMITTEE

## Competitors Briefing

- Welcome
- House rules
- Introduction of Officials - RO always available to competitors and supporters
- Plus any other information that will help in providing a safe and fair competition for the competitors
- First Aid facilities
- Ambulance Pickup
- Location of Notice board and on-shore signals, shore-based and water-based hazards, course areas, committee and duty boats description, weather, shipping, tides. If possible have marks on hand for inspection
- All sailing instruction questions/answers in writing
- Wish all competitors “Good luck and Good sailing”

# THE RACE COMMITTEE

## Coaches Briefing

- Before Racing Starts
  - Welcome
  - Club facilities and rules
  - Introduction of Officials - RO always available
  - Registration, Identification and Coach packs
  - Course Areas/Locations
  - Keeping clear of boats racing and traversing Course areas
  - Marine Regulations and Boat Safety
  - Berthing of coach boats and re-fuelling
  - Local danger areas
  - Intentions for the regatta
  - Emergency Plan, Contacts sheet, radio frequencies, callsigns, Code flag V, outside help
  - First Aid facilities, Injuries and Ambulance Pickup
  - Weather
  - Coach sign-on/off
  - Questions. Any sailing instruction questions/answers in writing
- Daily (if required)
  - Welcome
  - Intentions for the Day
  - Weather
  - Any issues from the previous day
  - Feedback/Questions

# THE RACE COMMITTEE

## Race Management Team Briefing

- Welcome
- Introduction of Officials and Race Officers
- Assignment of roles
- Volunteer Handouts
- Documentation and end of day procedures
- Radios Frequencies used
- Reporting to tower when leaving and returning to marina POB
- Emergency Plan, Contacts and Procedures, Ambulance Pickup and First Aid

# THE RACE COMMITTEE

## Race Management Team Briefing

- Daily RMT Briefings- When and Where
- Lunches and Water – Where to pick up
- Course Areas - Describe locations
- Transiting to / from Race Areas – Restrictions
- Starts – Classes and Times
- Policies that will apply (expand to all)
- Materials Check

# SAFETY MANAGEMENT

## Session 3

# SAFETY MANAGEMENT

## Case Study 3.1

- You are conducting a National Championship. Identify the On Water risks associated with such an event and the actions you would take to minimise them.

# SAFETY MANAGEMENT

## Case Study 3.2

Identify the Off Water risks associated with the event as described in 3.1 with respect to:

- Facilities
- Beach access
- Public

# SAFETY

- Race Officer
- Safety Officer
- Safety Boat crews
- Number of Safety Boats

# SAFETY

## Safety boat equipment

# SAFETY

## Safety operations plan

- Minimum Safety Requirements
- Rescue Boats and Personnel
- Rescue Patrol Plan
- Emergency Response Plan
- Communication Plan
- First Aid Facilities
- Risk of Entrapment by a Trapeze Harness Hook

# RACE DOCUMENTATION

## Session 4

# RACE DOCUMENTATION

## Case Study 4.1

- When preparing the Notice of Race and the Sailing Instructions, what are the main principles that should apply?
- What is the relationship between the two documents?
- What other documents are essential for the efficient running of a major regatta?

# RACE DOCUMENTATION

## Case Study 4.2

- Correct the Regatta Notice of Race
- Is there a way that the Race Committee may change the provisions of the Notice of Race?

# RACE DOCUMENTATION

## Case Study 4.3

- Correct the Regatta Sailing Instructions

# RACE DOCUMENTATION

## Case Study 4.4

- Neither the Notice of Race nor the Sailing Instructions mention the denial of the right of appeal, but the event has a properly constituted National Jury. At the competitors meeting, a competitor asks you (the RO), if the decisions of the Jury can be appealed.
- How should you respond?

# NOTICE OF RACE
# RRS 89.2, J1

- The Notice of Race is published by the Organising Authority (See 89.2(a))
- The Notice of Race is a rule
- Appendix J lists all the items that should be included in the Notice of Race
- Appendix K is a Guide to writing a Notice of Race. This should be used at all times
- NOR can be changed (refer 89.2(b) & 80)
- Appendix S (Standard Sailing Instructions) may be used if included in the Notice of Race
- Appendix T (Arbitration) may be used if included in the Notice of Race or Sailing Instructions
- Accommodation and other information should be contained in a separate document

# SAILING INSTRUCTIONS RRS 90.2,J2

- The Sailing Instructions are published by the Race Committee
- The Sailing Instructions are rules
- Appendix J lists all the items that should be included in the Sailing Instructions
- Appendix L and LE are Guides to writing Sailing Instructions. They should be used at all times and are downloadable from the World Sailing Website
- Appendix S (Standard Sailing Instructions) may be used if stated in the Notice of Race. These are accompanied by Supplementary Sailing Instructions specifying that event specific details may be used
- Appendix T (Arbitration) may be used if stated in the Notice of Race or Sailing Instructions. If you are using Appendix S, and are also going to use Appendix T, then include it in the Notice of Race

# RACE DOCUMENTATION

## Other Documents

- Safety Operations Plan
- Sign On / Off Sheets
- Mark Rounding
- List of Competitors
- Finish Sheets
- Starters Log
- Maintenance Log
- Protest Forms, Log, Time Limit and Schedule
- Boat Retirement Sheet

# RACE DOCUMENTATION

## Other Documents

- Wind graphs
- Scoring enquiry
- Alternative penalty sheets
- Race management policies (if applicable)
- RRS 42 summary and detail sheets (if applicable)
- Request for change of crew and/or equipment
- Request for information

# FACILITIES AND EQUIPMENT

## Session 5

# FACILITIES AND EQUIPMENT

## Case Study 5.1

- List the main onshore facilities that you would require for a major regatta and the equipment you require in the Regatta Office.

# FACILITIES AND EQUIPMENT

## Case Study 5.2

- You are invited as a visiting Race Officer to a National Championship outside of your home club. What personal equipment and information will you take with you to the event?

- How would you arrange the equipment and personnel on board for maximum efficiency?

# FACILITIES AND EQUIPMENT

## Race Committee Boats

- Main Race Committee Boat
- Mark Laying Boats
- Mark Boats
- Safety Boats

# FACILITIES AND EQUIPMENT

## Marks

- Course marks
- Start line marks
- Finish Line marks
- Other marks

# MARK

## Mark: (Definition)

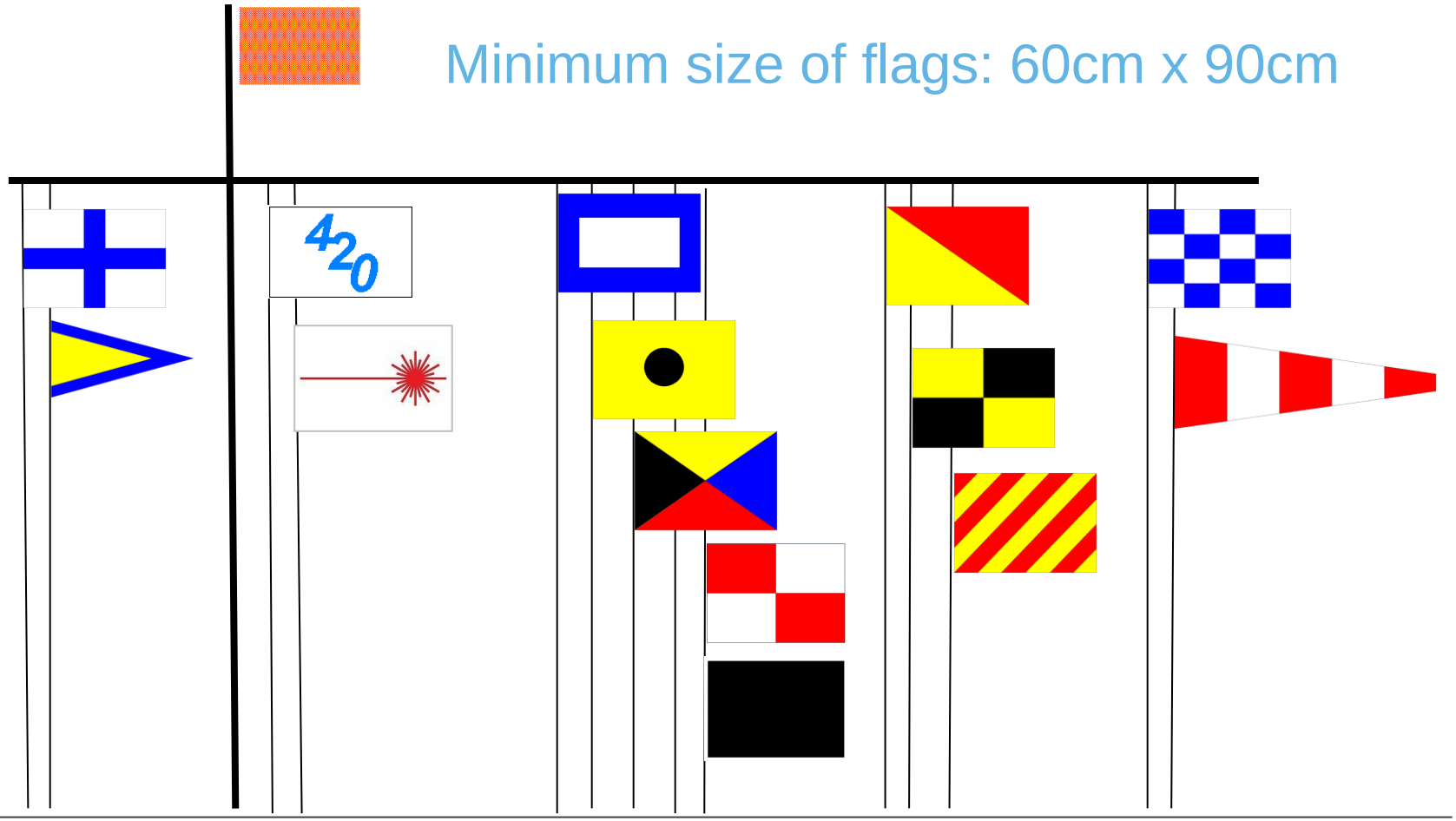
- An object the sailing instructions require a boat to leave on a specified side, a race committee vessel surrounded by navigable water from which the starting or finishing line extends, and an object intentionally attached to the object or vessel. However, an anchor line is not part of the *mark*.

# FACILITIES AND EQUIPMENT

## Other

- Race Office
- Boat Park
- Car and Trailer Park
- Shore
- Off Site

# LAYOUT OF FLAGS & HALYARDS



# COURSES AND START LINES

## Session 6

# COURSES AND START LINES

## Case Studies 6.1 and 6.2

(complete at end of this session)

# WIND STRENGTH

## Finding the wind strength

- Anemometers
- Lower wind strength
- Upper wind strength
- BoM forecasts and various apps

Follow the published wind range guidelines

# WIND DIRECTION

## Finding the average wind direction

- Wind indicators
- A wind vector
- The average wind

# SELECTING A SUITABLE COURSE

## Course geometry

- Triangle type course
- Windward-Leeward
- Trapezoid
- Other courses
- Gates
- Offset marks

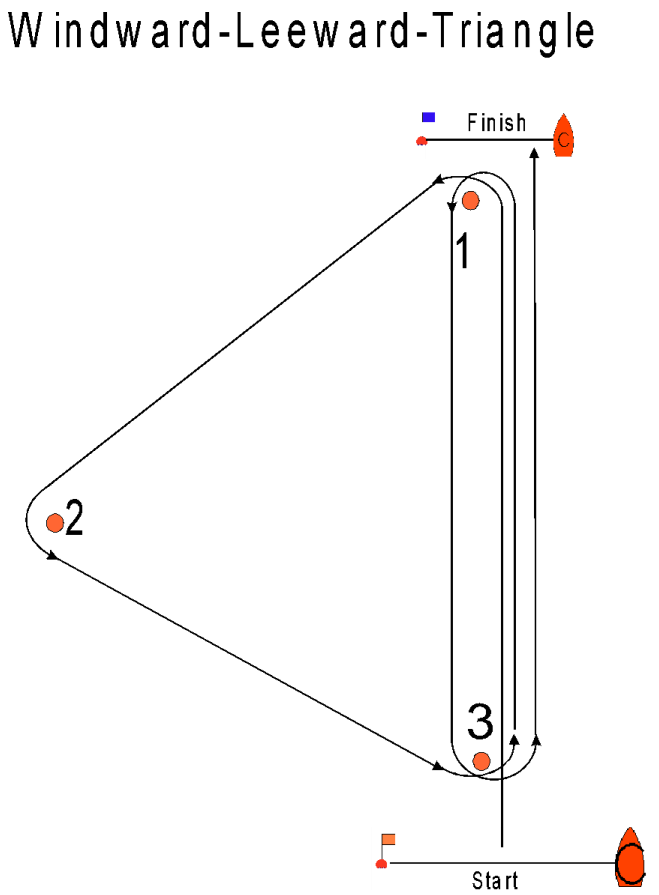
# TRIANGULAR COURSE

## Course angles can be:

- 60°
- 45° (90° at mark 2)
- 70° (to give a close reaching leg and a broad reaching leg)

The finish can also be located downwind of Mark 3

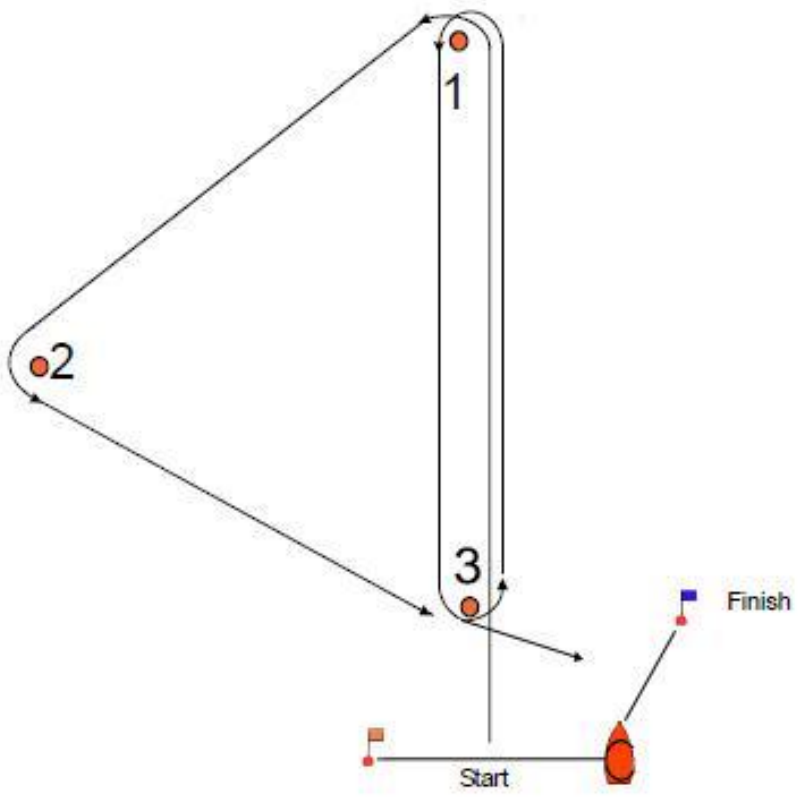
These days, some classes prefer the Windward/Leeward before the triangle



# TRIANGULAR COURSE

Option for hook reaching

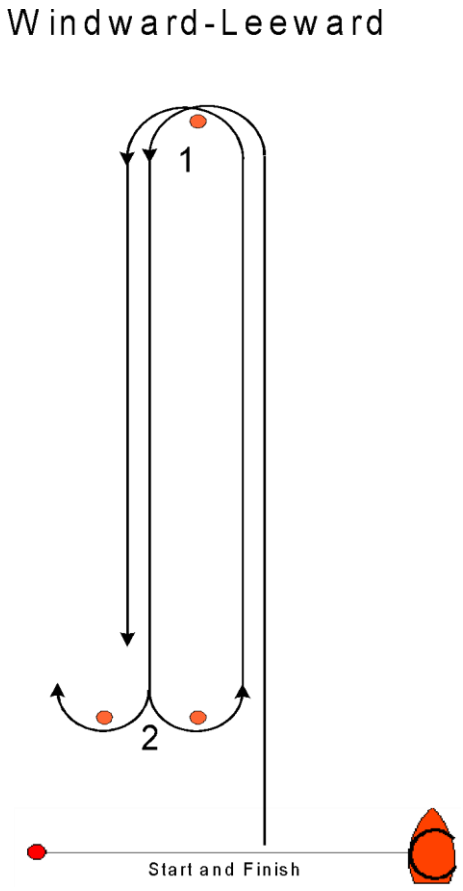
finish off Mark 3



# WINDWARD-LEEWARD

## Alternatives for this course are:

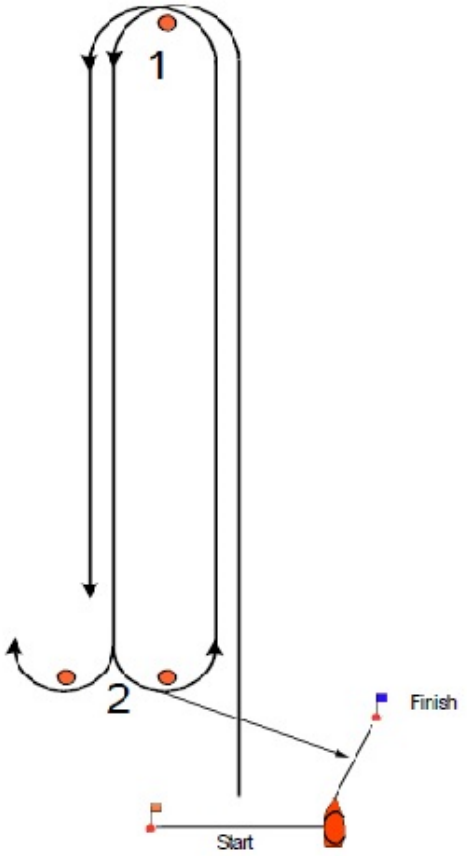
- No gate at Mark 2
- More rounds
- Finish upwind of Mark 1



# WINDWARD-LEEWARD

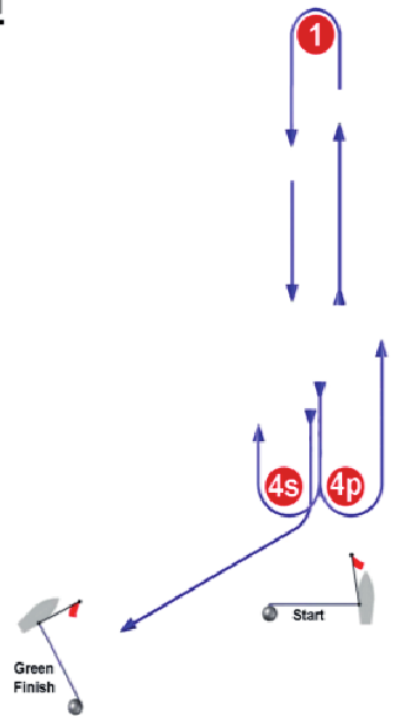
## Alternatives for this course are:

- Hook finish off Mark 2
- Use when only one committee vessel is available for both start and finish



# WINDWARD-LEEWARD – LG/LR

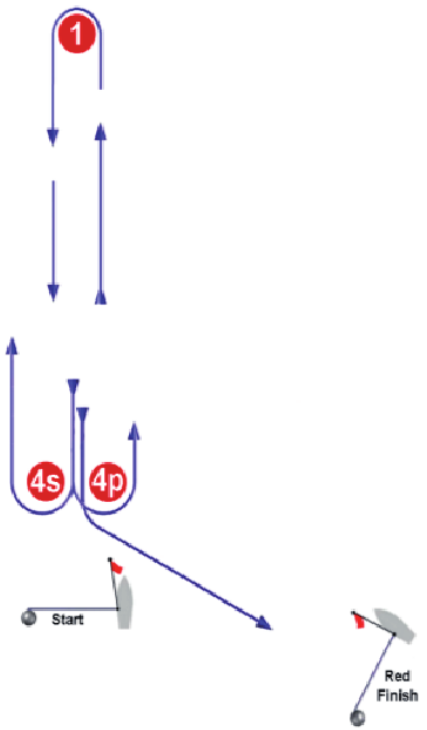
## LG




Course: Windward/Leeward

| Signal | Mark Rounding Order |
|---|---|
| LG2 | Start - 1 - 4s/4p - 1 - 4s - Finish |
| LG3 | Start - 1 - 4s/4p - 1 - 4s/4p - 1 - 4s - Finish |
| LG4 | Start - 1 - 4s/4p - 1 - 4s/4p - 1 - 4s/4p - 1 - 4s - Finish |

## LR

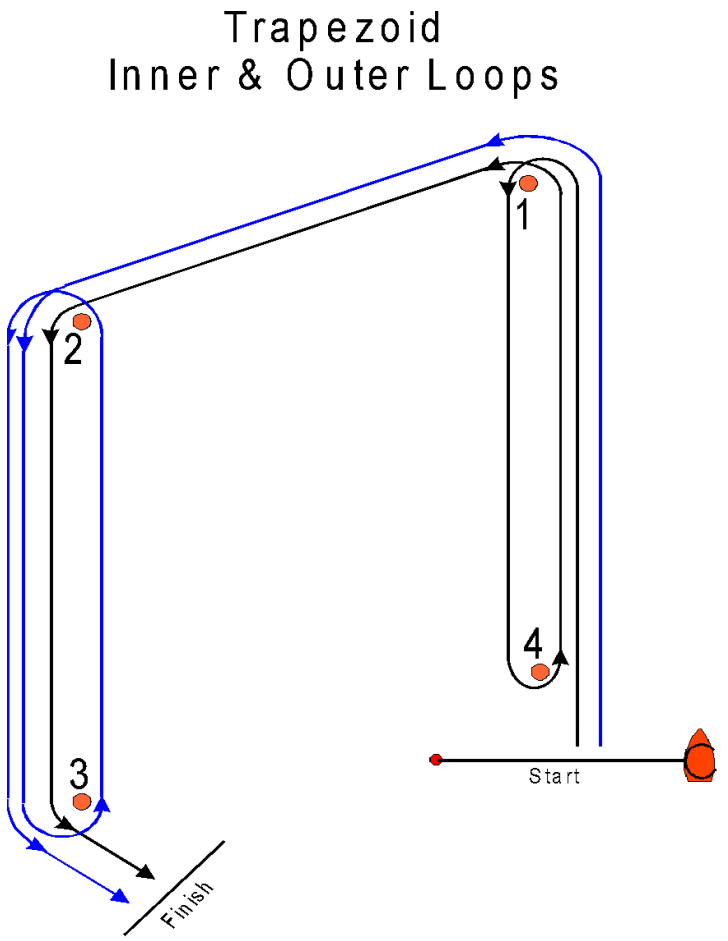



Course: Windward/Leeward

| Signal | Mark Rounding Order |
|---|---|
| LR2 | Start - 1 - 4s/4p - 1 - 4p - Finish |
| LR3 | Start - 1 - 4s/4p - 1 - 4s/4p - 1 - 4p - Finish |
| LR4 | Start - 1 - 4s/4p - 1 - 4s/4p - 1 - 4s/4p - 1 - 4p - Finish |

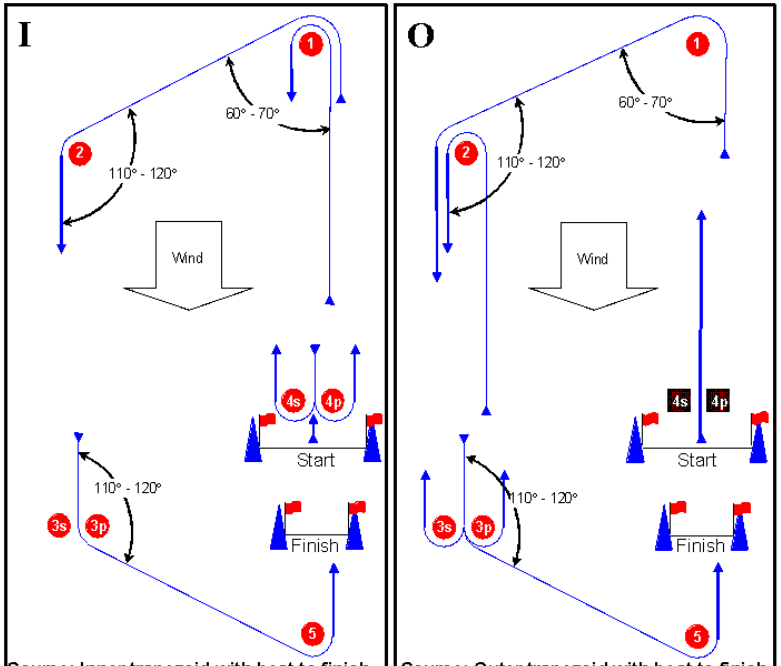
# TRAPEZOID - INNER & OUTER LOOPS

- Two parallel windward-leeward courses
- Use with two classes, or
- One class using flights



# TRAPEZOID – ROLLING RACES

**Course Illustrations – Trapezoid with beat to finish. Different starting and finishing lines**
Boats at both ends of the starting and finishing lines

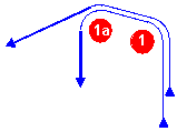



**Course: Inner trapezoid with beat to finish**

| Signal | Mark Rounding Order |
|---|---|
| I2 | Start – 1 – 4s/4p – 1 – 2 – 3p – 5 – Finish |
| I3 | Start – 1 – 4s/4p – 1 – 4s/4p – 1 – 2 – 3p – 5 – Finish |
| I4 | Start – 1 – 4s/4p – 1 – 4s/4p – 1 – 4s/4p – 1 – 2 – 3p – 5 – Finish |

**Course: Outer trapezoid with beat to finish**

| Signal | Mark Rounding Order |
|---|---|
| 02 | Start – 1 – 2 – 3s/3p – 2 – 3p – 5 – Finish |
| 03 | Start – 1 – 2 – 3s/3p – 2 – 3s/3p – 2 – 3p – 5 – Finish |
| 04 | Start – 1 – 2 – 3s/3p – 2 – 3s/3p – 2 – 3s/3p – 2 – 3p – 5 – Finish |




**Course: Same as course I except with offset mark 1a**

| Signal | Mark Rounding Order |
|---|---|
| IA2 | Start – 1 – 1a – 4s/4p – 1 – 1a – 2 – 3p – 5 – Finish |
| IA3 | Start – 1 – 1a – 4s/4p – 1 – 1a – 4s/4p – 1 – 1a – 2 – 3p – 5 – Finish |
| IA4 | Start – 1 – 1a – 4s/4p – 1 – 1a – 4s/4p – 1 – 1a – 4s/4p – 1 – 1a – 2 – 3p – 5 – Finish |

# COURSE DESCRIPTION IN SIs

| | |
|---|---|
| L1 | Start – 1 – (1a) – Finish |
| L2 | Start – 1 – (1a) – 4s/4p – 1 – (1a) – Finish |
| L3 | Start – 1 – (1a) – 4s/4p – 1 – (1a) – 4s/4p – 1 – (1a) – Finish |
| I2 | Start – 1 – 4s/4p – 1 – 2 – 3p – Finish |
| I3 | Start – 1 – 4s/4p – 1 - 4s/4p – 1 – 2 – 3p – Finish |
| O2 | Start – 1 – 2 – 3s/3p – 2 – 3p – Finish |
| O3 | Start – 1 – 2 – 3s/3p – 2 – 3s/3p – 2 – 3p – Finish |

# LOCATION OF THE RACE AREA

## Important factors affecting race management

- Clean winds; avoid cliffs and areas that create bends in the wind
- Even depth of water; ease of setting marks
- Tidal currents; these should be avoided if at all possible
- Space for more than one course; do not overlap course areas

# THE WINDWARD LEG

## There are three things to be considered when positioning mark 1

- The mean wind direction
- The distance to mark 1 from the start line
- The effect of any cross course currents

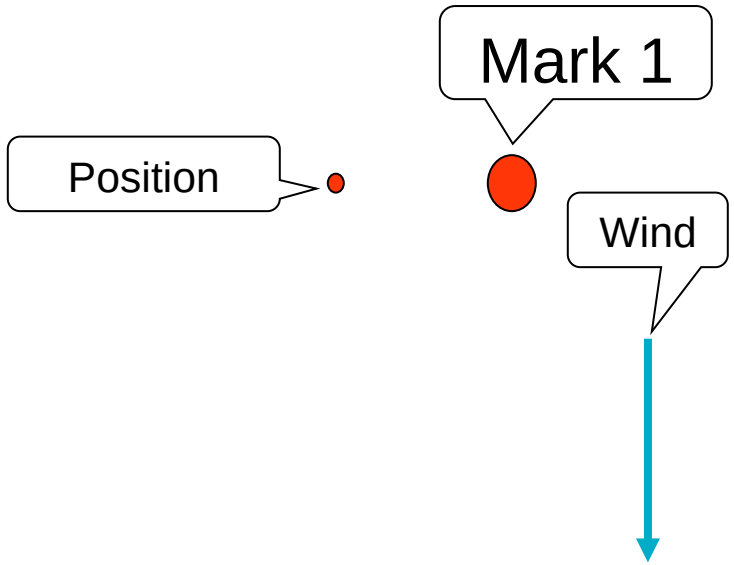
# THE DOWNWIND LEG

## The accuracy of this leg to the wind is very important

- Especially for symmetrical boats
- Cross currents can have a greater detrimental effect on this leg than on the upwind leg

# THE OFFSET MARK

- Distance and angle depend on the requirements of the class
- Designed to keep boats commencing run with spinnakers separate from boats approaching Mark 1 on a beat



# THE GATE

## Most windward-leeward courses have a gate as the leeward mark

- The gate requires three boat length circles around each mark, with a space between the circles
- Therefore minimum width of a gate is 7 boat lengths
- Most gates are set between 8 and 10 boat lengths
- Greater distance is required in stronger winds and for the high performance boats

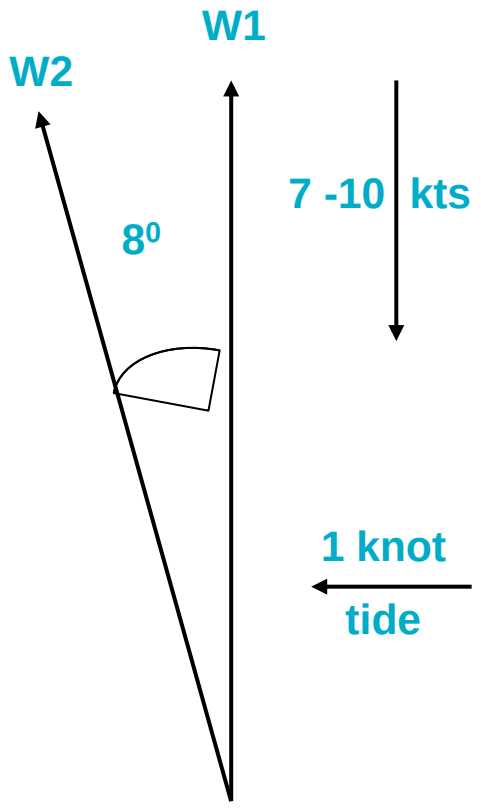
# TIDAL COMPENSATION - WINDWARD LEG

## A rule of thumb guide is:

- For every knot of tide, set the windward mark down tide

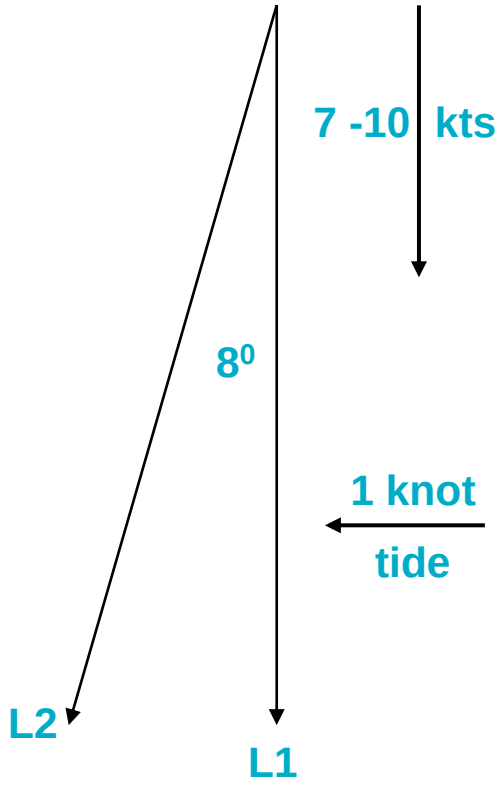
  8º

- In light winds, double the allowance
- For tides diagonal to the wind, halve the allowance



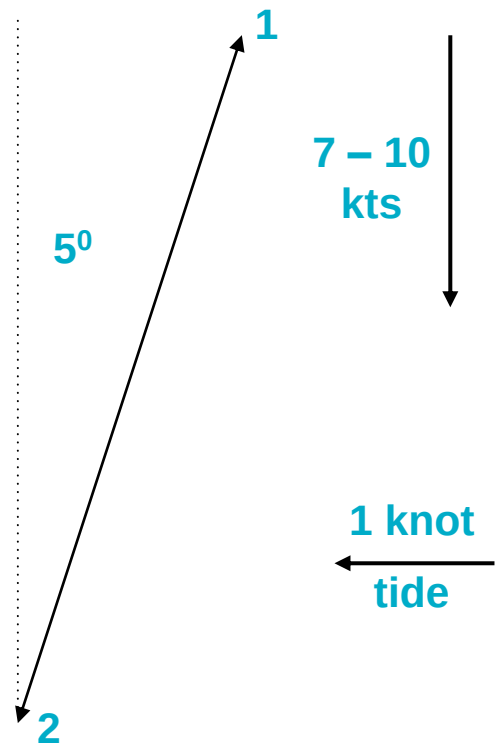
# TIDAL COMPENSATION - LEEWARD LEG

- The adjustment of the running leg to the tide is critical for a good race
- The same rule of thumb applies but greater accuracy is needed



# TIDAL COMPENSATION - A COMPROMISE

- Since a square leeward leg is more critical than a square upwind leg, this is a good compromise
- But, don't over compensate



# POSITION OF THE START LINE

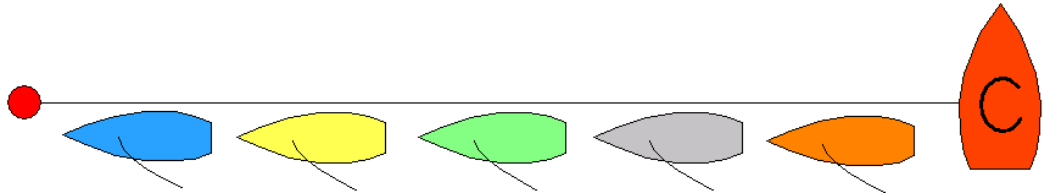
When positioning the start line within the course area the following need to be taken into consideration

- Tidal data (time of high and low water)
- Depth of water
- Sea bed
- The weather forecast

# THE STARTING LINE - LENGTH

## The formula is:

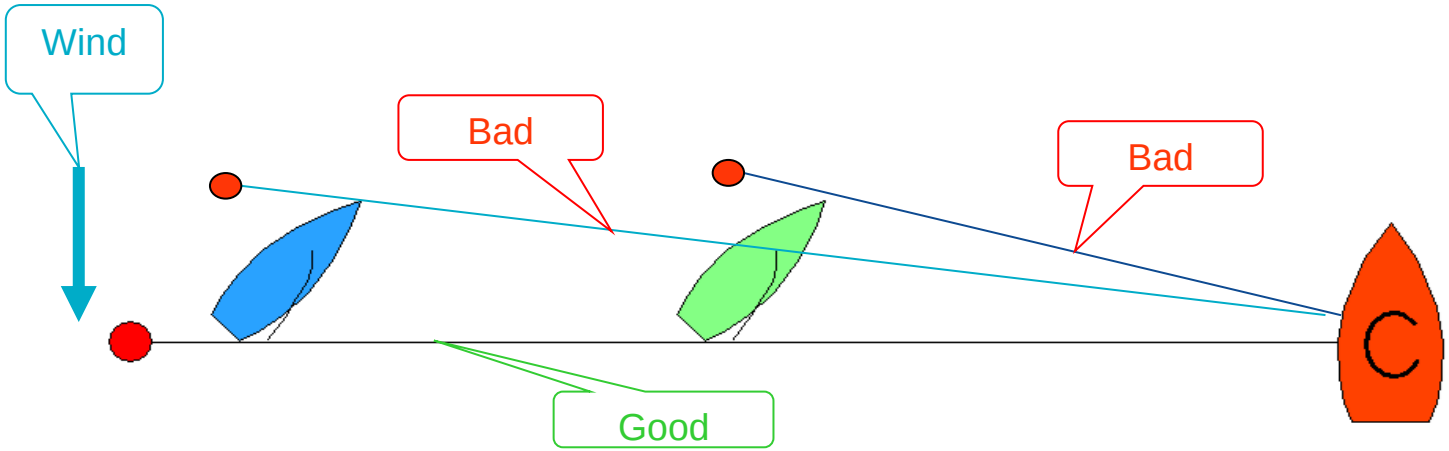
- Number of boats x length of the boat, plus 10% to 200%




## Other factors are:

- Size and manoeuvrability of boats
- Sea conditions
- Wind strength
- Current

# THE STARTING LINE - BIAS

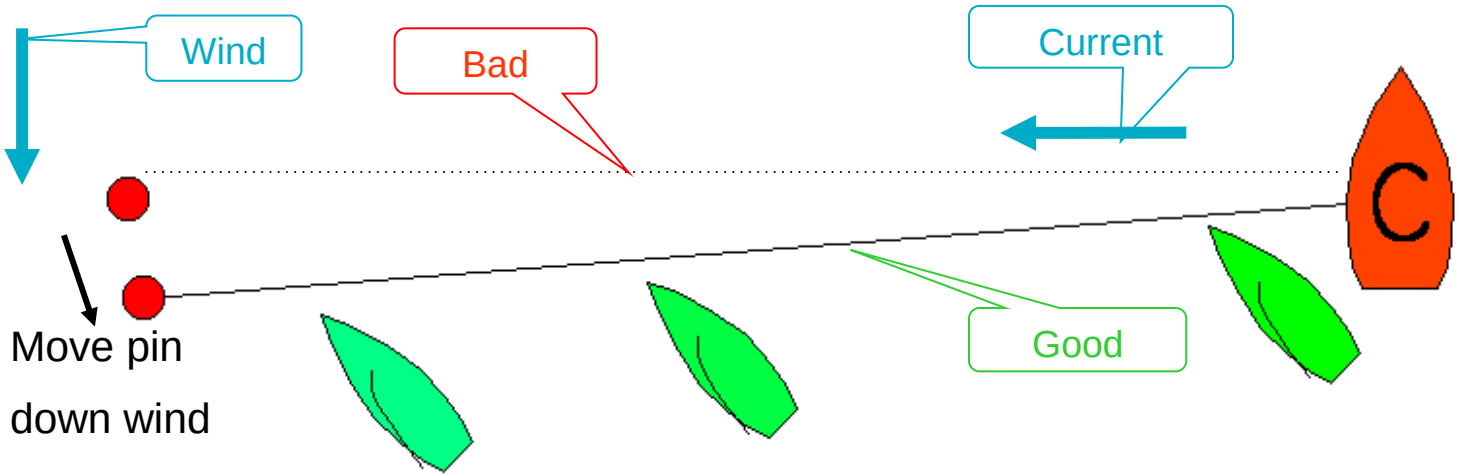



Bias used to be applied to give the Port end starter a slight advantage

- The longer the line, the less bias required (5° over 100m is approx. 9m)
- The shorter the line, the more bias required

It is better to start with a line at 90° to the wind and then fine tune it later

# ADJUSTING BIAS FOR TIDAL EFFECT




Boats are carried towards the pin by the current; by moving the pin as shown, boats can now clear the pin

# LAYING THE START LINE

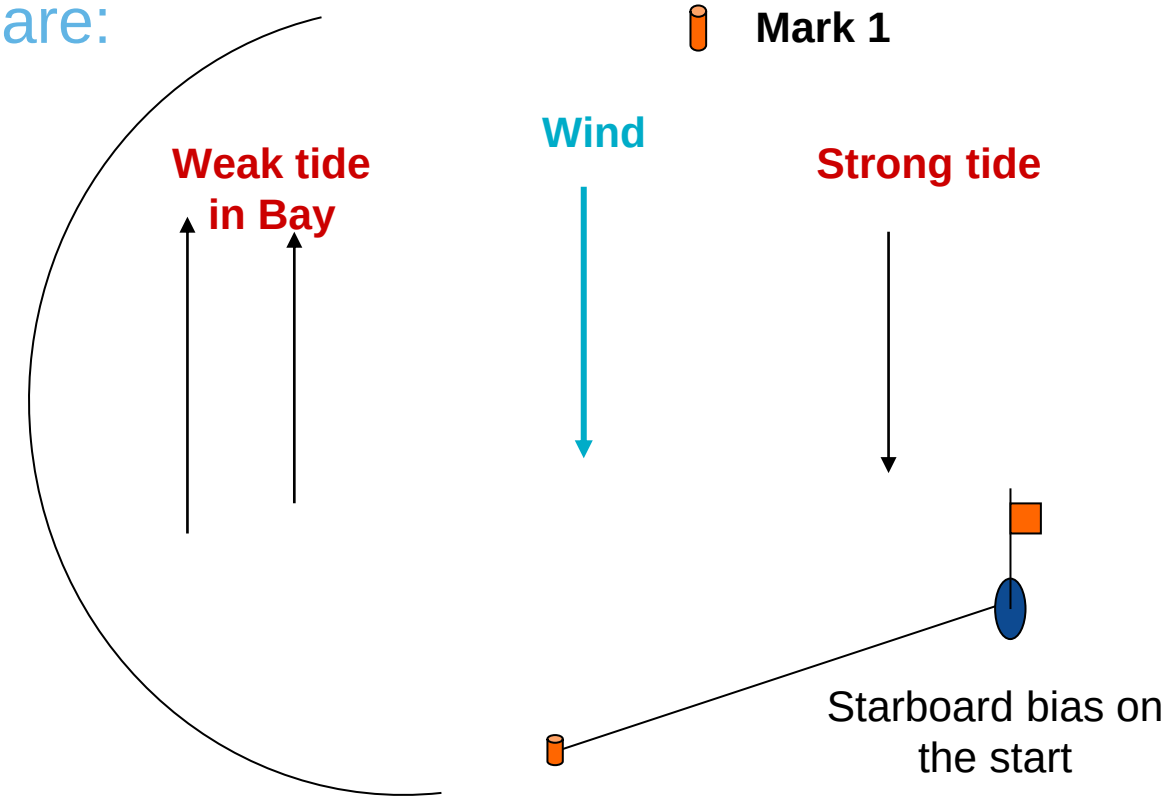
## Anchor the Race Committee Boat:

- So that the course can be adjusted to a new wind without moving the Committee Boat
- Use a long anchor line so that the start line can be ‘fine-tuned’ by pulling in or letting out the anchor line
- Position the pin end at 90º to the mean wind
- A counter weight/Angel should be used to force the anchor line down out of the way of the competitors at both ends of the line

# ADJUSTING START LINE BIAS IF ONE SIDE OF THE COURSE IS FAVOURED

## Factors to consider are:

- Wind shift
- Wind velocity
- Waves
- Current



# COURSES AND START LINES

## Case Study 6.1

- You are conducting a race for the 470 Australian Championship. The course is a trapezoid with interior angles of 60 / 120 degrees. The wind strength is 11 knots and direction is 210 degrees. Course duration is 60 minutes.

  From the reference point (mark 4) determine the leg lengths and course angles from the reference point to Mark 1, Mark 2, Mark 3.

# COURSES AND START LINES

## Case Study 6.2

- 470 Dinghy in 2 fleets.
  Wind is 13 kts at 200 degrees, race target time is 60 minutes
  Trapezoid course – O2 and I2
  Leading boat on outer loop at mid-point of 1st run.
  Leading boat on inner loop at mid-point of 1st beat.
  Wind shifts left by 20 degrees.
  Manage the course.

# RACE MANAGEMENT PROCEDURE DURING THE START

## Session 7

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.1

- Draw a diagram of how the start system works for a multi division regatta with 4 starts.

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.2

- You are the race officer on the race committee start vessel starting a multiple start regatta. You signal a general recall for start 2. The line has become biased to the pin and you ask a course boat to adjust the line for you. What is the sequence of signals you would use from the warning signal of start 1 until start 3.

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.3

- You are the race officer on the race committee start vessel. You are starting a national championship. At the end of the countdown to the Start the flags are moved but there is no sound signal.

  What action would you take as the Race Officer?

- Given the same scenario, when the end of the countdown is reached, the sound signaller has a twitchy finger and makes one sound and then presses the button a second time and makes a second sound.

  What action would you take as the Race Officer?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.4

- The sailing instructions do not mention individual recall; general recall; postponement; abandonment; shortening course; changing course. Which of these, if any, can the race committee do and still comply with the sailing instructions.

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.5

- What position do you, as the race officer, take on your committee vessel so that you can sight the line correctly?
- How can you make certain that all the premature starters are correctly identified?
- how do you communicate with the pin end of the line so that information on premature starters can be relayed quickly, therefore helping you to reach a decision on the type of recall required?
- at what point do you decide to signal a general recall?
- is there a time when you think that boats are over the line but decide NOT to signal any recall?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.6

There are four penalties that are available to the Race Officer to discipline a fleet, which persistently requires general recall. They are:

1. Flag “I”.
2. Percentage penalty using flag “Z”
3. The “U” flag.
4. The black flag.

- At what point do you introduce these penalties?
- How do you make sure that you are able to apply the penalties fairly?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.7

What would you do if you identified 4 of 6 boats over the line in a 30 boat fleet?

- Rule 30.2 “Z” flag is in effect
- Rule 30.3 “U” flag is in effect
- Rule 30.4 Black flag is in effect
- No rule 30 in effect
- Rule 30.1 “I” is in effect

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.8

- How much bias would you put on the start line and what would influence that decision?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.9

- How long should the starting line be?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.10

- What would you do if there were a 90° wind shift 20 seconds before the start?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.11

- You notice at the start that the pin end boat is well out of position. At the start you have one boat across the line right beside the committee vessel. It looks like he is the only boat over. The pin boat radios that it has identified three other boats that are over the line. What would you do?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.12

- 30 seconds to the start, the start mark breaks free and starts to drift to leeward fast. What would you do?

# RACE MANAGEMENT PROCEDURE DURING THE START

## Case Study 7.13

- As the Race Officer, you observe a boat hitting the start mark shortly after the warning signal. What would you do?

What would you do if:

- You observe a port/starboard collision shortly after the warning signal?
- One of these occurs after the preparatory signal?
- The collision occurs after one of the boats has finished?
- The collision occurs after both boats have finished?

# RACE MANAGEMENT PROCEDURE

- Start Lines
- Starting
- Recalls
- Starting Penalties

# RULES RELATING TO RACE MANAGEMENT

## RRS Race Signals:

- Only means of communication afloat
- Clear understanding of meaning
- Combination of visual and sound signal
- Corrective action; bail out if error occurs
- Visual Signals refer RRS 25.3

# DISPLAYING THE COURSE

The rules require that the course to be sailed is displayed no later than the Warning signal. RRS27.1

- Use the system described in the Sailing Instructions to display the course
- If a magnetic bearing to the first mark is required this should also be displayed at the same time

# STARTING

## The standard starting system is described in the rules (RRS26)

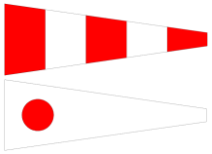
- This should be used whenever possible
- The time between the warning signal and the preparatory signal can be varied
- When racing ‘back-to-back’, a Sailing Instruction is required to warn sailors of an impending starting sequence (refer Appendix L 6.4)
- Decision to Race
- Starting penalties are incorporated into the preparatory signal
- No later than the preparatory signal, the race committee may move the starting mark. RRS 27.2

# POSTPONEMENT

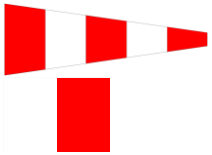
## There are four Postponement signals

- Indefinite Postponement

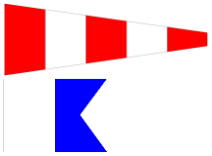
- Postponement of scheduled starting time



- Races Postponed – further signals ashore



- Races Postponed –no more racing today



# THE WARNING SIGNAL

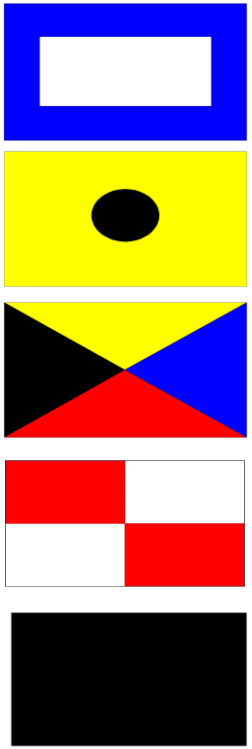
## The first signal in the starting sequence

- This should be displayed precisely at the time stated in the Sailing Instructions
- Sailors will start their watches/timers on this signal
- To assist sailors, many class flags bear the sail insignia of the class about to start
- Accompanied by one sound signal

# THE PREPARATORY SIGNALS

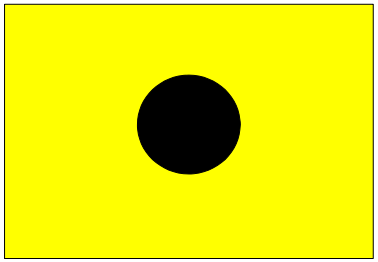
## There are five preparatory signals

- ‘P’ no penalties
- ‘I’ penalty (RRS 30.1)
- ‘Z’ 20% Scoring (RRS 30.2)
- ‘U’ (RRS 30.3)
- ‘Black’ (RRS 30.4)



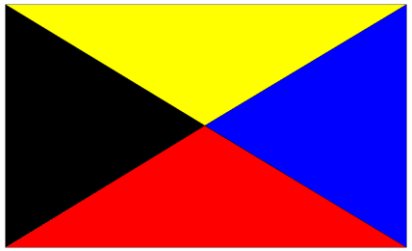
# “I” FLAG RULE

## Flag ‘I’ and 1 sound signal (RRS 30.1)



- Can cause the fleet to bunch at each end
- May create a large gap in the middle of the line

# “Z” FLAG RULE

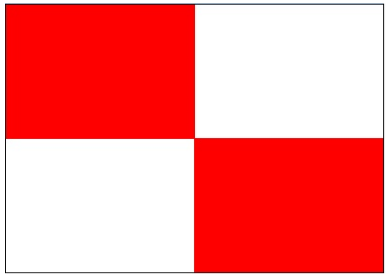


## Flag ‘Z’ and 1 sound signal (RRS 30.2)

- The penalty area is the triangle formed by the start line and Mark 1
- A boat which enters the penalty area in the minute before her start can dip back over the start line to the pre-start side
- Each time she infringes the penalty area after a General Recall or an Abandon signal, she is subject to an additional 20% penalty

# “U” FLAG RULE

## The ‘U’ Flag and 1 sound signal (RRS 30.3)



- This penalty should be used when the fleet are causing the problems
- This rule can be used prior to resorting to the Black Flag (RRS 30.4)
- At the top level of sailing or in championship regattas, this flag may be used on the first start instead of flag “P”
- A Race Officer should always use this flag with care
- The Individual Recall does not apply to a “U” flag start

# BLACK FLAG RULE

## The ‘Black’ flag and 1 sound signal (RRS 30.4)

- This penalty should be used when the fleet are causing the problems and not otherwise.
- For the race committee, great care must be exercised when using this flag.
- Following a general recall or abandonment when the black flag was used, any boats identified as breaking the rule shall have their sail number clearly displayed prior to the next warning signal for that race
- A boat disqualified under this rule cannot compete in a re-start of this race.
- The Individual Recall does not apply to a black flag start

# VOICE RECORDER

From approximately 90 seconds before the start signal, record all you see on your voice recorder

- Describe the scene as if you were a commentator making a radio broadcast
- Wind conditions
- Sea state
- Boat numbers
- The position of boats on the line
- Your ability to see the pin end
- Any other relevant information which will be of assistance in a redress hearing

# COMMUNICATION WITH THE PIN END

## The most efficient method is by mobile telephone

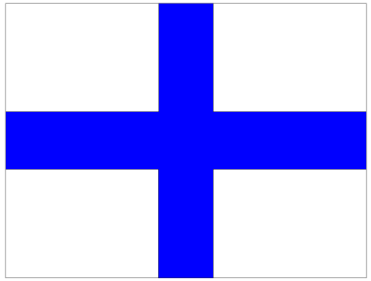
- It is a closed circuit
- Both parties can speak at the same time

## By radio

- Open to anyone to listen
- Only one person can speak at once

# INDIVIDUAL RECALL

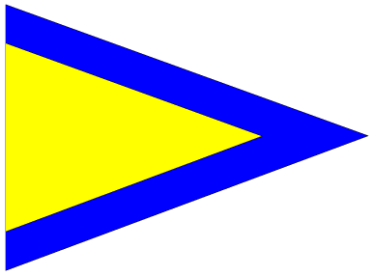
## Flag X and 1 sound signal (RRS 29.1)



- This signal must be displayed within 5 seconds of the start signal
- It must be accompanied simultaneously with a sound signal
- It remains on display until all OCS boats have returned and started, or for 4 minutes, or until 1 minute before the next starting signal
- It is removed without a sound signal
- Make every effort to identify all OCS boats
- Refer to Case Book - Case 79

# GENERAL RECALL

## Flag 1st Sub – 2 sound signals (RRS 29.2)



- A good start line will reduce the need for this signal
- A short start line with fewer boats will make this signal almost redundant
- Take care when penalty signals are used as the Prep Signal, especially the Black Flag
- Removed with 1 sound signal
- A General Recall should be used if **all** boats over the line cannot be identified

# RACE MANAGEMENT PROCEDURES

## After the Start, Race Control

## Session 8

# RACE MANAGEMENT PROCEDURES

## Case Study

## 8.1 - 8.11

# RACE MANAGEMENT PROCEDURES

## Case Study 8.1

- What would you do if there is a 30° windshift 15 minutes after the start of a 60 min target race?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.2

- What would you do if there is a 30° persistent wind shift 5 minutes after the start?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.3

- What would you do if there is a 30° wind shift 30 minutes into a 40 minute race?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.4

- What would you do if there is a 30° wind shift 200 metres from the finishing line?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.5

- There are more capsized boats than rescue boats?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.6

- There are more capsized boats than rescue boats?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.7

- How would you signal a change of course?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.8

- The wind increases to 40 knots half way through the race. What would you do?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.9

- You see a boat hit a mark and not do a one turn penalty. What would you do?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.10

- The wind starts to die out. What would you do?

# RACE MANAGEMENT PROCEDURES

## Case Study 8.11

- What steps do you take during the race to monitor the wind?

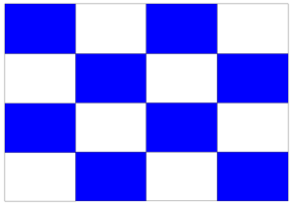
# AFTER THE START RACE CONTROL

Once the race has started, the Race Officer has a number of duties:

- Monitoring the weather conditions
  - Is the wind speed dropping?
  - Is it still safe to race?
  - Are the time limits being met?
  - Has the wind moved left or right?
  - Are all the marks still in place?
- Recording
  - At the end of each round (or mark)

# ABANDONING A RACE

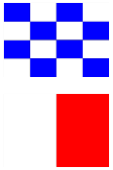
## Flag ‘N’ with 3 sound signals (RRS 32.1)



- This signal can only be used after the start

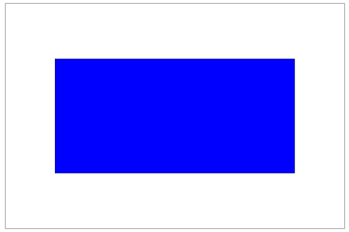
## There are two other Abandon signals. Each require 3 sound signals

- Both can be used at any time:



- ‘N over H’
- ‘N over A’

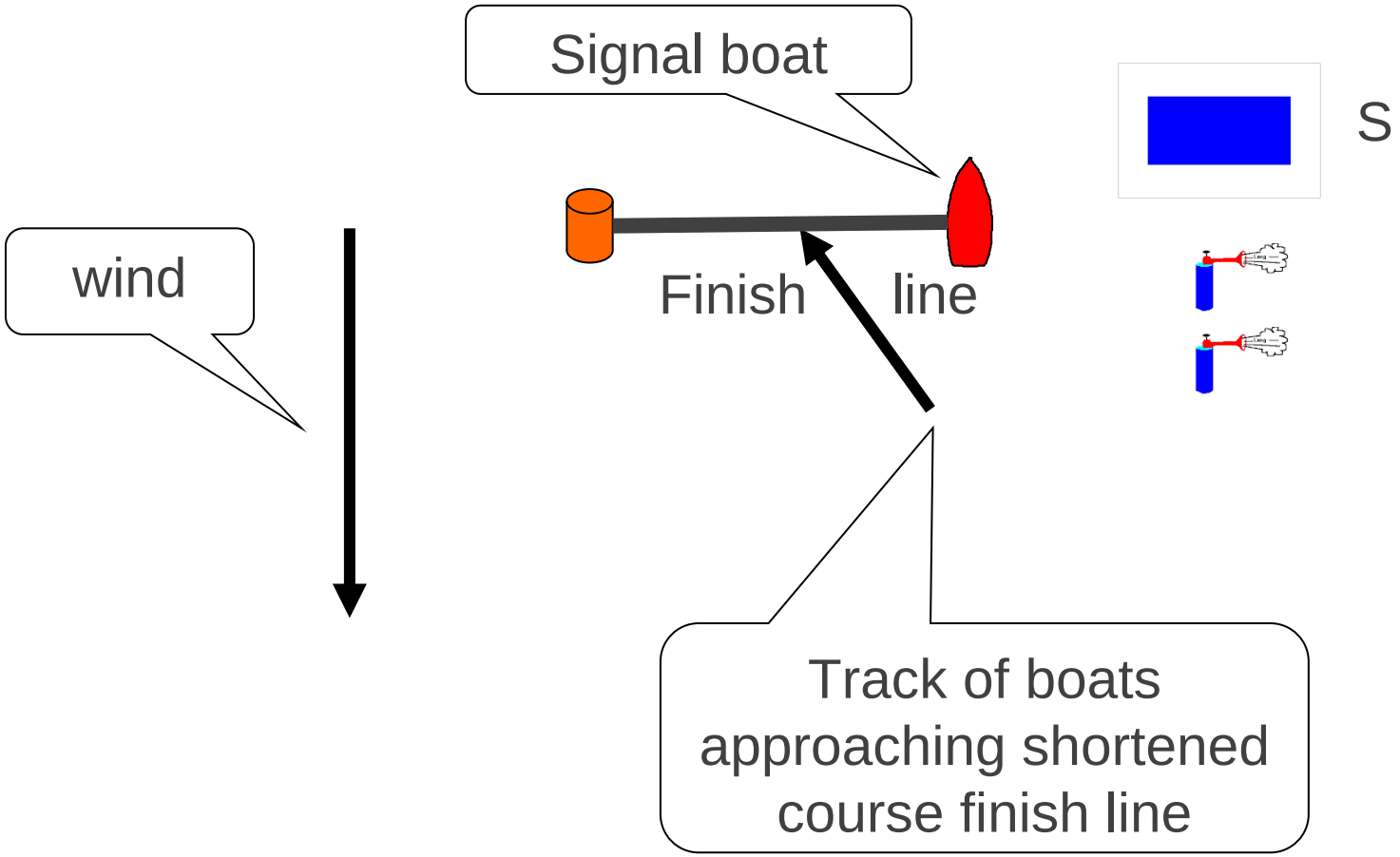
# SHORTEN COURSE (RRS 32)



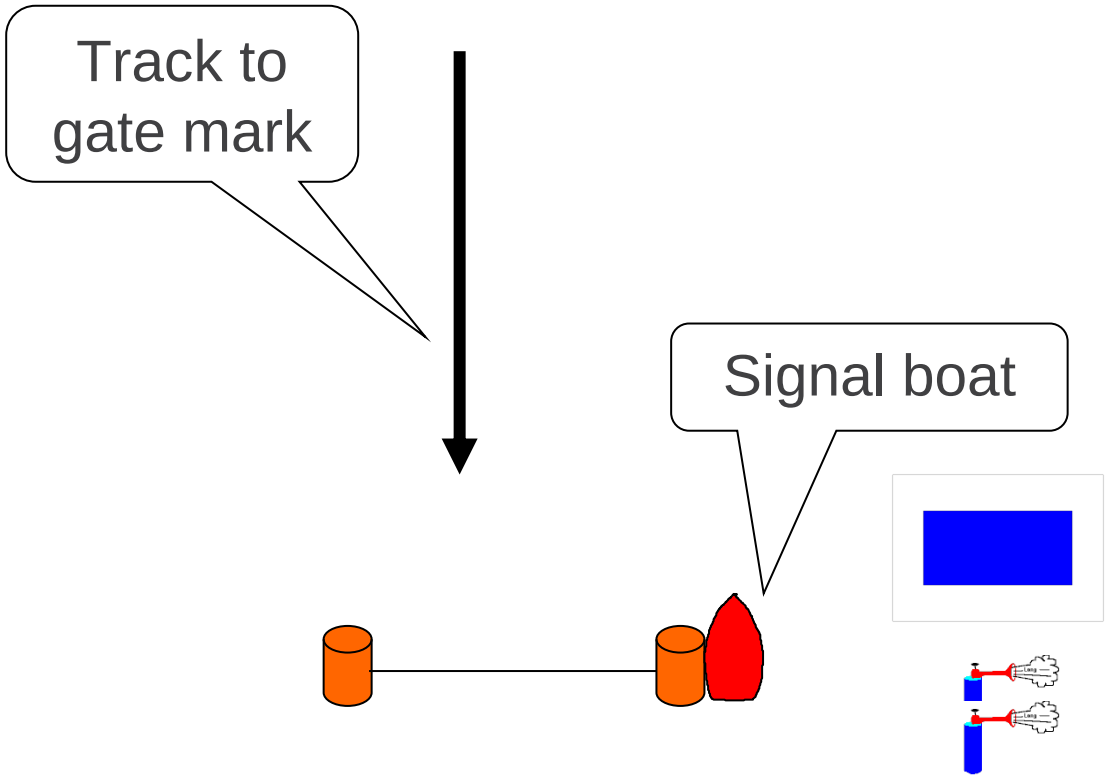
## Flag ‘S’ – two sound signals

- Because of foul weather
- Because of insufficient wind making it unlikely that any boat will finish within the time limit
- So that other scheduled races can be sailed
- Signal made as boats commence leg towards new shortened course finishing line
- Signal displayed on committee boat is further away from fleet than any other time a signal is displayed
- Some events do not allow shortening of courses

# SHORTEN COURSE SIGNAL BOAT POSITION for Upwind Finish



# SHORTEN COURSE SIGNAL BOAT POSITION for Gate Finish



# CHANGING THE NEXT LEG OF THE COURSE (wind angle variation)

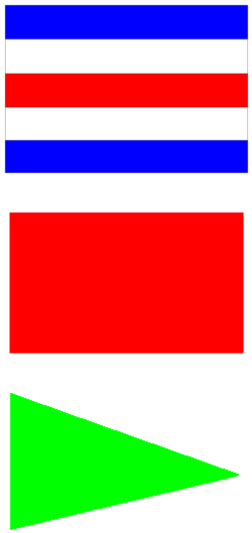
## Change of bearing of the next mark (RRS 33)

- Flag ‘C’ or an object of similar appearance with a repetitive sound signal

## This must be displayed with one or both of:

- A new bearing for the next mark and/or;
- A red rectangle when the new position is to port of the original

  or
- A green triangle when the new position is to starboard of the original



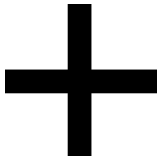
# CHANGING THE LENGTH OF THE NEXT LEG OF THE COURSE

Increase or decrease in wind strength

Flag ‘C’ or an object of similar appearance with a repetitive sound signal

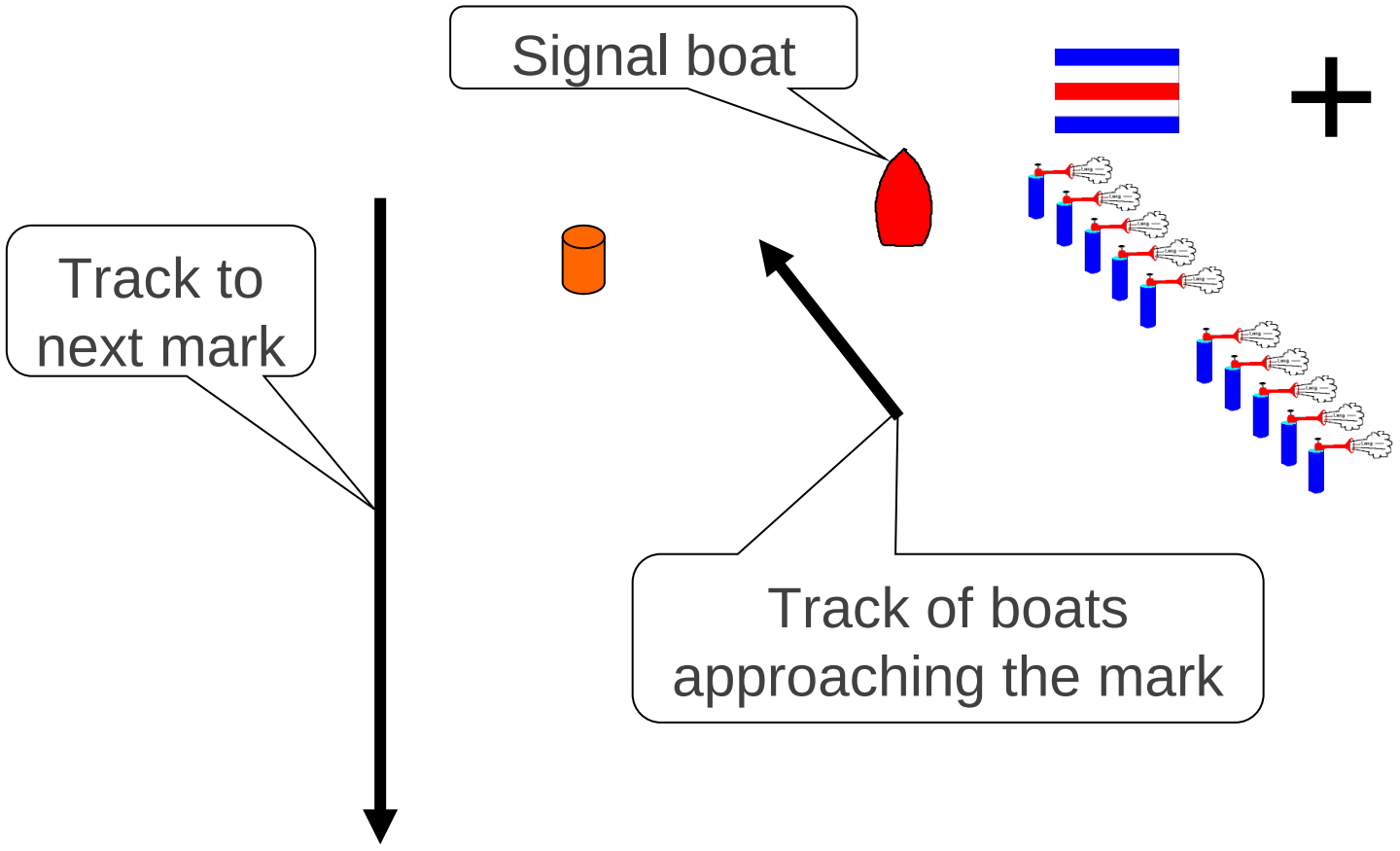
– This must be displayed with either:

- A plus sign if the leg is to be significantly increased in length



- A minus sign if the leg is to be significantly reduced in length

# MARK CHANGE SIGNAL BOAT POSITION

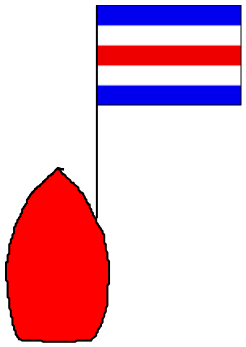


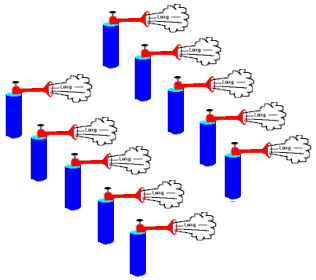
# CHANGE OF COURSE AT A GATE

Direction from last mark

Gate Mark

Gate Mark





The boat is not a mark

# RACE MANAGEMENT & RULE 42

Some classes allow parts of rule 42 to be:

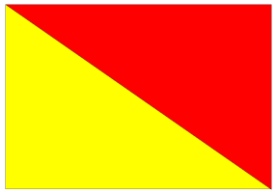
- Switched off
- Switched on

Different classes have different wind speeds at which this system becomes operative

Race Committees are responsible for the decision and application of the appropriate SI

# RULE 42 SIGNALS

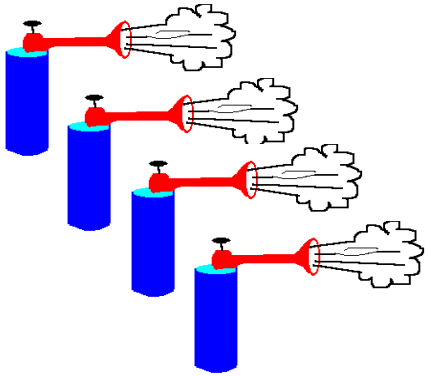
Flag ‘O’ – rule 42 does NOT apply



Flag ‘R’ – rule 42 applies

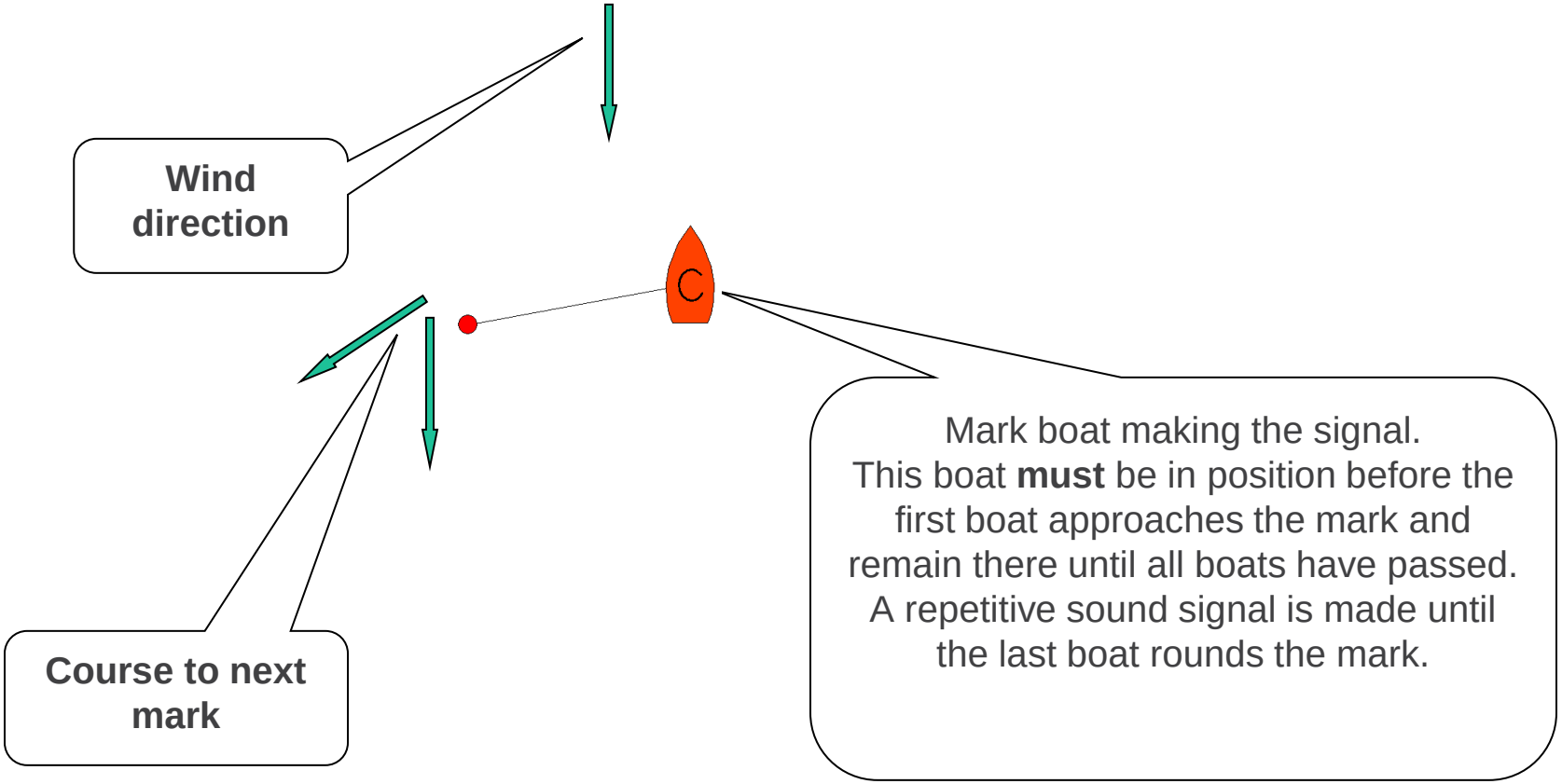
Flag ‘O’ may be displayed before or with the Warning signal to indicate rule 42 does not apply, as specified in the class rules

After the starting signal, flag ‘O’ or flag ‘R’ may be displayed at a mark



A repetitive sound signal is made when either flag is displayed at a mark

# POSITION OF BOAT MAKING THE SIGNAL



# WIND SPEEDS (RRS 42)

- The wind speed at which this system operates is to be found in the class rules
- If the wind speed is 12 knots, then the Race Officer requires a consistent wind of 1 knot above or below this speed before activating the system
- Before activating the signal, the Jury boats should be informed and a response received

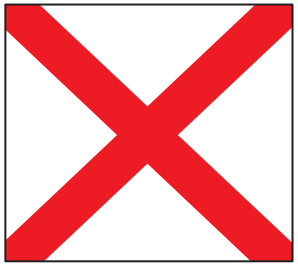
# COMMUNICATION WITH THE JURY (RRS 42)

The Jury should be informed at an early stage so that:

- They are able to get their Jury boats into position
- They are aware that there is a change in the pumping rule

# SAFETY

## Search and Rescue Instructions (RRS 37)



- Flag V displayed with 1 sound signal

- All boats and official and support vessels shall, if possible, monitor the race committee communications channel for search and rescue instructions.

# MARK MISSING
## (RRS 34)

Flag ‘M’ with repetitive sound signal

- The object displaying this signal replaces a missing mark
- The object may be a boat or another buoy

Before taking the above action, try to replace the mark or use a substitute of similar appearance

# RACE MANAGEMENT PROCEDURES

## Finishing and Post Race

## Session 9

# RACE MANAGEMENT PROCEDURES

## Case Study 9.1

- Where and how can you shorten course and signal it?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.2

- The race committee observed a boat breaking rule 31 as it crossed the finishing line. The boat does not take a penalty and sails home. What do you do?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.3

- The first 15 boats have finished, a big group of boats cross the line all at once. After this group, the rest finish in an orderly manner. You know that three boats have retired. What do you do?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.4

- Should all finishing boats be given a signal?
- Should boats finishing after the expiry of the time limit be recorded?
- Should finish times be recorded for all boats that cross the finishing line?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.5

- A boat that you believe has not sailed the course crosses the finish line. What would you do?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.6

- There are two large dinghy fleets due to finish within a short space of time. Your committee boat is on station and the “blue” flag is displayed.
- What are the instructions you give to your committee boat crew to ensure that the results can be produced correctly?
- What position do you order your committee to take up so that correct results can be recorded?
- What equipment is essential for efficient recording at the finish line?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.7

- At the end of a race, when does a boat cease to be subject to the racing rules?
- A boat finishes, clears the finish line to windward but due to an adverse current, then drifts back on the pin end finishing mark. How do you record that boat's finishing position?

# RACE MANAGEMENT PROCEDURES

## Case Study 9.8

- The Sailing Instructions state: “The low point scoring system, Appendix A of the racing rules will apply, with “x” races scheduled of which 2 shall be completed to constitute a series”.
- Determine the boats’ placing in the following examples:

# RACE MANAGEMENT PROCEDURES

## Case Study 9.8

- The Sailing Instructions state: “The low point scoring system, Appendix A of the racing rules will apply, with “x” races scheduled of which 2 shall be completed to constitute a series”.
- Determine the boats’ placing in the following examples:

# RACE MANAGEMENT PROCEDURES

## Case Study 9.8

**Example 1: Boats score – with one score excluded.**

| Race No | 1 | 2 | 3 | 4 | 5 | 6 | Total |
|---|---|---|---|---|---|---|---|
| Boat A | 3 | 4 | 1 | 6 | 2 | 7 | 16 |
| Boat B | 4 | 3 | 2 | 1 | 6 | 6 | 16 |
| Boat C | 1 | 2 | 7 | 3 | 3 | 14 | 16 |

# RACE MANAGEMENT PROCEDURES

## Case Study 9.8

**Example 2:** **Boats score – with one score excluded.**

| Race No | 1 | 2 | 3 | 4 | 5 | 6 | Total |
|---|---|---|---|---|---|---|---|
| Boat X | 3 | 4 | 1 | 2 | 5 | 6 | 15 |
| Boat Y | 2 | 3 | 10 | 5 | 4 | 1 | 15 |

# RACE MANAGEMENT PROCEDURES

## Case Study 9.8

**Example 3:** **Boats score – with no score excluded**

| Race No | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|
| Boat A | 1 | 2 | 3 | 4 | 5 | 15 |
| Boat B | 2 | 3 | 4 | 5 | 1 | 15 |
| Boat C | 3 | 4 | 5 | 1 | 2 | 15 |

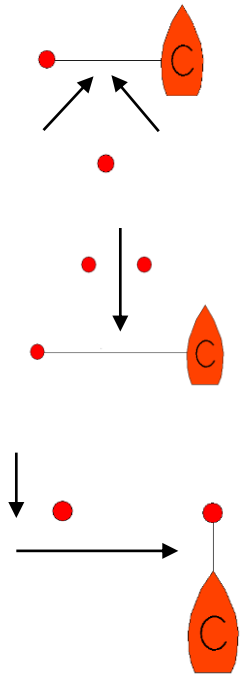
# RACE MANAGEMENT PROCEDURES

- Finish Line
- Finishing
- Post-Race Tasks

# LOCATION OF THE FINISH LINE

There are three possible locations for the finishing line:

- Upwind near or at the windward mark
- Downwind using the original start line
- On a reaching leg



# LAYING A FINISH LINE

On an upwind finishing line, the line must be set at:

- 90º to the wind direction

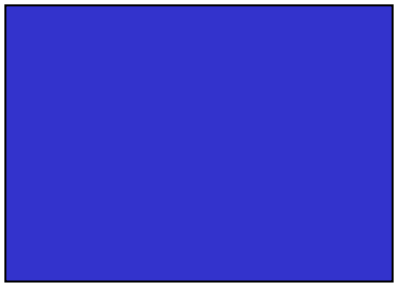
On all other legs of the course, the finishing line must be set at:

- 90º to the last leg of the course

The finishing line should be 50 to 60 metres in length or approximately 10 boat lengths

# THE BLUE FLAG

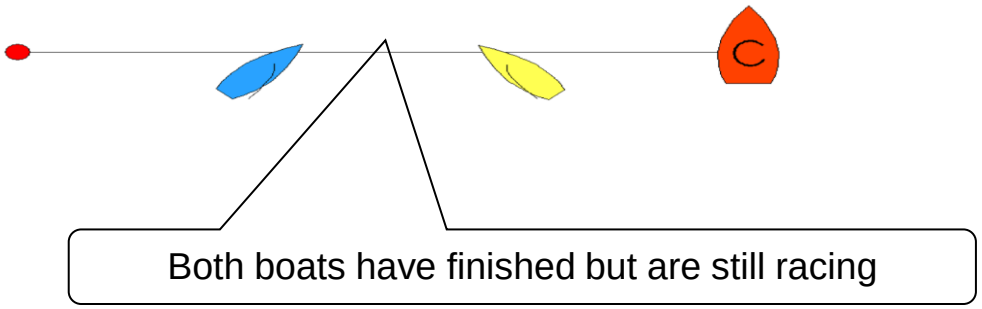
- The Blue Flag indicates that the Race Committee vessel is “on station” at the Finish and the vessel end of the Finish Line.



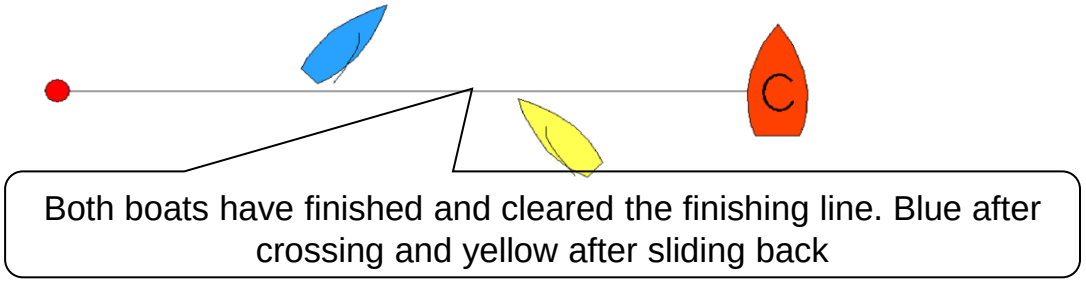
- It should be displayed, without a sound signal, when the leading boat commences the last leg to the Finish Line.

# THE FINISH OF THE RACE

- A boat finishes when any part of its hull crosses the finishing line from the course side



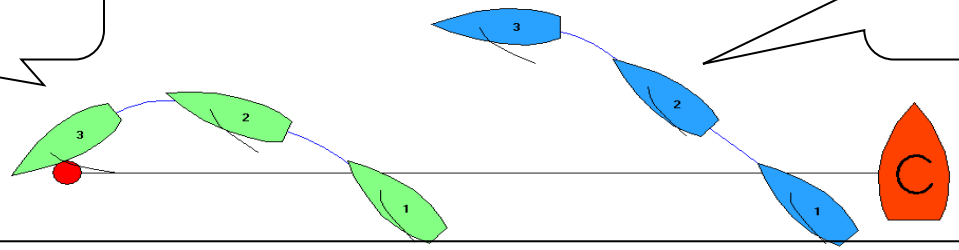

- A boat is racing until it finishes and clears the finishing line and marks



# CLEARING THE FINISH LINE & MARKS

This boat has finished and cleared the finish line. It may go home

This boat has finished and cleared the finish line. It may go home




This boat has finished and hit the finish mark BEFORE clearing the finish line. It must now take a penalty


Once it has completed the penalty and crossed the finish line a second time, that is its recorded position.

# Finishing

How do you finish capsized boats?


Finish and/or Score this boat

# RECORDING

## Recording the finish

- Recording teams are a line sighter and a writer
- The line sighter calls the numbers out, recording them on a voice recorder
- The writer keeps a paper and pencil record
- Always have at least two recording teams
- For big fleets have more

## Remember

- A start you can do over and over, the finish only once!

# SCORING ABBREVIATIONS

These scoring abbreviations shall be used for recording the circumstances described:

- DNC Did not start; did not come to the starting area
- DNS Did not start (other than DNC and OCS)
- OCS Did not start; on the course side of the starting line at starting signal and failed to start, or broke rule 30.1
- ZFP 20% penalty under rule 30.2
- UFD Disqualification under rule 30.3
- BFD Disqualification under rule 30.4
- SCP Took a Scoring Penalty under rule 44.3(a)
- NSC Did not *sail the course*
- DNF Did not *finish*

# SCORING ABBREVIATIONS

These scoring abbreviations shall be used for recording the circumstances described:

- RET Retired
- DSQ Disqualification
- DNE Disqualification that is not excludable
- RDG Redress given
- DPI Discretionary penalty imposed

# WORLD SAILING RACE MANAGEMENT POLICIES

- To provide the competitor and race management teams with guidelines on how the event will be conducted.
- These guidelines enforce using the same procedures from day to day. A competitor is entitled to know how the race management team is going to interpret the rules and conduct the event. The policies give guidelines for the race management teams.
- Refer to the World Sailing Race Management Policies for Olympic Sailing and World Sailing Events.

# RACE COMMITTEE PROTEST POLICY

- Primary responsibility rests with competitor
- May protest for:
  - Breach of Sailing Instruction that may not be protested by another competitor
  - Breach of good sportsmanship
  - Failing to take penalty after touching a mark
  - Failing to sail the course – more likely to score NSC if certain
  - Outside Help received under rule 41(a)

# REDRESS HEARINGS (RRS 62)

- Redress can be requested due to improper action or omission of the RC. RRS 62.1(a)
- Redress hearing is similar to Protest hearing
- Improper action or Omission could be incorrectly identifying OCS boat or displaying course, setting incorrect coloured marks, failure to display X flag timely etc
- Do not get upset because a competitor is questioning you
- Record all actions using paper notes and voice recordings.
- Try to resolve before the redress hearing
- Be factual in your presentation of evidence
- Describe your operating procedures
- Do not argue

# OUTSIDE HELP (RRS 41)

- Help for a crew member who is ill, injured or in danger;
- After a collision, help from the crew of the other vessel to get clear;
- Help in the form of information freely available to all boats;
- Unsolicited information from a disinterested source, which may be another boat in the same race
- However, a boat that gains a significant advantage in the race from help received under rule 41(a) may be protested and penalised; any penalty may be less than disqualification

# POST RACE TASKS

- Accounting for all boats:
  - For safety
  - For scoring
- Results service
- Protest time
- Talk to the Jury Chair

# EVALUATION

- Always analyse your performance
- What could you do better
- Talk to the other officials, but most importantly, talk to the sailors

# IN CLOSING

## Questions, Review, Evaluation

## Session 10

# Discussion and Questions Prior to Sitting the Exam

# Sample Exam Questions

- A
- B
- C
- D
- E
- F

# Exam Sitting and Post Discussion

# Becoming a Race Officer

# Developing as a Race Officer

- Gain broad racing experience.
- Gather race rules knowledge.
- Proficiency in standard international Rules English.
- Support policies of Australian Sailing.
- Establish a rapport with your club and its community.
- Show a physical capability for delivering a day or two's competition on-water.

There is no set order to achieving all of this.

Each of you will be at different levels of these skills and requirements

# Australian Sailing Accreditation Policy

# How to become an Australian Sailing Regional Race Officer

- To accredit or reaccredit you must have (Within last 4 years):
  - ✓Completed the Race Officer seminar.
  - ✓Passed the Race Officer Exam.
  - ✓Complete an Events Log.
  - ✓Complete a Performance Assessment.
  - ✓Submit an Online Accreditation Application Form (available on the AS website).

# How to become an Australian Sailing National Race Officer

- To accredit or reaccredit you must have (Within last 4 years):
  - ✓Completed the Race Officer seminar.
  - ✓Passed the Race Officer Exam.
  - ✓Complete an Events Log.
  - ✓Complete a Performance Assessment.
  - ✓Submit an Online Accreditation Application Form (available on the AS website).


## This concludes the seminar:

Enjoy the Journey.

Consider who you know that can help you – as a mentor.

Have fun and good luck!


# The End