RIGHT OF WAY

Power Versus Power

Quite often beginners feel that their sailboat always has right of way over powerboats even when running the engine. Not so. Only when a sailboat not running its engine is it classified as a sailboat. So even if you have a day sailor with a tiny outboard motor, when the motor is running (even if the sails are set) you are liable to the motorboat "rules of the road" (as the right of way rules are called).

Though there are many minor ramifications, the main thing to remember when motorboats are on a converging collision course is that the one in the other's "danger zone" has the right of way. The "danger zone" of a motorboat is from dead ahead to two points abaft the starboard beam. If there is any boat approaching from that area you must avoid it. It is the "stand-on" vessel in that it has the right of way, and you are the "give-way" vessel in that you must keep clear. The obligation of the "stand-on" vessel is to hold its course and speed so you won't be misled in your attempts to keep clear. What must be avoided at all costs is the kind of mixup that occasionally happens to pedestrians going in opposite directions on a city street. One steps one way just as the other decides to pass on that side, then changes direction only to find the other changing the same way. On a boat this could bring about a serious collision, so the "stand-on" vessel *must* maintain her course until it is obvious that a collision is imminent, at which time she must avoid it. See Fig. 31 for a description of "points".

If two boats are approaching each other from dead ahead, both should turn to starboard. If one is approaching the other from any point aft of the danger zone, he is overtaking and must keep clear of the overtaken boat.

Power Versus Sail

The above should be enough basic information to keep you out of trouble when you are running your engine and meet another powerboat. Another set of rules applies when you are sailing and meet a power boat. Many people have the misconception that a sailboat always has right of way over a motorboat. Though this is usually true there are a number of exceptions when a sailboat doesn't have rights: When the motorboat is anchored or disabled, is being overtaken by the sailboat or, when the motorboat is a commercial vessel over 65 feet long with limited maneuverability in a narrow channel.

Sail Versus Sail

There are only three basic possibilities when your sailboat approaches another: (1) You are on the same tack as the other boat, (2) you are on opposite tacks or (3) one of the boats is overtaking the other.

For this reason there are three basic rules to cover the three possibilities: (1) On the same tack, the leeward boat has right of way, (2) on opposite tacks, the starboard tack boat has right of way and (3) if overtaking, the boat ahead (the overtaken boat) has right of way.

There are three sets of general rules used by United States sailors: the International Rules, the Inland Rules and the Racing Rules. The International Rules and the Inland Rules agree with each other practically verbatim.

The Racing Rules agree with the three basic International and Inland Rules with one exception: the opposite tack rule overrides the overtaking rule. We get into the racing rules in depth for our racing courses, so don't worry about them at this point.

TEST QUESTIONS—SECTION THREE

1. Describe positive stability.
2. What is leeway angle?
3. What is a balanced rudder?
4. Why is excessive weather helm detrimental?
5. How do you reduce weather helm?
6. How do you steer without a rudder?
7. Define Center of Effort.
8. Define Center of Lateral Resistance.
9. Describe hull speed.
10. Describe planing.
11. Describe surfing.
12. In the following situations, determine which boat has the right of way:

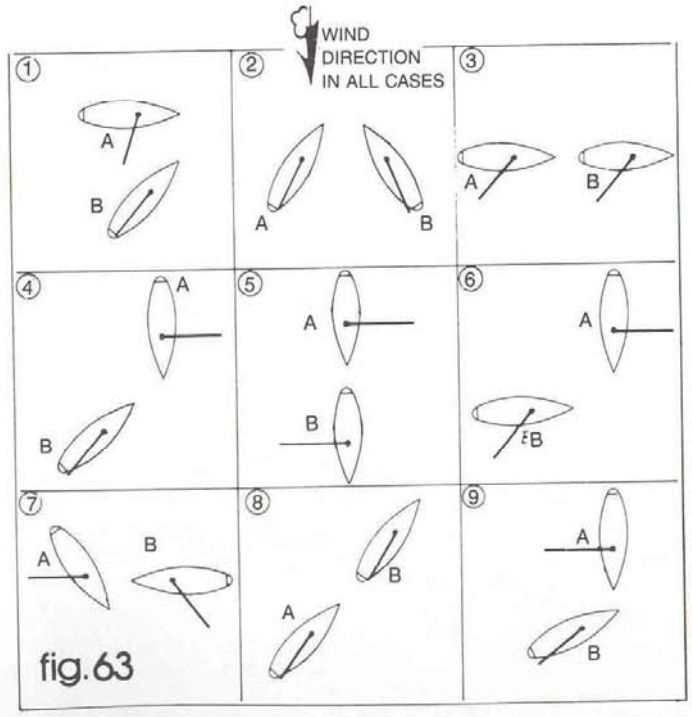
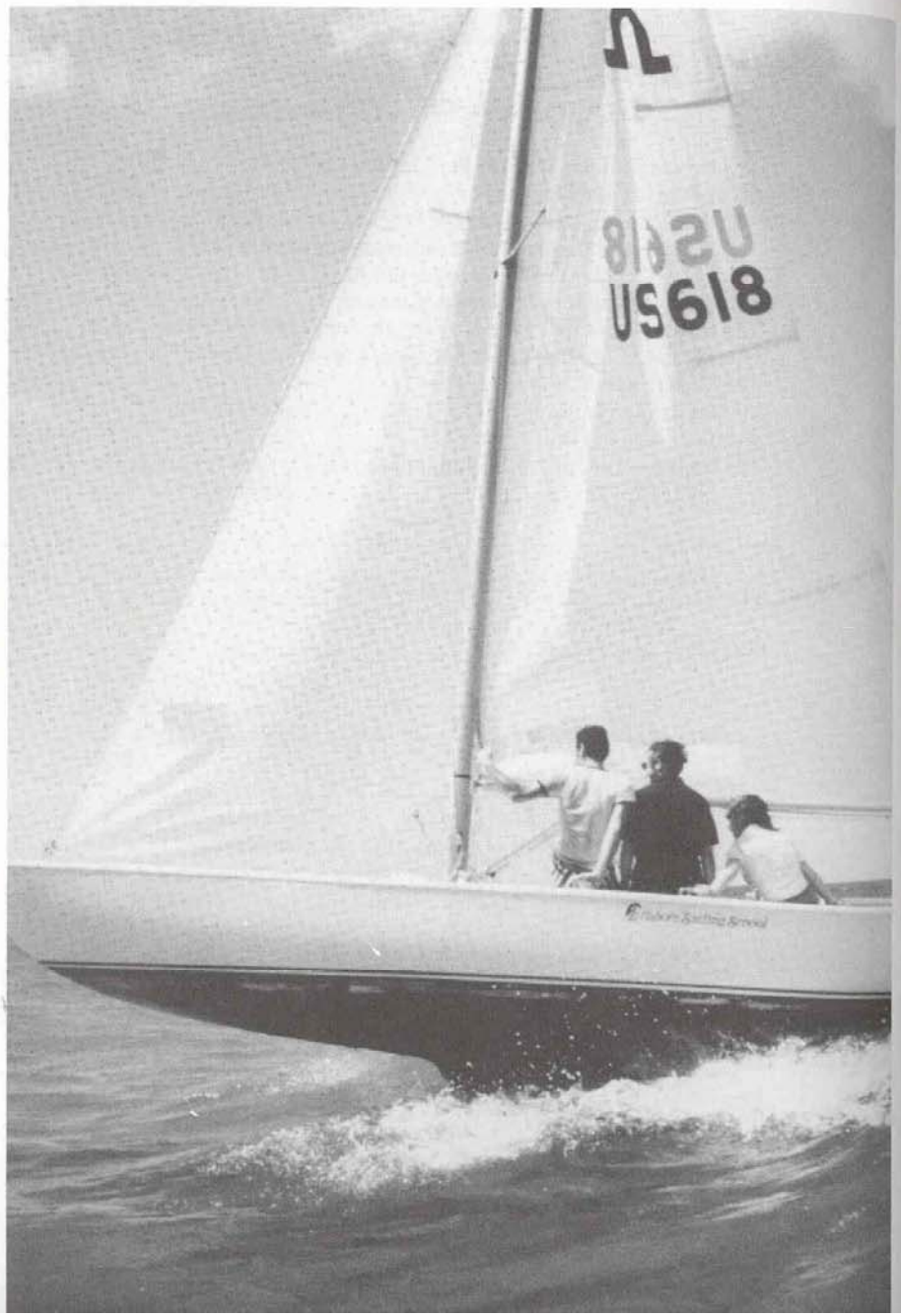


fig.63



HEAVY WEATHER

Though we advise beginners to sail only on pleasant days, after you have gained some confidence in your abilities try sailing on progressively windier days.

I know an owner of a cruising boat who races. Every spring he picks the windiest day he can find to go out and practice. The result is that he gains complete confidence in his boat, equipment and crew. If you can handle so much wind, any less windy day is a breeze (pardon the pun).

Until you either sail in a great deal of wind or get caught out in a passing squall you won't have confidence in your ability to handle the boat in a heavy wind situation. The best way to put your mind at rest is to imagine the worst that can happen—capsizing, man overboard or loss of the mast. None of these three is so frightening if you know what to do. If you are sailing a centerboarder, practice capsizing and righting the boat. After capsizing, swim the bow of the boat around into the wind so the wind can get under the sails and separate them from the water as the boat comes up. Then stand on the centerboard to apply righting leverage to the boat, scramble in when it's upright and bail it out or sail it dry if it has venturi bailers or transom flaps. See Appendix VII for a more complete description.

Practice crew overboard by tossing out a cushion and seeing how fast you can retrieve it, making sure to bring the boat to a complete stop.

You can't practice loss of the mast, but you can be prepared for that eventuality. An anchor with plenty of line, a paddle and a first-aid kit would help put your mind at ease. On a larger boat, wire cutters would be a good idea for cutting away a mast that might be damaging the hull.

Once you are confident that there is nothing that could happen to you or the boat that you can't handle, then all the rest is just sound and fury. It's natural to be a bit apprehensive or frightened

of heavy winds at first, but soon you'll find that you actually enjoy the heavy stuff—an exciting part of sailing!

When you get caught in your first squall remember that the most important thing to do is shorten sail. You may see the squall approaching and get some sail down before it hits if it looks bad enough, though it's hard to judge without a great deal of experience just how bad a squall will be. Sometimes a nasty looking sky turns out to be only dark clouds and rain, but no more wind. However, when a bad squall hits, the wind can go from 10 mph to 40 or 50 mph in seconds. If you hadn't reduced sail previously, you should have at least prepared for the possibility of having to. Halyards should be neatly coiled and ready to run. Crew members should be briefed as to what their responsibilities will be if the squall is a bad one so not a second is lost in giving orders. This has a secondary advantage of decreasing the chance of panic. When the first blast hits and the boat is laid over on its side, the brain processes of even some experienced crew members tend to become stupefied. If they know what they are expected to do beforehand, they don't have to think.

On a small boat, the mainsail usually has greater sail area than the jib and should be the first sail to lower. If it isn't lowered, as the wind increases the skipper should release the mainsheet to reduce heeling. The boat, due to the weight of the wind and sea, will probably be on more of a close reach than closehauled. At some point, even with the main and jib luffing completely, the wind force will be sufficient to lay the boat over on its side. The boom and mainsail will hit the water to leeward which, due to the boat's forward motion, will force the sail in towards the center of the boat just at a time when you want to let it out. The drag on the end of the boom pivots the boat to leeward just when you want to head up into the wind. The mainsail fills and over you go if it's a capsizable boat. So lower the mainsail first! The boat should sail well under jib alone.

If it's still blowing too hard, lower all sails and run before the wind "under bare poles" (no sail), unless there's a chance of running aground.

Your best friend in bad conditions may very well be your anchor. If the visibility is down to a few feet, you're not sure of your position and you're afraid you may be blown ashore, get your anchor over the side. You may not have enough line to reach bottom, but you can be fairly sure that the anchor will hook before you get into water shallow enough for your boat to go aground, or be swamped by breakers.

On a cruising boat, the genoa often has much more sail area than the main. If you're caught with the genoa up in a squall, that's the sail you should lower or quickly roll up. The cruising boat has better stability than the small centerboarder, so there is no need to worry about dipping the main boom. The boat should sail well under main alone until you can put on a storm jib, and the main can usually be reefed if necessary.

The most common method of reefing the mainsail is called "jiffy reefing". It's done in a number of simple steps: 1. Ease the mainsheet and vang 2. Lower the main halyard and hook the luff reef cringle (a hole a short way up the luff) on the hook at the gooseneck 3. Winch the main halyard up very tight *before* anything else is done 4. Tighten the line that runs through the leech reef cringle (a hole a short way up the leech) very tight so the foot of the sail is stretched tight 5. Trim the mainsheet and vang and 6. Tie up the excess sail along the boom.

Where "shaking out a reef", be sure to do each of the above steps in reverse order. If you ease the leech reefing line before you untie the excess sail, for instance, you take the risk of ripping the sail at the reef points where it's tied along the boom.