

WORKING THE LEEWARD END OF THE COURSE

LEEWARD MARK BOAT – CONTRIBUTED BY GRADY FOSTER

SUMMARY - The responsibilities of the crew of the leeward mark boat can be summarized as follows:

- Set the leeward mark or leeward mark gate at the distance and direction as directed.
- Be prepared to signal a course change using the “C” flag, a course board, and whistles or horns.
- Be prepared to take mark roundings, for safety, resolving scoring issues, and for tracking the elapsed time of the race.
- Be prepared to change the position of the leeward mark or gate marks if a course change is signaled from the windward mark.
- Be prepared to set up a finish line and record finishes if directed by the PRO.
- As noted in the duties of the windward boat, keep track of the wind and note direction, speed, and trends of possible shifts. The PRO may not need them as often as the data from the windward mark, but be prepared to provide whatever is needed.

DETAILS

- **Boat Preparation And Equipment** - Same as for the windward mark boat, with these additions I have found very useful: Extra “O” rings for each mark. A gas powered leaf blower, which makes transport of the marks easier and inflation quick. *Scratch sheets with entrants sail or bow numbers.* A cell phone and numbers of the PRO and other mark boats for use if normal radios are heavily used or confidential information needs to be shared. If scores are to be called in, use a cell phone. I carry my own set of flags, mounted in a roll-up bag and identified at the ends.
- **Setting the leeward mark** – As this mark is usually the last mark to be set, you have some leeway in its positioning. Whether to windward of the line or leeward of it (as in a modified course) the leeward boat and the PRO can make small adjustments of the course by setting it near the pin end or the signal boat end. Depending on the length of the start line, you have the capability of adjusting the course at the last minute 3-5 degrees. If winds are shifty, wait until the fleet is tacking to windward and observe which tack is favored, and then set the mark to the wind the sailors are seeing. When the mark is set, broadcast its GPS location using the procedure in the article on the Windward Mark under setting marks. When setting, or re-setting a mark of the course, transmitting the GPS coordinates to the other mark boats and the signal boat is helpful. However, on a course less than a mile or so, we should not depend on setting the mark using these coordinates. Often in the haste of resetting

the mark, a number can be misread, or incorrectly entered into the GPS. In these instances, if you have a visual on the start line and other marks, you can set a better course with a hand-held compass and a wind stick. As always, a straight string method, whether up wind, or down wind, is more reliable than the gizmo method.

If, however, there are to be multiple starts, setting the leeward mark first will avoid problems that might occur when trying to set it during a starting sequence. The leeward mark is set first and the windward mark adjusted to the leeward mark. In this case the windward mark may be set from the GPS location of the leeward mark, so it is very important to broadcast the GPS location of the leeward mark as soon as possible.

- **Setting Gates** – Gates have become very popular in one-design fleets and some PHRF fleets. These allow the sailor to break away from large pinwheels and gather a tactical or strategic advantage. The gate must be set precisely, or the advantage is lost. Usually gates are set ahead of the start line. There are several tricks to setting a gate. Set the port gate first (looking downwind). Wait until it settles to the wind and tide (if any) and then set the starboard gate. Go below the port gate and idle upwind with the mark streaming behind you. The distance between the marks should be 5-8 boat lengths of the racing boats. Have someone in the stern of your boat with a hand held compass take readings on the port side gate. When you get to the desired position, slowly count to 5 and drop the anchor. This will give you a very close position if the water depth is 20-40 ft. Go back and sight the bearing over the marks and adjust accordingly. Check on the distance between marks by driving your boat (you must know the length of your boat) slowly from mark to mark dropping small bits of leaves, etc. from the bow and count from the stern. This will work in place of a laser measurer.
- **Changing Course** - In the event of a consistent wind change you may be called upon to do a course change. In most cases the leeward boat will signal the change to take place at the windward mark. To do this properly you will display “Charlie” flag, a course board displaying the new course, (in some regattas a red or green flag will be shown in place of the course board to indicate the mark has been moved to port or starboard) and making continuous sound signals. If there are several fleets on the water it may be that the change of course applies only to some of these. In that case you will also display the class flag(s) of the affected fleets. There are different places to set up depending on whether you have a single mark or a gate. In case of a single leeward mark, position yourself near the mark but on the approach side. This keeps the “C” flag visible and the sailors will not be occupied with sail changes at this point. Keep close and do not go dead below the mark. This is true at the windward mark as well. To change course at a gate, get in the middle of the gate. Be in the absolute

middle, and a little to windward is better than being too low. They will be going left or right and will not hit you.

In some cases the PRO will direct that the leeward mark is to be changed. You will then lay the appropriate new mark where directed by the PRO. Always report when the new mark is set and broadcast its new coordinates. If no other boats are to round the old mark, pull and deflate it or hide it from view to avoid confusion. If there are multiple fleets on the course, always confirm with the PRO before pulling an old mark.