



MOB *Practice on Your Own Boat* for Short Handed Sailors or Cruising Couples

Course Syllabus

Course Overview:

This course is designed to assist boat owners, especially cruising couples or shorthanded sailors, in practicing Man Overboard techniques on their own boats. Attendees will find that despite having studied the subject and attended Safety at Sea courses, they are not prepared for the actual emergency until they have practiced MOB recovery on their own boats. The course requires your boat, your crew, and commitment of much of a day.

Course Size and Needed Resources:

1. Two to four boats with double handed crews.
2. Ideally a variety of vessel size and rigging.
3. One to two on-shore CCA hosts/presenters/coaches.
4. Dock space for all participating boats
5. One coach boat, optimally with a second chase boat. Onboard the coach boat is a CCA coach and at least one observer/note taker
6. 1 recovery dummy - OSCAR
7. Lifesling gear on each boat.
8. Prerequisite handouts to be circulated prior
9. Provisions established for lunch/rest rooms, etc.

Prerequisites:

1. Read and understand the day's plan for the practice session.
2. Read and understand the Quick Stop. <https://sas.cruisingclub.org/node/254>
3. Recommend practicing the Quick Stop and Heave-To.
4. Watch CCA POYOB video by Chan Reis: <https://youtu.be/NHDG5GT-UIU>

5. Watch Storm Trysail Club video: https://www.youtube.com/watch?v=LjQtQmX_1VM
6. Read Chuck Hawley Safety Moments: <https://sas.cruisingclub.org/node/205>
7. Read Man Overboard Recovery For Shorthanded Crews by Dick York:
<https://cruisingclub.org/article/man-overboard-recovery-shorthanded-crews>



Course delivery:

Part 1: On-the-dock discussion and Overview - 1 hour

1. Introduction:

- a. **Goal:** During the day's sessions, each team will develop and demonstrate simple and practical MOB capture and onboarding technique(s) that work for them, their crew, and with the gear on their boat
 - This is not a training session to learn all of the techniques on any vessel with both small and large crew sizes. It is training for you, on your boat with your crew and gear, so it can be practiced and perfected.
- b. **Discuss housekeeping stuff**
 - Lunch plan
 - Facilities, meeting/discussion space, bathrooms, etc.
- c. **Review the Plan of the Day**
 - Focus is on actively performing the tasks.
 - Emphasize the importance of practicing on your own boat.
 - Emphasize "are you really ready and prepared for a MOB emergency?"
 - Mistakes are allowed and supported, as learning is enhanced

- The goal is to create familiarity and “muscle memory”, so as to ingrain MOB emergency procedures into participant capabilities.

2. Discussion of Basic Principles - *Important concepts, not action steps:*

- Don't fall off the boat** - What do you do/use to prevent crew from falling overboard? What are your on-board rules and SOPs? Dual 3' and 6' tethers allow crew to traverse the deck with a short tether and work with a long tether. Or centerline or chest high tethers. What works for your boat? Wear your crotch straps. Know PFD maintenance and alternate inflation methods. PFD should contain whistle, strobe, and personal AIS (PAB). **First 10 seconds** – A moment to breathe, think, plan...then act
- Bark - even if no one is there, it is muscle memory.**
- Get help coming** –VHF/DSC Red Button - if needed based on situation
- Minimize separation to MOB** - Go head to wind, Quick Stop or heave to when feasible. Your decision might be different in different sailing conditions: upwind or downwind, 5 knot wind speed or 25 knots?
- Maintain MOB location** – MOB button (**a must for shorthanded crews**), pointer if available, throw floating gear (cushions, MOM, etc) overboard. Know how to operate your equipment!
- Safe rescue is the goal, not speed.** Final minute is high risk. The hull is a serious threat. Bring the MOB to the boat, not the boat to the MOB. Avoid bow & stern.
- Use engine**, but practice also with sails. Be certain that there are no lines in the water.
- Review Quick Stop technique

3. Terminology and equipment – show and tell

- MOB terminology
 - Capture: the process of safely bringing the MOB to the boat
 - On-boarding: the process of hoisting the MOB aboard once capture is successfully completed
- LifeSling: components & technique discussion
 - Flotation collar, retrieving line
 - Appropriate knots: figure 8 on bight to boat, butterfly knot for loop
 - Halyard only technique
 - Hoisting tackle gear technique
 - Mid-line lift technique

- Suggested modifications
- Annual inspection



- c. Know how to use your electronic equipment
 - Plotter (**MOB button - critical**)
 - Bearing and range to initial MOB is critical (although MOB may drift). Goal remains to minimize separation.
 - Practicing with your equipment in an emergency is critical.
 - Know how long to push your MOB button to activate.
 - Red MAYDAY button if needed, based on situation.
 - Optional but important – not part of this course but excellent for locating a MOB and allows other boats to respond:
 - Personal AIS locator (PAB) – MOB1 AIS/DSC Personal locator
 - PLB – satellite Personal Locator Beacon
- d. Man overboard marker– visual assist in marking MOB location
 - i. MOM 8-S, dye marker, John Bouy/Dan Bouy combination, pole with battened flag.
- e. Vessel rigging setup - **critical**
 - varies greatly by boat and by crew capabilities
 - what works on one boat with a specific arrangement might not work on yours, which is why...

- ***Creating a customized plan in writing for your boat, and practicing on YOUR boat is imperative***

4. Variables that need to be considered:

- a. Number of crew members onboard.
- b. Type of vessel (sail, power, high freeboard, low freeboard).
- c. Type of rigging (leisure furl mainsail, hanked jib, large #1, yawl or ketch, etc.).
- d. Type of winches, electric or manual, number of speeds, winch jaws size, winch handle style, line leads and deck blocks, line size.
- e. Weather, sea state, water temperature.
- f. Visual issues: night, fog, etc.
- g. MOB medical status.
- h. Navigational hazards.

Part 2: On-the-water Capture training - 2 hours

Each boat has their normal crew and demonstrates MOB capture. (process from MOB event to bringing MOB alongside) at the dock. Overview of on-the-water evolution:

- a. Coach boat drops OSCAR close behind the practicing vessel.
 - b. Simulate MOB with one crew member going below and not participating at all unless in an emergency.
 - c. If time permits, switch MOB crew member and rerun evolutions.
 - d. Coach boat monitors the capture process and stays out of the way.
 - e. Chase boats available to assist if needed.
 - f. Time the capture process for each boat - not as a race but to document how long the MOB is in the water awaiting rescue
- A quick review of the Capture process is suggested (from MOB event to bringing MOB alongside) at the dock. The 10 steps align with US Sailing's phases of: Initial reaction (steps 1-4), and safely turn the boat around and return and Approach and rescue (Steps 5-10):
 1. **Throw:** Throw lots of floating objects, cushions, etc. Throw your MOB rescue gear now (MOM, John Bouy/Dan Bouy, Pole and Horseshoe), particularly if you are moving fast downwind, or for any other reason will be making distance from the MOB, Short-handed crews are often in this

category. If conditions will allow you to stop progress, keep eyes on MOB, and turn vessel around and back to MOB immediately, possibly wait to deploy your MOB rescue gear until first return to MOB

2. **Bark:** Shout “Man Overboard” as you throw the floating gear.
3. **Mark:** Hit MOB button and establish lookout (if available).
4. **Park:** Imperative to maneuver the boat to keep close to the MOB. Begin maneuvers with a Quick Stop as first choice if jibe can be managed safely; or if conditions or vessel characteristics necessitate, consider heaving-to, or going head-to-wind to bring headsail down before return. Take time to think and plan, and get the boat under control. If you are certain there are no lines in the water, use the engine to assist in maneuvering.
5. Return to MOB and throw LifeSling gear if you did not in step 1.
6. Circle MOB with LifeSling, and engage MOB.
7. Stop vessel.
8. Pull MOB toward vessel.
9. Secure MOB to vessel.
10. Onboard MOB.
11. Perform quick medical assessment



Part 3: On-the-dock Onboarding training - 1.5 hours.

1. Each participant on their vessel individually:
 - a. Assemble the simplest onboarding system that works for them and lift OSCAR onto their vessel.
 - b. Test onboarding process on port and starboard sides.
 - c. Articulate and demonstrate the onboarding technique that works for them.
 - d. Allow for mistakes and experimentation.
 - e. Coaches (and other participants) suggest options both in rigging and in additional equipment when appropriate.
 - f. All participants observe and take notes for later discussion and debrief.
2. Once the double handed crew or couple have completed their vessel, move on to the next vessel at the dock and repeat with its crew.

Note: Focus is on experimentation, trial and error, mistakes, etc. This is not a training session on how to perform all of the techniques. Revisit the goal: each crew/vessel combination to

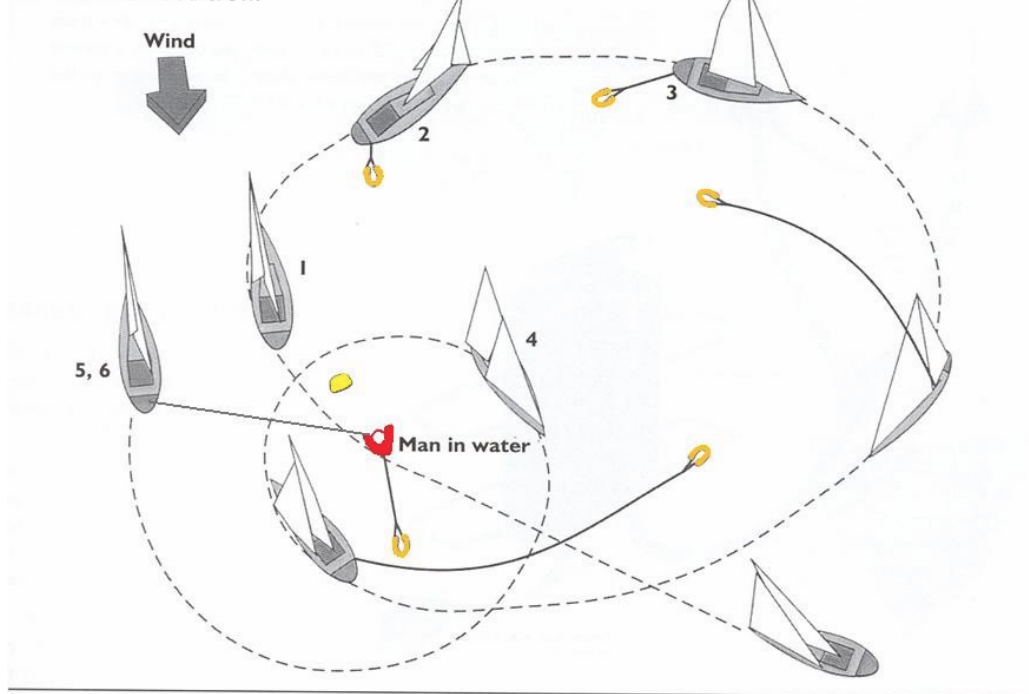
develop and demonstrate the best MOB onboarding technique that works best for them on their own boat.

Part 4: Debriefing session - 3/4 hour

1. Each boat presents their successes and issues with their
 - a. Onboarding technique
 - b. Capture evolution
2. Summarize key learnings
3. Each participant defines their starting level of confidence and now their post-practice level of confidence in MOB capture and onboarding.
4. Discuss creating an MOB checklist, specific to each boat/crew, for posting onboard

The “Quick Stop” along with the LifeSling, with slight modifications, is the recommended first recovery method to learn, as it keeps you closest to the victim and minimizes sail handling until the victim is connected to the boat using the LifeSling. The diagram provided by US Sailing.

Figure 2: Six steps to a man-overboard recovery for a shorthanded crew.



Lessons from 5/20/2022 practice session

Conditions: small chop, winds <10kts, clear skies

Galen and Susan Todd – J42 sloop, one starboard side spin halyard, LifeSling. Susan (5'6", 125lbs, >65yr) solo performed both the Onboarding and Capture evolutions.

Onboarding Learnings

- **spin halyard hoist works perfectly.** No need for hoisting tackle. Lines already rigged and in place. ST able to raise 200lbs+ with spinnaker winch at companionway. Large two-handed winch handle was extremely helpful.
- Mid-line Lift failed as it doubles the weight to be lifted onboard. Not feasible on our boat without great strength and/or electric winches.
- Block and tackle technique worked fine but not necessary plus complex and time consuming to rig.
- OSCAR did not work with LifeSling – shoulders too small, slips out of LifeSling, maybe DIY fix to resolve. It does demonstrate the weight and characteristics of a human body.

Capture learnings

- **MOB button is critical.** Sole rescuer, busy with boat and gear, quickly become disoriented and lost sight of MOB, even the MOB's general direction. Chart plotter MOB waypoint was needed to quickly locate MOB in water even on a calm day.
- Stopping boat, dousing sails and motoring to MOB is not complicated, since rigging setup to control the mainsail when dropped is present. Headsail is on a furler. On this boat the process can be managed in an orderly fashion by one person.
- Bringing **LifeSling to MOB in water by circling is not easy.** Using a pfd as MOB required 5x passes to get LifeSling close to MOB. More evaluation is needed here: wind? Current?
- Timing on when to deploy LifeSling needs more evaluation. Suggest this is not done immediately but after boat is under control.
- Need to totally stop the boat (no way on) prior to starting Recovery to assure not injuring MOB.

Learnings from 6/17/2022 practice session

Conditions: 2-3' swell, breaking waves, 15-18kts, overcast

Galen and Susan Todd – J42 sloop, one starboard side spin halyard, LifeSling. Susan (5'6", 125lbs, >65yr) solo performed Capture. Sails down prior, motoring only. Focus was to test Capture technique only.

Capture learnings

- As a follow-up from the previous training session, speed of the boat (2-3kts) improved the ability to capture the MOB with the LifeSling – needed only 2 circles
- The 10 step process for Capture worked well

Onboarding learnings:

- Exploring using 6-8mm spectra or dyneema line replacing 8-10' of yellow line from LifeSling harness to a spliced loop joining the yellow recovery line. This loop in the high tech line will then become the attachment point for lifting. The yellow tow line has limited load whereas the new dyneema line will easily handle the load of the MOB during lifting.

Ernie Godshalk and Ann Noble-Kiley – Sou'wester 42. Ann (5'8, >65) solo performed capture and onboarding. Boat had double reef, lazyjacks deployed and partially furled headsail.

Capture learnings

- Hit the MOB button on chart plotter immediately and deployed MOB pole with flag
- Solo getting the boat under control took time. Would be more difficult if lazyjacks had not been deployed as is our usual sailing status and with more sail
- Could not see MOB pole at all once the sails were down and boat under power
- Plotted MOB bearing and range were significantly off actual MOB location. Could not find MOB initially. Important to note current drift and set.
- Strobe would have been helpful.
- MOM 8 could have been deployed which has a strobe.
- Circling took 2 complete circles to capture MOB with LifeSling
- 14 minutes total

Onboarding learnings:

- Spinnaker halyard to butterfly knot on yellow LifeSling line was simple and worked perfectly
- Winch for spinnaker halyard is on mast. It was used by jib halyard but could be freed since jib was furled. With jib unfurled, winch conflicts would be a complication.
- A larger, two-handed locking winch handle really helped – being purchased asap.
- Tried Midline Lift but it was more difficult to winch due to 1:2 rigging disadvantage and poor fair lead issues from stern given deck layout and bimini.

Bill and Johanna Strassberg. Chuck Paine Custom 62', Bill and Johanna solo onboarding. Bill solo capture. Boat had double reef, in-boom furling and partially furled headsail.

Capture learnings (Bill only)

- At speed (8.4 kts) when MOB occurred
- Hit the MOB button on chart plotter immediately
- Head to windward and boat slowed immediately
- Furled main and jib with power assist
- Found MOB and made 2 circles
- Completed capture in 8+min

Onboarding learnings: (Bill and Johanna)

- Attempted setting up boom as hoist point using preventer lines – way to complex and ineffective
 - Rigged spin halyard to butterfly knot in LifeSling with halyard tail to deck winch. Johanna was able to slowly winch OSCAR on board
 - Simple and very effective
 - Larger two-handed winch handle greatly helped.
 - Have permanently deployed a spin halyard on a snatch block to save time making a fair lead to deck winch
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US Sailing – Dick York 8/1/2022

- This training aligns with current practice of bringing the MOB to the boat vs older protocol of bringing the boat to the MOB (history has shown this to be very dangerous to the MOB)
- 10 step MOB process is very good and in alignment with US Sailing protocols
- **Mark** and **Park** sequence can be boat specific due to plotter location
- Understanding your plotter's MOB button operation is critical
- Midline lift does offer better MOB protection during the Onboarding process and should be reviewed and practiced

Suggested equipment modifications:



OSCAR modification to prevent LifeSling from slipping over OSCAR's shoulders

- Picture on left shows OSCAR with stock 15.5" threaded rod for shoulders
- Modification replaces 15.5" rod with longer 19" threaded rod and hose grips cut down from a 24" rod
- Picture shows OSCAR with a 24" rod which is too long for OSCAR to fit into travel bag.
- McMaster-Carr #98804A035 24" 5/8-11 18-8 Stainless Steel threaded rod \$19 + shipping



The Cruising Club of America is a collection of passionate, seriously accomplished, ocean sailors making adventurous use of the seas. All members have extensive offshore boat handling, seamanship, and command experience honed over many years. Practice On Your Own Boat events, organized by The CCA's Safety&Seamanship Committee, are intended to advance seamanship and help skippers promote a Culture of Safety aboard their vessels.