## Man overboard procedure

List what is available on board and where

Reduction

* Stay in cockpit when possible
* Keep center of gravity low
* Go on high side of the boat (if heeling)
* Use
	+ First or second reef
	+ Short handed
	+ Poor visibility (i.e. night, fog)
	+ Faster boats
* New, high quality boat shoes only worn on board, non-skid

Challenges

* Cold water shock
	+ Gasp reflex (wear life jacket)
		- Sequence
			* Gasp reflex
			* Uncontrollable inhale water
			* Uncontrolled breathing time
	+ Swim failure
	+ Hyperthermia
* Finding the victim
* Get floatation device to them
* Haul back into the vessel

Be a good victim

* Stay afloat
	+ Wear life jacket
* Pull arms in and reduce heat loss
* Keep clothes on – (keeps heat in)
* May need shoes
	+ If swept to shore
	+ Get back on board
* Maintain composure
	+ Male yourself more visible
	+ Signaling devices
	+ Whistle
	+ Reduce heat loss
		- Pull arms in and legs up
		- Do not swim
		- Close foul weather gear enclosures
	+ Be on leeward side
* Crew on vessel shout that they see them and assure victim

Initial response

* Throw floatation when someone goes overboard
	+ Person can swim to it
	+ Marks location
* Have someone on board be a pointer who tracks person in the water
* Store position in GPS
	+ Should be activated within 10 seconds
	+ Press Man overboard button on the chartplotter
	+ Distress button on VHF radio (if available)
		- Lift cover
		- DSC Digital Selective Calling)
* Consider how current affects position
* Broadcast a mayday
	+ Cancel mayday once person is on board
* Person in command
	+ Procedure to use
	+ Engine or sails
* Methods
	+ Heave to
	+ Figure 8
	+ With spinnaker

Equipment

* Life jacket
* Boarding ladder
	+ Fastest in calm water
	+ Hyperthermia – people loose dexterity in their hands
	+ In rough water, stern ladder looks like cheese grater
* Horseshoe
	+ Has buoyancy
	+ Not attached to boat
* Man 8
	+ Gear with horseshoe, light (like the dan buoy)
	+ Life sling
		- Make sure it is already attached to vessel
* Throwable life ring
	+ Not attached to vessel
* Standard cushion
	+ Colors life blue may not be visible
* SOS Dan buoy
* Throw rope heaving life

Reboarding victim

* Boarding ladder
	+ Calm waters
	+ Warm waters
* Brute force
	+ Have healthy, strong crew
* Lifesling hoisting
	+ Direct hoist method (extra halyard where line can be down to water line)
	+ Attach lifesling lifting sling shackles attached to any halyard
		- Raise fiddle block up at least 10 feet
* Elevator method

Beacons and Signaling

* Fanny pack
	+ Marine whistle
	+ LED flashlight
		- Bright
		- Waterproof
	+ Laser flare
		- Positive – good for long distance
		- Con – can not shine at aircraft (put crew’s eyes at risk)
	+ Signal mirror
		- Aircraft can see from 10-15 miles away
		- Viewing screen (i.e. red dot)
		- Plastic, durable, cheap
	+ Strobe light
		- Steady LED
		- Water activated
	+ Personal locator beacon (PLB)
		- Transmits for up to 24 hours
		- Goes directly to the Coast Guard
		- Bad since it does not signal to your vessel
	+ AIS transmitted
		- Deploys automatically
		- Attached to blow tube on life jacket
		- Show up on chart plotters as MOB
	+ AIS and MMSI of vessel

Conclusion

* Preventable through good habits and standard operating procedures
* Structured commands
* Devices to locate victim
* Floatation