

# Club Race Management Seminar

Welcome



## INTRODUCTION

- Instructors
- Participants
- How to become a Club Race Officer
- Objectives of the Course
- Reference Material



## Club Race Officer

#### CLUB RACE OFFICER CRITERIA

- Current member of their club
- Agree to the "Code of Conduct for Officials"
- Attended an Australian Sailing race officer seminar in the past 4 years
   or
- Nominated by their affiliated club



# AUSTRALIAN SAILING OFFICIALS' CODE OF CONDUCT

- Maintain a high level of understanding and application of the rules, procedures and Australian Sailing policies;
- Ensure that each decision or action taken is based upon the rules and principles of fairness and objectivity, and is made with care and without prejudice;
- Uphold the confidentially of committee and jury deliberations during and after the regatta;
- Be polite, courteous, open-minded, and patient with colleagues, competitors, regatta officials, team officials, coaches and hosts, and to respect cultural differences;
- Declare, without delay, any apparent conflict of interest which may arise;



# AUSTRALIAN SAILING OFFICIALS' CODE OF CONDUCT

- Arrive at the event in adequate time and remain until after all duties are completed;
- Incur only expenses that are necessary, and when expenses are reimbursed, to claim only legitimate and essential out-of-pocket costs;
- Maintain high standards of behaviour and good manners, including being on time, wearing appropriate clothing, refraining from inappropriate smoking, and maintaining only a moderate consumption of alcohol (total avoidance before important decision making)
- Agree to the Australian Sailing Membership Protection Policy



# Resources & Equipment

## **Session 1**



## Race Management Resources

#### What people resources are need to conduct a race?

- Race Start Team
- Course Boat Team
- Safety Boat Team
- Race Finish Team
- Results Team



#### Race Officer

#### Person in charge of the Race Management Team:

- Check your club's Duty List
- Brief the Club Volunteers on the day's activities



# Guide to Start Boat Equipment

- All weather clothing
- Buoyancy aid
- Wind direction indicator
- Hand bearing compass
- Anemometer
- Tape recorder
- Radio
- Timer
- Course laying aids















## Guide to Start Boat Equipment

- GPS
- Mobile phone
- Binoculars
- Whistle
- Loud Sounding Horn
- All Race Documentation
- Signal Flags
- Sunscreen













# Safety and Weather Checks

## **Session 2**



## SAFETY

#### Safety Operations Plan

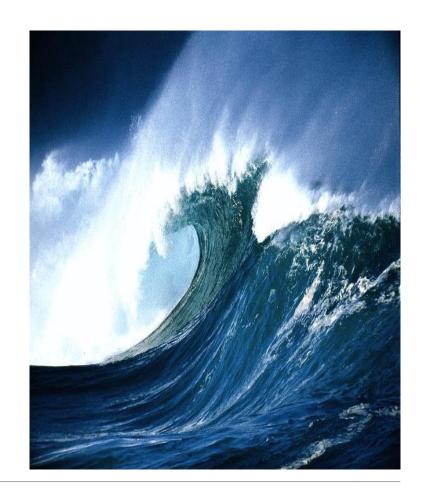
- Minimum Safety Requirements
- Rescue Boats and Personnel
- Rescue Patrol Plan
- Emergency Response Plan
- Communication Plan
- First Aid Facilities
- Risk of Entrapment by a Trapeze Harness Hook



## WIND STRENGTH

#### How to find wind strength:

- Anemometers
- Lower wind strength
- Upper wind strength
- Follow the published wind range guidelines

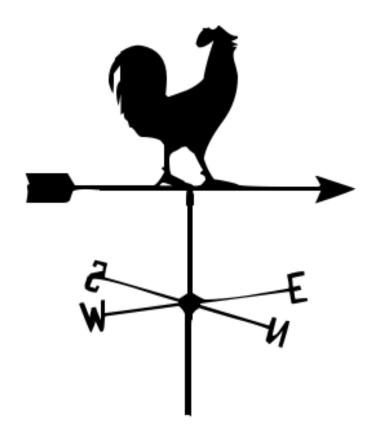




## WIND DIRECTION

# How to find the average wind direction:

- Wind indicators
- A wind vector
- The average wind





# Setting up for the Course and the Start

## **Session 3**



## **COURSES**

- Windward Leeward Course
- Trapezoid Course
- Triangle Type Course
- Gates
- Off-set marks



# CONSIDERATIONS WHEN SELECTING A SUITABLE COURSE

#### What is used at your club?

- Consistency
- Not complicated
- Port roundings
- Class requirements
- Water available to sail in
- Wind strengths

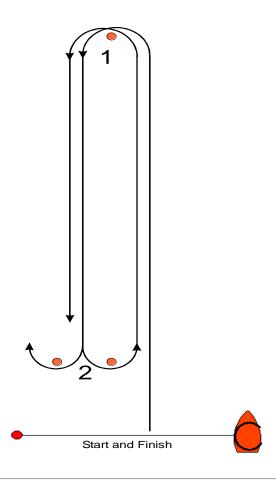


#### WINDWARD-LEEWARD

#### Windward-Leeward

#### Alternatives for this course are:

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

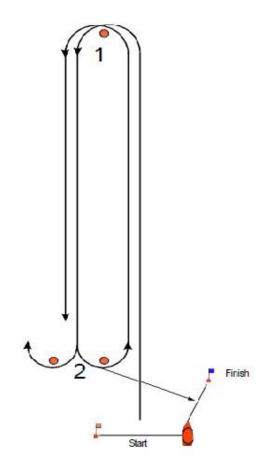




#### WINDWARD-LEEWARD

#### Alternatives for this course are:

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





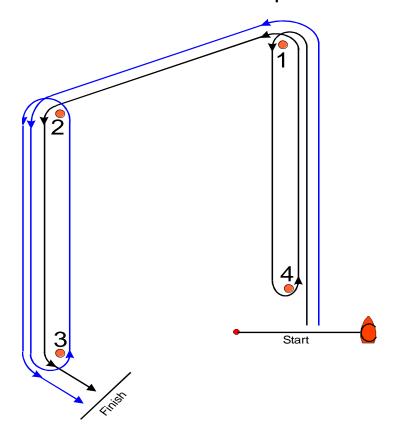
## TRAPEZOID COURSE

- Two parallel windward-leeward courses
- Use with two classes

or

One class using flights

## Trapezoid Inner & Outer Loops





#### TRIANGULAR COURSE

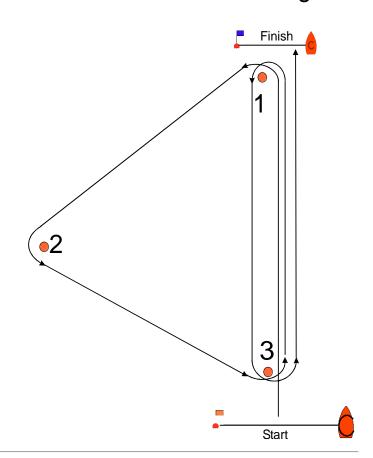
#### Course angles can be:

- 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

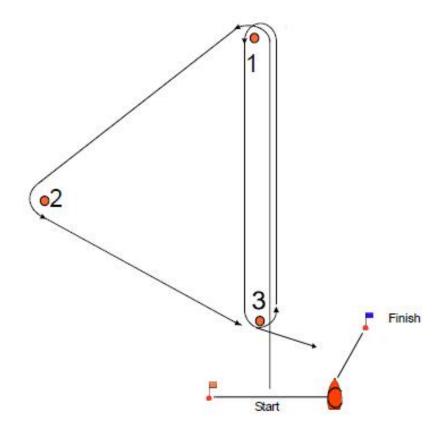
#### Windward-Leeward-Triangle





## TRIANGULAR COURSE

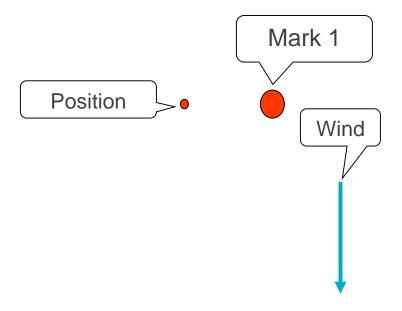
Option for hook reaching finish off Mark 3





#### 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

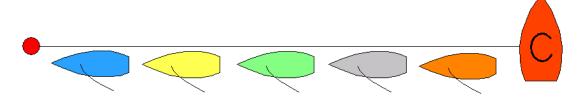
- The gate requires three boat length circles around each mark, with a space between the circles
- Therefore, minimum width of a gate is 7 boat lengths
- Most gates are set between 8 and 10 boat lengths
- Greater distance is required in stronger winds and for the new high performance boats



## 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



## LAYING THE START LINE

- Position the boat so that the course can be adjusted to a new wind without moving the Race 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 90° to the mean wind



# Starting Flags and Procedures

## **Session 4**



## 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 by the Sailing Instructions without changing RRS 26
- When racing 'back-to-back', a Sailing Instruction is required to warn sailors of an impending starting sequence (refer Appendix L 5.4)
- Decision to Race
- Starting penalties are incorporated into the preparatory signal



#### **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 that will be of assistance in a redress hearing





## SIGHTING THE LINE

- Stand behind the mast at least 1 metre away. Don't fall overboard!
- Sight on the pin-end
- Don't forget that both ends of the line are moving
- Record everything on your voice recorder



# Flags at The Start

#### Flags required on the Start Boat

- Preparatory Flags: P, I, Z, U and Black
- Recall Flags: 1st Sub, X
- Postponement Flag
- Abandonment Flag
- A & H Flag
- Start Line Flag (Orange)
- Warning Signal Flags
- RRS 25.3 or an object of similar appearance



## LAYOUT OF FLAGS & HALYARDS





## 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 stopwatches 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

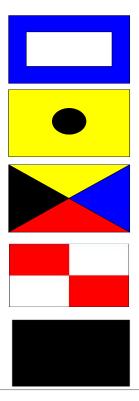
'P' no penalties

• 'I' penalty (RRS 30.1)

• 'Z' 20% Scoring (RRS 30.2)

• 'U' (RRS 30.3)

• 'Black' (RRS 30.4)

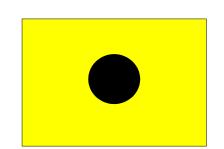


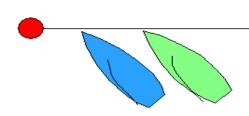


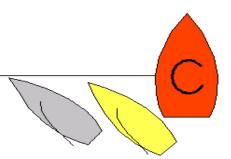
## "I" FLAG RULE

#### 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





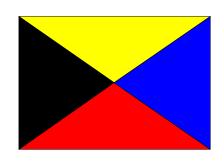




## 20% PENALTY RULE

#### Flag 'Z' and 1 sound signal (RRS 30.2)

- The penalty area is the triangle formed by the start line and Mark
- 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

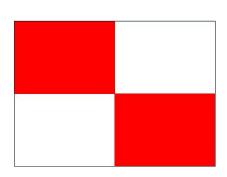




### "U" FLAG RULE

#### 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





## BLACK FLAG RULE

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

- This penalty should be used when it is the fleet causing the problems and not as a result of the setting of the start line
- At the top level of sailing, after a general recall on the first attempt, the
   RO will generally go to Black if it is the competitors causing the problem
- An important principal is that the Black Flag is only used when general recalls are being caused by the competitors and not by the actions of the Race Management team
- The Race Management team should have a clear understanding of how the process should be managed and their obligations for advising the fleet of any boats being penalised under this rule
- A Race Officer will use this flag with care





# REMOVAL OF THE PREPARATORY SIGNAL

#### This is done precisely one minute before the start signal

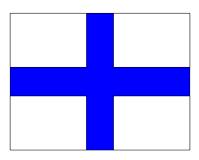
- A long sound signal is made at this time
- If a penalty signal has been used as a preparatory signal, this is the time when the penalty period commences



### 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



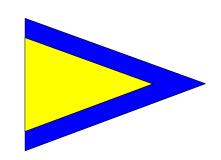


### GENERAL RECALL

#### Flag 1st Sub – 2 sound signals

(RRS 29.2)

- Should be used reluctantly
- 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

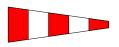




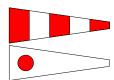
### POSTPONEMENT

#### There are four Postponement signals

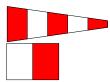
Indefinite Postponement



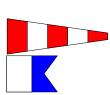
Postponement of scheduled starting time



Races Postponed – further signals ashore



Races Postponed –no more racing today





# Race Control

# **Session 5**



# 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:

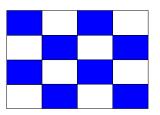
At the end of each round (or mark)



### ABANDONING A RACE

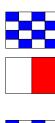
#### Flag 'N' with 3 sound signals (RRS 32.1)

- 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'







### ABANDONING AFTER THE START

#### Rule 32.1

After the starting signal, the Race Committee may abandon the race (display Flag N, N over H, or N over A, with three sounds):

- Because of foul weather
- Because of insufficient wind making it unlikely that any boat will finish within the time limit
- Because a mark is missing or out of position, or
- For any other reason directly affecting the safety or fairness of the competition

(Additionally you may abandon a race because of an error in the starting procedure)



### However...

After one boat has sailed the course and finished within the time limit, if any, the Race Committee shall not abandon the race *without* considering the consequences for all boats in the race or series.



# CHANGING THE NEXT LEG BEARING OF THE COURSE

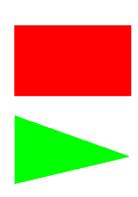
#### Change of bearing of the next mark:

 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 NEXT LEG LENGTH 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:

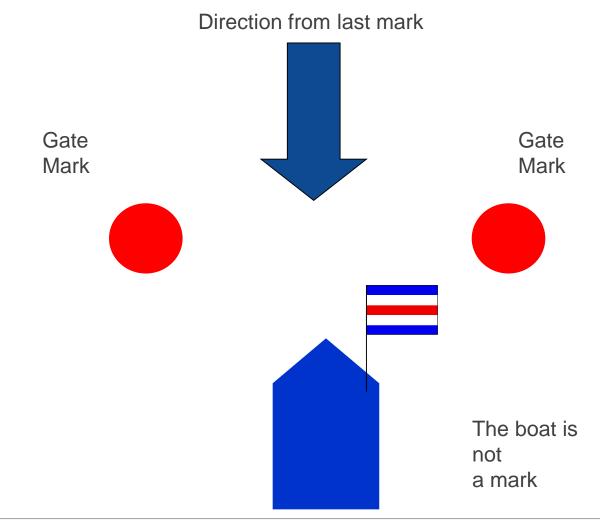
A plus sign if the leg is to be significantly increased in length



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

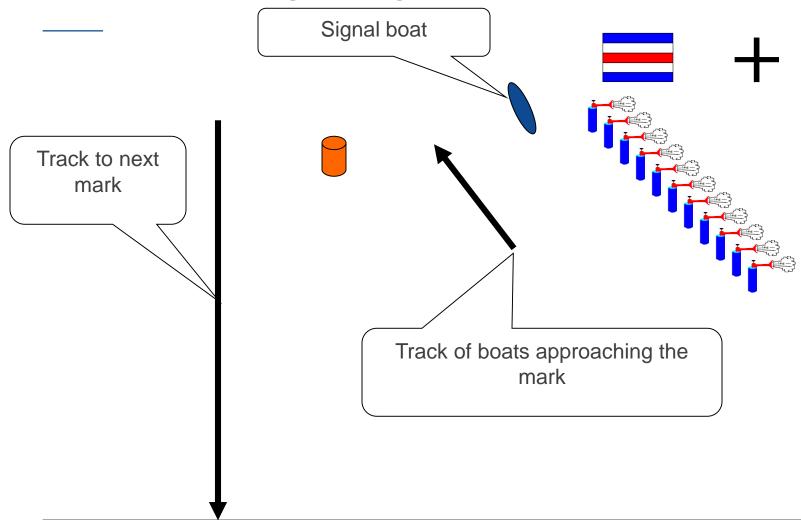


# Change of course at a gate





# Mark change signal boat position





# SHORTENING AFTER THE START (RRS 32)

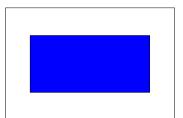
After the starting signal, the Race Committee may shorten the course (display Flag S with two sounds). Refer RRS 32.1 and 32.2.

- When is this signal made?
- How often is the sound made?
- Can you do this if it is not in the Sailing Instructions?
- Where is this signal flown?
- Where is the Finish Line?



# SHORTEN COURSE

#### Flag 'S' – two sound signals (RRS 32.1 and 32.2)

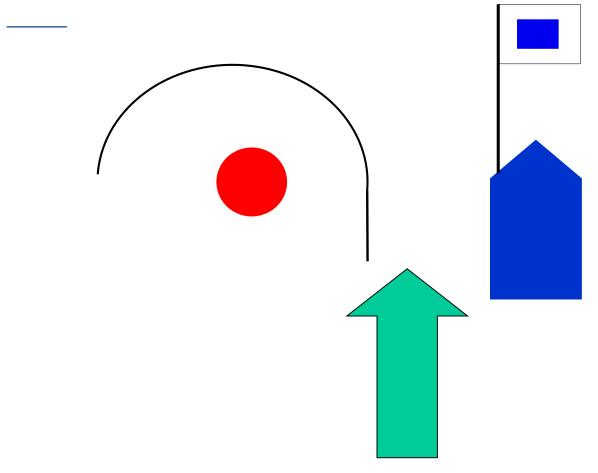


- One or more legs cut off the course that was displayed at the warning signal
- Because of foul weather
- Because of insufficient wind making it unlikely that any boat will finish within the time limit
- So that other scheduled race/s can be sailed
- Signal made from the CV at the shortened course finish line 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 shorten course



# Shortening at Mark - Port Rounding

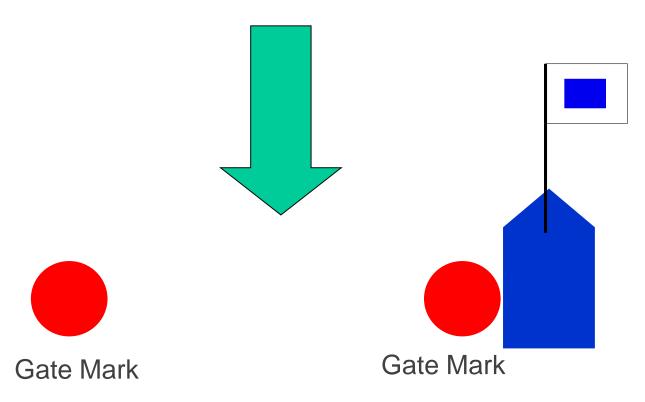


Direction from last mark



# SHORTENING AT A GATE

#### Direction from last mark





# MARK MISSING (RRS 34)

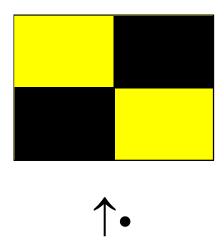
#### Flag 'M' with repetitive sound signal

- 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





# OTHER SIGNALS (1)

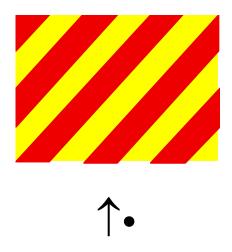


L Ashore: A notice to competitors has been posted

Afloat: Come within hail or follow this boat



# OTHER SIGNALS (1)



Y Wear personal buoyancy



# Finishing

# **Session 6**



### LAYING A FINISH LINE

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

90° to the wind direction

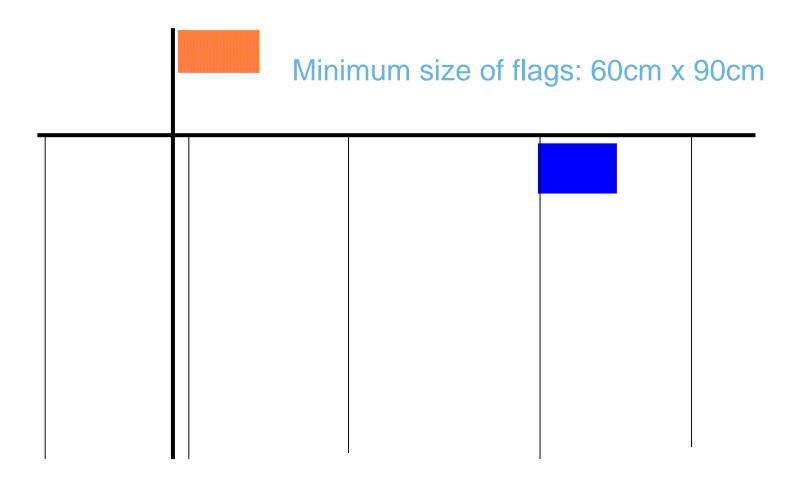
On all other legs of the course the finishing line must be set at:

90° to the last leg of the course

The finishing line should be 50 to 60 metres in length for most dinghy fleets or approximately 10 boat lengths.



## LAYOUT OF FLAGS AT THE FINISH





### THE BLUE FLAG

 The Blue Flag indicates that the Race Committee boat is "on station" at the Finish.



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



### RECORDING

#### Recording the finish:

- Recording teams are a reader and a writer
- The reader 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!



# Post-Race Tasks

# **Session 7**



### Post Race Tasks

- Account for all boats:
  - For Safety
  - For Scoring
- Results Service
- Protest Time
- Clean up and make sure everything is ready for next time
- Report and arrange for any damage to be repaired



### **Evaluation**

- Always analyse your performance
- What could you do better?
- What went right, what went wrong and WHY?
- Talk to your team and other officials
- Most importantly, talk to the sailors



# **GPS**

# **Session 8**





# GPS Set Up

Map Datum: WGS 84

Location Format: hddd°mm.mmm'

North Reference: Magnetic

Distance: Nautical Miles

• Time: 24 Hour

Language: English



# Setting a course using a GPS

- Set the reference point and note number
- Press GOTO and select this point as your go to waypoint
- Proceed on the course angle provided by the RO and note your back angle and distance to the waypoint (i.e: course 160° = back bearing 340°)
- Once position is reached, check with RO and when confirmed, set mark
- Enter the mark's position as a waypoint
- Use the same principle to set all marks



# **Practical Session**

# **Session 9**



# Setting a course using a GPS

Split group into teams and simulate the following with both GPS and hand bearing compass:

- Laying a Start Line
- Laying the Windward Mark
- Laying the Gybe Mark
- Laying a Gate

