LIFE SAVING AND FIRE FIGHTING EQUIPMENT AND METHODS

Good seamanship skills are essential for staying safe on the water. Navigational skills will help get you from here to there safely and efficiently. Learn too how to be prepared for difficult conditions and what to do if an emergency strikes.

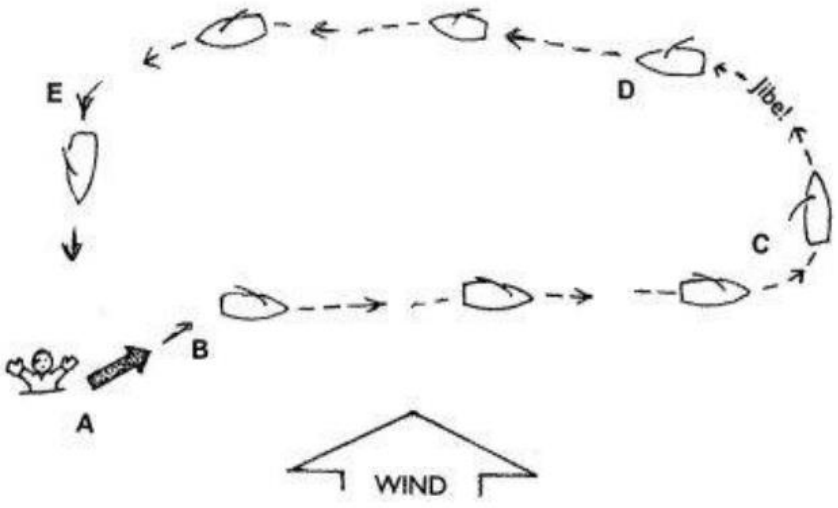
How to Rescue a Man Overboard in a Sailboat

A man overboard (MOB), also called crew overboard (COB) or person overboard (POB), is a very serious boating emergency. Most boating deaths result from falling overboard. Sailors should know how to quickly return under sail to a person overboard in the water and stop the sailboat beside the person for recovery. Here are step-by-step descriptions of the best methods for sailors to do a man-overboard maneuver.

Seamanship - Preparing for a Sailing Crisis

Sailing can rapidly become a crisis if something unexpected goes wrong - and it often does. Good seamanship calls for having the right equipment on board in case of a problem or emergency, as well as the knowledge of what to do. A good skipper stays prepared by thinking about "What if" scenarios and knowing what to do. Here are some common things that can go wrong and steps to take to be prepared.

Principles for Man Overboard Rescue



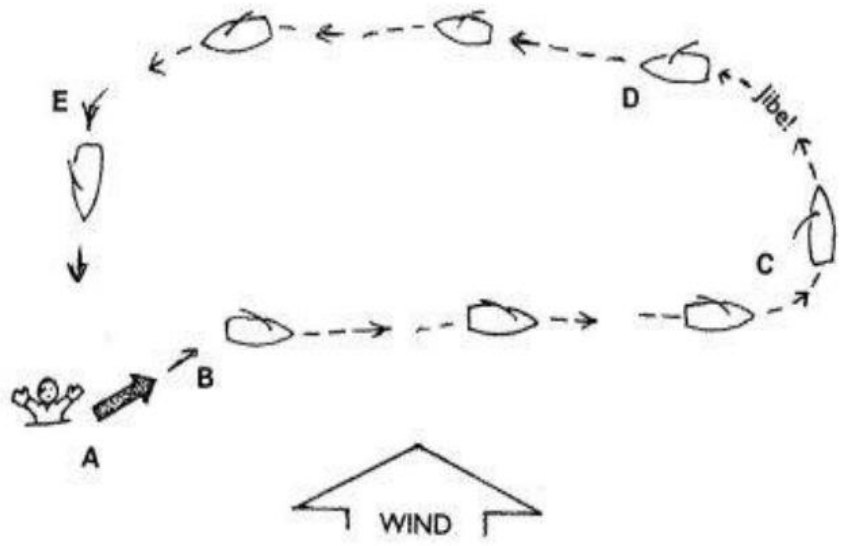
A man overboard (MOB), also called crew overboard (COB) or person overboard (POB), is a very serious boating emergency. Most boating deaths occur after falling overboard. Since you can't trust your engine to start immediately, and since most MOBs don't occur in flat water in calm conditions, you must know how to efficiently turn the boat around and return to and stop beside the person under sail.

First, remember these general principles for any MOB:

1. Immediately throw floating objects in the water near the person, including life rings, boat cushions - anything that will float, and the more the better. The person can hold onto these things to help stay afloat until you return - important even if the MOB is wearing a lifejacket. Things in the water also make it easier to locate the area of the MOB, which can be critical in high waves or at night.
2. Get all crew on deck to help. Assign one person to keep watching and pointing at the MOB at all times while the rest of you handle the boat.
3. Press the MOB button on your GPS unit or chartplotter, if you have one. You might think you can easily return to and find the person in the water, but it can be easy to lose track in poor conditions, and knowing the person's GPS position may be necessary.
4. Start the boat's engine, if you have one, to assist with or manage your return to the victim. Loosen the sheets as needed so that you're not fighting the sails when you turn. Remember to be in neutral or turn the engine off when you near the victim.

Next we'll look at the steps for maneuvering the boat under sail to return to and stop beside a man overboard.

The "Beam Reach-Gybe" Method



Art modified from International Marine

This diagram shows a simple method for turning the boat back to the MOB and stopping. Different MOB maneuvers have been developed for different kinds of boats and different conditions (we'll see others in the next pages), but if you want to remember just one that can be used by all boats and in all conditions, this is a good one that is easy to practice and remember. Here are the key steps:

1. While throwing floating things overboard (point A on illustration) and gathering other crew to help, the helms-person immediately turns the boat onto a beam reach (B). If needed, sails can be quickly trimmed to keep forward momentum and steering. Note the compass heading.
2. When crew are ready, gybe the boat (C) and head back on the other beam reach. You will be on a reciprocal course (D) after this 180-degree turn and can use your compass to confirm you are on course.
3. Because it typically takes two to three boat-lengths to gybe, you will be about that distance downwind when you reach the person in the water. Depending on the boat and conditions, it may also take two to three boat-lengths for the boat to come to a stop when you turn into the wind (E) to reach the MOB. Ideally you stop just beside the person. If there is any risk of stalling before reaching the MOB, angle your reciprocal course (D) to approach closer before turning into the wind.

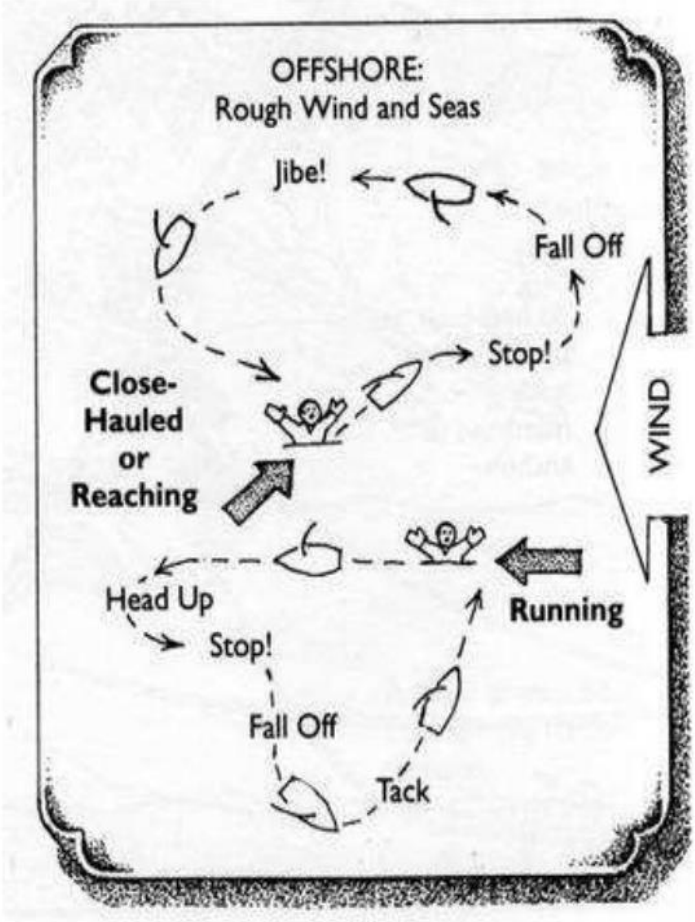
Advantages of the beam reach-gybe maneuver include:

- Starting on a beam reach means you can always return on a reciprocal course to where you started.
- If you lose sight of the MOB, sailing the same length of time on both beam reaches will put you in about the same place.
- When you return to a spot just downwind of the MOB, it is more likely you will see the person or things you threw overboard as they drift downwind toward your position.

- There is less risk of running over or past the MOB when your final approach is into the wind rather than on another point of sail.

Nonetheless, other MOB sailing maneuvers are useful in some situations. The next two pages show other effective methods.

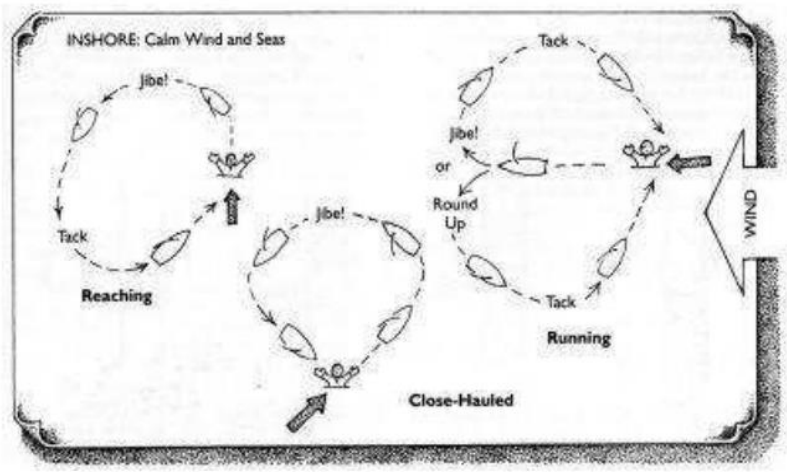
Offshore MOB Quick-Stop Maneuvers



When sailing offshore in a larger boat, especially in conditions where it is more difficult to keep an eye on the person in the water, you might use one of the two quick-stop methods shown here. Both involve very quickly turning into the wind, as soon as possible after the MOB is recognized, so that the boat stays close nearby. Because the boat will stall when headed up into the wind to stop it, you will then need to fall off the wind again in a controlled manner to gain way and turn back to the person.

Although these two methods may at first seem more complicated or more difficult to remember, both actually use one very similar principle: turn right away into the wind to stop, and then fall off again and turn in the most natural manner to return to the person.

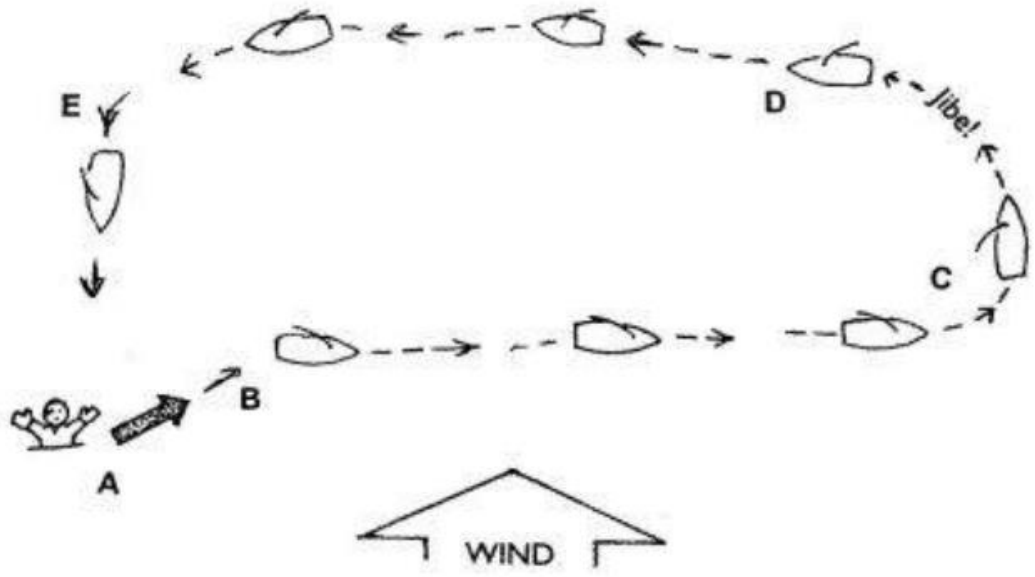
Inshore MOB Maneuvers



Inshore, especially in calm water and lighter wind, when it is easier to keep the person in sight and to turn the boat quickly, you can simply turn back to the MOB in a tight circle. Just remember to turn in a way that brings the boat in its final approach into the wind.

Examine the left and center illustrations, for example, where the boat is reaching or close-hauled on a starboard tack. In either of these, if the helms-person turned the wrong way, turning right and then tacking instead of turning to port and gybing, then the circle would be completed upwind of the MOB instead of downwind. In that case it could be difficult to stop the boat beside the person in the water, as it is very difficult to stop a boat that is moving downwind.

Figure-8 Variation on Beam Reach-Gybe Maneuver



Art modified from International Marine

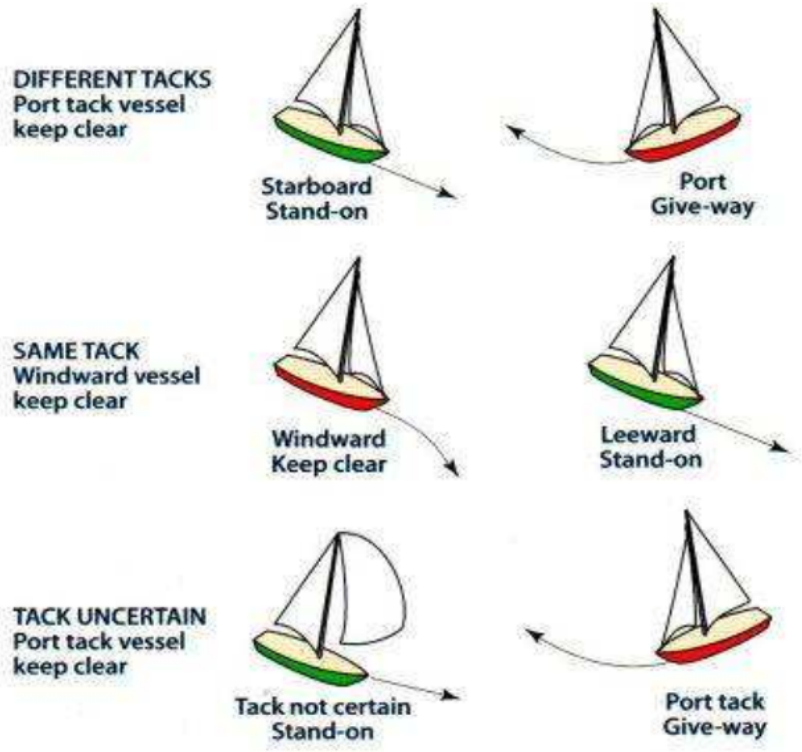
Shown here again is the "beam reach-gybe' method described earlier. Again, this is one method you can almost always use, regardless of conditions and boat size - if you want to remember and practice only one technique. It has a major disadvantage for large sailboats, however, which can be dangerous or tediously slow to gybe in a strong wind.

The figure-8 technique lacks some of the advantages of the beam reach-gybe method, but it avoids having to gybe in a larger boat. You begin the same way, heading onto a beam reach to start. Instead of gybing, you then tack and head back to the MOB. The issue now is that if you sail a reciprocal beam reach back, you will be upwind of the person on your return. So instead, while coming back, you fall off downwind somewhat so that your return track crosses your outbound track (in a figure-8), putting you downwind of the MOB in the same manner as with the beam-reach gybe method. You can then angle up close-hauled to the MOB and loosen sheets to stop the boat, or go below the MOB and head straight into the wind to stall.

Regardless of which MOB maneuver you choose for your own boat, it's critical to practice it until you can do it smoothly and efficiently, almost without thinking. This is a good way to improve your sailing skills while having fun with your crew. Choose an unexpected moment and toss a life ring or fender overboard while yelling "Man overboard!" Practice until you can return and stop the boat where you can reach the object with a boat hook. If it's hard to be that exact at first, you'll see why it's so important to practice until you can do it well in case of a real emergency.

And don't forget that after you stop the boat, you still need to get the person out of the water and back on the boat - often no easy feat. Consider a LifeSling for the best solution for both rescue and recovery.

Rules When Sailboats Meet



Collisions occur between boats more often than you might think, usually because one or both captains did not know or were not applying the Rules of the Road. The rules come from the International Regulations for Preventing Collisions at Sea (COLREGS), with which the U.S. regulations are consistent. Following are the basic rules that apply to all sailboats in U.S. waters.

Whenever two boats come close to each other, the rules designate one as the **stand-on** vessel and the other as the **give-way** vessel. The rules are designed to prevent a situation like two people walking toward each other on a sidewalk who both step out each other's way in the same direction and thus run into each other. The **stand-on vessel** must continue on its course and the **give-way vessel must** turn away to avoid collision. Therefore both captains must understand the Rules of the Road and know whether, in any given situation, their boat is to stand on or give way.

Sailboat vs. Sailboat

The Rules are simple when two boats meet under sail (engines not running), as shown in the illustration above:

- *If the boats are on different tacks* (sails on different sides of the boat), then the **sailboat on the starboard tack** (wind coming from the starboard side, with sails thus out to the port, or left, side) is the **stand-on vessel** and the **boat on the port tack** must **give way.**

The port-tack boat must also give way to a sailboat whose tack is uncertain (such as when sailing downwind using a spinnaker).

- *If the boats are on the same tack*, the **leeward (downwind) boat** is the **stand-on vessel**, and the **windward boat** must **give way**.

In sailboat races there are additional rules about the start line, rounding marks, and so on, but the basic rules above apply when boats meet in open water.

Sailboat vs. Powerboat

Remember that a sailboat running an engine, even if sails are up, is legally categorized as a powerboat. In a congested area it is best not to run the engine with sails still up, because captains of other boats may not be aware of your engine running and may assume you are operating under sailing rules.

The Rules are simple when a sailboat and a small recreational powerboat meet:

- *In most situations* the sailing boat is the **stand-on vessel** and the powerboat must **give way**.
- *If the sailboat is overtaking a powerboat*, the powerboat is the **stand-on vessel** and the sailboat must **give way**.
- Any boat with more maneuverability must **give way** to any boat with less maneuverability (see below).

Maneuverability Is Key!

Sailboats under sail generally have right of way over most *recreational* powerboats, because sailboats are assumed to have more restricted maneuverability than powerboats (for example, a sailboat cannot turn and sail straight into the wind to avoid a collision). But by the same principle, sailboats must give way to any boat with less maneuverability.

Rules of the Road