

A&E Review Form (Sailing & CQM) rev 10/2022

Name:		Level:
Vessel:	STT Skipper:	

A&E Reviews are designed to improve general competence and ensure safe sailing of OSC vessels. The written multiple-choice tests are to be completed prior to each A&E Review. Both the Sailing and Close Quarters Maneuvering (CQM) exercises are generally conducted in a single (approximate 2-hour) session.

All Skipper and Skipper Candidate Reviews will be conducted by the Independent Professional; Mates and Mate Candidate Reviews will be conducted by the Specialized Training Team (STT).

Mark, 'X' for in the appropriate box below when the exercise is successfully completed.

Skpr & Mate

<u>Prepare To Get Under Way</u> Checks the systems for operational integrity before setting sail (i.e. fuel & oil level, engine cooling system, rigging, radio, GPS and bilge pump).
Checks weather, tides, and small craft advisories.
Explains the "Rule of 12 th 's" and the effects of wind and tides on vessel while exiting and entering the marina and slip.
Describes the effects of prop-walk on a vessel in reverse.
Plans the appropriate departure plan from the dock, including which lines to untie first, which way to turn according to the prevailing winds, or offshore wind, when to turn, and describes a backup plan (such as the 3-point turn) should a backup or emergency plan be needed.
Recruits crew to stand at stern with fender and takes a fender to the bow in preparation to fend off if necessary.
Close Quarters Maneuvering
DOCK-PARALLEL EXERCISE: Motor parallel to the dock or buoy lines along our main channel, or the lines between the mooring buoys in our main channel in forward gear, slows down, throttles back to idle, shifts into reverse, turns bow to port to accommodate prop walk, stops boat at planned location and backs straight back for 25-50 feet. Then, slows down, throttles back to idle and shifts into forward and proceeds straight forward. Complete the procedure a minimum of 3 times. Should maintain moderate to high power until boat is moving at desired speed (slow walking pace). Both tester and subject should keep in mind that the purpose of the exercise is to be able to reverse course when recognizing a need to do so, because, for example, you entered the wrong slipway. Correcting for prop walk, maintaining consistent distance from the dock, and maintaining slow, controlled speed are more

important than precision stopping.

Skpr & Mate

	MOORING BALL EXERCISE : Maneuvers the bow and approaches to within 5 feet of a designated buoy 3 times in succession: once with the buoy dead-ahead, once with the buoy to starboard of the bow, and once with the buoy to port of the bow. Shifts into reverse and backs straight back for 25-35 feet. Considers the wind direction and tidal flow in approaching the buoy.
	REVERSE TO BUOY : Maneuvers the stern and approaches to within 5 feet of a designated buoy four times. Once into the wind, once downwind, once across the wind with the wind on the starboard side, and once across the wind with the wind on the port side. The crosswind approaches are difficult in over 8 kt wind, so take this into account. Part of the point of the exercise is to notice how much the bow swings downwind as the boat slows to a stop. Ideally, speed is controlled to where boat is going too slowly to steer only for a very short time, thus limiting bow swing.
	DOCKING IN SLIP: Approaches the dock staying 2/3's of the way towards the far side of the slipway to provide a proper angle to the slip while docking the boat. Gets up to slow walking pace quickly, then glides under little or no power in neutral until ready for next maneuver. Docks the boat and stops the vessel completely in the slip, 2 times.
	Handling The Boat Under Sail: <u>Issues orders to crew</u> for all sails, sheets, traveler, halyards and preventers to handle the boat under sail.
П	Raises the mainsail and unfurls the headsail.
	Sails a relatively 'tight' Figure 8 course by sailing around 2 stationary items (i.e. buoys. mooring balls, etc.), each clockwise and counterclockwise, tacking and/or jibing as necessary to demonstrate reactions to unexpected situations and varying wind conditions. Issue appropriate orders to crew.
	MATE ONLY: Sails successively on a close reach, then fall off to a beam reach, then falls off to a broad reach, on both tacks, using telltales & wind vane effectively for sail trim and course adjustments.
	MATE ONLY: Sails a controlled jibe, broad reach to broad reach.
	MATE ONLY: Sails a tack, close hauled to close hauled.
	Puts boat into irons then gets out of irons and begins sailing on a desired tack.
	Reefs the mainsail, and shakes it out by self, or with assistance from one crewmember.
	Heaves-to
	<u>Crew Over Board/COB Exercise:</u> Retrieves a COB cushion thrown overboard. Stays close and returns to the COB promptly. First, using the motor, and then a sailing-only COB retrieval (Several attempts to retrieve the cushion/COB may be performed until reviewer is satisfied that skills are performed quickly and adequately).
	Hails "Man (or Crew) Overboard!!" and issues instructions to throw flotation, assigns a "spotter" to watch and point to COB, activates an MOB waypoint on the chart plotter and depowers sails or

		uses motor to approach COB slowly.
		Provides instructions to crew on pickup location (starboard or port).
		Simulates securing the COB (cushion) onboard at the swim step by releasing and dropping the swim ladder.
		Maintain Physical and Mental Fitness: Demonstrates physical strength for safe sailing of the vessel and handling rigging.
		Exhibits adequate hearing abilities (with hearing aids if needed) to safely respond to others.
		Possesses adequate long and short distance vision (with glasses if needed) to sail safely.
<u>Ski</u>	pper Onl	Y.
		Prop Walk Turn: Pivots the vessel in a clockwise (turning to starboard) motion alternating between forward and reverse gears. Always <u>throttle back</u> to idle speed BEFORE shifting. The vessel should not move substantially forward or backward during this maneuver.
		3-Point Undocking: Demonstrates a departure from a dock or a simulated dock using the 3-Point turn as a backup/emergency departure plan. This is NOT done in our slipway.
		Undocking: Backs the boat out of the slip by backing to port and continue motoring in reverse, straight out of the Balboa Yacht Basin 2 times. Keeps in the center of the slipway without wavering significantly to port or starboard while exiting the slipway. In the event of offshore (Santa Ana) winds, backs the boat out of the slip by backing to starboard, shifts into forward gear and proceeds bow first out of the Balboa Marina Yacht Basin.
Rev	<u>riewer Co</u>	omments:
	Signatu	re of Certification Reviewer
	Signatu	re: Date:

Multiple Choice Test - Sailing

Name:		Level:
Boat:	Date:	
•	on Test - SAILING – To be con the on-board A&E Certification	mpleted by person being reviewed <u>IN</u> n Review.

- 1. When you first get on board you always do a pre-sail check of equipment. Which list below is the best checklist?
 - a. Check the bilge, battery power, radio, exhaust water flow.
 - b. Pump the bilge, start the engine, turn on the radio, store perishables.
 - c. Check the battery power, fresh water, exhaust water flow.
- 2. What do you need to steer a sailboat?
 - a. A rudder
 - b. An engine
 - c. Sails
 - d. Water passing over the rudder
- 3. Which way do you turn to tack?
 - a. Always to the right
 - b. Always to the left
 - c. Into the wind
 - d. Away from the wind
- 4. Which way do you turn to jibe?
 - a. Always to the right
 - b. Always to the left
 - c. Into the wind
 - d. Away from the wind
- 5. Why is jibing more dangerous than tacking?
 - a. The boom travels across the cockpit faster and can cause serious injury
 - b. If the wind is blowing hard and the mainsheet isn't hauled in fast enough, the boom could snap across the cockpit and possibly damage the sail or the mast fitting
 - c. Jibing is harder to do than tacking because of all the lines involved
 - d. Both A and B above
- 6. What is the difference between 'falling off' and 'heading up'?
 - a. Falling off is the term for a man overboard
 - b. Falling off is turning the boat away from the wind, heading up means turning towards the wind
 - c. Falling off is sailing downwind and heading up means to sail upwind

7.	a. b. c. d. e.	When the windward tell-tale When the windward tell-tale When the leeward tell-tail fal When the windward tell-tales When the leeward tell-tale fa Both A and B above Both C and D above	falls down, turn into th ls down, turn away fro s flutter up or down, tu	m the wind rn away from the w	
8.	a. b. c.	It will be automaticator that the It will be automatically trimme When the top leach telltale is When all the leach telltales a When the traveler is centered	ed when the jib is set s streaming back cons are streaming back	correctly	
9.	a. b. c. d. e. f. g.	r the following questions True Sailboats always are privileg When meeting head-on, boa Boats dead in the water have The speed limit in the bay is The Balboa Island ferries haw When one boat is overtaking Pleasure boats give way to law When power boats (and sails).	ed (have the right-of-vits steer to starboard as no right-of-way 5 MPH ve the right-of-way over another boat, the over arge ships	ind pass, port-to-po — er sailboats ertaking boat gives	ort way
	i.	If both sailboats are on the s	ame tack, the leeward	l boat has privilege	
10.	a. b.	a crewmember falls overboard Start the engine, take the sai Call the Coast Guard, do a q Call "Man (or 'crew') Overboa towards victim, assign a spot	ils down, call the Coas juick stop, start the en ard", set a MOB wayp	st Guard gine	otter, throw floatation devices
11.		e following selections to answ			
	Green Red	Square One Triangle	Three Two	Five	Red/White
		When returning from the oce port side?	•	•	board side?On your
		What is the color of the first buoy coming into Newport Harbor? What shape is the marker on jetty on your port side when returning from the ocean? On your starboard side?			
	d.	How many horn blasts mean "I intend to leave you on my port side"?			
		How many horn blasts mean "I intend to leave you on my starboard side"?			
		How many horn blasts mean "I am backing up"?			
		How many horn blasts mean "I don't understand"?			
	h.	In fog, give 2 to 4 sec minutes.	ond horn blast and 2 s	short horn blasts, n	ot longer than every 2

Close Quarters Maneuvering

- 1. Each of our sailboats has a "right hand propeller", so when starting to motor in reverse the boat will:
 - a. Go in a straight line
 - b. Pull the stern to port
 - c. Pull the stern to starboard
- 2. When motoring in reverse in close quarters, you must:
 - a. Look only aft to see where the boat is headed and to look out for other boats, docks, etc.
 - b. Look only forward to ensure that you are straight in the channel
 - c. Look aft to see where the boat is headed AND occasionally look forward to ensure that the boat is in the middle of the channel.
- 3. When docking the boat, your position in the slipway as you approach the slip should be:
 - a. 2/3's of the way towards the side of the slipway closest to the dock where the slip is located
 - b. 2/3's of the way towards the side of the slipway farthest from the dock where the slip is located
 - c. In the center of the slipway.
- 4. Motoring in reverse, when you want to turn the stern to starboard, you must:
 - a. Turn the steering wheel clockwise
 - b. Turn the steering wheel counter-clockwise
 - c. Turn the steering wheel clockwise to see which way the stern turns and if it doesn't turn quickly to starboard, try turning the steering wheel the other way.
- 5. When attempting to turn the stern while motoring in reverse, you must "neutralize" (i.e. 'center) the steering wheel BEFORE the stern is positioned where you want to go, because:
 - a. The stern continues to move after you neutralize the wheel.
 - b. The stern stops moving as soon as you neutralize the wheel.
 - c. The stern will move in the opposite direction you turn the wheel.
- 6. Before shifting gears, you must always:
 - a. Set the throttle at above 2000 RPM
 - b. Throttle back to idle speed (about 850-900 RPM).
 - c. Advise the crew "Prepare to come about"
- 7. In close quarters maneuvering, "Go as slow as you can afford to go" means:
 - a. Go slower than any other boats in the slip channel.
 - b. Go slow enough to be safe but fast enough to maintain steerage
 - c. Go as slow as the boat will go without stopping
- 8. Turning while changing directions from Forward-To-Reverse, you should NOT begin turning the steering wheel until:
 - a. You shift gears from Forward-To-Reverse
 - b. The boat actually starts moving in reverse.
 - c. When the crew yells "all clear"
- 9. What dock lines should be untied LAST when preparing to depart the slip?
 - a. The lines on the leeward side of the boat.
 - b. The lines on the windward side of the boat.
 - c. The spring lines.
- 10. Tidal flow can be estimated using the "Rule of 12ths" in the following manner:
 - a. 12 hours will lapse between each high tide and low tide.
 - b. 12 inches is the usual rise or fall of a tide.
 - c. 1/12th of the water volume will move during the first hour and sixth hours of tidal flow, 2/12ths will move during the second and fifth hours, and 3/12ths will move during the third and fourth hours of a normal 6-hour beginning of each high and low tide.
 - d. 3/12th of the water volume will move during the first and sixth hours of tidal flow, 2/12ths will move during the second hour and fifth hours, and 1/12ths will move during the third and fourth hours of a normal 6-hour beginning of each high and low of tide.

- 11. When stopping the boat in anticipation of changing directions from forward to reverse, it is important to position the bow to port because this position:
 - a. Counteracts currents and enables the boat to back up in a straight line.
 - b. Clearly signals your intentions to other boats.
 - c. Compensates for prop walk which will cause the stern to move to port
 - d. Allows the helmsman to see traffic in front of the boat
- 12. If conditions permit, is it preferable to stop the boat with the wind on the starboard side of the bow when anticipating a change of direction into reverse:
 - a. No, it has no effect on the boat
 - b. No, it will make it more difficult to back up in a straight line due to prop walk
 - c. Yes, it counteracts the effect of prop-walk
 - d. Yes, it makes it easier to bear away if a problem occurs
- 13. The emergency shut off switch for the engine is located:
 - a. At the breaker panel above the nav station
 - b. Inside the front engine access cover, located below the companionway steps
 - c. Inside the engine compartment, accessible through the aft compartment door to the engine
 - d. On the Engine Panel Display, below the Stop button
- 14. After starting the engine in the slip, the first things to check for are:
 - a. Oil temperature and fuel level
 - b. Abnormal noise in the engine compartment and gear shift lever position
 - c. Chart plotter display, auxiliary instruments and handheld VHF radio operation
 - d. Fuel level, water flowing from the cooling exhaust and oil pressure
- 15. You can steer immediately when starting to go:
 - a. Forward because the propeller pushes water over the rudder
 - b. In reverse because the propeller pulls water over the rudder
 - c. In reverse because it's easy to control prop walk