

Mate's Manual

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Oasis Sailing Club Corona del Mar, California

www.OasisSailingClub.org

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Mate Candidate (MC) Program

The prime responsibility of the Mate is to **support** the Skipper in everyday and emergency situations. The mate needs to be able to communicate well, manage and adjust the sails, keep the boat running smoothly, and be prepared in the event of an emergency.

The Mate also needs to be able to act in the Skipper's place if the Skipper is unable to perform his/her duties. In times of emergency, the Mate must have the skills to sail the boat and to organize and direct the crew in whatever tasks are required to overcome the emergency.

Therefore, in addition to the objective criteria outlined in the Mate Checklist, all Mate Candidates are evaluated using subjective criteria including the ability to organize and lead under all weather and sea conditions. Thus, qualification in Seamanship and Sailing play a major role in OSC's designation as a "Mate". Many Mate Candidates find it helpful to take sailing lessons e.g. at OCC, before entering the Mate program.

If you're interested in becoming a Mate, you need to make sure you SHOW UP. When you're the Mate, not showing up may mean the sail doesn't go, so you really need to be there, so you need to build a reputation for participating in the sails you sign up for. Preferably, arrive at your sail 20-30 minutes before departure so that you can participate in setting up the boat.

This Manual, while not a textbook, provides a step-by-step guide and a checklist of items requiring sign-off as prerequisite to becoming a Mate. Under the guidance of a Mentoring Skipper, Mate Candidates will gain proficiency and knowledge pertaining to rules of the road, sailing abilities, and boat handling skills, as well as general seamanship.

Mate Candidates are strongly encouraged to sail with all active Skippers during their mate training. This will allow Mate Candidates to gain exposure to a wide variety of sailing experience and knowledge. This broad sailing exposure will benefit Mate Candidates when they are considered for promotion to Mate status.

As experience is gained and verified, the candidate will be 'signed off' in the Manual's "check list" by any OSC Skipper. Once the candidate completes all the required sign-offs, the candidate must successfully complete an Assessment and Enhancement (A&E) evaluation conducted by STT skippers.

The A&E includes a written multiple-choice test, rigging and preparing the boat for departure, demonstration of knowledge of tides and weather, operating the boat under power in close quarters, i.e. Close Quarters Maneuvering (CQM) (see page 28) including docking and Crew Overboard (COB) (see page 44), and operating the boat under sail.

All Mate candidates are required to complete their training programs within 12 months from when they enter the program.

MATE Q	UALIFICATION	
Mate Candidate:		
Mentoring Skipper:		
Date Started MC program:		
Date Promoted to Mate:		

LOG OF MATE TRAINING SAILS

Skipper	Dates of Sails (record up to 4 per skipper)
1.	
2.	
3.	
4.	
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21.	
22.	

SKIPPER SIGN-OFF ITEMS LOCATION AND USE OF EQUIPMENT

Item	Skpr	Item	Skpr
Lock & Lock Combination		American Flag (Ensign)	
Boat's Papers & Manuals		Ship's Log	
Charts		Maintenance Log	
Safety & Emergency Equipment		Safety & Emergency Equip.	
PFDs, Cushions & LifeSling		Built-in Boarding Ladder	
Fog Horns		Jacklines	
Fire Extinguishers		Bailing Bucket	
First Aid Kit		Boat Hook	
Flares		Net	
Flashlights		Tiller Handle	
Tools & Spare Parts		Safety Harness & Tether	
Spare Lines			
Primary & Secondary Anchor			
AC – Shore Power System			
Shore Power Cable		DC – Battery Power System	
AC Master Switch		Batteries	
Battery Charger		Main Battery Switch	
Battery Charge Indicator		DC Volt Meter	
AC Outlets		DC Volt Meter Switch	

SKIPPER SIGN-OFF ITEMS LOCATION AND USE OF EQUIPMENT (CONTINUED)

Item	Skpr	Item	Skpr
Electrical Panel & Switches		Boat Lights	
AC Switches		Running Lights	
DC Switches		Steaming Light	
DC Outlet		Flood Light	
		Masthead Light	
Standing Rigging		Running Rigging	
Sailing Instruments		Engine Instruments	
Binnacle & Compass		Fuel Gauge	
B&G Chart Plotter		Tachometer/Engine RPM	
Depth Finder		Temperature	
Knot Meter		Oil Pressure	
Wind Direction/Speed		Alarms	
Plumbing System		Engine System	
Head /Holding Tank Pump Out		Ignition Power Button	
Galley & Head Sinks		Start and Stop Buttons	
Galley Sink Thru Hull Drain		Raw Water Intake Filter	
Head Sink Thru Hull Drain		Fuel Filter	
Fresh Water Pump		Oil Dip Stick	
Electric Bilge Pump		Coolant Level Check	
Manual Bilge Pump &			
Stove Gimbal Catch			

The candidate knows the location, the use and the application of the above equipment.

Skipper (Print) Date Signature: Date

SKIPPER SIGN-OFF ITEMS PREPARING TO LEAVE THE DOCK

Item	Skpr	Item	Skpr
Pre-departure Checklist		Shore Power	
Boat External Visual Inspection		Logs (Maintenance and	
Lifeline and Stern-Safe		Preparing Running Rigging	
Cabin Access		Tides and Weather	
Cabin Visual Inspection		Report to Skipper	
Check Levels: Fuel, Fresh Water and Waste Water			
Engine Filters		Engine Start up Procedure	
Check Bilge		Check Water Flow at Exhaust	
Stowage of Personal Gear		Check gauges	
Cockpit Cushions		Fenders	
Stowage of Sail Cover, Winch Covers, Binnacle Cover and Companion Hatch Cover		Removing Dock Lines	
Winch Handles		Securing Lifelines	
American Flag (Ensign)			

(what is Stern-Safe?)

The Candidate has demonstrated his/her ability to prepare the boat for leaving the	he
dock.	

Skipper (Print)	O· 1	Б (
Skinnar (Drint)	Signature:	Date
	Sidilatule.	Dale
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SKIPPER SIGN-OFF ITEMS CLOSE QUARTERS MANEUVERING UNDER POWER

<u>Exercise</u>	Mentoring Skipper Sign-off	<u>Date</u>
Dock-Parallel : Motor forward parallel to a dock or other line. Stop the boat at the end of a dock, turning left to correct for prop walk before backing.		
Back the boat parallel to the dock, stopping at the end		
Mooring Ball: Maneuver to within five feet of a buoy (head on, to starboard, to port) in various tide and wind conditions		
Figure 8 : Steer the boat in a figure eight around two buoys in reverse.		
Buoy Backing : Back the boat to within one foot of a buoy (upwind and crosswind)		
Successfully dock in the Oasis slip 6 times over at least 3 different sails:		
Sail Date #1:# times:		
Sail Date #2:# times:		
Sail Date #3:# times:		

maneuvering under power.		•	•
Skipper (Print)	Signature:		

The Candidate has demonstrated his/her ability to perform close quarters

SKIPPER SIGN-OFF ITEMS

GETTING UNDER SAIL

Item	Skpr	Item	Skpr
Removing Sail Ties (Gaskets)		Unfurling the Genoa/Headsail	
Raising the Mainsail		Trimming the Genoa/(Headsail)	
Shaping the Mainsail		Using Winches	
Trimming the Mainsail		Using the Boom Vang	
Using the Traveler		Reefing	
Using Preventers		Engine Shut Down	

Using the Traveler		Reeting	
Using Preventers		Engine Shut Down	
The Candidate has demonstra	ted his/hei	ability to get under sail.	
Skipper (Print)	Signat	ure: Date_	
		SN-OFF ITEMS	
<u>S/</u>	AILING IN	<u>ΓHE HARBOR</u> □	
Item	Skpr	Item	Skpr
Right-of-Way Under Power		Aids to Navigation – Buoys, Beacons and Channel Markers	
Right-of-Way Under Sail		Other Buoys (Information, Control and Hazard Buoys)	
Speed Limit in Harbor		Docking at Fuel and Pump-Out Station	
Accounting for Low Tides		Pump-Out Station Procedure	
Traffic Handling		Passing the Balboa Ferry	
Sailing to Windward		Clearing Jetties	
Running Before the Wind		Reaction in Emergencies	
Reaching		Horn Signals under power	
The Candidate has demonstra	ated his/he	r ability to sail safely in the har	bor.
Skipper (Print)	Signat	ure: Date_	

SKIPPER SIGN-OFF ITEMS SAILING AT SEA

Item	Skpr	Item	Skpr
Crew Overboard (COB)		Reefing Genoa/Headsail	
Points of Sail, Selection of		Reefing Main sail	
Sailing in Varying Winds Seas		Finding Harbor on Return	
Close Hauled, Beating		Assigning Watches	
Reaching		Tacking	
Running		Jibing	
Lowering the mainsail		Furling the Jib/Genoa	

The Candidate has demonstrated his/her ability to sail at sea in varying winds and seas.

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	Signature:	Dale
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SKIPPER SIGN-OFF ITEMS RETURNING TO THE DOCK AND SECURING THE BOAT

Item	Skpr	Item	Skpr
Docking in Different Conditions – Wind & Tide		Securing Sheets and Halyards	
Deploying Fenders		Securing Binnacle Covers	
Securing Dock Lines		Attaching and Checking Shore Power	
Returning Gear to the Proper Location.		Completing the Post-Sail Checklist	
Securing Engine		Locking and Covering Companionway Hatch	
Securing and Covering Mainsail		Rinsing Off Cabin Top and Cockpit	

The Candidate has demonstrated his/her ability to dock and secure the boat.

Skipper (Print)	_ Signature:	Date

SKIPPER SIGN-OFF ITEMS NAVIGATING IN THE HARBOR AND AT SEA

Item	Skpr	Item	Skpr
Compass		Charts	
Basic Chart Plotter Operation and Displays		Local Landmarks	
Knot Meter		Buoys and Channel Markers	
Depth Meter		Tide Tables & Indicators	
Wind Direction/Speed			
Auto Pilot		Shipping Lanes, Location	
Use of Coast Pilot/Light List			

SKIPPER SIGN-OFF ITEMS COMMUNICATIONS

Item	Skpr	Item	Skpr
Emergency Use of VHF Radio and MMSI		Use of Pistol and Flares	
Routine Use of VHF Radio		Using Boat Lights	
		Using Sound Signals	

The Candidate has an understanding of how to communicate under varying conditions.

Skipper (Print) Signature:	Date
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SKIPPER SIGN-OFF ITEMS KNOT TYING

Item	Skpr	Item	Skpr
Bowline		Square knot	
Cleat hitch		Sheet Bend	
Two Half Hitches		Figure eight (stopper knot)	
Rolling Hitch		Clove Hitch	

The candidate has demonstrated basic knot tying skills.

Skipper (Print)	Signature:	Date
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SKIPPER SIGN-OFF ITEMS SAFETY EQUIPMENT

Item	Skpr	Item	Skpr
First Aid – Kit Location & Use		Emergency Calls – Who and How	
Fire Extinguisher – Locations & Use		Lifesling use	
Thru-hull Holes/Valves/Plugs		Emergency Use of Topping lift, Hauling MOB Aboard	
PFD – Location and Use		Emergency Tiller – Location & Use	

The candidate knows the location, the use and the application of the above equipment.

Skipper (Print)	0:	D-4-
Skinner (Print)	Signature:	Date
Chapper (i init)	Olgi lataro.	Date

SKIPPER SIGN-OFF ITEMS RULES OF THE ROAD, SIGNALS AND BUOYS

Rules of the Road

Main rule: don't hit anything.

I. All Boats:

- A moving boat gives way to a stopped boat.
- An overtaking boat gives way to the boat being passed.
- A pleasure boat gives way to large ships.
- A powerboat gives way to a sailboat.

<u>Exceptions:</u> A sailboat gives way to vessels restricted in their ability to maneuver (i.e. large ships in channels, ferries, tugboats with tows, fishing boats with nets & lines out, etc.; the Balboa Ferries are not considered restricted, however they usually yield to vessels under sail)

II. Boats Under Power:

- Both boats give way when meeting head-on. Passing port-to-port is preferred
- Boat on port side gives way to boat on starboard side when powerboats cross.

III. Boats Under Sail:

- Boat on port tack gives way to boat on starboard tack.
- The windward boat gives way to the leeward boat when both boats are on the same tack.

SKIPPER SIGN-OFF ITEMS

RULES OF THE ROAD, SIGNALS AND BUOYS (CONTINUED)

Horn Signals

- One Short Blast This means "I intend to leave you on MY port side"
- Two Short Blasts This means "I intend to leave you on MY starboard side"
- Three Short Blasts This means that "I am backing up"
- Five Short Blasts This is the DANGER signal ("I don't understand your intentions.")
- One Prolonged Blast This means you are leaving a dock or departing your slip.
- Sailboat in FOG:
 - While under sail = One prolonged blast followed by two short blasts. Repeat every 2 minutes.
 - When operating under power = 1 prolonged blast. Repeat every 2 minutes.

Aids to Navigation

- Lateral Marks
- Buoys or beacons
- 3-R's: Red- Right-Returning (from sea)
 - o Right Side Red, Even Numbers, Triangle (Nun)
 - Left Side Green, Odd Numbers, Square (Can)
- Safe Water Markers: Red & white or black & white (may be lettered). Used to designate navigable (safe) water on all sides. Frequently used to identify the middle of the channel or offshore approach to a channel (example: NWP buoy)
- Special Purpose Markers: White cans with orange markings used to alert you of dangers, controlled areas or other information matters
 - Hazard buoys Designated by a diamond pattern
 - Informational buoys Designated by a square pattern
 - Control buoys Designated with a circle pattern

The candidate knows the Rules of the Road, Signals and Buoys
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Skipper (Pi	rint)		Signature:		Date)
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SKIPPER SIGN-OFF ITEMS SEAWORTHY TRAINING AND PRACTICE

The candidate has demonstrated proficiency in the application of the following skills:

Туре	Training Date	Skipper (Print)	Skipper Signoff
Crew Overboard (COB)			
Anchoring			
Boat Systems			
Docking			

FINAL APPROVALS

EQUIPMENT

The candidate has demonstrated	d knowledge of boat equipment.
Mentoring Skipper	Date
EXPERIENCE	
In my judgment, the candidate's	overall experience qualifies him/her as a Mate.
Mentoring Skipper	Date
Assessment & Enhancement (A&E) Review
The candidate has successfully co	ompleted his/her 'on water' A&E Review.
A&E Committee Chair	Date
<u>APPROVALS</u>	
The candidate has completed all a	aspects of the Mate's Manual
Training Officer	Date
The candidate was approved by to	he Board of Directors and designated as Mate
Commodore	Date

The Fleet: OASIS-VI

BOAT SPECIFICATIONS

Model	Catalina 34 Mark II (C34II), sloop		
Years	2005 (Oasis VI) & 2007 (Oasis V)		
Overall Length (LOA)	35' 8"		
Length at Waterline (LWL)	29' 10"		
Extreme Beam	11' 9"		
Draft at bottom of keel	5' 7" (Fin Keel)		
Displacement	11,950 lbs.		
Ballast in keel	5,000 lbs.		
Sails	Jib – Roller-furled Main – Full battens, single reef		
Total Sail Area	Standard rig 231 sq. ft. main; 528 sq. ft. total		
Engine	Yanmar 4-cycle diesel engine (3YM30AE), 29 HP @ 3100 RPM		
Fuel Tank Capacity	25 gallons		
Water Tank	Forward: 25 gallons Aft: 42 gallons		
Waste Holding Tank	18 gallons		
Calculated Hull Speed	7.3 kts.		
Mast	43' 4.5" ft. deck to head.		
Boom	12' Aluminum		
Anchor System	Electric Windlass		

EQUIPMENT LOCATION

NOTE: This is not an "end-all" list. Additionally, some items may have relocated.

Mate Candidate should ensure familiarity with current equipment location

Anchor	Anchor chain locker		
Bailing Bucket	Cockpit port locker		
Bilge Pump-Manual	Cockpit, close to swim ladder, port		
Bilge Pump-Handle	Cockpit port locker		
Boat Hook	Starboard quarter berth		
Binoculars	Cabin, port side shelf		
Charts-Navigation	Navigation station		
Cockpit Cushions	V-berth		
Depth Sounder	Helm mounted display (configurable) / sensor is under V-berth		
Emergency Tiller	Cockpit locker		
Fire Extinguishers	1 in V berth above port locker; 1 in cockpit port locker 1 aft in starboard berth, 1 at companionway stairs		
First Aid Kit	Head (compartment under mirror)		
Fish Net	V-berth (or aft starboard cabin)		
Flares	Cabin, port shelf		
Fog Horn	At helm station;		
Foul Weather Clothing	2 in cabin, port hanging locker		
Chart Plotter	B&G Zeus 3, configurable, touch screen chart plotter		
Auxiliary Instruments	B&G Triton 2, configurable auxiliary displays		
Horseshoe Life Ring	Stern portside		
Instrument, Binnacle, Hatch, Bimini Window Covers & Main Sail Cover	Store in aft berth		

EQUIPMENT LOCATION (CONTINUED)

Inverter / Charger	Inverter: Under starboard settee under mid cushion. Charger: Under galley sink on left side of cabinet		
Jacklines	V-berth port locker. Install when crew will be on foredeck for extended period		
Knot Meter	Helm mounted display (configurable); chart plotter screen. Sensor is under V-berth.		
Life Jackets	V-Berth: shelf (4), port locker (4); cockpit large port locker (3); aft berth starboard locker (4)		
Life Sling	Stern portside		
Lines-Extra	Cockpit port locker		
Manual pump	Head, in cabinet under sink		
Manuals	Cabin, cabinet above settee, port side		
PFD Cushions	V-berth		
Radio-VHF	Nav station & helm mounted slaved hand-held unit		
Safety Harness	Port locker in V-berth		
Spare Parts	In cabin, port locker drawer (between head and nav. Station)		
Spotlight (night sailing aid)	Cabin, port shelf		
Thru-Hull Plugs	At each thru-hull seacock.		
Toolbox	Cockpit, port locker		
Winch Handles	Cabin, starboard shelf above settee		
Wind Angle/Speed	Helm mounted chart plotter screen (angle & speed) Helm mounted auxiliary screen Top of mast wind vane ("masthead fly" or "Windex")		

MACERATOR OPERATION

The waste holding tank can be discharged 3 or more miles from shore. It is unlawful to discharge raw sewage within three miles from the shoreline.

The procedure for emptying the waste holding tank is as follows:

- 1. Open the thru-hull valve
- 2. Position the macerator switch on the DC panel to the ON position
- 3. Activate the macerator pump by holding down the macerator pump switch located near the holding tank. When empty, the pitch of the macerator pump will notably change. A full holding tank will empty in 2 ½ to 3 minutes. Do not activate the macerator pump switch for more than 3 minutes.
- 4. After completing the waste pump out, **close the thru-hull valve**! (The holding tank will fill with seawater if the valve is not property closed).
- 5. Reposition the macerator switch on the DC panel to the OFF position.

PUMP-OUT STATIONS

Dock, being aware of the wind and current. Choose an appropriate method and sequence for tying up. Dock lines are in the port cockpit locker.

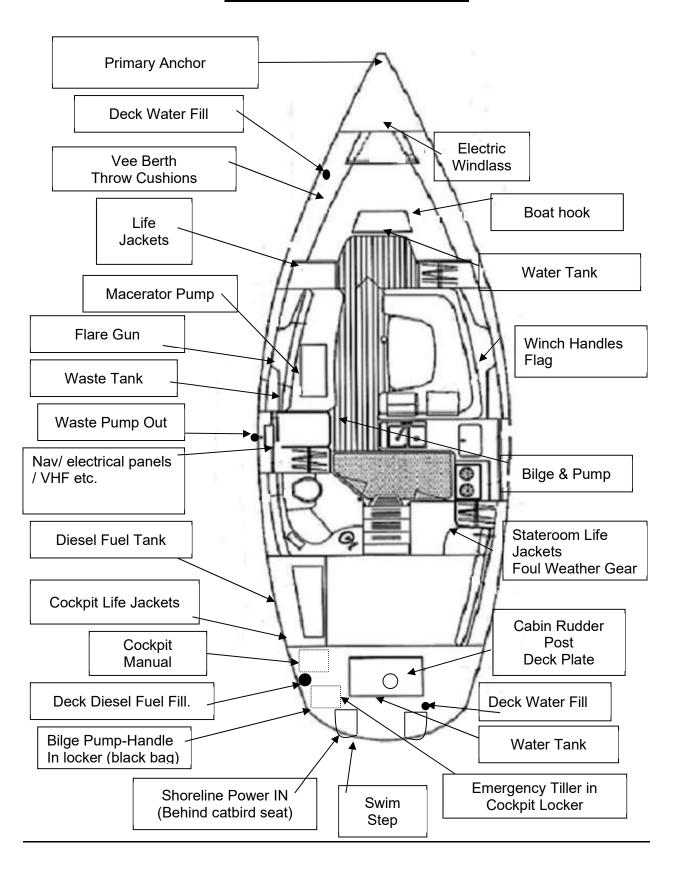
Open the "Waste" fitting on the port side of the boat using a two-toothed key located in the nav station.

Put on waterproof gloves, preferably disposable.

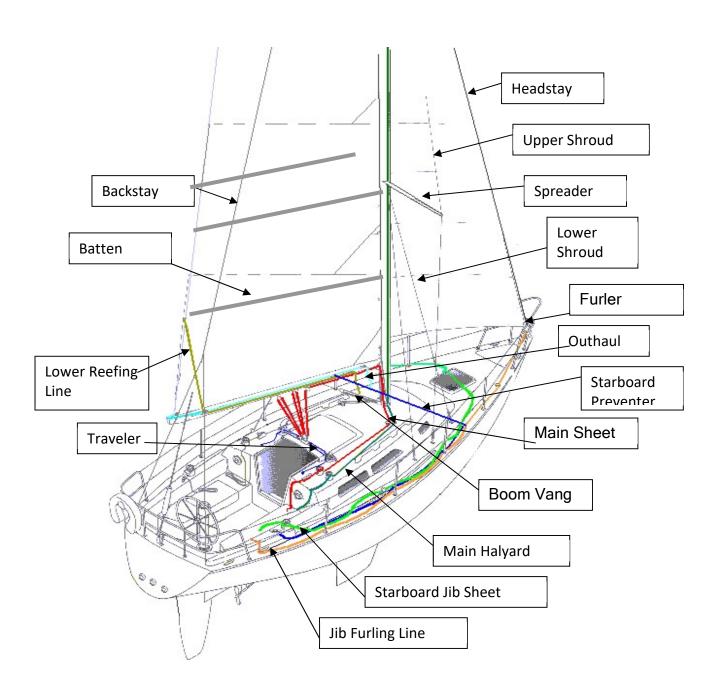
Insert the pump out nozzle into the Waste fitting, turn on pump, and turn on valve (align handle with direction of flow).

There is a vent at the base of a nearby stanchion where the air gets sucked in during waste removal process.

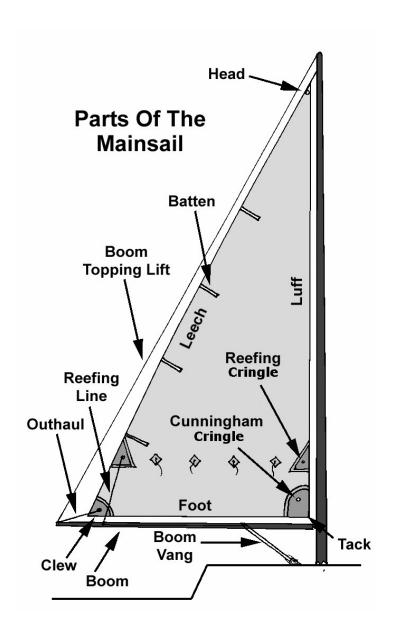
EQUIPMENT LOCATION



STANDING AND RUNNING RIGGING



PARTS OF THE MAINSAIL



BOAT HANDLING

Introduction

The following instructions are presented to help Mate Candidates work through the many steps it takes to sail a boat safely and comfortably. While some of the steps are required, others are subject to skipper and crew preferences and should be considered as guidance rather than requirements. Your skipper will identify those that are requirements. Additionally, this manual is not a textbook. It is mostly intended to highlight and give the Mate Candidate a top view and to facilitate the training process. Mate Candidates are encouraged to read other material and to ask questions. Skippers and Mates are happy to instruct and help. The more familiar you are with all aspects of the equipment and sailing the safer we all are.

CLOSE QUARTERS MANEUVERING

Close Quarters Maneuvering (CQM) under power is one of the most important skills in which a Mate must demonstrate proficiency. Maneuvering in the highly confined areas of a marina poses unique challenges. There are numerous obstructions and the risk of causing damage or injury is high. While at the helm, Mates must be able to maintain good steerage while also operating the boat at a safe speed, both in forward and reverse. This requires an understanding of numerous factors including tidal flows, the effects of windage on the boat and the effect of prop walk, as well as the peculiarities related to a specific dock or mooring location.

The CQM exercises that the Oasis Sailing Club uses in training and in our A&E are designed to build proficiency and confidence in boat handling, and to teach specific skills that are needed to operate the boats safely in common situations that arise. During training or practice, if you are wondering why you are learning a particular maneuver, ask the skipper the purpose.

The CQM maneuvers are described in the A&E Review Form on the Club web site (see Training/A&E CQM). Mentoring skippers will work with Mate Candidates to develop these CQM skills. Before a Mate can take the helm to dock a boat with another skipper, a Mate Candidate must obtain CQM competency sign-offs (page 9).

PREPARING THE BOAT FOR SAILING

NOTE: THIS IS SIMILAR BUT DIFFERENT FROM THE CHECKLIST ON BOARD

Before you leave home:

- ✓ Check on tide conditions and obtain a marine weather forecast
- ✓ Some weather resources:
 - Windfinder
 - Sailflow
 - o Windy
 - National Weather Service (NOAA)

When preparing for departure, remember to report to the skipper:

- a. What you have done
- b. Any concerns you have about the boat
- c. Yet to be completed prior to departure

I. Boat Visual Inspection:

- Walk around the boat
 - o Inspect for damage (hull, equipment, rigging etc.)
 - Standing and running rigging, undamaged and in place
 - o Life-lines secure
 - o Dock step in place
 - Anchor secured
 - Shore lines in place
 - o Shore power is hooked up
 - o Fenders in place to protect hull
 - Complete check list

II. Boarding

- Crewmembers should hand over to on-board crew, or place aboard all carry-on, to have both hands free for boarding.
- Use the dock step on starboard & ensure the two starboard lifelines are released.

III. Cockpit, Cabin & Deck Preparation

- Remove the companionway hatch canvas cover and stow.
- Unlock, remove padlock and remove the companionway hatch panels & stow at companionway portside wall, lock hasp facing out (to avoid scratching other panels).
- Stow the padlock in the navigation station desk
- Remove all covers (binnacle cover, instrument covers, winch covers, Bimini cover & Bimini window-cover, companion way cover & sail cover) and stow below in the aft cabin
- Verify that the porthole in the head is slightly ajar.
- Check the logs for boat equipment condition and operation information and respond to situations, as needed.

IV. Gear Retrieval and Stowage

- Get all cockpit cushions from the cabin and place in the cockpit.
- Put one PFD cushion per person in the cockpit.
- Put two winch handles, one in each holder in cockpit.
- Mount US Flag in the bracket on the stern pulpit

V. Engine, Electrical and System Preparation

- Check helm by turning wheel end-to-end.
- Verify that the boat was left with AC ON: (verify at nav. panel, battery charger rectifier light or dehumidifier fan.)
- Rotate the battery power switch from "OFF" to:_"1" or "2". Use 1 on odd number days and 2 on even number days.
 - NOTE: When switching from one battery to the other go through the "BOTH" position (not the "OFF")
- Verify that the required power breakers are ON
- Check battery status
- Check consumable status
 - Check log for fresh water last fill & holding tank emptying dates
- Turn off the circuit breaker at the dock box and unplug the shore power cable and coil it on the dock.
- Turn on the electrical breakers to enable the radio, instruments, and water pump.
- Press power button on chart plotter and verify that the chart plotter is functioning. Set the chart plotter to the desired chart panel view. (The Operator Manual for the B&G Zeus3 chart plotter contains detailed operating instructions. It is accessible on the Oasis Sailing Club website.)
- Set the auxiliary instrument displays for the desired views.
- VHF: Verify it is ON & set to Channel 16. Check volume and squelch setting.
 Perform a radio check by calling on channels 27 or 69. Return to channel 16 after completing radio check.
- If sail may extend past sunset, check that running lights and at least two flashlights are operational. Remember to do this especially if you are taking over a boat from a day sail to do a sunset sail.
- Check bilge
 - Verify that bilge switch set on automatic and panel breaker is "ON"
 - Verify & operate bilge pump operation manually, remove excess

- water (report water presence to skipper)
- Check for oil or diesel in the bilge water and report anything unusual to skipper
- Engine Visual Inspection
 - o Inspect absorption pads below engine for water or oil
 - Check oil level
 - Check coolant level in overflow receptacle
 - Check alternator and water pump belt tension
 - o Inspect (but do not open) raw water intake filter

VI. Sails and Rigging Preparation

- Line Preparation
 - Release the main sail halyard from its rope clutch and check that it is ready for mainsail hoisting. Place halyard on the appropriate winch. Ensure that the mainsail halyard rope clutch is closed and that the halyard is made ready for mainsail hoisting.
 - Release the boom vang
 - Ease the mainsheet slightly by releasing clutch and re-closing
 - Secure the boom
 - Center and secure the traveler
 - Secure the main sheet
 - Secure the preventer lines
- Ensure that the reefing line and boom vang rope clutches are open and lines can run free
- Retrieve the starboard and port jib sheets. Ensure they are free and ready to be wrapped around the appropriate winches.
- Check jib fairlead car placement on both port and starboard sides

GETTING UNDER WAY

I. At the Dock

- Check the sailing schedule to be sure that all crewmembers are aboard or accounted for.
- Verify that all on board have signed the Friends of OASIS Waiver.
- Ensure that all loose gear is safely stowed below.
- Instruct all guests on safety procedures, location of life vests, fire

extinguishers and use of the head.

II. Start the Engine

- Place the transmission gear-lever in the neutral position and the throttle lever in the idle position
- Turn on the Engine Panel Assembly (EPA)
 - Depress POWER button and release quickly
 - o Red lights and display will activate, and instrument alarm will sound
- Press START button to start engine
- Observe that water is exiting the heat exchanger/exhaust once engine is started
- Check the engine gauges for proper operation (tachometer / oil temp / volt meter/ fuel)
- Let engine warm up for five (5) minutes before proceeding with departure

Tip: Do not operate the engine continuously at idle speed for more than 30 minutes

III. Cast Off Mooring Lines

- Cast off stern, spring and bow lines (as applicable) when directed by helmsman. Leave all lines on dock (they remain cleated at a preset length)
- Remove all fenders from the lifelines and stow two in the aft cabin floor. Temporarily station a crew member with one fender on foredeck and one crew member in stern while backing out in case they are needed to cushion accidental contact with another vessel or object.
- Ensure that port and starboard and aft "gate" lifelines are secured.

Tip: Verify that the boat is free of **all lines** and **shore power** before confirming "all clear". Ensure that all crew members are ready.

IV. Leaving the Slip (Undocking) AS OF 9/2022 UNDOCKING IS ONLY DONE BY SKIPPER CANDIDATES AND SKIPPERS

Undocking NOTE: As of September 2022, undocking is no longer part of the Mate Candidate program and training, and will be done only by a Skipper Candidate or Skipper.

- Post a crew at the stern to watch out for traffic, which might pose a danger to the exiting boat.
- Slowly motor <u>in reverse</u> out of the slip, turn to port when it is clear that the bow will clear the starboard side of the slip; continue to back out of the slip channel until you reach the main channel.

- While motoring in reverse out of the slip channel, ensure boat is 'straight' (and parallel) in the center of the channel. Be prepared to stop or even reverse direction if another boat unexpectedly enters the slip channel or traverses the slip channel entrance.
- When clear of traffic exit straight back until the bow has cleared at least halfway through the main channel. Neutralize the reverse motion. Then, turn to port and proceed down the marina channel fairway into the main harbor channel.

OASIS-V & O-VI are heavy boats; consequently they have a lot of momentum and readily "glide" considerable distances in neutral. Thus, docking and undocking requires attention to speed control. GO SLOW, but maintain sufficient speed for steerage.

A qualified Skipper must be positioned next to all inexperienced helmspersons when docking & undocking to be ready to "take the helm" on a moment's notice if necessary.

- Position a crew member on bow with a fender
- Have a fender in the stern
- Using a dock line, position the bow slightly to port
- Center the helm
- Maintain adequate speed for steerage
- When the cabin hatchway reaches the end of the dock, turn the helm full to port
- When the maximum beam of the boat is out of the slip, apply power to get to a controllable speed and to use prop walk to bring the stern around to port
- When applying power, you can use pulses or moderate steady power, but make sure you don't get going too fast
- Before the bow swings past the center of the channel, straighten the helm
- Make the necessary helm adjustments to keep boat in center of channel
- About 1½ boat lengths from the end of "D" dock, change to neutral and glide; instruct your spotters to watch for cross traffic in the main channel
- Be prepared to come to a full stop or move forward to give way to cross traffic

RAISING THE SAILS

I. Preparation

 With the boat under way and under power turn her directly into the wind, slow down and maintain just enough speed for steerage.

II. Setting the Mainsail

Note: Oasis Sailing Club practices a "safe hoist" technique to raise the mainsail. This involves centering and securing the boom with the mainsheet, traveler and preventers while hoisting the mainsail.

- Center the traveler and cleat it down with both cam cleats.
- Release the boom vang
- Ease then secure the main sheet to reduce tension. Open the reefing line rope clutch. Pull through sufficient slack for the line to run free when the mainsail is hoisted
- Remove all sail ties and stow below
- Wrap at least two clockwise turns around the starboard winch to secure it.
 Then haul in the main halyard to raise the main sail. A crewmember
 standing at the mast, hauling down on the halyard ("jumping" or "sweating"
 the line) will make this task easier
- Complete raising the main using the starboard winch to ensure appropriate tension on the sail's luff (i.e. taut with a slight vertical crease along the luff in a breeze, or looser for light wind)
- Ensure that the mainsail halyard rope clutch is fully engaged and it is safe to take the line off the winch. Remove the line from the winch, flake and stow it
- When crew is in cockpit, release the preventers
- As wind conditions dictate, shape the mainsail using the mainsheet.
 When finished, secure the sheet
- Trim the mainsail using the traveler, boom vang and mainsheet as necessary

Tip: Secure the leeward preventer when sailing downwind or in heavy seas. This will prevent an accidental jibe.

III. Unfurling the Jib

Ensure that the jib furling line is un-cleated and free. As the jib is unfurled maintain enough drag/tension on the line to ensure that the line is not tangled as it on the furler.

- Ensure that the windward jib sheet is free.
- Place the leeward jib sheet on the appropriate winch (2-3 turns), haul it in to unfurl the jib.
- Trim and secure the jib sheet.

Cleat down the jib furling line and stow the line.

IV. Engine Shutdown While Underway

OSC boats have feathering propellers that are designed to minimize drag when the engine is not operating. The feathering action is not automatic and requires the following steps to activate the feathering of the propeller blades:

- 1. The boat should be moving forward slightly faster than the speed the boat would be sailing. (This will ensure the propeller is in the forward position so it will feather properly.)
- 2. Press the stop switch to shut off the engine while the transmission is engaged in the forward gear position.
- 3. After the engine has stopped, momentarily shift to neutral, and then engage reverse gear for a beat. Finally, shift to neutral. This will cause the propeller blades to feather and the propeller shaft will stop rotating.
- 4. Press and hold the power switch to turn off the power once the engine has stopped. This will deactivate the display and all the instrument alarms.

The propeller blades will automatically return to their active position once the engine is started and the propeller shaft is rotated.

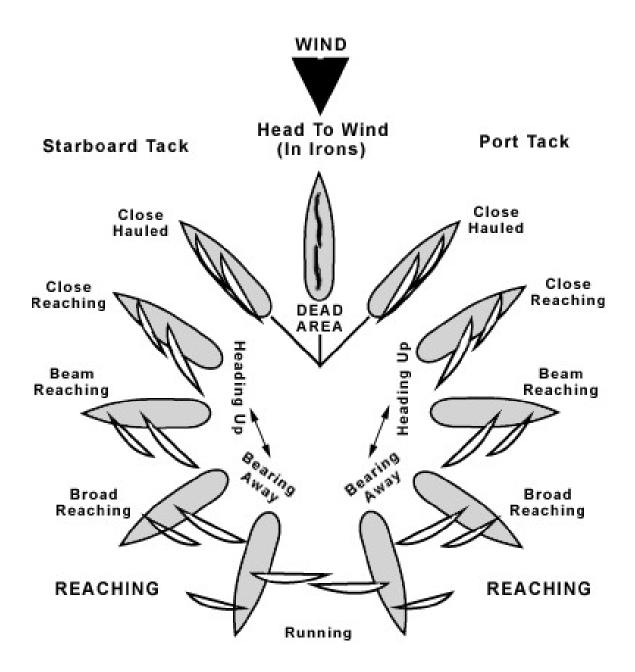
Emergency Shutdown

If the engine cannot be shut down using the normal STOP button on the cockpit panel, the engine can be stopped by pushing the red button at the back of the stop solenoid. This button is accessible from the aft berth through the aft engine compartment door.

Never use the emergency stop switch for a normal engine shutdown. Use this switch only if the normal engine shutdown procedure does not work.

POINTS OF SAIL

It is important to know the points of sail. The terminology is commonly used and you should be familiar and fluent: (a) what they are (b) how to set the sails for each point of sail.



Note: "Bearing Away" as shown above is frequently called "Falling off"

REEFING THE MAINSAIL

I. Preparation

NOTE: If anticipating high ocean winds, consider reefing at the slip or in the harbor.

- Set course and trim jib for a close reach to allow main to luff while sailing.
- Move the traveler car to the leeward end of the traveler and lock in place with both rope clutches.
- Release the boom vang.
- Ease main sheet a few inches to allow boom to rise and let the mainsail luff.

II. Reefing

To "reef," or reduce mainsail area, complete the steps below:

- Main halyard: Lower the mainsail until the reefing cringle near the mast is about 14-18 inches above the boom and close halyard clutch. Use wraps on the winch to lower the halyard safely and with control.
- Reefing line: With the reefing line on the winch, haul it in until both the
 reefing cringle forming the new tack (near the mast) AND the leech cringle
 forming the new clew (near the aft of the boom) are tightened.
- If necessary, raise the main halyard until the luff is taut. If the main halyard was only lowered to 14-18 inches above the boom, the halyard should already be at a suitable height.
- Trim in the main sheet and re-tighten the boom vang

Note that the reefed clew is not attached to the boom like the normal clew. This is why the reefed clew does not "sit" right above the boom but instead floats above it a few inches. While not necessary, the reefed clew can be secured to the boom with a short line or a strap.

Note: If desired to tidy up the loose foot of the main sail, reefing ties may be added at the 4 reefing cringle grommets on the main. These ties should be loosely tied and ONLY around the foot of the sail- NEVER AROUND THE BOOM. Severe damage to the mainsail will occur if the ties are tied around the boom. If reefing in the ocean or in rough sea conditions, it may be safer to omit using reefing ties.

III. Shaking Out the Reef

To "shake out," or remove a reef in the sail, follow the steps below:

- Remove any reefing ties that were used to gather the foot of the mainsail
- Sail and trim the jib for a close reach
- Move the traveler car to the leeward end of the traveler, ease mainsheet and luff the mainsail

- Release the boom vang
- Ease the reefing line while winching the main sail halyard back to the top
 of the mast. It can be helpful to have a crew member pull the reefing line
 through the boom to create slack.
- Trim the mainsail and snug the boom vang as appropriate

FURLING THE JIB

I. Preparation

- Turn the boat towards the wind keeping a little wind in the sail.
- Un-cleat the furling line.
- Throw off both jib sheets but keep enough drag on the jib sheets to maintain a smooth wrap around the headstay as the sail is furled.
- Jib can be reefed by partly furling

II. Furl and Secure the Jib

- Haul in the furling line (using a winch if necessary).
- Ensure that there are 2 to 3 jib sheet wraps around the furled jib.
- Note: in a strong breeze, the jib furls really tightly, and it may not be
 possible to get sufficient jib sheet wraps around the furled jib. If this
 happens, unfurl and re-furl at the dock.
- Cleat down the furling line.
- Secure and store both jib sheets

LOWERING THE MAINSAIL

I. Preparation

- Close the companionway top hatch
- Turn (and keep) the boat directly into the wind
- Release the rope clutch and ease the boom vang
- · Center the traveler and cleat it on both ends
- Haul in the main sheet to center the boom. Cleat it down
- Secure preventers to lock boom in place

II. Lowering and Securing the Mainsail

A designated line handler should ease the main halyard from the cockpit.
 If weather conditions permit, place two sail handlers up on the deck to handle the flaking of the sail; one sail handler should flake the main sail

onto the boom starting at the clew and moving toward the mast. The second (optional) sail handler should stand at the mast and alternatively flake the luff section of the sail on the boom as it is lowered. When finished, 3 to 4 sail ties should be used to secure the flaked sail to the boom.

Tip: If wind or other conditions do not allow for safe sail flaking while sailing, the sail should be lowered to the deck and secured with sail ties, but flaking will be completed in the slip.

- Tuck in slack reefing line(s) into sail folds at luff and leach. Pulling it through at the mast will damage the sail.
- At the slip, complete mainsail stowage with the sail cover.

RETURNING TO THE DOCK

I. Preparation

- Make sure all loose gear is safely stowed below
- Verify that the depth gauge and the knot meter are operating and monitor them closely, especially the depth gauge at low tide
- Release starboard lifelines in preparation to carefully step off the boat onto the dock
- Assign responsibilities to secure lines once boat has returned to its slip
- Send a crewmember to the bow with a fender prepared to fend off if necessary

Docking maneuvers are highly susceptible to mishap and thus require the crew's full attention

- Prior to entering the "D" dock channel, make a "horseshoe" maneuver to slow the boat to obtain maximum visibility down the "D" dock channel
- Proceed slowly down the slip channel watching for cross traffic
- Bring the boat, in a gentle "arc," slowly into the slip, preferably in neutral gear and shift into reverse, if necessary, to slow and stop the boat inside the slip. Remember that the boat turns at its "pivot point" NOT at its bow or stern
- Avoid striking either side of the slip
- Position the boat's starboard stern next to the dock to enable a crew member to safely step off onto the dock

II. Dock Lines

After a crew steps off the boat onto the dock:

- First attach the starboard stern and spring lines. Then attach the bow lines (port and starboard) to the bow cleats and advise the helmsperson "bow lines are on"
- Attach port spring and stern lines to boat cleats
- Place fenders on the lower lifelines near the widest part of the boat

III. Docking

Mate Candidates should adhere to the following maneuvering guidelines when docking at the Oasis slips (under light wind and tide conditions):

Docking

- Enter the slip channel at approximately 1.5 knots
- Position the boat about 2/3 of the way across the slip channel from our slip
- Go slow and only apply sufficient power for steerage, taking into account tide and wind conditions
- Power down to idle and change gear to neutral toggle between forward, neutral or reverse as needed
- When the cabin hatchway is about 1½ slips away from the targeted slip, begin the turn
- Briefly apply a little power in reverse to stop the boat prior to the end of the boat slip.

IV. Engine and Electrical

Caution: Before turning engine "OFF" verify that the lines and boat are secure

- Place the transmission lever in neutral
- Rev the engine 5 times in quick succession to at least 2,800 RPM. This should be performed within a timespan of 15 seconds. This procedure will clean out the carbon buildup from the cylinders and the fuel injection nozzles.
- Push the STOP button on the EPA. The engine will stop, and the instrument alarm will sound. Then, to turn off the display and deactivate the instrument alarm, press and hold the POWER button for approximately 3 seconds.

Tip: Obtain engine hours from EPA display prior to turning off the EPA display.

- If the engine does not shut down on the first or second attempt, or a crewmember has accidently hit the POWER button on the EPA with their foot, press the POWER button briefly. The instrument lights will come on. Then proceed to turn off the engine by depressing the STOP button on the EPA.
- Carefully connect the shoreline AC power cord, then turn on the circuit breaker at the dock box. Always wrap the incoming cable around an upper stanchion or another easily visible frame. Ensure ample cable slack so the boat electrical connector is not pulled or strained. Ensure that AC power is operating by checking the AC light on the instrument panel above the navigation table.

Tip: Exercise caution to avoid damage to the AC connector. Do not drop the plug or cable in water. If the plug goes in the water, do not connect it to the boat, but coil on the dock and inform the Maintenance Chair.

SECURING THE BOAT AT THE DOCK

I. Stowage of Gear

- Remove all personal gear and place it on the dock.
- Remove all trash and dispose of it in the dumpster on the dock.
- Remove the cockpit & PFD cushions, ensure they are dry and stow in Vberth. If damp, hang in an appropriate space.
- Retrieve and install the instrument, winch, Bimini, binnacle helm & sail covers.
- Remove the flag from the stern rail and stow it on the shelf above the starboard settee.
- Remove the winch handles and stow them on the shelf above the starboard settee.

II. Passenger Disembarking

- The Mate needs to make sure the boat is close to the steps when crew are disembarking
- Crew members should have both hands free and should use at least one hand to hold a stanchion or other secure handhold when stepping off the boat onto the dock.
- Leave the area around the disembark location free of sailbags and other gear.

 Any passenger who feels hesitant about stepping off the boat to the dock should request assistance from a crewmember.

III. In the Cabin

• If neither rain nor fog is expected, crack open the porthole in the head.

IV. Engine and Electrical

- Battery Switch: With the engine off, turn the battery switch to the "OFF" position
- Verify that the AC main panel electrical switch is "ON" (switch light is ON)
- Ensure bilge pump switch on "Auto"
- Verify that the 110 v (AC) green light is on after AC is connected
- Remove the padlock from the nav station desk and hang it the companionway sliding cover.

V. Cleaning & Closing the Boat

- The Mate shall verify that the cabin, head and galley are clean. Mate to ensure that all garbage and dirt are collected for removal. Some dirt might need some cleaning and scrubbing. Place new plastic bag in the trash can
- Remind the Skipper to fill out the log
- Install the companionway hatch covers and lock the padlock
- Secure all canvas covers in place
- Step ashore. For safety and courtesy, the Mate should remain on board until the Skipper has left the boat. Verify that all lifelines and mooring lines are attached.
- Hose down the boat <u>after sailing to remove saltwater residue and aircraft</u> <u>jet fuel residue (our slips are under a flight path).</u> Use the dock hose to wash down the hull, cockpit, railings & decks to remove dirt, debris and residue. Be courteous to other OSC members; leave the boat in the same condition for the next user as you want it left for you.
- Before leaving: Step back (do not fall in the water), take a good look at the boat, rigging etc. to ensure that everything is in ship shape.

SAILING IN FOG

- Position a crew member on bow as a lookout
- Turn "ON" running lights
- Turn "ON" steaming lights, if motoring
- Use chart plotter and waypoints to navigate and identify location of buoys, jetty and harbor markers
- Follow rules of horn signals

VHF RADIO AND CHANNELS

VHF Radiotelephone (156-162 MHz) - Used for voice communications with other ships and coast stations over short distances.

Channel 16

For distress, emergency, safety and initial vessel contact messages ONLY. The
intent here is to have the recreational boater make contact on channel 16 and
then move to one of the other recreational channels thus clearing channel 16 of
some of its traffic. Never use channel 16 for a radio check.

Channel 9

 Designated by the FCC as the Recreational Calling Channel for use by noncommercial boaters.

Channel 27

• This should be used for radio checks. Never use Channel 16.

Channels 68, 69 and 71

 For non-emergency calls, once contact has been made on channel 9 or 16, switch to one of these "working channels. Also use these channels for your radio checks.

Channels 3, 21, 23, 61, 64, 81, 82 and 83

These channels are reserved for U.S. Government use only.

Mayday calls

 Used only when there is immediate danger of loss of property or life and loss of communication. In other words, if you are sinking, or see another vessel sinking, or someone on board is seriously injured, you issue a "Mayday" call.

- Otherwise use the "Pan Pan" call. (If possible, obtain your location from the GPS)
- Oasis sailboats are equipped with MMSI (Maritime Mobile Service Identity).
 When activated, the VHF radio will automatically send a distress signal along
 with GPS coordinates alerting emergency responders. Lifting the red
 "DISTRESS" cover on the VHF radio and pressing the button underneath
 activates this function. (A distress button is also accessible on the back of the
 helm mic.)
- MMSI is used ONLY in a LIFE-or-DEATH situation. The Skipper is the only
 person authorized to issue an order to activate the MMSI distress signal. If the
 Skipper is incapacitated, the Mate is authorized to issue the order.

Hailing (or Raising)

- Other than being in standby, Channel 16 is also used for hailing and distress purposes. Once contact is made, switch to another working channel to continue the conversation. Make your initial hailing call clear and short!
- The correct hailing procedure is to state one to three times in succession the
 name of the boat or station you are calling, followed once or twice by the name of
 your boat, then "Over." Any additional words are unnecessary and incorrect
 procedure. Once your party replies, you instruct him/her to switch to a working
 channel like 68 or 69 and clear channel 16.

CREW OVERBOARD (COB)

Picking up a crew overboard (COB) follows the following outline:

- 1. Get to the COB quickly and safely.
- 2. Secure the COB to the swim step.
- 3. Call for help.

. Whatever method is used to return to and retrieve the COB, the process starts with the following four steps:

- 1. IF A PERSON FALLS OVERBOARD, whoever sees him first should hail "CREW OVERBOARD!" to alert the rest of the crew. Then the helmsman repeats the hail
- 2. Seat cushions or life preservers should be immediately thrown to the COB
- 3. A crewmember will be assigned to keep his eyes on and CONTINUOUSLY point to COB. This crew member should NOT do anything else.
- 4. The helmsman should simultaneously activate the two MOB buttons on chart plotter. This will immediately set a waypoint for the COB position.

There are many methods that can be used to retrieve a COB, and most of the methods published for teaching sailing are sailing-only methods, such as the Jibe-stop method and the Figure 8 method. These methods are very good for developing skills for CQM under sail, and in the event the engine doesn't work. However, in the club boats, the engine should be used while returning to the COB.

Any method used correctly ends up with the boat stopped next to the COB. Usually this means that the final approach to the COB is head to wind with the main secured by the traveler and the preventers, and the jib furled.

Practice is highly recommended. Picking up balloons at sea is a good COB practice opportunity.

ANCHORING

All boaters need to master the art of anchoring if they intend to cruise with peace of mind. Without a good understanding of anchoring skills, sooner or later in boating, this will lead to difficulty, inconvenience or even danger.

The objective of successful anchoring is to keep the boat in place without dragging the anchor once it has been set. Successful anchoring can be achieved by following the "3-S Rule":

- Survey Make a preliminary pass through the anchorage area prior to committing to an anchoring location. Obtain a good understanding of the depth, slope, seafloor, hazards, and nearby anchoring boats. This survey will also involve a review of charts or other publications for information on the anchoring site.
- **Scope**: For a secure anchoring, it is important to deploy an appropriate length of rode (e.g. anchor chain and line). This is determined by selecting a proper scope (e.g. the ratio of rode to anchoring depth). For effective anchoring, a minimum scope may range from 5:1 to 7:1; however, a higher scope may be necessary for strong conditions. When calculating your desired scope, the depth should be based on high tide water levels and take into consideration the height of bow roller from the waterline.
- **Set**: Getting a good set involves securing the anchor firmly in the seafloor. It is important to carefully deploying the anchor and then backing away in a manner that secures the anchor flukes into the seafloor.

I. Anchoring Procedure

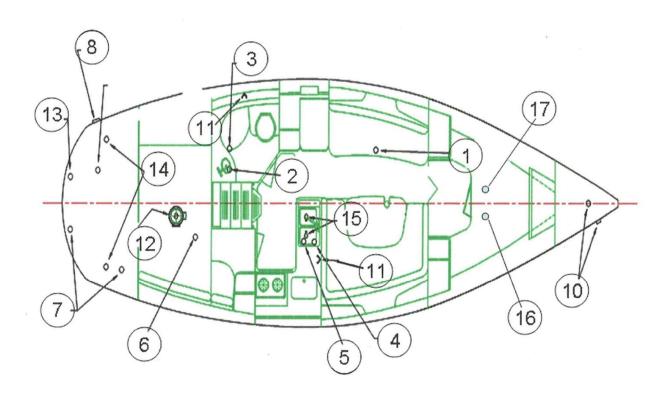
- 1. Ensure that the chain and line will deploy freely from the chain locker.
- 2. Referring to the appropriate chart, determine that the bottom of the selected anchorage is suitable for secure anchoring (i.e. not rocky or grassy).
- 3. Note other boats at anchor and select an anchoring site accordingly.
- 4. Motor over the anchoring point, note depth, unlock chain and lower the anchor.

- When the anchor has hit bottom, slowly back away downwind while paying out the anchor line. When the desired scope has been attained, make the anchor line fast.
- Set and test the anchor by slowly increasing RPMs while in reverse gear. Note boat location throughout this process to check for drag. Once satisfied that the anchor is firmly set, shut down the engine.
- 7. Consider assigning "anchor watches" if there is any concern about weather, anchor drag, collisions with other boats, etc.

II. Getting Underway

- 1. Motor slowly towards the anchor, retrieving anchor line as you close in.
- 2. When directly over the anchor, stop the boat and pull the anchor straight up to dislodge from the seabed.
- 3. If anchor fails to dislodge, make anchor line taut and motor slowly upwind of the anchor. Unless the anchor is lodged in rocks or fouled on something submerged, this step should dislodge the anchor.
- 4. Recover and stow the anchor, chain and line.

APPENDIX I: THROUGH HULLS AND DRAIN LOCATIONS



1	MACARETOR PUMP	10	ANCHOR LOCKER DRAIN
-		_	
	HEADSINK OUTLET		VENTED LOOP BEFORE #5
3	HEAD INLET	12	1" IN 5/8" OUT (WATER STAINER)
4	GALLEY SINK OUTLET	13	COCKPIT OUTLET
5	ICEBOX DRAIN OUT	14	COCKPIT DRAINS
6	ENGINE COOLING IN	15	GALLEY SINK DRAINS
7	LPG DRAINS	16	DEPTH SOUNDER
8	BILGE OUTLET	17	KNOT METER
9	ENGINE EXHAUST OUT	7	