



## OPERATIONAL PROCEDURES



# OPERATIONS MANUAL

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# OPERATIONS - ENGINE

## ENGINE START UP

- Open engine raw water cooling valve
- Check coolant tank to ensure levels are sufficient
- Turn on batteries via Master battery switch (starboard under chart table seat) and select either battery bank 1 (engine) or both (house & engine)
- Check engine control lever is in neutral position (centred)
- Turn key to ignition position for audio/visual alarms
- Turn key to start
- Check for water coming out of exhaust
- Audible oil alarm stops and all alarm lights extinguish
- Run at idle speed for 5 minutes to warm engine up
- Check in engine compartment to ensure nothing is loose or damaged, oil leak or water hoses leaking.

## ENGINE SHUT DOWN

- Allow engine/turbo to cool down by idling for 5 mins once on mooring or in berth
- Turn off engine key to stop engine
- Visual in engine bay to ensure all in order (no leaking hoses/no water in bilge)
- Check shaft seal and ensure not dripping more than one drip per 30 seconds
- Turn off battery switch

# OPERATIONS – 12V & 240V

## GENERATOR INSTRUCTIONS (240V)

ONLY TO BE OPERATED BY CREW UNDER EXPLICIT INSTRUCTION FROM THE MASTER

### Start Procedure

- Battery (aft cabin - starboard side) to “BOTH”

### On switchboard:

- Turn Power Select to “OFF”
- All Yellow switches “OFF” (down)
- Ensure sea cocks in Master cabin under centre floorboard are open
- Key to “PRE-HEAT” & hold for 10 seconds
- Turn key to “ON”
- Hold “PRESS IN AT START” button (white) in while turning key to “START”
- Once generator starts release key and “PRESS IN AT START” button (white)
- Let run for one minute
- Turn Power Select to “SHIP”
- Turn on Battery Charger (yellow switch)

### Close Down Procedure

### On switchboard:

- All Yellow switches “OFF” (down)
- Turn Power Select to “OFF”
- Turn key to “OFF”
- Battery (aft cabin - starboard side) to “OFF”

## 12 VOLT PROCEDURES

### To energise 12 volt dc system

- Turn on batteries via Master battery switch under starboard chart table seat and select either battery bank 1 or both
- Log voltage and Amp at chart table via Ampere gauge
- Select on red circuit breaker switch at chart table
- Turn on electronic or electrical device

### To shut down 12 volt dc system

- Turn off electronic or electrical devices
- Turn off red circuit breaker
- Switch battery bank to off via battery switch (at end of trip)

# OPERATIONS - GALLEY

## FRIDGE INSTRUCTIONS

DO NOT RUN FRIDGES AND WATER MAKER AT THE SAME TIME

### Start Procedure

- Fridge control panel & taps are on starboard side in the lazaret
- ONLY ONE COMPRESSOR RUNS AT A TIME
- If Pump 1 is operating (i.e. centre switch is up) then ensure Comp 1 switch is ON (i.e. left hand switch is down) & Comp 2 switch is OFF (i.e. right hand switch is up).
- Turn left hand tap on fully, then back off for one full turn.
- If generator is running then turn yellow “fridge” switch on switchboard control panel in Nav station “ON”. If not then complete generator start up procedures below.
- Ensure water is flowing out starboard side aft outlet at water level
- If Pump 2 is operating (i.e. centre switch is down) then ensure Comp 2 switch is ON (i.e. right hand switch is down) & Comp 1 switch is OFF (i.e. left hand switch is up)
- Turn right hand tap on fully, then back off for one full turn.
- If generator is running then turn yellow “fridge” switch on switchboard control panel in Nav station “ON”. If not then complete generator start up procedures below
- **Ensure water is flowing out starboard side aft outlet at water level**

## FRIDGE INSTRUCTIONS (continued)

### Close Down Procedure

- Fridge control panel & taps are on starboard side in the lazaret
- If Pump 1 is operating (i.e. centre switch is up) then ensure Comp 1 switch is ON (i.e. left hand switch is down) & Comp 2 switch is OFF (i.e. right hand switch is up).
- Turn left hand tap OFF fully
- Turn yellow switch off on switchboard control panel in NAV station OR
- If Pump 2 is operating (i.e. centre switch is down) then ensure Comp 2 switch is ON (i.e. right hand switch is down) & Comp 1 switch is OFF (i.e. left hand switch is up)
- Turn right hand tap OFF fully
- Turn yellow switch off on switchboard control panel in NAV station  
(rip)

## GAS INSTRUCTIONS

### OPERATING THE GAS (galley)

- Gas bottles are in the port locker in aft cockpit.
- On Switchboard panel turn “GAS GUARD” on

# OPERATIONS - GALLEY

## LIGHTING THE HOB

- Make sure the gas guard is on at the switchboard panel
- Turn the knob to the left and press and hold to ignite

## LIGHTING THE OVEN

- Make sure the gas guard is on at the switchboard panel
- Open oven door
- Turn oven knob to left up to the small white line on the dial and press and hold in
- Click on the red ignition switch and keep holding the oven knob in for 10 seconds
- After 10 seconds release the knob gently and immediately turn around to your chosen heat setting and check the flames have fully ignited

## USING THE OVEN

- The oven is tricky. It's very hot at the bottom and the back and can burn things quickly
- Use the top shelf if you only need one shelf, this way you minimize burning risk!
- When cooking every 10 mins or so rotate the oven tray front to back, top to bottom
- Always cook on a solid oven tray never just in an aluminium foil tray. It WILL burn!
- Never leave trays in the oven after use. They rattle around and can break the glass door
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## THE GRILL

- The oven is also a grill
- To use the grill remove the metal tray in the top of the oven.
- The knob to light the grill is the far left knob.
- To light press and hold for approx. 10 seconds. You may need the yellow sparker to ignite it if you have trouble.

## WASHING UP

- Be smart about washing up...don't let it pile up but also consider your water usage
- Wipe down plates ideally with used napkins from the meal or with paper towel (be economical with your use of it)
- Rise plates with salt water after they've been wiped down
- Wash-up using fresh water and a little detergent
- ONLY fill the bowl ¼ full unless you're doing a large wash up after a meal.
- We don't have enough water to rinse everything after washing up so only rinse if essential.
- If the water is still clean leave it in the bowl for future use
- If the water is dirty let it out then wipe down the sink and clean the plug hole afterwards
- Dry and put away all washing up after use.

# OPERATIONS – WATER, FUEL & SEWAGE

## FILLING THE WATER TANKS

- Open floor in saloon, under floor starboard side of companionway
- Switch in line valve 180 degrees to forward position
- Fill tank mid-ships starboard side of deck
- Listen in saloon by mast for bubbling water from breather. When bubbling stops call for water to stop. (Once tank full there will be small spray from mast into saloon – dry any water on floor to prevent slipping)
- Close cap of tank
- Switch in line valve 180 degrees to aft position and replace floorboard

## DISPOSAL OF SEWAGE

- Sewage to be pumped out at D'Albora Marina facilities at Rushcutters Bay or King Street Wharf.
- Have absorbent materials at hand in case of spill
- Remove cap on deck, port side forward in line with the mast
- Screw in hose adaptor located rear port outside locker in plastic container marked black water (where gas bottles are located)
- Connect pump out hose
- Monitor level at chart table gauge (B&G Inst switch must be on)
- Disconnect hose carefully and return to holder on dock
- Remove adaptor, wash and return to storage container and locker
- Replace deck cap and record in log

## REFUELLING

- Crew to be present for duration of fuelling
- Shut down machinery and isolate batteries
- Turn off mobile phone
- No smoking or naked flames in or around fueling area
- Locate environmental spill kit on fuel wharf in case of fuel spill
- Place fire extinguisher on standby
- All hoses and equipment should be inspected for tags showing serviceable dates before use
- Hoses to be correctly supported between fuel source and vessel taking on fuel
- Visually monitor and maintain a vigilant watch at all times during filling
- Record quantity and date in log

### Procedure in the event of fuel spillage

- Immediately stop the flow of pollutant overboard into the water
- Notify Master, crew and other vessels in the vicinity that a spill has occurred
- Vessel's crew to clean up on board spillage
- Contact Harbour Control
- NSW Maritime will take responsibility for dealing with spill in the water

# OPERATIONS – BILGE PUMPS & ENVIRONMENTAL

## **BILGE PUMP OPERATIONS**

- Bilge pump is located in engine bay port forward access door (under forward companion way)
- Ensure engine is running
- Locate red T handle which is attached to the valve
- Lift and push forward to rotate valve handle 180 degrees
- Switch on deckwash switch on switchboard in navigation station
- Pump is now in operation
- Confirm bilge water discharge by monitoring water levels
- Reverse procedure to stop pumping bilge and return to seawater hose

## **DISPOSAL OF GARBAGE**

- All garbage to be collected and placed in appropriate bin onboard vessel
- On arrival at dock, garbage bins in heads and galley to be disposed in appropriate bins on shore.

## **DISPOSAL OF WASTE OIL**

- No pollutants or oils contained within bilges to be pumped overboard
- Collect waste oil during the servicing of the vessel's machinery
- Waste oil to be stored in sealed containers
- Any spillage of oil into the bilge to be treated using oil soaker. Notify Master before taking any action.
- Collected oil to be deposit in the oil recycling tank located on shore at Double Bay Marina or CYCA, Rushcutters Bay
- Record oil disposal in vessel's maintenance log

## **ENVIRONMENTAL SPILLAGE**

- Respond to pollutant spillage immediately and isolate overflow
- Contain spillage to prevent pollutant entering wate
- Contact Harbour Control on VHF Channel 13
- Inform and reassure passengers of action to be taken
- Liaise with and provide assistance to emergency response vessel



# PRE-DEPARTURE CHECKS - COASTAL

## GENERAL CHECKS

- Weather forecast reviewed
- Maintenance tasks have been performed
- All hatches are closed and secured
- Escape hatch is closed but inside locks disengaged
- All items are stowed
- All sea-cocks closed (forward and aft under basins)
- Fuel & fresh water levels are appropriate for trip
- Rig lee cloths and prepare bunks

## ELECTRICS & ENGINE CHECKS

- Batteries secure, water levels, terminals tight and clean
- Battery isolator switch selection
- Battery key engaged
- Breakers switched on
- Radio battery key switched on
- Radio check
- Navigation lights working
- Engine room checks

## EMERGENCY EQUIPMENT CHECK:

- Life-jackets & tethers allocated to individuals and readily accessible
- Life raft on-board and in service
- Life rings on pushpit & tied on
- EPIRB and PLBs allocated and accessible
- Flares in date in stored correctly
- First aid kit is fully stocked and contents in date
- Emergency navigation lights & batteries checked
- V-sheet, radar reflector & day shapes stored correctly
- Anchor secure and hawse pipe filled so won't leak
- Emergency anchor on board
- Fire buckets on board
- Fire extinguishers in date
- Jackstays are in place
- Horn operational
- Check bilge pumps operational
- VHF handheld radios charged



# OPERATIONS – COASTAL PASSAGES: WATCHES

## WATCHES

Generally we run the following watch system:

2 people per watch

4 hours on watch during the day starting at 6AM (3 watches during the day)

3 hours on watch during the night starting at 6PM (4 watches at night)

*All hands on deck may be called for reefing, when approaching ports or other challenging situations.*

## STANDING ORDERS

### WAKE OR CALL PAUL IF:

- You see any lights, ships or objects which could be a hazard
- You notice approaching weather, lightening or low, dark clouds to windward
- Increase in windspeed or change in direction
- Unidentifiable sounds or alarms
- IF IN DOUBT, AT ANYTIME FOR ANY REASON

The captain who knows that he will be awakened by the crew for these or any reason will always sleep better!

## WATCH PROCEDURES

### DUTIES OF THE PERSON ON WATCH:

- Be on deck with appropriate clothing on (wet weathers/warm clothes / PFD\*/PLB) at the watch handover time.
- Understand your watch duties (see Duty Roster below – while on watch you need to perform Keeper of the Deck, Navigator & Weather Guru duties)
- **You are the eyes of the ship.** Maintain a vigilant 360 degree watch

### AT THE END OF YOUR WATCH

- Wake incoming watch with 15 minute warning
- Put the kettle on for incoming watch (at 15 min warning) & make a hot drink for them
- At the end of the watch do a thorough handover to the new watch – weather, hazards to observe, sail trim, heading etc

**\*PFD's are required at night or if the wind strength is greater than 15 knots**

## OPERATIONS – COASTAL PASSAGES: DUTY ROSTER 1

ROLE	DUTIES	FREQUENCY
SAILOR & DECK KEEPER	Maintains continuous watch for ships, hazards, weather, lighthouses	All the time
	Monitor sail trim, wind shifts & approaching weather	All the time
	Check engine gauges	All the time
	Keep deck tidy & wipes down white & hatches daily	Daily – (10am -2pm watch)
	Check aft toilet is not flooding & bilges are free from water	Every two hours
NAVIGATOR & WEATHER GURU	Plot route on paper chart for next day	Daily (pre-dinner)
	Monitor position on electronic chart	Hourly (minimum)
	Plot position on paper chart	Every 2 hours
	Keep paper charts organised	Every 2 hours
	Records log book entry including weather observations	Twice a day (over VHF)
	Downloads grib files in Weathertrack app	Twice a day
	Reviews and interprets all weather forecasts for current position and next 12 hours up to 3 days.	On receipt of forecasts
	Check tides & currents for current position and next 12 hours up to 3 days	Twice a day when possible
	Brief crew of weather forecast	On receipt of forecasts



## OPERATIONS – COASTAL PASSAGES: DUTY ROSTER 2

ROLE	DUTIES	FREQUENCY
CHEF DU JOUR	Prepares dinner Dries & stows dishes	Daily After meals
GALLEY HAND	Prepares lunch Washes dishes Wipes down benches Removes tomorrow's dinner from freezer	Daily After meals After meals Dinner time
HEADMASTER & SALOON CONTROLLER	Cleans toilets, wipes out sink & empties bin (when needed) Check all personal possessions are put away in cabins Checks sea-cocks, bilge water	Once a day Change of watch Change of watch