

## **Skipper & Crew Guide to Man/Crew Overboard (MOB)**

This manual is for those who own a vessel and plan to take crew sailing or boating. The term 'man overboard' is the same as crew overboard and not intended to discriminate, but most GPS equipment still uses MOB as a convention, so we will use MOB for these guidelines.

**A man overboard is always a life-threatening emergency.** As a skipper of a vessel taking on crew, you have an important responsibility to:

1. PREVENT a MOB situation from occurring,
2. EQUIP and HARDEN your boat with appropriate safety gear to enable rescue,
3. ORIENT your crew to your boat's safety features, and,
4. MANAGE successful rescue in a MOB situation, should one occur.

It is recommended that you as a skipper hold drills to help prepare you and your crew for MOB. This Guide is intended to assist in orienting you to safety procedures and equipment in conformance with current best practices to prevent and manage MOB.

**EXTREMELY NOTEWORTHY, the USCG has documented that most MOB situations occur in inland lakes and rivers on calm, clear days.** Therefore, vigilance to safety should not be reserved for the "dark and stormy night". It can happen and most often does happen suddenly, when you least expect it, in ideal boating conditions.

A man overboard is always a life-threatening emergency because so much can happen when the victim falls overboard. Both Crew and MOB may be subject to a life-threatening situation during a rescue attempt.

CREW may be frightened and will need immediate information and resources to handle the MOB event. Training and practice is essential for all aboard since the Skipper could also be the victim of a man overboard.

THE VICTIM is likely to become disoriented as they fall off the boat causing a cascade of issues that makes recovery difficult. Disorientation can also cause panic and, even for good swimmers, may cause a person to take in water or easily get out of breath. Falling from a boat can cause an impact injury such as dislocation of a limb, concussion, bleeding, or any number of injuries or trauma

that prevents the victim from being able to help themselves or remain clear-headed. With enough trauma or panic, a person can easily suffer shock or cardiac/respiratory arrest in minutes. Within a short amount of time the victim could also become hypothermic or drown.

Losing sight of the victim even for a few seconds, can make finding the victim again nearly impossible, even in calm water. Inland waterways include additional hazards such as encountering floating or submerged objects, currents, or other vehicles (vessels). An additional hazard is the victim being run over by vessels that are unaware of the MOB's presence in the water. While preventing a MOB in the first place is a priority, Skippers must prepare their crew for appropriate and quick action to prevent a deadly outcome. The MOB process is provided in this document and should be repeated in your MOB training drills.

## **PREVENTION**

While it's true that each person must take responsibility for their own safety, they are on your boat. While you may be familiar with your boat's nuances and unique characteristics, your crew may not be. Your crew's unfamiliarity could lead to YOUR demise, should YOU be the victim of a MOB, so it is in everyone's best interest for you as skipper to be open with your crew about any unique attributes/fallibilities and conduct a proper orientation to your vessel. The following steps are important to consider.

1. Make sure your **boat is maintained in good condition**. While this seems basic, boats require constant repair but inspecting for and addressing loose or rusted lifelines, shrouds, frayed running rigging, worn out safety gear, or safety hazards that could lead to an MOB, should take priority.
2. Having the **USCG required Life Saving gear accessible** (i.e., throwable flotation as well as PFD's) on board is essential, as well as any equipment needed to adapt your boat's unique features to an emergency. If you plan to lift an adult from the water over a life rail using a single or double purchase dinghy lift, you should try it first to see if success is possible. 'Sugar Scoop' transoms may be more suited to different lifting equipment than "double enders" or high freeboard designs, so each boat must be evaluated to determine how a victim can effectively be recovered and lifted over life rails and onto the boat deck if necessary. Location of safety equipment should also be easily accessible and workable and marked

for use. The LifeSling has proven to be an effective device for retrieving and lifting a victim from the water and is especially well-adapted for use on sailboats.

3. Boat layout is an important factor in anticipating and orienting your crew to hazards. Consider how your boat's stability and center of gravity is affected by crew members moving forward or aft. Most MOB situations occur on small boats due to tipping (instability) and tripping hazards aboard. Are your shrouds placed inboard or outboard of the walkways? *Where* are the hand holds as one moves fore or aft? Are your sheets strung over walkways, etc.
4. What accommodations must be made for the placement of your life raft, dinghy or other equipment. Are there extrusions or equipment that can snag a jib sheet or line that must then be freed during a tack or gybe?
5. Does your Isinglass itself or bimini hardware prevent access to your throw rings, emergency devices or to a potential boarding point for the victim? There are so many potential areas that can throw one off-balance, snag a line (and subsequently require someone to endanger themselves to free it) or otherwise present a hazard to you or your crew. Honestly consider and mitigate the risk by eliminating the problem(s) or orienting your crew to their potential hazards.

**Crew Preparation** is one of the most effective means of MOB prevention. At the very least, all new members of your crew should have a proper orientation to your boat including;

1. Operation and location to your vessel's essential equipment.
2. Knowing how to start and stop the engine, work the helm (engine throttles and gears). For skippers skeptical of orienting crew to operating "their baby", remember it could be YOU whom the crew must save. Give them the tools to do that through proper orientation of your boat's operations.
3. Basic navigation equipment including MOB button on GPS, location of and orientation to the compass. *These devices may be key to location and recovery of the victim.*
4. How to operate the VHF radio including making a Mayday, Pan-Pan, or Securite call and the difference between each type.
5. Number and type of PFD's for crew aboard as well as throwable items. Wearing of PFD's should be mandatory for all crew. It is too late to put one on after you've fallen into the water.

6. If you will use a block & tackle purchase system for lifting an MOB out of the water, consider labeling it (the fall is the top) and placing it within easy reach and accessible so there is no confusion or delay when it is needed.
7. Depending on the length and type of trip you are planning, consider whether you should outfit each life vest with a whistle, mirror, reflector tape, flashlight, or strobe.

**Other factors in Crew Orientation.** Expected sea and weather conditions should be a factor in considering the number of crew needed for safety. In rough conditions, having only one crew aboard may not be sufficient should a MOB occur. You may need to orient and prepare a short-handed crew more thoroughly as their need to multitask during an MOB event will complicate an already tense and difficult process.

Inexperienced crew should also be oriented in advance to make sure they understand how to use unfamiliar equipment and that their clothing, footwear, and physical condition is appropriate for the trip (non-slipping and well-fitting clothing, well hydrated, confident). The crew is only as strong as its weakest link and reducing controllable risk is an important act of prevention.

### **The Man Overboard Process**

Since response time is of the essence in recovering someone from the water, the Crew Orientation should include an overview of the MOB process. Multiple simultaneous actions are needed by the crew to speed along the MOB process, so your crew needs to know **WHAT THESE STEPS ARE USING THE EQUIPMENT YOU HAVE ON YOUR BOAT**. The more you and your crew practice MOB, the better your success should it unfortunately occur. The process below demonstrates best practices and should yield favorable results.

1. Crew—As soon as someone falls overboard (MOB), the person seeing the MOB should immediately yell “Man Overboard” to alert crew & captain. That person should continually keep sight of and point to the MOB and, at regular intervals, shout out the location of the MOB using the ‘clock orientation’ to the boat’s bow (i.e., 6 o’clock, 75 yards).
2. Crew—Upon hearing “Man Overboard”, crew should throw out a flotation device (safety ring, cushion) to give the victim an additional float and leave

a more visible trail to return to the victim. Additional flotation should be thrown at intervals to leave a trail to the victim if time continues to elapse before returning to the victim.

3. Captain—The helmsman should activate the MOB button on the GPS or mark location and time of the MOB. This will assist in establishing a search point, should that be needed. *A lost victim's position may be established by calculating drift and time from the MOB point.*
4. Captain—The skipper/captain should immediately *begin to perform* a 'Quick Stop' maneuver. The purpose of the Quick-Stop is to immediately stop the boat's forward progress by turning the boat into the wind, trimming the mainsail and jib to close-hauled. While sailing schools teach the Quick Stop Method as a means of sailing to the MOB, BEST PRACTICES SHOW THAT IF YOUR BOAT HAS AN ENGINE, THAT IT IS QUICKEST AND SAFEST TO RETURN TO THE VICTIM UNDER POWER. By heading into the wind and getting the engine started, the sails can be taken down and your focus can be on returning to the victim without worry about the sails or boom hitting the crew or otherwise compromising the recovery.
5. Captain & Crew--Once you are under power, keep the gear in neutral until the victim is determined to be free of the prop. While still into the wind, take the sails down & secure (you can flake later), turn to head back to the victim, and have the crew begin to prepare the lift equipment. This may include; freeing the main halyard for use with the LifeSling or lifting device, attaching the block & tackle to the halyard and running it through a jib car to a winch, getting out a throw line and a line to secure the MOB to the boat.
6. Crew-- One person always continues their job of keeping a watchful eye on the MOB so their position is not lost.
7. Captain—If the MOB remains in sight, it is wise to report a Pan Pan on Channel 16 stating that a MOB recovery is underway and that no assistance is needed. This also notifies nearby boats of the presence of the victim in

the water. Once the victim is recovered, a Pan Pan “ALL CLEAR” should be made to update the Coast Guard and other boats in the area that may still be on alert. Should the victim be lost or if assistance is needed, a Mayday should be called on CH 16. During a Mayday, the captain can also assign the radio to a crew member to give updates and maintain radio contact.

8. Captain—The helmsman’s immediate role is to return the boat to the victim as quickly as possible and safely approach them SO THAT THE VICTIM CAN BE ATTACHED TO THE BOAT. Generally, a victim is approached from windward in light conditions to give a calm, wave-free, area for recovery, and from leeward to avoid the boat drifting into and hitting the victim in heavy weather.
  
9. Captain— When the victim is approached, the engine should be in neutral and the boat should remain a safe 8-10 ft. from them. THE INITIAL GOAL IS TO SECURE THE VICTIM TO THE BOAT and to ASSESS THE VICTIM TO SEE IF HE CAN HELP IN HIS RECOVERY. If the victim is conscious and uninjured, continue with the lift plan.
  
10. The LifeSling (or similar device) should be used only when closing in on the victim, circling them with the line until they can grab it. Never ‘tow’ a victim (you can drown them in as little as 4 knots of speed). *When the MOB has the LifeSling line and/or harness, have them get into the sling vest and PULL THEM TOWARD THE BOAT.*
  
11. Crew – The crew should SECURE THE VICTIM TO BOAT. The method used should ensure the victim’s head and shoulders are able to be maintained above the water.

THE CREW SHOULD NOT GO INTO THE WATER TO FETCH THE VICTIM. Only upon assessment that the victim is unable to secure himself to the line (to be pulled toward the boat) should a PLAN be approved to send a crew member to assist. This can be done only with the crew member wearing a PFD AND tethered to the boat AND with a means of lifting him back onto the boat. THIS PLAN MUST BE ESTABLISHED BEFORE ENTERING THE WATER. SHOULD THE

MANEUVER PLACE THE RESCUER IN ANY THREAT, the attempt should be discontinued, and A MAY DAY SHOULD BE CALLED TO REQUEST ASSISTANCE IN RECOVERING THE VICTIM. It is never a good idea to create a second victim by trying to rescue the first.

12. Captain & Crew—Once the onboarding procedure is completed, the victim's status should be reassessed. Notify the Coast Guard of the All Clear or need for Medical or Recovery Assistance.