

back before the main comes across. The trim of the staysail has to be varied slightly depending upon the downwind course desired. A jib can be used instead of a staysail.

A steering emergency occurred one year during a flotilla charter of our Offshore Sailing School graduates in Greece. The cruise was being led by our then Operations Director, Rob Eberle. He noticed that one of the boats appeared to be in trouble and was sailing toward shallow water off a point of land. He immediately raised her on the radio and asked the problem. The girl who responded was a fairly recent grad and she said they had lost their steering. Rob asked if she remembered from the "Learn to Sail" course how to tack a boat without using the rudder. She said, "Yes, luff the jib and trim the main," to which Rob replied, "Do it! Now!" He was delighted to see the boat tack and sail away from the shallow water. The point is, since it is possible to steer with the sails it is not a disaster to lose your steering. Every skipper should practice sailing without touching the steering wheel or tiller so that should a failure occur, he or she will know just how the boat handles when steered by the sails alone and would be able to guide her into safe water or to port. Unless you practice, it's easy to panic and end up in trouble. Most important about steering failure is don't panic. Boats have sailed thousands of miles without rudders, so figure you can too.

RIGHT OF WAY

The first defense against collisions is proper vigilance. There are blind spots on sailboats to leeward behind the sails so the skipper must assign a crew as a lookout in areas where he or she can't see. The second defense is knowledge of the right of way rules—second because such knowledge is of no help if you hit a boat you failed to see.

It's very easy to be lulled into complacency on the water. Everything is so peaceful and quiet. But if you are sailing at six knots and another boat way off, two miles away, hardly more than a speck, is approaching you at six knots, in ten minutes you both could collide. So every few minutes, sweep the horizon for other boats.

As for the rules, let's start with power. A cruising sailboat under power is classified as a motorboat and is liable to the motorboat "rules of the road" as the right of way rules are called. Even

if you have your sails up and are "motor-sailing" as long as the engine is in gear the motorboat rules apply.

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 (figure 61). 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 they won't be misled in the other's attempt to keep clear.

The other most common motorboat rule to remember is that if two vessels are approaching almost head-on, each will avoid the other by turning to starboard. It's most important to make your

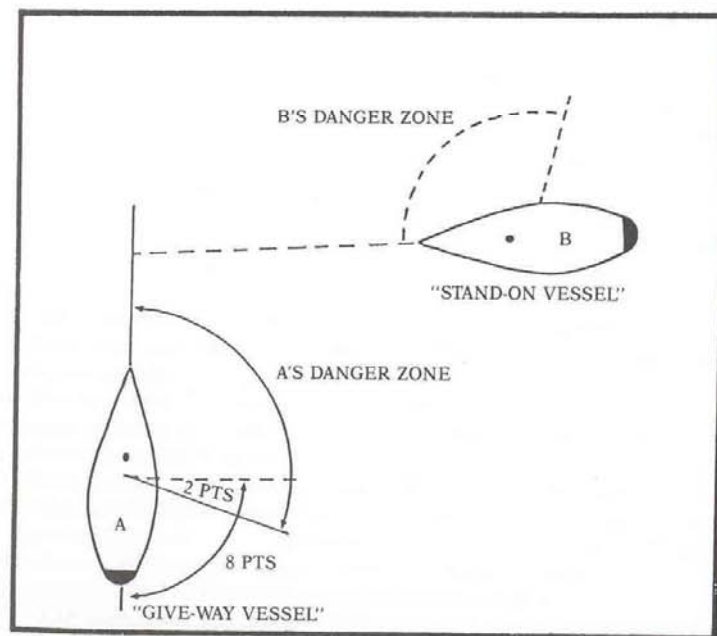


FIGURE 61
BOAT B IS IN A'S DANGER ZONE (FROM DEAD AHEAD TO TWO POINTS ABAFT THE STARBOARD BEAM) AND THEREFORE HAS RIGHT OF WAY.

intentions very clear to the other skipper. A sharp turn to starboard followed by a gradual turn back to your original course will indicate to him that you plan to pass port to port (your port side passing his port side.) Motorboats use horn signals for passing and, legally, sailboats under power should too. As a practical matter, though, the horn is usually buried in a bucket or tool kit somewhere and not handy. Therefore, make sure your turns clearly indicate your course intentions. One other common motorboat rule is the overtaking rule. A boat catching up to another from any point aft of the danger zone is overtaking and must keep clear of the overtaken boat.

The rule covering sail versus power is quite simple. Almost every sailor knows that a sailboat has right-of-way over a motorboat. However, not many seem to know that there are a number of exceptions to this rule. If the motorboat is anchored, is disabled, or is being overtaken by a sailboat, the motorboat is the privileged vessel. A commercial vessel with limited maneuverability in a narrow channel and a commercial fishing boat trawling also have right-of-way over a sailboat.

A slightly more complicated set of rules governs two sailboats meeting one another. There are three basic possibilities covered by three rules: (1) if sailboats are converging on the same tack, the leeward boat has right-of-way; (2) if they are converging on opposite tacks, the starboard tack boat has right-of-way; and (3) as in motorboats, the overtaken boat (the boat ahead) has right-of-way over the overtaking boat.

So how do we know if we're on a collision course? Take a bearing on the other boat either by using your compass or by lining it up with a shroud, stanchion, or other fixed item on your boat. If, a little while later, the bearing hasn't changed and you haven't altered your course or speed, then you are on a collision course. That the boats are traveling at different speeds makes no difference. Boat A in figure 62 is obviously sailing faster than Boat B but the compass bearing of 070 degrees hasn't changed, so they are destined to collide. If A takes a second bearing and it's 080 degrees and then 090 degrees, A will cross ahead of B. If the numbers decrease, then B will cross A.

Another way of judging whether you are on a collision course is to sight land in the distance behind the other boat. If land is disappearing behind the bow of the boat, she will cross you. If land is appearing in front of the bow (as if she was going backwards against the backdrop of the land), you will cross her. If the land remains stationary, watch out! You are on a collision course.

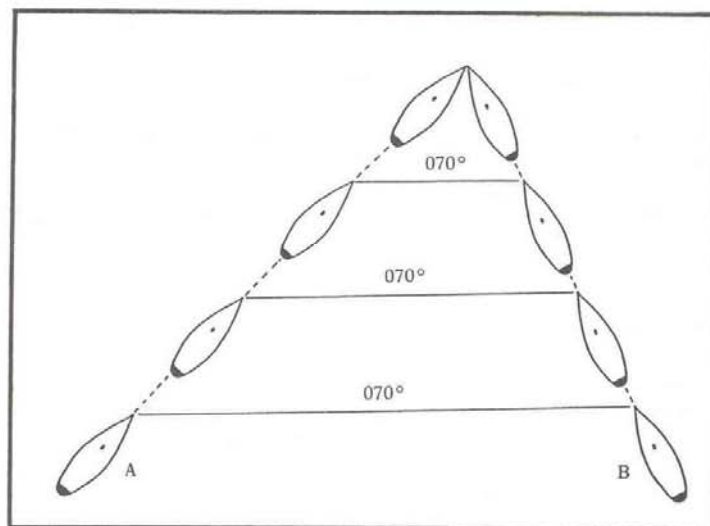


FIGURE 62

COLLISION COURSE WHEN THE BEARING DOESN'T CHANGE—SPEED MAKES NO DIFFERENCE.

NIGHT SAILING

Almost all charter companies insist that there be no sailing at night aboard their boats. Their insurance does not cover it. However, on the assumption that persons taking our courses may sail at night in their own or friend's boats, we will briefly review it here.

For those used to city and suburban electrical illumination at night, the thought of sailing at night at sea is that of sailing in pitch black darkness. Such is not the case. Even with total cloud cover, visibility is rather good and on some moonlit nights one can see perfectly for miles, much like being in daylight wearing dark sunglasses.

In certain parts of the country, Long Island Sound, for instance, there are so many navigation lights that it's virtually impossible to get lost at night. Just be sure to follow the charts carefully and steer an accurate compass course. Count the number of seconds between flashes of the light you've spotted. Let's say you've seen a light flash. Count "One thousand and one, one