



# Bluewater Sailing

Est. 1978, 25<sup>th</sup> Anniversary !!  
A Division of Compass Rose, Inc.  
**SAFETY! FUN!! LEARN!!!**

TM

Sailing, Power & Navigation Instruction  
Yacht Management and Delivery

Our Professional Instructors Average More than 20 Years Experience On The Water  
Only American Sailing Assn. & International Yachtmaster Certification Facility in U.S.

Boat Rentals & Yacht Charters

Group / Private Lessons

## ANCHORING

### OVERALL

- Safety is paramount. If an operation can not be done safely, we will delay and correct the situation before proceeding
  - never stand => in the bight of a line => in the anchor locker while rode is being raised or lowered
  - => outboard of the anchor rode
  - never straddle / stand over the anchor rode
- Speak up if you are uncertain, unsafe, untrained or inexperienced
- Don't handle lines if you have been drinking or are smoking ( if you're doing drugs, you've already been thrown off the boat )

### PREPARATION

- Remove all watches, rings and jewelry & store them below
- Put on gloves and kneepads as applicable

- Review anchor plan, including hand signals and communication
 

⤴	⤴	⤴	↑↑	⤴	“⤴⤴”	“↗↗”	←	“⤴⤴”	↑	
steer	put in	steer	steer	slow	speed	kill	put in	anchor.		
left	neutral	straight	right	down	up	engine	reverse	up/down		

( One hand: course adjustments;  
Two hands: engine changes )

- Determine / Estimate / Evaluate:
  - depth of water and type of bottom
  - type of anchoring system ( hand down / windlass up, hand up & down, windlass up & down, etc. )
  - amount of anchor rode and type of anchor to place in water
  - anchor method to use ( single bow, bow & stern, two bows, Bahamian moor, Mediterranean moor, etc. )
  - scope needed: ( for safety and to minimize rope chafe on bottom )

$$\text{Scope} = \frac{\text{Length of Anchor Rode}}{\text{Depth of Water}} \quad \text{Scope} = \frac{\text{Length of Rode}}{\text{Depth of Water}} \quad (\text{Adjust for Expected Tidal Range \& Weather})$$

Scope Desired:	Temporary “Lunch Hook” =	3 - 5	Note:	Scope Can Be Slightly Reduced
	Normal Overnight	= 7		as Depth Increases and / or As
	Heavy Weather / Storm / Current	= 10 +		More Chain (vs. Line) is Used

- Lock or tie open anchor locker hatch
- Check to ensure entire anchor rode chain and line is safely organized:
  - belay / cleat off anchor rode **Bitter End** around anchor locker cleat ( to ensure that rode is not lost overboard )
  - verify rode will run free without jamming
  - anchor line is on bottom of locker with chain on top ( to match order that rode will be released )
- Take one turn of anchor line around deck cleat just behind chain / line transition
  - this allows a safe & easy transition by hand between chain & line
  - ensure line can run out to chain and then anchor from **Forward** portion of cleat

“The best noise in all the world is the rattle of the anchor chain when one comes into harbor at last and lets it go over the bows.”

Hilaire Belloc On Sailing the Sea

**COMMUNICATION**

- To / from the captain and anchor leader is critically important
- Everyone must understand their job & stay with it until anchor is set or reassigned by the captain

**ANCHOR SETTING PROCEDURES**

- If necessary, a preliminary survey of potential anchor location, water depth, wind direction, etc. will be taken
  - conduct all anchor maneuvers for vessel ( approach, stop, back down ) except setting the anchor
  - based on the “practice run”, make adjustments ( if any ) in the anchor plan
- Final approach will be made into the wind
- Dinghy will be brought in close or alongside / ensure no slack in line that might foul propeller
- Captain will direct removal of anchor shackle pin
- Anchor leader will
  - report when ready to set the anchor, ensure bitter end of the rode is secure
  - ease out anchor so that just the tip of the fluke is in the water
- Boat will motor up to anchorage head to wind, then be placed into neutral, note the depth
- Allow wind to blow back / or place engine slightly astern
- When boat has stopped (deep water) or slight sternway (shallow water), Captain will order: "Ease out the [forward] anchor"
- Anchor Leader will ease out the anchor chain while standing aft and clear of anchor locker
  - ensure chain does not hit boat or pile up chain on bottom
  - ease / pay out slowly by hand but without snubbing or standing in a bight ( keep bitter end attached )
  - preferred: pay out at same speed as boat (slight ) sternway
  - maintain one turn of rode end around deck cleat & slowly ease out the anchor line ( especially if in deep water )
  - emergency: if chain is running out too quickly, **do not firmly hold anchor line** ( just let it go )
  - stay in communication with captain & report the veer (communicate via anchor assistant)
- When proper scope is out, Captain will direct Anchor Leader to abruptly snub / check anchor & then belay / cleat off the rode
- Captain will run engine astern (1500 - 1800 rpm) to set anchor and check drag
- If anchor skips, let out additional scope or recover and reset anchor
- Lash / lock helm, set chafing gear, set anchor snubber / install anchor shackle pin
- Hoist anchor ball or fender & turn on anchor light
- Take and record navigational position & depth / start anchor log: navigational marks, bearings & depths
- Rig second anchor on deck or in water as emergency back-up
- Establish anchor watch if necessary ( bad weather expected, poor holding conditions, crowded anchorage, etc. )
- Check anchor with snorkel if feasible

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“The single commandment of anchoring is “Thou shalt create scope.” Reese Palley

**TERMS**

Fathom = Six (6) Feet

Ease Off = Pay out More Line to Remove Most of the Tension

Belay = Cleat Off

Rode = anchor chain and line ( can also refer to anchor line only vs. anchor chain )

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**ANCHOR RECOVERY PROCEDURES**

- Fully prepare the vessel to sail in case engine fails after anchor is recovered
  - Pull / windlass up anchor rode while slowly motoring forward ( do NOT pull boat forward utilizing the anchor windlass )
    - if using windlass: use few and long bursts of constant action rather than many short engagements of motor
  - Captain only places engine in forward infrequently ( do not want to run over anchor rode )
    - only when requested by Anchor Leader
    - for a very short period of time
  - Communication from the Captain: **COMMUNICATION** - is critical to easy success!!
    - frequent engine & helm status
    - higher RPM (>1500 rpm) required when using anchor windlass
  - Communication from the Anchor Leader
    - continuously give direction of anchor rode
    - indicate desired engine condition: ahead, all stop, astern
    - indicate when anchor windlass is in use & not in use ( windlass use requires higher engine RPM )
    - “Anchor is ‘up & down”” ( scope is now 1:1)
    - “Anchor has broken free / anchors aweigh” ( vessel is now floating free )
    - “Chain at the waterline” & “chain on deck” ( clean off chain if necessary )
    - “Anchor at the waterline”, “Anchor on deck”, “Anchor secure”
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**SPECIAL CONDITIONS**

(TO BE COVERED IF NECESSARY)

- Kedging
  - Buoying the Anchor
  - Use of a Kellet
  - MoOrings
  - Setting a Second Anchor
  - Difficult Recovery (Motor Over, Dinghy Reversal, Sally Ship, Etc.)
  - Standby Second Anchor (Recovered While Underway), Etc.
  - Catalina Mooring System
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**MOORINGS** ( partial )

- Prep Line: One End to Deck Cleat
  - Indicate Left or Right to Helmsman, Call out Distance
  - Lift Straight Up / Vertical ( No Bend Boat Hook )
  - Leave Mainsail Uncovered & Ready to Go in Case of Engine Failure
  - If Pennant, Pick up Tail with Boathook (Not Hook on the Ball)
  - Double Up Lines, Set Chafing Gear
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“The clink of an anchor chain, the ‘yo-ho!’ of a well time crew, the flapping of huge sails – I love all these sounds.”

John ‘Rob Roy’ MacGregor

**ANCHOR SELECTION**

CONDITION "X" = Recommended	CQR / PLOW	DANFORTH / FLUKE	BRUCE	DELTA	FISHERMAN	NORTHILL
CHANGING CURRENTS	X		X	X		
FOUL WITH RUBBISH	X		X	X	X	X
GRASS & WEEDS	only fair	skips	X		X	X
MUD, SOFT	X,excellent	flukes drag				X
ROCKS & STONES	X, fair	skips		X	X	
HARDER MUD & SOFT CLAY	harder	X				
SAND & CORAL		X		X	X	X
SAND & GRASS	X	X	X	X	X	X
SAND & GRAVEL	X	X	X	X		
SAND & MARL		X	X			
SHORT SCOPE			X	X		
STRONG CONSTRUCTION	X		X	X	X	
HIGH HOLDING TO WEIGHT		X				X
STOWS WELL: ON BOW ON DECK BELOW DECK	X	X	X hard?	X	X X	X
GOOD STERN ANCHOR		X				
ROLLS OVER WELL IN WIND & CURRENT SHIFTS		X		X	X	
LIGHT CONSTRUCTION		X				X
LOW HOLDING TO WEIGHT					X	
STOWS POORLY ON BOW ON DECK BELOW	X X	X	X X	X X	X	X
CAN FOUL ITSELF DURING A ROLLER		X			X	X
CAN TRAP DEBRIS, ROCKS IN JAWS		X	X			X

