Guidelines for the Organization of Team Racing events

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The following document has been written to assist those running team race events from Club level to World Championships.

Many of the systems used in modern team racing were developed by Dr. Geoffrey Jackson at Spinnaker Club in the UK and much of what is written here is based on various booklets and papers written by Geoff.

The sailing instructions and breakdown appendix were written initially by Richard Thompson for the UK Team Racing Association.

The following document is in draft form, so any comments for additions/changes/deletions gratefully received.

The document is divided into 6 sections.

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The Organisation and Management of Team Racing Events

Introduction and Aims:

Team Racing, Match Racing and Fleet Racing are three distinct forms of sailboat racing. For success in each area there are a range of common skills but also a set of unique skills, tactics and formats.

The primary aim of those running team racing events should be to provide an event that allows the best team racers to win while allowing all competitors to have enjoyable racing.

Team Racing emphasises boat on boat tactics, aggressive rules application and brings in the concept of teamwork and combined points results.

Team Race events should be organised and managed to allow competitors to maximise the opportunities of using their boat on boat skills, rules knowledge and team work to achieve success.

Successful Team Racing events allows teams of

1. equal weight
2. sailing equal boats
3. to have the maximum opportunity of using their boat on boat skills
4. and team work
5. in many short races
6. to produce an event winner.
   …while having a lot of fun!

To achieve the above Team Racing has evolved an exciting format, which demands boat handling and boat speed skills of the highest level, the boat on boat skills of match racing and the absolute need of teamwork for success.

This guide is designed to allow the organiser to provide the best possible event meeting the criteria set out above.

The guide is divided into 6 sections.

Section 1. Competitors

Section 2 Racing Boats

Section 3 Event Organisation

Section 4 Event Format and Sailing Instructions

Section 5 Equipment

Section 6 Appendices

1. Competitors

1.1. Weight Restrictions:

ISAF Worlds

A key objective of Team Racing is to allow the team with the best "team racing skills" to win. In working to achieve this ISAF specifies a minimum combined crew weight of 120kg for the ISAF Team Racing World championships.

Those teams who weigh in with less than the minimum must carry weights, normally in the form of sand or water filled containers.

The standard ISAF Team Racing SI's cover this item.

It is important that the weights of competitors are open to public scrutiny and subject to a request for weighing by other teams.

Clearly teams with a combined weight above the minimum may have an advantage in strong winds but the balance of fairness has dictated the minimum rule.

While the 120kg limit may not be ideal for all boats organisers are encouraged to keep to a single international standard so that National teams do not have to chop and change crews to meet different event specifications.

Other dinghy events

Outside of the ISAF World Championships weight limits simply place a restriction on participation and are not as a result recommended. Organisers are however encouraged to use sailing instructions which prevent the changing of crews within an event.

Keelboat events

Keelboat Team Racing typically uses maximum crew weights which are generally the same as for Match Racing in the class in question. Where there are allowances for different number of crew for women only boats, this should be included.

1.2. Age and Gender

For events catering for Youth and Juniors it is helpful to use the ISAF age limits of under 15 on the 31 December for Juniors and under 19 on the 31 December for Youths. This allows consistency for training and selection.

The ISAF Worlds have a gender requirement. Most teams have a mix of males and females so specific requirements are rarely necessary for most teams but can cause difficulty for a minority and can act as a discouragement, so are not recommended.

2. Boats

2.1 Equal boats

Aim: that in all respects the boats have equal performance.

For events where the organisers supply the boats great care needs to be taken to ensure that the boats are identical in all performance aspects. If identical boats cannot be provided the flights (the boats the teams sail in) should be equalised. To achieve this simplicity is the key.

Equalisation includes:

- Hull weight
- Mast rake
- Spreader deflection
- Rig tension where excessive tension can be damaging

Identical manufacture of all other equipment:

- Sails
- hulls
- foils
- spars etc

For dinghy team racing

- No Spinnakers
- No trapezes

These add more to cost, complexity and problems of change over than they are worth so should not be used.

In Keelboats spinnakers are a useful addition in light airs.

Sailing instructions need to be very clear in the prohibiting of any action that will affect the equality of the boats.

If it is not possible to provide each team with equal boats then the organisers should try to balance the 6 boats, for example 1 new boat and 2 old boats in each flight.

2.2 Boat Protection

There are 3 main sources of damage.

1. Boat on boat contact

2. Boom on boat contact (especially for boats with long booms (Fireflies and Vanguards) and high freeboards.)

3. Contact with the dock/pontoon/jetty.

To minimise the damage:

1. Bow fenders with 75-100mm of padding running the whole length of the bow should be used. The fender should be “V” shaped to fit around the bow. The fact that it may touch the water is not an issue if this is true for all boats.
   These should be secured in a manner that prevents them from riding up when there is contact.

2. If wood can be attached to the gunwale edges this is ideal, and if done, it should be laminated strips and bolted/ or screwed rather than riveted. "D" section rubber is not generally considered very successful, though it is easy to apply and is good protection for boats alongside docks. Duct tape works well to stop chips and abrasions but after a couple of days in the sun is very hard to remove it is therefore better to use plastic electrical tape.

3. Long booms especially on Fireflies should have padding on the ends. Inserting pieces of polyurethane foam and then fixing with duct tape is very effective.

4. If changeovers can be affected afloat then this should be done. Otherwise ensure there are personnel on the dock to catch boats when they come in and that the dock has good padding.

2.3 Boat identification:

Boats need to be clearly identifiable for:

1. Start and Finish officials
   - Clear bow number and a coloured jib or a coloured stripe on the jib.
   - The bow number should be close to the bow, large- 300 or 400mm high and in the same colour as the rest of the identification.
   - The stripe on the jib must me low down so that the race official is able to see the colour of the sail and the number at the same time. Sail number material cut in 100mm wide strips works very well.
   - Sail numbers should be large and low down on the sail. Numbers on Jibs are probably not worth it.

2. Umpires
   - In addition to the above Umpires frequently follow boats so a coloured stripe on the transom and a small number are needed
   - Also a large coloured number or the mainsail, or a number on a coloured mainsail.
   - Coloured hulls are a real bonus

3. Team-mates and opponents
   - The more colour the better

4. Spectators/Commentator
    - As much colour as possible
    - Large sail numbers

The identification needs to be in two clear and distinct colours. For example: Red for boats 1,2,3 and Blue for boats 4,5,6 etc.

Warning on coloured sails and hulls:

1. Check with your sail maker that the coloured cloth supplied is of the same quality as for white sails. Many find it hard to get equal quality cloth and so the flights may become unequal.
2. Coloured hulls are great, but can be very difficult to match the Gelcoat in later years. White is the best option with lots of big coloured stripes and numbers.
3. Sail numbers when applied to hulls work well but are a nightmare to remove. Fablon keeps its colour much longer, sticks well but peels away easily even after years of exposure to UV.

Sailcloth Quality

1. Team racing sails especially jibs are subject to very hard wear. Soft cloth lasts well but loses shape quickly. Mylar jibs delaminate. The best solution is heavy weight hard cloth sails. These however need to be looked after carefully initially.

2. Battens should be sewn in, as flapping tends to cause them to pop out.

2.4 Breakages and Spares

With all boats breakdowns will occur, so organisers need to work to:

- Prevent or minimise these occurrences
- Get damage repaired as quickly as possible.

The appointment of a Bosun who has a good knowledge of the boats, has access to a range of spares and the tools and experience to make repairs quickly is essential.

Prevention

1. Check all halyards have knot stoppers
2. Check all shackled fittings are tight. (use pliers)
3. Tape all shroud pins and any sharp item.
4. Check toe strap mountings and that toe straps are tied securely with good quality (4 or 5mm line)
5. Check rudder and tiller assemblies especially the flexible Universal joint.
6. Check all sheets for wear and replace any that look likely to part.
7. Check all fittings in boat, cleats, fairleads, pintles gudgeons and blocks for attachment and serviceability.

Having a check off list for each boat makes things very much easier.

Spares

1. If it is possible to have a spare boat ready to go then any major repair can be done without holding up racing. Failing that a spare rudder assembly.
2. The most common breakage is the flexible joint on tiller extensions. If all boats are supplied with the same snap on- snap off type of fitting then repairs can be achieved in seconds.
3. Many dinghies are supplied with rudders held down by pins. A rope downhaul is a much better system for team racing, but if pins are used then make certain there is a ready supply of spares.
4. Supplies of shackles, lengths of 4 and 5mm line and electrical tape cover most problems.

Repairs

1. Rolls of heavy Duty sail repair tape for sail repairs
2. Whipping twine, and needles for batten pockets.
3. Fablon and Duct Tape for holes in boats. Also towel and Acetone to clean and dry damaged area.
4. A toolbox with spanners, Allan keys and screwdrivers to fit all the fixings on the boat.

3. Event Organisation

3.1 Venue and Facilities

In advance of the event carefully consider the water that is available. Select an area for racing that fulfils as many of the following criteria as possible.

- Exclusive use.
- Either non tidal or with as low tidal flow rates as possible.
- As free as possible of wind disturbing obstructions.
- An area that allows a satisfactory course to be set with any wind direction.
- The course area should be as close as possible to the beach area/dock that will be used for the change over.
- The change over beach/dock should be close to the club house.
- Spectator viewing of the course area should be possible.

If exclusive use of the water is not possible then the event organisers need to liase closely with the other water users to ensure that the events do not interfere with each other.

If you are committed to using tidal water, try to select and area, which allows the course manager to set a beat with equal time spent on each tack.

The sailing area needs to be close to these facilities so that changeovers, boat repairs and shelter for competitors and spectators alike are close to hand. Ideally, the clubhouse should have an area where wet competitors can get quick refreshments whilst still able to keep an eye on the progress of the competition. Failing this, there needs to be a very reliable means of communicating with competitors.

Change-overs where one team hands the boats over to the next users are the most likely cause of delays in a programme.

The on-shore facilities can make a significant contribution to the success of the event.

Competitors spend at least 60% of their time ashore. The availability of food throughout the event and shelter from the elements is important.

3.2 Entries

The maximum number of entries should be decided on the basis of a percentage on the water calculation.

For Youth and Junior events a 40% sailing ratio is optimal.

If there are 3 flights of boats then six teams will be sailing at any one time.

6 is 40% of 15. So 15 teams should be the ideal entry. From the point of view of schedules 15 would mean three leagues of 5, but if 16 teams then a slightly smaller percentage, but then 2 leagues of 8 are possible.

To plan for less than 30% is likely to cause dissatisfaction.

3.3 Single or Multiple Courses

Most events use separate start and finish boats and so having a single course saves considerably on manpower both on race officials and umpires. The calculation below shows that it is possible to run 6 and possibly 7 races on the same course.

$$\frac{\text{Race time + start sequence + turnover time}}{\text{Start sequence}} = \text{max no. of flights}$$

Eg 11 mins + 3 mins + 5 mins/ 3 = 6

Only if there are more flights than this, or if there are significantly different boat types racing (Optimists and 420's) should two courses be considered.

The temptation to lengthen the course should be avoided as the key to successful Team Racing is to have many short races.

3.4 The Race Management Team

3.4.1 The Principal Race Officer (PRO)

The Principal Race Officer is the event manager. He or she may be part of an event committee whose responsibilities include:

1. Appointment of:

a. Registration Officer
b. The Start Boat team
c. The Finish Boat team
d. The Course Manager
e. The Chief Umpire and the Umpire team
f. The Results team
g. Rescue/ Support
h. The Ferry boat(s) team
i. First Aid and Emergency Cover
j. The Bosun
k. The Damage Officer
l. The Resail officer
m. The Protest Committee Chairman
n. The Beach Master
o. Catering
p. Rotation and Breaks

The responsibilities and duties of each of the above officers is listed below (check index)

2. The liasing with the host club on the following matters:

a. Use of the water
b. Provision of motor boats
c. Use of the clubhouse including
d. a room for results team
e. a room for Protests
f. Radio Channels
g. Catering arrangements
h. Car Parking
i. Fuel and Oil

3. Preparing the Notice of Race
4. Preparing the Sailing Instructions and Appendix

It is recommended that the ISAF Standard Sailing Instructions are used. The Appendix to the Sailing Instructions allows for local conditions, handling of equipment etc. The Chief Umpire should be consulted regarding section 1 of the Appendix.

5. Deciding the Event Format

See section 4.

6. Carrying out the initial briefing to competitors.

The PRO should lead the briefing, which should be in 3 parts:

1. Domestic details, car parking, food, changing etc.
2. Race Management,
    a) Course configuration and location
    b) Starting procedure and time of start
    c) Event format
    d) Changeover arrangements
    e) Care of equipment
    f) Wearing of buoyancy aids (PDF's), wetsuits etc.
3. Umpiring: led by the Chief Umpire
    a) Protest procedure to be used
    b) Rule 42 warning
    c) Rule 14 warning

Many events issue by email a set of briefing noted that cover most of the key issues and therefore ensure that the briefing itself is as short as possible.

a. The Registration Officer:

The Registration Officer is responsible for ensuring that all the teams competing have:

1. Paid their entry fee in full.

2. Paid their deposit in full.
3. Have provided any documentation required by the organisers.
4. Received any tickets for food or social events.
5. Been issued with race schedules.
6. Been issued with Bibs.

And at the end of the day/event;

1. Collect all the bibs

b. he Start Boat Team

The start boat team has the following duties:

1. To check that competitors are in the starting area, or have been given sufficient time to get to the starting area.
2. To check that an umpire is in the race area.
3. To indicate to competitors the number of the next race to start.
4. To make the Warning, Preparatory and Start signals both visually and with sound signals.
5. To clearly identify and recall any boats that are OCS
6. To record and communicate any boats OCS to the finish boat.
7. To record and communicate to the finish boat the identification of any boat that has retired before the start.

Number of people on the start boat:

Ideally three: duties should be split between the various members of the team, but the person who calls the line and signals OCS needs to have a strong voice or a loud hailer and should ideally at the time of the start have no other responsibilities.

Team with 3 persons:

1. Timer: Calls timing, communicates to PRO and Finish Boat
2. Signals: Flies shapes or holds battens
3. Line: Calls OCS and returns

Timings:

Competitors prefer if races are run from a single watch so that they do not have to readjust their watches for each race. This also aids the umpires. Eg all race signals will be made when the Race Officers watch reaches 00.

Even if visible clocks or automatic horn systems are used competitors often use their own watches so maintaining the same synchronised timing is appreciated.

Postponements:

These should only be made with the agreement of the PRO, but reasons include:

1. Major wind shifts
2. Legitimate absence of competitors.
3. Absence of Umpires.

OCS: Individual Recall

As the races are very short the OCS procedure needs to be very prompt. The following calls should be made:

1. Number of boats over eg 2 boats over, followed by:
2. The number of the boats: boats 4 and 5 over.
3. The boat numbers should be hailed repeatedly to ensure they hear.
4. When only one boat needs to cross the line the dropping of flag “X” is sufficient though a call of “clear” is helpful.
5. If there are several boats returning then the “X” is only dropped when the last boat has successfully crossed the line, a call to individual boats…. “boat 4 clear” is helpful.
6. The “X” flag need only be displayed for 1 minute.
7. Boats that fail to start correctly within 2 minutes of their start signal shall be recorded are NSF and scored accordingly.
8. Premature starters that do not return should also be advised to the finish boat. Make a note straight-away of exactly what happened for use at the protest hearing

OCS: General recall

1. If all premature starters cannot be quickly identified, a general recall must be signalled.

Start Boat Equipment:

1. Race number board and race numbers (00-99)

    - The number for the next race should be clearly displayed on a board attached to the starboard side of the committee boat.
    - The numbers should be in bold print and some 20cm in height.
    - The number should be changed immediately after the start of the previous race.

2. Whistle or horn
    - This needs to be audible in strong winds for at least the length of the starting line.
    - If using electrical or pneumatic horns a back up whistle is strongly recommended.
3. Race Watch
    - Preferably digital.
4. Visual signals (shapes or battens)
    - These need to be of sufficient size and colour that they can be clearly seen for at least 100 meters.

- If battens are used the different sticks should be at 45 degrees to each other, held high and clear of any rigging.

5. Race sequence sheet
    - This should provide details of which team is racing in which race.
    - The copy for the Start boat should be kept in a plastic wallet.
6. Notebook and pencil to record any incidents that may be subject to protest or redress.
7. Radio to communicate to Finish Boat. This should work on a different frequency to the Umpire frequency.

Communication with competitors:

Questions regarding race order, especially when events approach later stages are very common. Start boat crews should be prepared to answer these questions, as well as questions about the course. Questions relating to the sailing instructions or to umpiring issues should not be answered.

c. he Finish Boat Team

The finish boat team has the following duties:

1. To record the finish order of the boats racing
2. To identify any boats that were OCS and thus subsequently penalised
3. To note any red flag protests at the finish and ensure the PRO is aware of these protests.
4. To calculate race results.
5. To communicate results to the shore.

Number of people on the finish boat:

Here two people is an optimum number; one to sight the line, make the sound signal and to call out the finishers; the other to record the information.

Double Finishes

The most difficult situation to judge occurs when there is an incident on the finish line and a boat crosses once, does penalty turns and then crosses again. Here, the finish team should record *both* crossings of the line on the race record sheet and clearly identify which boat did this. The result should then be calculated by ignoring the first crossing but leave the written record clearly showing what happened.

Timings and Time Limit:

The time for the first boat and last boat to finish each race should be noted if required. Certainly, the time at which the last boat to finish before any break must be noted for the purposes of determining if protests are handed in inside the time limit.

Nature of Records

The records that the finish team keep must be very clear. If alterations are necessary, these must be done so the previous entry is visible and the new entry is unambiguous. The race record sheets are relied upon for basic information and evidence by the protest committee.

Non Returning OCS

If a boat that is OCS does not return and start correctly the Finish Boat must be informed, and the result sheet marked accordingly. The Finish Boat should attempt to tell the boat concerned that they were OCS.

DNF and DNS

The Finish Boat needs to record these on the results sheet. The umpire for the race should inform the Finish Boat of any boats that are required to retire because of inversion etc.

Red Flag protests

Competitors are required to inform the Race Committee of any Red Flag protests they wish to make. This is normally done by telling the Finish Boat. The Finish Boat should record this on the Results Sheet and then radioing this to the PRO.

d. The Beach Master

1. The Beach Master is responsible to ensure that changeovers between teams racing are carried out efficiently.
2. Where teams change on pontoons/jetties/docks the next team to go afloat needs to be correctly identified and on the jetty when the boat comes in.
3. The Beach Master must ensure that the correct team gets into the correct set of boats.
4. The Beach Master must also ensure that boats are handled in a safe and seamanlike way when coming into the pontoon, while alongside and when departing.
5. When boats are to stay unattended alongside a pontoon/jetty the Beach Master should ensure they are safely moored with sails stowed or furled.
6. When sail plans are changed the Beach Master directs the operation in association with the Bosun.

Timely Changeovers are critical to the efficient running of the event. The Beach Master should note any unnecessary delays that take place and report this to the PRO with details of times. Teams that are late in arriving at the start may claim redress and the evidence of the Beach Master may be critical in providing a just decision.

e. The Course Manager

The Course Manager has the following duties:

1. To set the course described in the sailing instructions

- When laying an “S” course care needs to be taken when positioning mark 3. If it is likely to be near the start boat it is better to have it up wind so as to minimise interference from other boats starting.

2. To maintain the course to the desired sailing time length
   - This is ideally 8 minutes from the start signal to the first finish.
3. To ensure the legs are all as true as possible, with special attention to the beats.
4. To maintain a true start line and length for the conditions.
   - Start lines should be about six boat lengths long.
   - When racing is for less experienced sailors a longer line may be preferable.
   - Port biased lines in most conditions can be very hard for racing boats to fetch so need to be avoided.

Moving of Marks

1. The outer distance mark may only be moved between the warning and preparatory signals.
2. Marks of the course may only be moved by fairly small amounts when there are no boats on the leg of the course leading to that mark.
3. Large adjustments should only be done in a break in the racing.
4. The Course Manager can request a postponement to make large changes.
5. While perfect courses are ideal, the most important legs to get right are the beats.
6. When conditions are especially shifty the course Manager may lay a number of optional windward marks and place “flag one” on the best positioned mark just before the start of the race.

Marks and Flags

Marks need to be visible over a relatively short distance so small pole marks with flags are ideal.

Marks

The ideal mark is constructed from a “through line fender” with an aluminium or stainless steel pole passed through the centre of the fender and secured at both ends of the fender.

The pole should extend 600mm above the fender to take the flag, and about 1000mm below the fender with sufficient weight attached to the bottom of the pole to keep the mark vertical in breezy conditions.

The anchor line is appropriate for the venue is attached under the mark, but must attached in a manner that prevents it fouling the foils/propellors of passing boats.

Flags

Flags are very important as team racing courses being small by nature can be quite confusing, so numbered flags are of great assistance. Furthermore the flags provide valuable information about wind shifts to the Course Manager, other officials as well as the sailors.

Flags are 400mm wide by 550mm high, of bright translucent spinnaker cloth with 300mm high numbers attached to one side. The flags are attached to a stiff sailcloth sleeve that is taped to a 600mm length of low-density plastic waste pipe. Before attaching the flag to the length of waste pipe ensure there is sufficient closed celled foam in the top end of the waste pipe to ensure the flag will float if it falls into the water.

Marks of the course should be all the same colour with numbers 1,2,3 and 4 attached. The start and finish marks should be of a different colour, usually Blue without numbers.

f. The Chief Umpire and the Umpire team

The Umpire team's duties:

2. These are laid down in the ISAF Team Race Umpire's Manual.
3. Additionally Umpires are frequently asked to help with setting marks.
4. As most team racing is in dinghies Umpires should always be aware of safety issues and be prepared to stop umpiring to render assistance in emergencies.
5. Umpires should assist competitors with on the water repairs.
6. Umpires may be asked to ferry results ashore.
7. The Chief Umpire may be asked to give a view on the wording of the sailing instructions, especially the Appendix.
8. The Chief Umpire is normally the Chairman of the Protest Committee, and needs to liase with the PRO regarding timings and venue of Protests.

Communications

The Chief Umpire should be able to communicate by radio with the PRO.

Radio communications between Umpires should be on a separate channel.

g. The Results team.

- The Results Team is responsible for collecting, recording and publishing the race results.

- Ideally the Results Team should be provided with a quiet room away from the main activity.

- Results may initially be radioed in from the finish boat but it is the race results sheet that is completed by the Finish Boat that is the definitive document.

- A copy of the event race results should be published so that competitors can check their correctness.

- The Results Team shall assist the PRO when calculating overall positions and applying tie break rules.

- As protests may not be heard if they will not effect the next stage of the event, the Results Team should maintain a “What If” sheet so that such decisions may be made with confidence.

- The Results Team should record all relevant information regarding the races, such as Red Flag protests.

- Appendix 1 has copies of individual results sheets as well as event results sheets.

h. First Aid and Emergency Cover

It is the responsibility of the PRO to appoint a qualified First Aider for the event, and a full first aid bag be maintained.

The PRO should also have a driver and a vehicle available to take minor injuries to the nearest Accident and Emergency (A and E) hospital.

The location of the nearest A and E must be known with a map and telephone numbers and GPS details recorded and available.

Emergency service numbers must be known and kept in the event file.

i. The Bosun

The Bosun is responsible for maintaining the racing boats in a racing condition.
Specific duties include:

1. That each boat is checked prior to going afloat.

2. Providing a stock of essential spares:
    a. Shackles
    b. Pins, curlies, split pins.
    c. Lengths of line
    d. Toe strap
    e. Rudder
    f. Tiller
    g. Tiller extensions
    h. Sails
    i. Complete boat
    j. A toolbox with all the appropriate screwdrivers, spanners, nuts, bolts and screws etc.
    k. Cordless drill with set of bits
    l. Sail repair tape, sail makers’ needles, thread, palm and twine.
    m. Spare main and jib sheets
    n. Spare line for halyards.

3. Providing equipment for more minor repairs:
    a. Wet and dry sandpaper of various garde
    b. Acetone
    c. Duct tape
    d. Fablon

e. Resin
f. Glass fibre
g. Filler

4. Providing a set of Cut down sails for all boats racing with the necessary line to fit to masts and booms.

j. The Damage Officer

k. The Resail Officer

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l. The Protest Committee Chairman

The Chief Umpire shall in consultation with the PRO appoint the Protest Committee Chairman and the Jury for any protest. The Chief Umpire frequently takes on the role of Chairman.

Protest Room:

The PRO needs to ensure that there is a suitable room available to hold protests.

m. Rescue/ Support

The provision of a rescue/support team is a decision for the event organisers. In the case of windy weather and the presence of young or less experienced sailors the PRO may appoint a team to have specific rescue/support duties.

This team should consist of two suitably qualified persons, with the appropriate equipment and clothing to do the task effectively.

Whether a dedicated rescue/support team has been appointed or not all race officials afloat have a prime responsibility for the safety of all others afloat and should act accordingly even if this means stopping umpiring, mark laying etc.

n. Catering

For Competitors:

As competitors at team racing events spend at least 60% of their time ashore there is a constant demand for food and drinks.

The organisers should ensure there is a constant source of drinking water available ashore as well as bottled water to take afloat.

Caterers appreciate knowing the number of competitors and the times of arrival.

As many events start quite early and competitors have often travelled from afar the availability of “breakfast” is greatly appreciated.

For Race Officials Afloat:

Hot or cold drinks together with biscuits/cookies or confectionary should be provided mid morning and mid afternoon.

Officials afloat should be provided with some form of lunch, this should include, sandwich/baguette, fruit, drink, biscuits and crisps/chips.

To ease matters officials afloat can register their Tea/ coffee/sandwich preferences before going afloat.

o. Rotation and Breaks

Unless there are planned breaks when the afloat Race Officials may come ashore the PRO and the Chief Umpire should try to arrange some form of rotation that allows the officials to have a break.

1. The Briefing

The PRO should lead the briefing, which should be in 3 parts:

1. Domestic details, car parking, food, changing etc.
2. Race Management,
    a) Course configuration and location
    b) Starting procedure and time of start
    c) Event format
    d) Changeover arrangements
    e) Care of equipment
    f) Wearing of buoyancy aids (PDF’s), wetsuits etc.
3. Umpiring: led by the Chief Umpire
    a) Protest procedure to be used
    b) Rule 42 warning
    c) Rule 14 warning

Many events issue by email a set of briefing noted that cover most of the key issues and therefore ensure that the briefing itself is as short as possible.

4 Event Format and Sailing Instructions

4.1 What Type of Event Do You Want

Various formats for team racing exist. Before embarking on an event the organising authority must decide what they want to achieve. Is it to be an event where the format is designed to keep each team racing for most of the duration of the event and with as many races as possible, or an event that eliminates the less able teams early on. If some teams are to be eliminated fairly early on from the main event will there still be sailing for the eliminated teams.

4.2 Racing Formats:

There are basically three formats:

- Round Robins: here each of the teams sails against every other team.
- Leagues Seeded or Unseeded: here teams are divided into groups, in seeded leagues teams are divided so that the best teams are not in the same leagues.
- Swiss Leagues: a format where the next round of sailing is based on a team's previous results. The aim is to have good teams increasingly sail against other good teams and vice versa. Requires highly expert race management and works best where there are large numbers of teams eg 32.

4.3 The Sailing Instructions

The Sailing Instructions are in two parts. The first part is standard instructions, which are applicable to all events. The Appendix allows Event Mangers to make changes as necessary to cover for local conditions etc.

4.4 Back up planning for unfavourable weather conditions.

The sailing instructions should allow for changes in format whilst the event is running in order to get a result.

The greatest problem facing organisers is insufficient time for the completion of the event. It is important therefore to construct the programme that maximises the possibility of obtaining a winner.
One way to do this is to set time limits on rounds: For example if a Swiss League is being used for ranking the sailing instructions might say that the last round will start no later than 1200, leaving 4 hours for the final knockout rounds…or if sailing round robins a similar cut off time to be imposed before moving to the knockouts with provisions for selecting teams from leagues to go forward to the knockout stage.

4.5 Protest hearings

- The sailing Instructions should specify that protests need only be heard if the result affects future rounds or final positions.
- If possible protest hearings can be delayed until the end of the day.
- Protest hearings need to be short and sharp.

4.6 Event Structure

Most events are normally in two or even three stages.

Stage 1 to determine a ranking order.
Stage 2 to provide close racing against peers
Stage 3 to determine an event winner through knockout.

Stage 1

Ideally the first round of a competition should consist of a single round robin. This is often too time consuming so multiple smaller rounds are often used. If this is the case a system of repercharge should be built in to ensure that teams are not unfairly treated by having all/most of the better teams in the same league. If it is possible to seed then this should help remove potential unfairness by spreading the better teams across the leagues.

The Swiss League system could also be used to determine an initial ranking order.

Stage 2

Where Leagues have been used in Stage 1, an intermediate stage can be used to provide “peer racing” to produce a final ranking order. For example if there were 2 leagues of 9 teams, Stage 2 might see the top 3 teams from both leagues move into a Gold league, the nest 3 into the Silver and the last 3 into the Bronze.

Before moving to the Final Knockout stage a repercharge between the winner of the Silver League and 4th in the Gold league provides an opportunity for those in the Silver League until late in the competition.

Stage 3 The final 'knock-out' rounds

Depending on time available and the number of teams entered the organisers may run:
Quarter finals
Semi finals
Finals

Ideally each should be a best of three, although best of five reduces the random factor.

4.7.1 Course

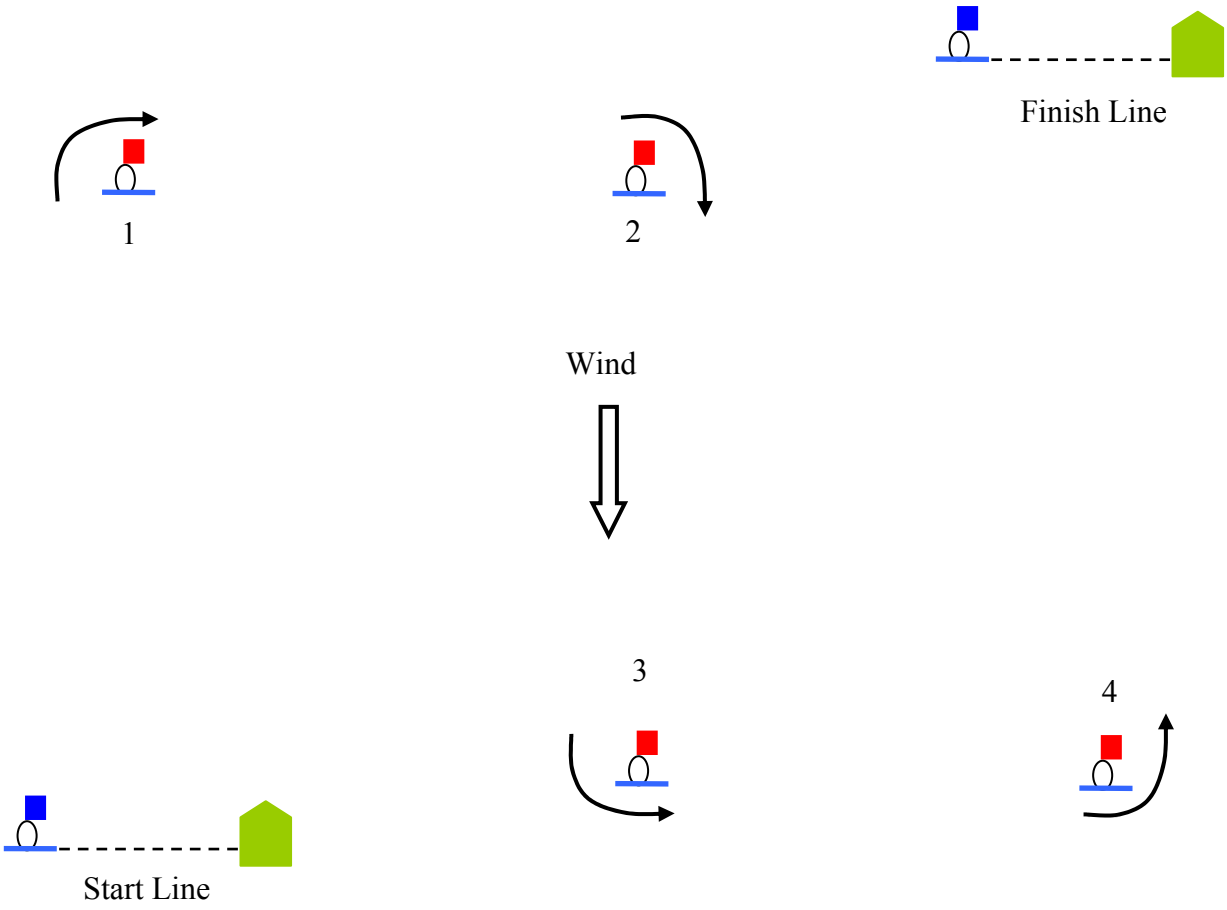
The nature and configuration of the racecourse is a matter for the PRO. The “S” course has evolved as a popular model as it offers tactical sailing. This form of course, optimises the tactical opportunities of beats, beam reaches, runs and many turning marks. Unless conditions make such course impossible to set, organisers are strongly recommended to use an “S” or when only one committee boat is available the “L” course.

The use of Windward- Leeward or Triangular courses is not recommended.

Given the nature of team racing the team that is in a winning combination at the first mark is most likely to win. The first beat must be as long as reasonably possible and set in a manner that there is equal length sailing on both tacks. Reaches are used to slow opponents so do not need to be long, whereas runs provide the greatest opportunities for sailors to catch up with their opponents so again should be long.

Below are the three most popular course confirmations.

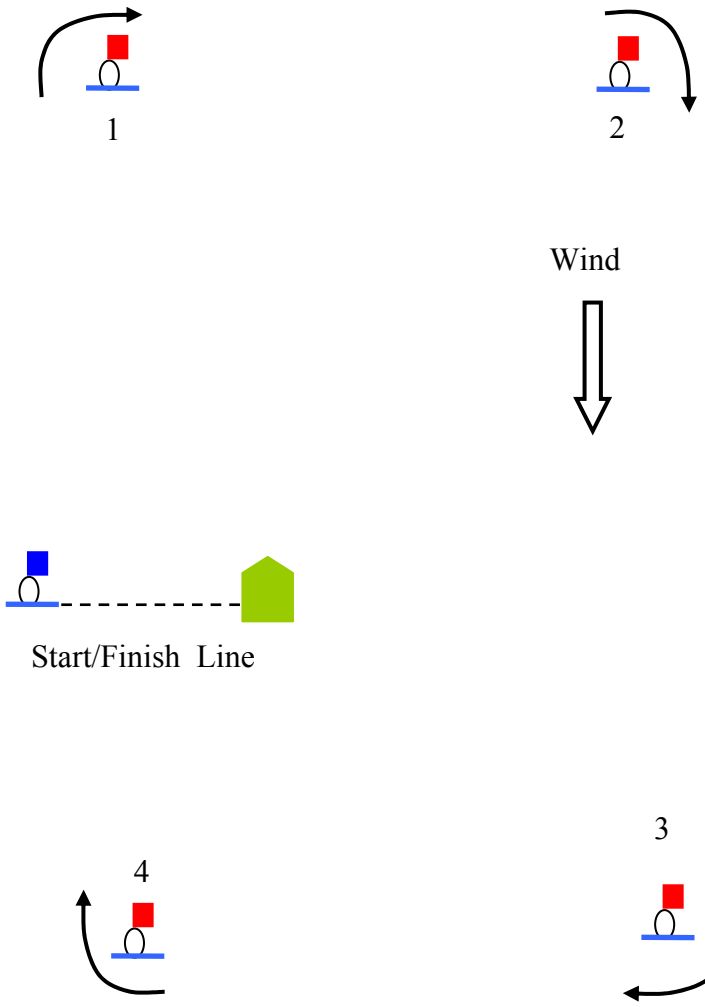
a The "S" Course.



The "S" course with starboard rounding of windward mark

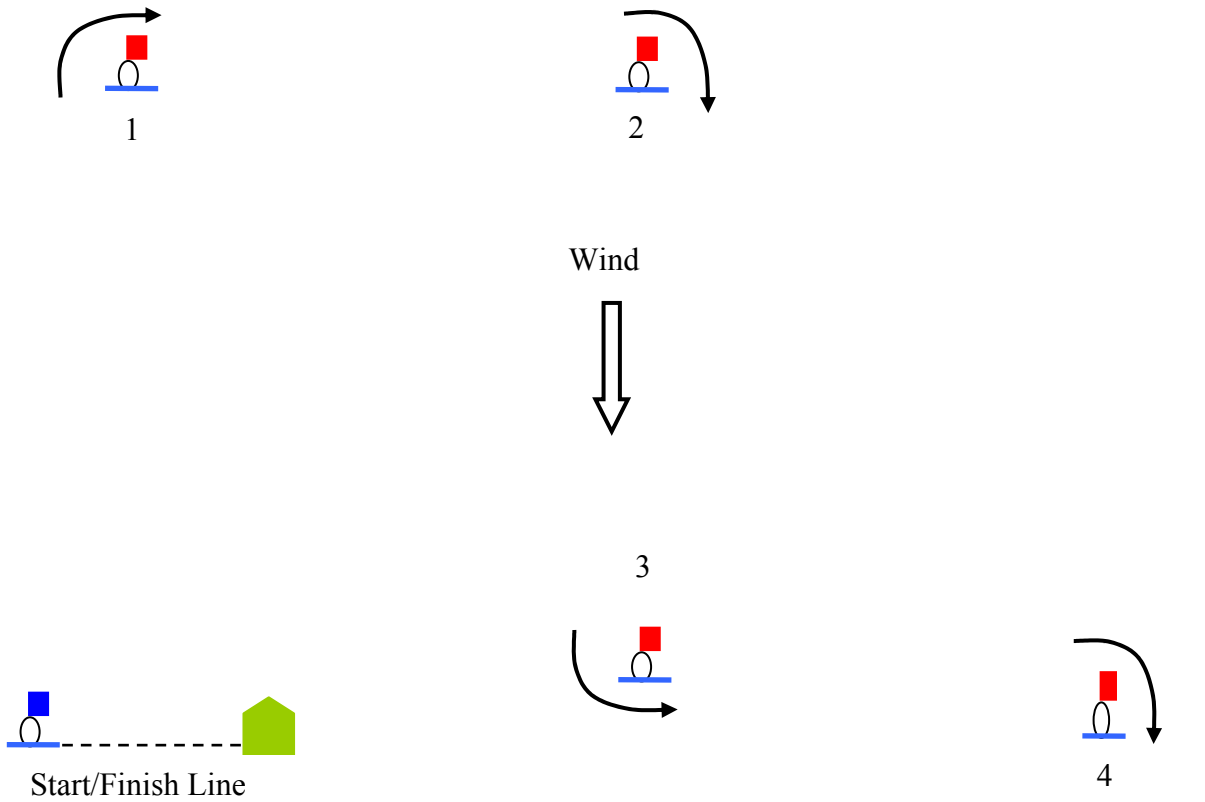
Reaches should be sufficiently long to reduce the likelihood of boats on a beat meeting downwind boats from another race. Marks 3 and 4 should be to windward of the start line as shown in the diagram to keep them relatively clear of boats engaging in pre-start manoeuvres. Boats in a following race approaching mark 2 can cause some problems to boats on the final beat and thus mark 2 should be kept well to leeward of the line.

b The Box Course



This course is relatively easy to set and run races when there are limited resources. If more than two sets of boats are likely to be on the course at the same time great care needs to be taken with the start sequence, so that one race does not finish at the same time as the other is starting. If there is more than one flight then run the races immediately after each other and ensure the race length is longer than the combined starting times.

c The “L” Course



The “L” Course is a compromise between the “S” and the Box course. It needs only one start/finish boat, with the issues discussed above being relevant. It brings in both port and starboard leeward marks which is considerably testing and therefore exciting for the competitors. The main drawback is the number of marks that need to be moved in the event of a windshift.

d Start and Finish Lines

Start lines are typically much shorter than those used for the same number in fleet racing. For 6-boat team racing a length of 20 meters. Every effort should be made to keep the line square.

The Finish line can be very tactical so should be kept short, again 20m is more than enough.

4.8 Time Limit

This is 30 minutes unless otherwise specified. In three boat team racing in moderate breezes on an 11 minute course 15 minutes is probably sufficient.

4.9 Capsize Rule

Where boats that capsize are likely to take a considerable time to get upright and then to be full of water organisers may institute a masthead rule. Boats that capsize such that their masthead touch the water after their starting signal shall be deemed to have retired.

For most dinghies a capsize with the masthead touching the water is simply a wet inconvenience. If racing is in such boats organisers should stipulate that boats that capsize such that their masts touch the bottom or invert such that both gunwales when upside down are touching the water shall be deemed to have retired.

4.10 Boats that do not start, finish or who capsize

Appendix D and the Sailing Instructions deal with these issues with regards to scoring. It is important that the Finish Officer is informed of any boat that does not start or for whatever reason will or can not finish.

The starts of races should not be postponed as a result of capsizes before the start sequence unless the PRO decides that a general postponement is necessary as the conditions have become unsailable.

When boats capsize and touch the bottom the Bosun should be informed so that damage to the rig is checked when the boat next comes ashore.

4.11 Breakdowns

D5 covers the procedures for breakdowns. In addition Appendix 2 contains guidance on breakdowns as well as forms that may be used in assessing the breakdown and whether a resail should be awarded.

4.12 Damage Deposits

The main purpose of Damage Deposits is to protect the interests of the owners of the equipment lent to the event.

Damage Deposits are levied to cover the excess on the organiser's insurance policy. The amount of the Damage Deposit should be equal to the amount of the excess.

Damage deposits may also be forfeited for failure to comply with certain sailing instructions eg putting away of boats at the end of an event. (This must be clearly stated in the appendix to the Sailing Instructions)

When damage occurs a competitor may agree to accept liability without a hearing but if not a hearing must be held and the proportion and extent of costs assigned to those involved.

Where damage has clearly taken place at an event but can not be attributed to an individual the cost should be split across all competitors and deducted from each of their deposits.

When a competitor causes damage during an event, the organisers may ask for Damage Deposit to be increased to cover the costs of the damage incurred before the competitor is allowed to carry on racing.

5. Equipment

5.1 The Start Boat

The start boat needs to be sufficiently large to accommodate 3 people, have space to show race numbers and preferably have a covered area so that paperwork may be completed out of the elements.

As the start line is short, a method of anchoring both fore and aft to prevent swinging is recommended.

A mast for sighting the line should be fitted and in a position that the Line officer can easily and safely sight the line.

The following flags are required:

1 Answering Pennant
2 Flag X
3 First Substitute
4 Flag N
5 Flag L

If there are no flag halyards, these flags should be attached to sticks.

Other Equipment/Paperwork

1 Race Schedule
2 Race Number board
3 Horn
4 Whistle
5 Watch
6 Radio
7 Paper and pencils for recording race information.
8 Start battens or shapes.

5.2 The Finish Boat

The finish boat needs to be large enough for 2 persons, and should have a covered area.

The boat needs to have a mast or similar siting point for the finish line.

Equipment needed:

1 Whistle or horn
2 Radio
3 Race results sheets
4 Race sequence sheet
5 Pens/pencils and paper.
6 Watch

5.3 Umpire Boats

These need to be sufficiently large to carry two large men.

The boat should be powerful enough to easily keep up with racing dinghies on all points of sailing.

Ideally 4 stroke engines to conserve fuel and for quieter running.

Ribs rather than dories, and preferably wheel steered rather than tiller steered.

5.4 Course Manager boat

The course manager needs to be move quickly with as little wash as possible around the course. The boat provided should also have space for all the marks required.

5.5 Change Over/Ferry boat

The purpose of this boat is to ferry teams to the race area. Large Ribs are ideal for this operation.

6 Appendices

Appendix 1 Round Robin Sequences

The attached pages cover round robin sequences for various:

Numbers of teams
Flights of boats

Back to Back racing: In most of the sequences back to back racing is used to minimise the number of teams changing at any one time. Note it is often not possible to go through complete rounds without double changes.

If, for any reason a team drops out part way through a programme, it is best to simply award each team drawn against the absent team a win with points for first 3 (or 2) places. The absent team should score 3 did not starts (18 points for three boat team racing. This is needed in case points are used for tie breaking)

Appendix 2 Race Record Sheet

One is required for each race. If a protest is lodged, the relevant race record sheet should be attached to the protest form after the pre-protest result has been entered on the Race Result Sheet.

Appendix 3 Race Result Sheet

Each team has a section for results. **Every race will require 2 sets of figures to be entered for each race - one for each team .** All results including those subject to protest should be entered. There are spaces left for amendment due to protests. This helps you analyse the likely effect of protests.

Appendix 4 Protest Summary Sheet

Log all protests that have been received on this sheet. It is an aid to keeping track of protests and in deciding which to hear.

Appendix 5 Protest Analysis Sheet

This sheet may help you decide which protests may have an effect on the cut for progress to subsequent rounds and positions above the cut.

Appendix 6 Breakdowns

This guidance note addresses the process required by rule D5 when considering redress requested by a team suffering a breakdown of a boat supplied by the organising authority.

1. General
   A request by a competitor suffering a breakdown is a request for redress made in accordance with rule 62.1(a). The consideration of the request is different to the extent that it is considered and decided by the race committee in accordance with rule D5.

2. Validity Requirements

A red flag shall be displayed as soon as possible after any loss of performance is noticed. The flag does not need to be displayed to the finish. The flag should also be drawn to the attention of, and acknowledged by, an umpire at the first reasonable opportunity.

The request must be submitted within the time specified in the sailing instructions; UKTRA SI 10.1 refers. If rule D2.4(b) applies the request does not need to be in writing.

3. Boat Continuing Racing
   Rule D5.1 requires the boat to continue racing if possible. UKTRA SI 11.4.2 requires her to retire immediately if she cannot continue racing.

4. What is a Breakdown?
   It includes faulty equipment. It does not include equipment that a prudent competitor should reasonably be expected to check when taking over the boat. Shackles or knots that come undone in the cockpit area are not breakdowns.

5. Taking of Evidence

When the race committee is taking evidence from the boat making the request it is advisable that a representative of the other team in the race should be present and allowed to give evidence.

6. Impact on Finishing Position
   The boat seeking redress has the onus of convincing the race committee that her team would have finished in significantly better places in the race if the breakdown had not occurred.

7. Race Committee Consultation
   The race committee should if practical consult the race umpires to seek their opinion on whether specifically the damage changed the race result, and should consult the damage officer on the exact nature of the damage.

8. Race Committee Decision
   A boat shall only be entitled to redress if she satisfies all the requirements of rule D5 as clarified above. Only then should the race committee decide what redress, if any, to award and which shall be in accordance with rule 64.2.

9. Further Requests for Redress against Race Committee Decisions

These can only address whether the race committee complied with rule D5. If the race committee complied with rule D5 the protest committee cannot address any subjective judgement as to what is fairest decision to all competitors.

A pro-forma for use by the race committee is on the reverse of this note.

Request for Resail Pro-Forma

Race Number:	

Request:

Time lodged	Team	Helm	Sail number

Representative of opposing team is present: Yes / No

	Resail officer	Competitor	Reported
When did it happen?			
Was it a breakdown?			
In what way did the breakdown significantly worsen the boat's finishing position?			
When was red flag displayed?			
When did teams come ashore?			
Is the request within the time limit?			
Why didn't boat continue racing?			
Was breakdown fault of the crew?			
Reasonably-competent crew avoided it?			
Was finishing position predictable?			

Extract from the Rules

D5 BREAKDOWNS WHEN BOATS ARE SUPPLIED BY THE ORGANIZING AUTHORITY

5.1 A supplied boat suffering a breakdown, and seeking redress as a result, shall display a red flag at the first reasonable opportunity and, if possible, continue *racing*. The race committee shall decide redress as provided in rules D5.2 and D5.3.

D5.2 When the race committee decides that the boat's finishing position was made significantly worse, that the breakdown was through no fault of the crew, and that in the same circumstances a reasonably competent crew would not have been able to avoid the breakdown, it shall make as equitable a decision as possible. This may be to order the race to be resailed or, when the boat's finishing position was predictable, award her points for that position. Any doubt about a boat's position when she broke down shall be resolved against her.

D5.3 A breakdown caused by defective supplied equipment or a breach of a *rule* by an opponent shall not normally be determined to be the fault of the crew, but one caused by careless handling, capsizing or a breach by a boat on the same team shall be. Any doubt about the fault of the crew shall be resolved in the boat's favour.

Decision (ring one):

No Redress or **Resail** or **Adjust points:**	

I have informed both teams of my decision Event issue number:

. . . . . Resail Officer

. . . . . Date **and** time

Team race record sheet **Race Number…….**

Team Number/Letter.....**(From left column of schedule) Team ID.....**
Sail nos...../...../.....

Team Number/Letter.....**(From right column of schedule) Team ID.....**
Sail nos...../...../.....

position	Team shape/ colour identif-ication	sail number (list sail numbers in order of finishing)	notes (protest flag, re-rounding etc)	Place points	Team ……. points (team in left column on schedule)	Team ……. points (team in right column on schedule)
1st				1		
2nd				2		
3rd				3		
4th				4		
5th				5		
6th				6		
				Total		

*** Enter 6 points if a boat DID NOT START, inverted, or DID NOT FINISH within the time limit. Make a note of this in the notes column. Do not enter a finish position. This is VERY important in case of a protest.**

PREMATURE STARTERS that did not return to start properly should be finished in the position as they cross the line and a note made with a "P(RC)' for a protest from the race committee. Advise them of this after they have crossed the line. The points for OCS are finish position plus 10 points.

WINNER IS TEAM No./Letter .....
.....Protests - yes/no - how many?.....

	(left team)	(right team)
Total penalty points given by protest		
NEW TOTAL POINTS		

Winner after protests – Team No. Letter.....