

Navy Offshore Sailing

Man Overboard!

Be Prepared, It could happen to you....



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Preventive Measures..

- *Boat*
- *Crew*
- *Equipment*
- *Procedures*



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First Line Of Defense Is To Stay On The Boat!

Know Your Boat's Features..

- Deck Layout – risky zones
 - Hand holds (on deck and around companionway)
- Lifelines and pulpits
- Tether clip-on points (jacklines, thru-bolted padeyes, stanchion bases, toe rails, etc.)
- Handling characteristics in various wind/sea states and sail configurations



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Know Your Crew..

- Individual skills and experience
- Familiarity with each other
- Physical/mental condition
- Are each equipped with appropriate personal equipment and familiar with proper use? (PFD, crotch straps, harness/tether, light, whistle, personal locator beacon)
- How practiced and familiar are you (and they) with the boat radio operations, onboard COB recovery equipment?





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Know Your Recovery Equipment..

- Deployable gear - M.O.M., horseshoe w/ drogue, DAN buoy, light, *anything that floats*)
- MOB function of GPS (on deck and below) Op Test it!!!
- DSC Distress function on VHF Familiarize entire crew with it!!
- AIS Personal Locator Beacon Each crew should get familiar with theirs
- LIFESLING Ensure its secured to the boat and don't be afraid to deploy..
- Heaving line Least appreciated but one of most effective pieces of gear
- Hoisting block and tackle and other recovery rigging
- Boarding ladder

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Assorted Recovery Aids

M.O.M. (man overboard module)



AIS Personal Locator Beacon plus Onboard AIS Receiver/Chart Plotter



LIFESLING

Hoisting rig for LIFESLING



Galerider Drogue can be used for victim retrieval

Heaving Line





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Brief and Train on Proper Procedures

- *Importance of Leadership*
- *Best helmsperson (train multiple)*
- *AIS beacon use & plotter/VHF issues*
- *What maneuver to use?*
- *Assignments/responsibilities Train, train, train!*



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Procedures Common for All COB Scenarios:

- Hail “Man Overboard” loud enough so entire crew (as well as any boats nearby) are made aware
- Deploy flotation and other floating/visible aids towards victim
- Designate spotter (get at least one permanent set of eyes on victim to serve as guidance for helm)
- Activate MOB function on GPS (operator should augment spotter info with range/bearing updates as requested)
- Get boat slowed, into a maneuverable state and aimed back in the direction of victim ASAP
- Start engine (keep in neutral until absolutely assured all lines are clear of the water)



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Additional Procedures Common for All Situations

- Consider putting most experienced driver on the helm
- Ensure all remaining crew are not placed in unnecessary danger
- Helm/skipper communicates approach and recovery plans to crew with revisions as needed
- If feasible, make a “pan pan” or “Mayday” VHF broadcast advising area traffic of situation
- Contact Coast Guard (as dictated by situation)



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Considerations for Choosing Recovery Method

- *Wind and sea conditions*
- *What's your present point of sail?*
- *If above a beam reach, would a quickly executed jibe jeopardize boat or crew?*
- *Can boat be borne away without significant ease of mainsheet?*
- *Present sail/rigging configuration*
- *Number of crew immediately available*
- *Proximity to hazards (shoal water, traffic)*

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Quick Stop Recovery

5. Head down to deep broad reach *without easing sails*

4. Allow speed to bleed off by holding a close winded angle

3. Tack without releasing jib sheet (jib will go aback)

2. Immediately head up to initiate a tack, trim sheets hard if possible

1. Man Overboard!!

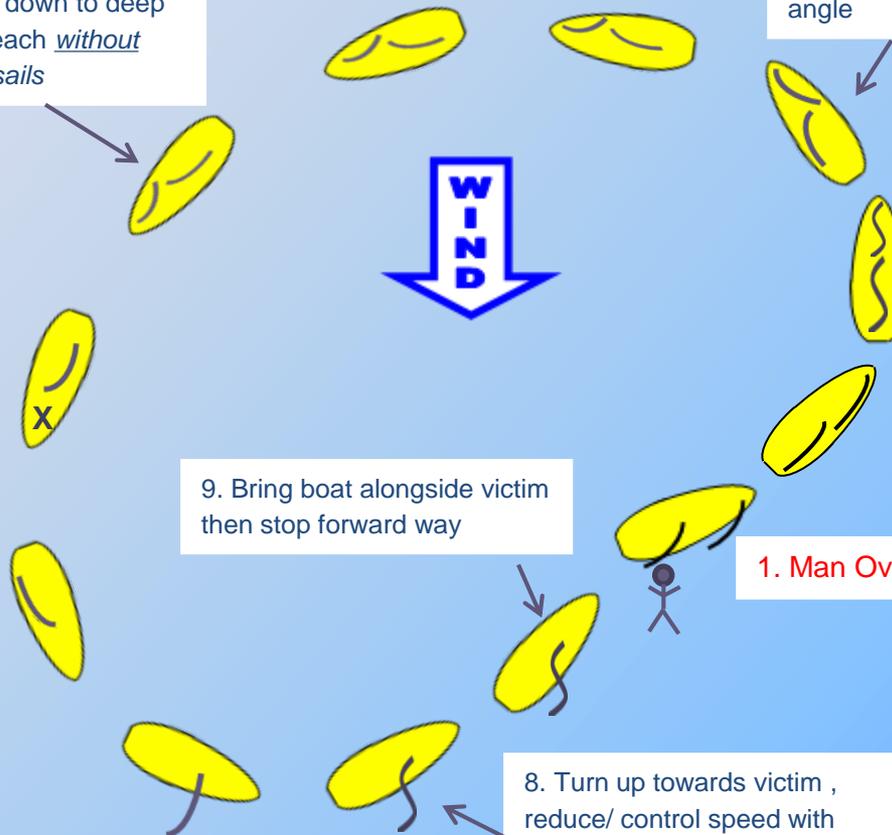
9. Bring boat alongside victim then stop forward way

8. Turn up towards victim, reduce/control speed with mainsail trim, use motor assist *with caution* as required

7. Jibe and continue on broad reach until approach angle to victim is approximately 60 degrees relative to true wind direction

6. Once deep wind angle is reached, lower or furl jib

Note: Always ensure all rigging is clear of water before engaging propeller!!



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Fast Return (figure 8) Recovery



1. Man Overboard!!



2. Immediately head down to a deep broad reach



5. Continue heading down to broad reach then lower or furl the jib

7. Bring boat alongside victim then stop forward way

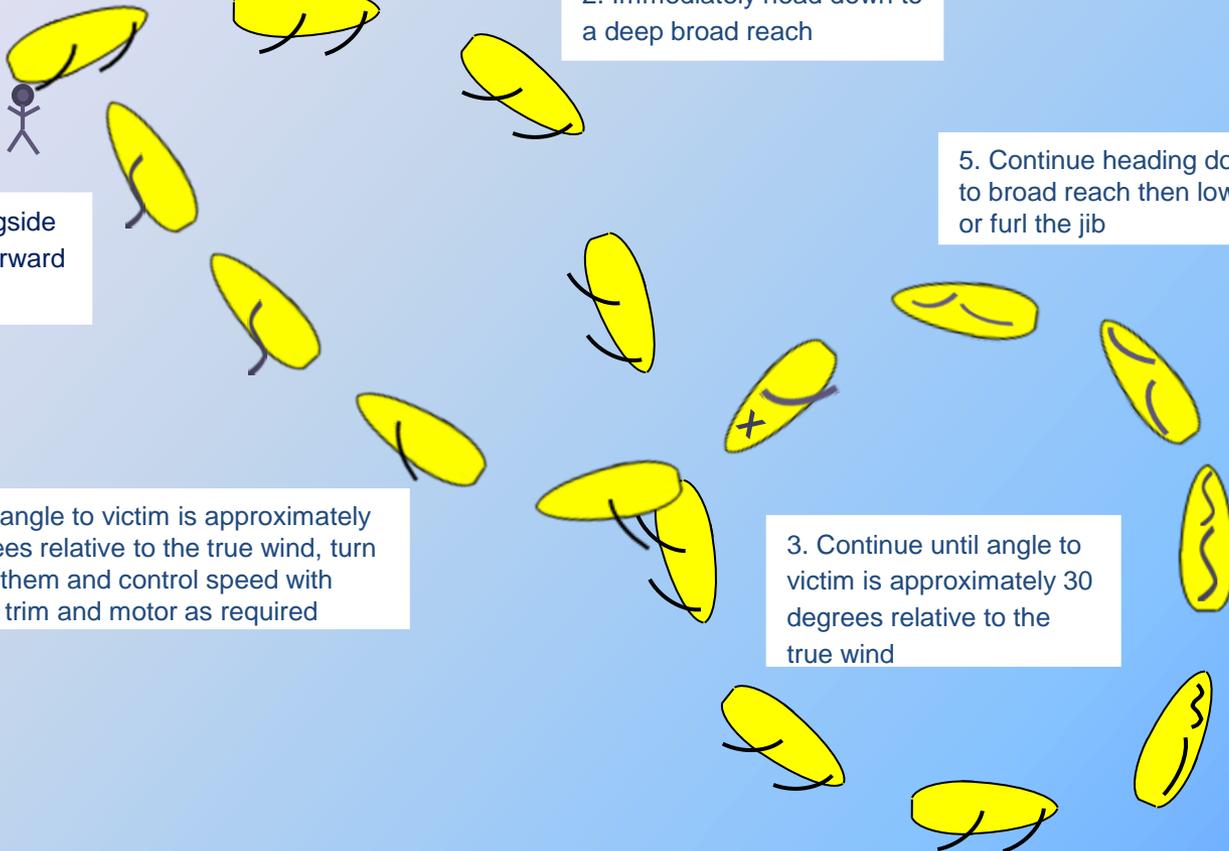


6. Once angle to victim is approximately 60 degrees relative to the true wind, turn towards them and control speed with mainsail trim and motor as required

3. Continue until angle to victim is approximately 30 degrees relative to the true wind



4. Sharply tack the boat with a backed jib and continue turning until aimed well to leeward of victim



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Fast Return (figure 8) Recovery for High Performance Boats



5. Sharply tack the boat and continue turning until aimed well to leeward of victim

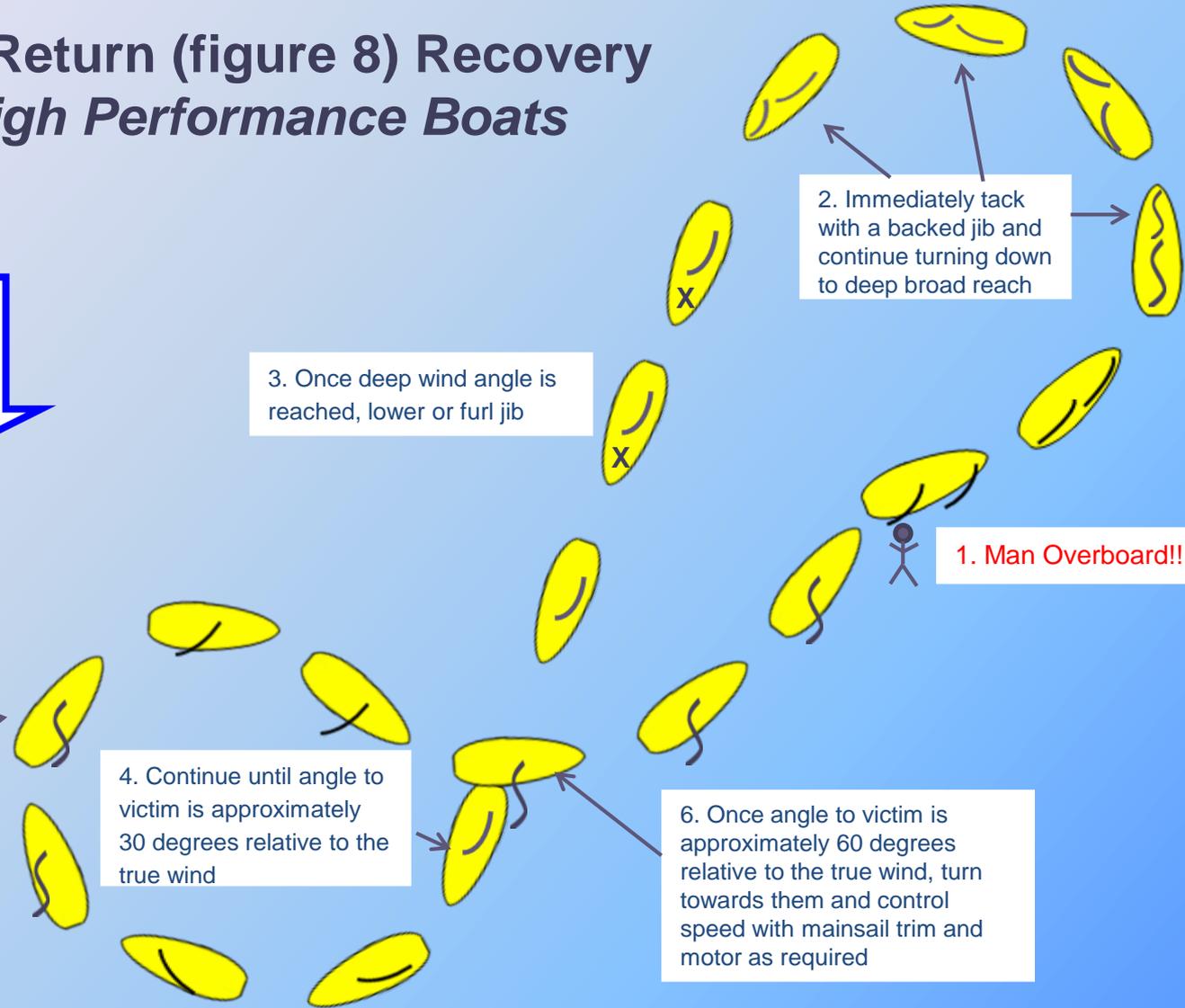
4. Continue until angle to victim is approximately 30 degrees relative to the true wind

3. Once deep wind angle is reached, lower or furl jib

2. Immediately tack with a backed jib and continue turning down to deep broad reach

6. Once angle to victim is approximately 60 degrees relative to the true wind, turn towards them and control speed with mainsail trim and motor as required

1. Man Overboard!!



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Downwind Quickstop Recovery (w/ spinnaker)



7. Bring boat alongside victim controlling speed with main trim and motor as required

6. Approach victim on close reach, lower spin pole to improve visibility

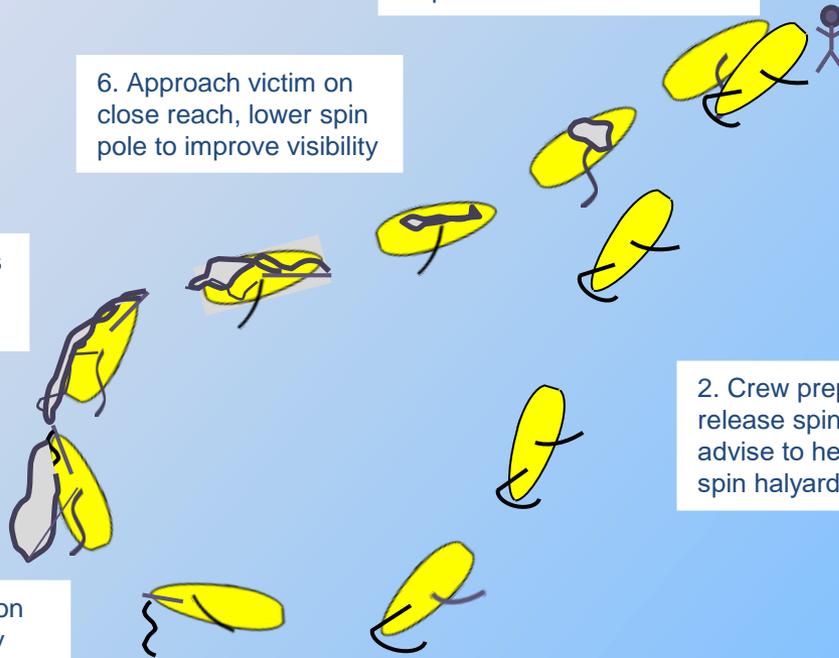
5. Helm tacks boat as crew gathers spin on old lee rail

4. Spin halyard is run on helmsman call, usually before crossing head to wind, do not release guy/tack

3. Helm heads up sharply, in a continuous turn

2. Crew prepare to release spin halyard, advise to helm "ready on spin halyard"

1. Man Overboard!!



Note: Always ensure all rigging is clear of water before engaging propeller!!

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Lifesling Recovery Method



4. Head down to deep broad reach without easing sails

3. Tack without releasing jib sheet (jib will go aback), deploy Lifesling

2. Immediately head up to initiate a tack, trim sheets hard if possible

8. Drop sails, haul victim to boat using pennant. Keep boat stopped!! Execute recovery

1. Man Overboard!!

7. Once victim has pennant in hand, tack with backed jib, slow boat to heave to position

6 Turn up towards victim , passing just to leeward of them to bring Lifesling pennant into contact with them



5. Jibe and continue on broad reach until approach angle to victim is approximately 80 degrees relative to true wind direction

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Getting Victim Back Onboard

1. Decide on which side to approach (to windward or leeward of victim)
2. Establish positive contact/attachment with victim (throw rope, sheet tail etc.)
3. Stop the boat once in contact and don't allow it to bear away from wind (generally full windward rudder), drop sail(s)
4. Decide on method to bring them aboard
 - Stern platform
 - Swim ladder
 - Lifesling with halyard hoist or block and tackle rig
 - "Elevator" rig using jib sheet or other rigging
 - Use of a sail or drogue in event of incapacitation
5. Does victim need assistance in the water? (think hard before jeopardizing another crew member, ensure they are tethered to the boat)
6. Stand by to provide first aid for injury/hypothermia



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Summary

Stay on the boat! (*or at least attached to it..*)

Become intimately familiar with your boat's handling characteristics

Know capabilities of your crew and monitor their physical condition; *your operating decisions should be based on these*

Learn proper function and use of all onboard rescue equipment. **TRAIN WITH IT!**

Determine best maneuvering techniques for your boat in various conditions through training

Train in all conditions and configurations that you may encounter



***A crew overboard is a for real life-threatening situation.
Don't let one ruin your day...***