

# Crew Instructions

SV Turiae – 2016 Beneteau Oceanis 45

## **Standing Orders**

Be deliberate and act — everyone is counting on you to take timely, responsible actions. Ask questions and seek assistance when in doubt. If you are wondering whether to ask for help or wake the captain, the time to do so has already passed. Ask early and often.

- Everyone must wear a PFD while underway.
- If you leave the cockpit while underway:
  - You must be clipped in with a tether in adverse weather or sea state.
  - An observer must be present in the cockpit — wake someone if necessary.
- Use the doorbell (aft center cockpit table) to summon the captain. Use the air horn to summon all crew.
- Sail changes require at least two persons — always summon help.

## **Notify the Captain at Next Opportunity When:**

- A water tank runs out / the selector valve must be turned.
- Propane runs out.
- Battery voltage drops below 12.6 V.
- Something breaks or is not functioning correctly.

## **Crew Maintenance**

Take care of yourself before you need to. Your effectiveness on watch depends on it.

- Eat before you are hungry.
- Dress before you get wet.
- Layer before you get cold.
- Drink water before you get thirsty.
- Rest before you get tired — nap early and often.
- When you are not on watch, you are preparing for the next watch.

## **Notify / Wake the Captain Immediately When:**

When in doubt, wake the captain. It is always better to disturb a sleeping captain than to face a dangerous situation alone.

- Crew member is ill or injured.
- You are concerned, need a second opinion, or are in doubt about any course of action.
- Restricted visibility is encountered.
- Wind speed or direction changes such that you cannot maintain desired course or speed.
- Sea state or wind requires reefing or other action.
  - Sea state change >2 feet.
  - AWA changes more than 20°.
  - AWS or TWS increases or decreases requiring a sail change.
- Barometric pressure changes 3 mb during your watch, or 5 mb or more in any 6-hour period.
- A weather warning is received for our area.
- A CBDR (constant bearing, decreasing range) situation is developing.
- CPA < 2 nm on AIS — unless a known buddy boat maintaining consistent course and speed.
- Failure to sight an expected ATON or landmark, or unexpectedly encountering one.
- Any mechanical or other issue affecting safety, stability, maneuverability, navigation, or propulsion.
- Electronic navigation malfunction not immediately remedied.
- Approach within 5 nm of land (offshore) or 2 nm (near shore).
- Arrival at a waypoint or planned route turn.
- Fuel level below 1/4 tank while motoring.
- Battery voltage drops below 12.4 V.
- A distress message is heard on VHF.
- Unusual sounds or vibrations.
- SOG drops below 4 knots for more than 30 minutes.
- An approaching squall is noted on radar or visually.
- Depth readings are shallower than expected for the sailing area.
- Difficulty maintaining course or speed, or are doubtful about course, speed, or vessel safety.

## **General Watch Duties**

- Check the watch schedule and know your rotation — ask for clarification before your watch begins.
- All times are “Boat Time” — the time zone of departure or last port, as set on the chart plotter, navigation iPad, and captain's phone. Time zone adjusts upon arrival at destination.
- Be ready to go on deck at least 5 minutes before your watch starts, properly dressed with life jacket, harness, and tether. At night, clip on tether before leaving the companionway.
- If the autopilot is in use during periods of heightened risk, maintain a position from which you can immediately take the wheel — this may mean standing at the helm even if not actively steering.

## **Monitor Throughout Your Watch**

- Course / heading
  - Speed: SOG and boat speed
  - Wind: AWA, AWS, TWS
  - Sail trim — sails should be silent!
  - Weather: barometric pressure, radar, and visual observations
  - Traffic: AIS, radar, visual — vessels, ATONs, and land
  - Chart: verify position, depth, and check for reefs or hazards
  - VHF Channel 16 for distress or other calls
  - Engine gauges (fuel, oil, temperature) if motoring
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- Maintain a clean and tidy cockpit — secure lines, devices, and any loose items.
  - Turn navigation lights on/off as required.
  - Secure any loose items above or below decks as needed.

## **Night Watches**

- You must be clipped in 100% of the time while above decks after sunset.
- Navigation lights on vessels are solid (red, green, white). ATON lights are flashing (green, red, yellow, white). Be certain of what you are observing.
- Maintain heel angle at 10° or less.
- Call for assistance for any sail plan changes.
- Use red lights to preserve night vision. Set all electronics to night mode at minimum brightness.
- Limit or eliminate device usage at night to preserve attention and night vision. No earbuds or headphones — Bluetooth speaker at low volume is okay.
- A standing watch is preferred when sea state and safety allow.
- Continuously and slowly scan the horizon, instruments, sails, and cockpit.
- Sail trim is difficult at night — occasionally use a light to check telltales, and listen for luffing or flutter. You can test trim by heading up to luff or easing a sheet.
- If hand steering, steer by stars when possible. Set course by compass/plotter, pick a reference star, and periodically reconfirm with compass/plotter. Remember: stars move across the sky (except Polaris).

## **Watch Shift Change**

### **Outgoing Watch**

- Complete the watch log.
- Brief the incoming watch on:
  - Traffic: any vessel, land, or ATON contacts within 10 nm (AIS, radar, visual).
  - Sail plan: current configuration and any changes made or anticipated.
  - Wind: AWS, TWS, AWA.
  - Weather: current or anticipated events or trends, including radar review and barometric pressure.
  - Navigation: position (GPS), course (COG and magnetic heading), speed (SOG and boat speed), depth, ATONs/landmarks, autopilot mode and recent performance.

### **Incoming Watch**

- Check sail trim and perform any needed sail changes before the outgoing watch goes below. Reef early and often!
- Confirm all wind and navigational data.
- Memorize the desired magnetic heading to maintain desired COG — reconfirm routinely throughout your watch.

## **Moored / At Anchor**

- The boat must be on anchor and stable with no dragging for at least 1 hour before leaving the vessel.
- Use a minimum scope of 5:1 at all times unless safety requires otherwise and it has been discussed and agreed upon.
- The snubber must be used while at anchor.
  - Light weather bridle: winds up to 25 knots.
  - Heavy weather bridle: winds above 25 knots.
  - See guidelines posted in the anchor locker.
- The anchor alarm must run continuously on the navigation iPad. All crew are encouraged to run their own alarm.
- The captain is responsible for anchor light on/off — all crew assist in remembering.
- The swim platform must be raised at night, or any time weather or sea state could cause it to impact a wave. If a wave strikes the lowered platform, it can be ripped from the transom — resulting in large holes in the hull.

## Sail Configuration

Always set sails for gusts, not average wind speed.

### Wind Speed Guidelines (AWS)

- 0-6 kts: Motoring
- 6-10 kts: Full sail, all points of sail
- 10-15 kts: Full sail downwind; begin de-powering upwind
- 15 kts: Reef 1 in main
- 20 kts: Reef 1 main and jib
- 25 kts: Reef 2 main / reef 1 jib; work toward reef 2 main and jib
- 30 kts: Deep reef 3 main / reef 2 jib; work toward deep reef 3 in all
- 35 kts: Storm jib, reef 4+ on main

### Sail Plan Reference

TWS (kts)	TWA (°)	Headsail	Main	Engine
< 4	Any	-	-	On
<6	<120	-	Full	On
< 6	> 120	-	-	On
< 10	<90	Jib	Full	-
< 10	90-160	A Sym	Full	-
< 15	90-160	A Sym.	Full	-
< 17	Any	Jib	Full	-
> 17	Any	Jib	1st Reef	-
> 21	Any	Reef 1 Jib	1st Reef	-
> 25	Any	Reef 1 or 2	2nd Reef	-
> 27	Any	Reef 2 or 3	3rd Reef	-
>30	Any	Storm Jib	Deep Reef	-

TWS = True Wind Speed | TWA = True Wind Angle | AWS = Apparent Wind Speed  
AWA = Apparent Wind Angle | "-" = Not applicable / as needed