

Roger B's Last update: Monday, 17th September 2012

(Several of these notes need to be updated to reflect changes the boat has undergone since 2012)

General Specification & Details

SSR 13423. Hull No 919676

Length 10.40 metres. Beam 3.60 metres Draft 1.60 metres. Gross Tonnage. 5.70 tonnes

Motor Perkins 4108 Diesel (50hp)

Radio Call Sign: MTDT5 (MIKE. TANGO. DELTA. TANGO FIVE.)

Ofcom (Radio Licence) Number 217932

Insurance. Premier Insurance Policy No MR/013408

No smoking below decks

Keys - The master set of keys should always be left on board. Unused padlocks are normally left on the cockpit 'Clip on Eyes'. Key for liferaft is hung on the EPIRB in the aft cabin.

Electrical System - 12 volt.

The main 12-volt round isolation switch is located behind the companionway steps. Current convention is to use No1.1 and 1.2 batteries for domestic use and No2 battery for engine starting. A subsidiary smaller battery switch just starboard of the main switch allows selection between 1.1 and 1.2. **Do not run the engine with either battery switch in the off position as alternator damage may result.**

No1.1 and 1.2 batteries are approx 100AH and were purchased in Apr 2010. (Both replaced in 2017)

No 1.1 battery is hard wired via a fusebox, forward of the batteries, to run VHF, Stereo Radio, Gas Alarm & Navtext. There is also a direct supply to both bilge pumps.

No2 battery approx. 100AH was purchased Apr 2011. Then 2018

Electric appliances and instruments on the 12-volt system are generally protected by a series of circuit breakers /push button switches (identified with symbols) on the rear saloon bulkhead for, from top to bottom:

- Engine instrument and all cockpit instrument.
- Domestic water pump, earth return is attached to -ve post behind new chart table instrumentation.
- Cabin lights. Note that there is some interconnection behind new chart table instrumentation.
- Bilge pump. Starboard. Beware the other supply to the pumps via the float switch. This switch has been deliberately left unearthed, to avoid difficulties with the dual supply.
- Bilge pump. Port.
- Autohelm supply.

Inside the cockpit locker is a fuse box supplying power to the Cockpit locker light.

The following numbers refer to the new engine instrument wiring diagram. (details in large folder under chart table)

1. The Solenoid supply is via a relay behind the bulkhead between saloon and cockpit. The solenoid takes 27 amps for the few seconds of starting. Supply to the relay is via 2x1.5mm wires directly from the selector switch.
2. Supply to new engine instruments is via a 15 amp contact breaker (top switch of new switch panel on saloon/cockpit bulkhead)
3. New earth return in new position near and behind new switch panel on saloon/cockpit bulkhead.

4. Fresh water temperature alarm is disconnected. It is via new circuitry (to get temperature alarm and display from a single sensor), but alarmed at too low a temperature.(about 60F)
5. Battery charging alarm.
6. Preheater supply is disconnected.
7. Oil pressure alarm, also via new circuitry (to get pressure alarm and display from a single sensor). This does work.
8. Raw water alarm, not fitted
9. Rev counter supply, reads about 20% less than before (due to new alternator pulley?)
10. Not fitted
11. Not fitted
12. Not fitted
13. Pressure gauge supply, pressure reads 4bar (50psi)
14. Temperature gauge supply, temperature reads 90C at 2000rpm

Chart Table Instrumentation.

The Vetus switch panel. Power supply is behind the switch and originates from the main battery selector switch under the saloon steps, via the starter motor solenoid. The functions, from top to bottom are:

- Steaming Light
- Deck navigation lights
- Tricolour light
- Anchor light- all round white
- Deck light
- Switch marked 12V is the fridge on/off switch.

The fridge was purchased April 2006. (Replaced in 2018. £900) The fridge will not discharge the batteries to an unsustainable level because of voltage protection, both as a built in feature of the fridge and by an addition black box behind the chart table instrument panel.

New gas detector, which is hot wired to the battery via same supply as radios and Navtex. (detector head for the detector lies under the floor panel nearest to the sink, when operational. At present we need a replacement head, which only seems to last a season.

Below the stereo speaker is a panel with the following contact breaker switches. These pop out if a fault is detected. They supply:

- Electric toilet
- Shower pump.

Note. A few loose ends lie behind these instruments from the old engine/switch panel.
 the old selector switch live and earth.
 some lighting wires
 some earth returns, principally the domestic water.
 wires to/from the fuel tank and water tank.

Bilge Pumps

Both bilge pumps are Jabsco Water Puppies.

Located in the bilge they are Direct Wired (from No 1.1 battery) . Each pump is operated by a relay (

contained in the white supply box near to the pumps), and operate via a float switch.

No1 New Jun 2000 No2 New Mar 2006 .

Each is individually fused via an in line fuse located close to each pump, remove fuse to isolate.

Bilge Pumps - Service Kit SK224. Service Parts Impellers Cruisermart 6303-0003 Located in pilot berth.

Cockpit - Manual bilge pump 35mm pipe connectors New Diaphragm May 97. No Spare. Pretty ineffective.

Electrical System - Mains 240 volts

A mains shore power socket is located in the aft locker with a circuit breaker in the cockpit locker.

The 220/ 240 volt supply can be wired differently at different marinas and vary between hook up points within the same marina. There is a Plug-in tester for checking polarity and earth. The switch for the 240-volt immersion heater is next to the main battery switch.

Gas supply

Working gas bottles are located in the aft cockpit locker. Port and starboard bottles have regulators (renewed March 2006) that supply the cooker. Single bottles can be exchanged without cutting off the gas supply. Below the cooker is an appliance isolation valve. This should be closed when cooker is not in use.

Calor gas being heavier than air and having no natural escape from the vessel will stay in the bilge's of the boat for several weeks creating a long-term hazard. Every precaution must be taken to prevent the escape of gas within the confines of the boat including the good practice of lighting of matches before the gas tap is turned on and burning out (starving a gas ring) before leaving the boat unattended for long periods.

Domestic Water

Two x 20 gallon. The port water tanks provide water to the Vetus Toilet. The starboard tank supplies the galley, heads, cockpit shower and aft cabin (cold supply only). An 100 litre flexible tank supplements the starboard tank and is located under the companion way. A shortened winch handle in the cockpit locker is for removal of the deck filler caps. A water filter was located in the galley cupboard supplying filtered cold water to the galley, but has been removed. Located near the domestic water pump is a small black cylindrical accumulator tank with an air vent. If the system has been emptied it may need bleeding of air (at both the filter and this accumulator). It is easy to cross thread the bleed screw of the accumulator tank when replacing. A guidance note when changing the water filter cartridge is on file.

The water pump, located below the companionway, is wired via the control panel. The diaphragm water pump was fitted in March 2004 and operates to maintain a pressure. Domestic water can be heated from the 240v immersion heater (Renewed 06). You are advised to use bottled water for drinking.

A Swim & Rinse Cockpit Shower (Whale) was fitted in 1997. (Replaced again in 2018) This has isolation valves accessible from the rear hatch of the aft cabin. Supplied Cruisermart Part Number 32039

Battery Charging:

A Statcharge Truecharge 20 battery charger is installed (March 98) (Replaced in 2016) adjacent to the chart table. It is vital (so as not to blow an internal fuse) to ensure correct 240v polarity. To avoid accidental reverse polarity, switch off the 240v-supply charger as you leave any berth and check polarity before re-connecting. On 240v charge both batteries 1.1 and 1.2 are being charged/

controlled, regardless of the position of either battery switch and the charger must be set to "Flood" position. No2 battery, the starter battery is not charged by this 240v system.

Whilst the engine is running all 3 batteries are charged automatically from the alternator.

Vetus Toilet:

The obvious bit first. Only material that has passed through the human body or toilet paper must pass through this toilet, (p.s. not even kitchen towel, or face wipes). The obvious danger with the new macerator is its semi-exposed position. Keep fingers, other bits of human anatomy or any toilet brush well away whilst the disc rotates.

The toilet is flushed by pressing a button on the top left hand side of the toilet, 1 press or 2 presses. Then stand back and wait for the spectacular action.

Fresh water is used to flush. The forward water tank is used for the toilet only. We have not concluded if there is a need to flush generously but in port, with fresh water available, we suggest we start off by flushing several times. If the water tank is low, you can use the showerhead to supply water from the domestic tank.

As a consequence of this new toilet installation, fresh water only, the toilet waste and basin seacock located in the heads cupboard require opening/ closing. The old saltwater flush supply and the new Waste seacock located in the cockpit locker remain closed at all times until further notice.

The power supply to this new toilet comes from the main panel by the chart table. There is no switch, just a circuit breaker. (It's the top one on the new bottom left corner black plastic cluster). The power supply to the toilet fresh water pump is on the same switch as the domestic water. The pump, (Jabsco PAR-Max 2.9, Flow 11l/m, pressure 25psi) fitted in August 2007, is located under the companionway with all the other pumps.

The toilet waste can be directed out to sea or to the holding tank via a 3 way valve. If the holding tank is used it should be discharged when well out to sea by opening the seacock at the stern end of the cockpit locker and switching on the pump (the switch is located by the companionway steps). It is essential that the holding tank is left empty for the next visitor and it should be well flushed on your final discharge.

Heads Shower:

The new bits are the shower tray, sump and pump. The pump discharges from the old seawater inlet under the companionway. Keep the seacock closed when not using shower, otherwise you will have sea water ingress. The switch to activate the discharge pump is a pull out version located just to the left hand side of the sink cabinet. The pump will run dry but in any case stop it running when the shower tray is empty. At the moment you still need to mop a small amount of water from the tray sump.

The power supply to the shower discharge pump is protected by another circuit breaker just under the one for the toilet on the chart table instrument panel, and is marked as such.

Seacocks:

Eight in Total There are Seven in use:

One seacock controls the operation of the toilet outlet. The old toilet inlet seacock is blanked off. One for the heads wash basin outlet, one aft cabin wash basin outlet and one combined galley sink outlet. One seacock inlet (located below the port quarter berth) for the engine coolant MUST BE OPENED before the engine is started. The seacock outlet to discharge the holding tank is located to the rear of the cockpit locker. The old galley salt water inlet is now the shower outlet. Because it is well below the water line it will back flow through the shower pump if it is not isolated after use. When exercising a seacock also ensure the Cathodic protection cables are attached.

Eight in total: One seacock controls the operation of the toilet. One for each wash basin, galley sink and the domestic salt water. The old toilet inlet seacock is blanked off and should remain closed.

One seacock (located below the port quarter berth) for the engine coolant **MUST BE OPENED** before the engine is started.

The seacock to discharge the holding tank is located to the rear of the cockpit locker.

When exercising a seacock also ensure the Cathodic protection cables are attached.

Engine & Controls:

Engine 1984 Perkins 4108 UK built Number: ED33211U609060L.

Hours Original Counter?? Replacement 1154.9 New Cockpit Counter fitted March 2002

Perkins Power Sales & Service Ltd. Peterborough Cambs PE1 5NA Tel: Technical support 0120289370

Gearbox: Hurth HBW 150V No D52386 Some details File
Tel: 0962881282 Fax: 0926881285

No Spares

Starting the engine; At the start of each season turn on fuel at the valve under the forward helm seat. Open engine coolant seacock. Centralise engine controls to neutral. For security reasons the ignition wiring is via 'Engine Room Lights' switch on the main panel. Turn ignition with open the throttle. When engine fires make sure the alternator (Ammeter gauge) is charging - a burst of throttle may be needed to trigger the charge. The fuel preheat is not connected.

Make sure water is being pumped at the stern exhaust outlet.

A manual stop cable with the pull handle showing a bonnet stop symbol (located between the companionway steps). For security when the vessel is left, a short section of 0.5" plastic hose, placed over the pull stop shaft, permits the pull handle to be held in the stop position. Turn off the ignition to stop the alarm.

Should the engine stop pull fail the engine can be stopped manually. Gain access to the fuel injector pump by removing the engine side cover from within the cockpit locker. The fuel pump is illustrated Engine Photograph A.3 of the Perkins manual directly behind the oil filter. On Juli the configuration is slightly different the pump being further aft. From the pump diesel shut off valve is the fine cable which connects the pull handle. This can be operate by hand to cut the engine.

When motor cruising, observe the temperature gauge and listen for the oil pressure warning buzzer. If oil pressure buzzer is heard, or the temperature gauge shows overheating stop the engine immediately.

DO NOT REMOVE THE RADIATOR CAP FROM A HOT ENGINE BECAUSE BOILING WATER WILL SPURT OUT.

Should the engine fail to turn over, first check the tightness of the electrical connections at the:

a) Starter motor accessible from the cockpit locker, via a lower engine, compartment side cover.

b) Security of spade connectors around the alternator/regulator (accessible from the cockpit hatch and fixed high on the port side. Starting is over-riden if the alternator is unable to charge. If the alternator brushes are damaged the over-ride will also prevent the engine starting. A new alternator was fitted in 2002.

Make sure the battery controls are set to OFF - as any spanner work in this area will cause a short circuit.

To turn the starter-motor in an emergency, the starter solenoid can be shorted circuited, with a screwdriver. See photograph of the starter motor and solenoid assembly.
The engine controls require regular light oil lubrication.

Engine Care:

To start easily, run reliably and maintain good condition a diesel engine needs regular oil changes (100 hours), clean air and fuel together with substantial battery power for starting.

Diesel engines do not perform well or give good service under light load. Running engines, in port, for the sole purpose of charging batteries should be avoided wherever possible. Diesels are designed for, work best, and give long life by running under load - in our case motor cruising. The on board Perkins manual covers servicing and bleeding of the fuel system in detail.

Fuel Supply, Filters & Bleeding. Fuel contamination by dirt rarely causes permanent damage to an engine but can be the cause of poor starting or stalling. Air has a similar effect to dirt but is often easier to diagnose (froth at a bleed screw). Water is the serious contaminant, which can quickly and easily cause permanent damage to the finely machined components of the injector pump and injectors. The golden rule is prevention. The injector system is by far the most expensive and delicate ancillary piece of engineering attached to the diesel engine (£1,000+) and is protected by two of the cheapest items namely the fuel filter and a water separator.

A fractured low pressure fuel pipe, bridged with plastic hose and jubilee clips (made up section of pipe below the aft berth) forms a repair that will easily get you home providing you can air bleed the fuel system. Follow the procedure set out in the manual. It only takes a few minutes, but remember hand priming the primary pump will only bleed the water separator, fuel filter and injector pump. This may be sufficient to start the engine. If not, to bleed the injectors, (the final stage) the engine must be cranked using the battery.

WARNING If you choose, to slacken each injector union and bleed the injectors, ONE BY ONE, (although not prescribed in the manual, this method will work) the engine will possibly start and run when cranking to bleed the second injector. If not it will most certainly start during the cranking sequence for the third injector. - so whilst bleeding the injectors, avoid loose clothing as well as keeping clear of rotating belts.

Injector Removal - Should it be necessary to remove the injectors, note the differing length of the flange securing-studs. Each injector requires one long & one short securing stud. The longest of the pair will bottom out in the wrong hole.

Fuel Filters - The two original filters use either Perkins P26561117, or Fram C1191PL Filters.

The new filter cartridges are Coopers AZF 090 or Bosch N 4106. The units appear universal so other cartridge fuel filters, of the same size, may well suit.

April 2006. The fuel supply was modified so as to bypass number one filter, incorporate an auxiliary 20lt fuel tank (stowed in Cockpit aft locker) and installed rubber bulb pump to aid bleeding air from the system. The normal running arrangement is with No 2 valve closed and the auxiliary tank isolated so as to feed fuel via both filters. To avoid confusion and for normal operation No1 valve is tied open.

In the event of a suspect filter blockage isolating No1 filter and opening No2 valve will feed fuel direct to the second filter.

If the engine runs with no indication of fuel starvation continue journey.

In the event of continued fuel starvation indicated by continued 'hunting' – turn off the engine.

To dislodge any sediment fuel line to the filters, close all auxiliary fuel valves before disconnecting the feed main feed-pipe and blowing back towards the tank. Once clear re-connect the supply and bleed the system.

Fuel capacity. Whilst the manual refers to 200lt, the usable tank capacity is 170 litres providing, at 2000 rpm approximately 48 hours running giving, in calm weather, a boat speed of 5kn.

Engine Cooling System:

The boat has a complex cooling system. Firstly an internal fresh water system provides cooling for the engine. This system may require occasional topping up with clean fresh water via the radiator cap clearly visible below the cockpit hatch. Water (in the fresh water cooling system) is heated by the engine, regulated by the thermostat and pumped, firstly to the calorifier where heat is transferred to the domestic hot water. The coolant is then piped to a heat exchanger (which is attached to the engine - see manual photos), where any residual heat of the coolant is dissipated before being returned to the cylinder block.

The calorifier, (through which the engine's fresh cooling water is circulated), is located behind the hatch at the rear of the aft cabin. A single isolation valve is located in the engine compartment. The calorifier is fitted with a pressure relief valve and a 240-volt immersion heater the switch for which is located near the battery controls. Two valves adjacent the calorifier can isolate the cockpit shower.

The heat exchanger (Renewed in Jan 97) is cooled by raw sea water drawn from the coolant seacock (below aft cabin berth) and pumped through the heat exchanger before being discharged at the transom. The heat exchanger also incorporates an oil cooler.

Raw water is circulated by a pump mounted on the timing gear cover (rear of the engine) and is driven at half speed from the fuel pump gear. The raw water pump will, from time to time, require renewal of the impeller (Spare on board – Bosun's Locker). Pump Jabsco 3270-200 Old Impeller reference number was 1210-0001. Code change to 3085-001. Alternative: CEF 500 107 GT. Agent Cleghorn Waring & Co (Pumps) Ltd. Tel: 01462 480380. Fax 01462 482422. Email mail@cleghorn.co.uk.

The fresh water pump and the alternator are belt driven from the crankshaft pulley. A fresh water pump and a spare drive belt are on board. Both water pumps are fully described in the Perkins manual.

Some likely causes of engine overheating:

- a) Loss or restricted flow of the Fresh water coolant: Loose jubilee clips, split water hoses, leaking water pump, broken drive belt, low water level, dirt/ sludge causing partial blockage of the water ways, faulty thermostat or faulty water filler cap.
- b) Loss or restricted flow (check flow at the stern pump out) of the Raw water coolant: Blocked strainer (external hull fitting), closed Seacock, loose jubilee clips, split water hoses, dirt or sludge causing partial blockage of the heat exchanger, worn raw water pump impeller.
- c) Blown cylinder head gasket. Initially this may be difficult to diagnose. Often, but not

always, causes water contamination of the engine oil, indicated by globules of water on the dipstick. A blown gasket often causes the loss of fresh water coolant and/or a build up of steam pressure causing swollen hoses. Perhaps slowly at first but the water loss and/or steam pressure may quickly increase. Slow running (less than 1500 revs) for a couple of hours with a blown cylinder head gasket is unlikely to cause serious damage providing engine temperature is monitored and overheating can be controlled.

Engines, which suffer overheating, are quickly subjected to the following symptoms and damage: An increase in temperature within the range of the temperature gauge. Further increase in temperature beyond the range of the gauge with a simultaneous steam pressure built up. This will quickly rupture hoses and/ or blow core plugs resulting in the total loss of fresh water coolant. Further rapid increase in temperature causing piston seizure followed immediately with catastrophic damage - Broken Pistons/ rings and/ or crankshaft and/ or connecting rods, ruptured cylinder walls and mangled valve assemblies.

Engine Lubrication:

Engine (Diesel Grade Engine Oil, semisynthetic at present) and Gearbox (Automatic Transmission Fluid) need checking at regular intervals (Gearbox Filler Stud has an integral dip stick). Loss of engine oil pressure can have similar results to overheating but the risk is regarded as less likely. The boat is fitted with a "low engine oil pressure" alarm (the same buzzer as the "ignition on" alarm).

Saltwater Leakage. - From time to time saltwater leakage has caused superficial corrosion to parts of the Engine, Gearbox and Mountings. Protection of these areas is by periodic spraying of Waxoil or wax based products (aerosols).

Deep Sea Seal:

Replacement Plastimo Shaft Seal

Remove prop shaft and prop anodes

Clean prop shaft on its full exposed length.

Straighten the prop tab washer and remove prop nut

Remove retaining grub screw from rope cutter.

Withdraw prop and rope cutter together using hub extractor. (Noting which way around the rope cutter is fitted.)

Remove the 4 flange bolts attaching the inner end of the prop shaft to the gear box.

Release the 3 grub screws from around the perimeter of the steel ring on the seal.

Entirely remove the prop shaft into cabin. This can be done easily if the prop is lubricated with washing up liquid. Hold the stainless ring during this removal process.

Probably by now you will have noticed that the stern tube is not aligned with the shaft, the misalignment is about 4mm in 35mm of length. Lucky we have a bellows to compensate.

Loosen the 2 jubilee clips attaching the bellows to the stern tube and carefully remove the rest of the seal.

If on examination the graphite ring shows little wear, uneven or otherwise, carefully clean.

If on examination the bellows appear to be in good condition, carefully clean before inserting the graphite ring.

Always replace the o-rings on the steel ring. The rings are 30mm I/d 3mm section.

Replace the reassembled graphite ring and bellows onto the stern tube.

Feed shaft back through the gearbox and replace the stainless ring taking care not to damage the graphite disc.

Feed the shaft through to steel ring, this will need the washing up liquid again.

Tighten the flange bolts attaching prop shaft to gearbox.

Align the steel ring with the grub screw indents on the shaft. This can just about be done by sight.

Replace the 3 grub screws using thread tight.

Line up the grub screw hole in the rope cutter with the indent on the shaft, and introduce the rope cutter to the shaft. Omit the keyway and follow the cutter with the prop.

Attach the prop nut and compress on the cutter with the prop but maintain a 5mm gap with drill bits between the cutter and the rear boss of the prop. Fit the rope cutter grub screw.

Remove the prop with the hub extractor, replace the keyway, refit the prop, tab washer and nut and fully tighten the nut. Bend over the tab washer.

Refit anode

When in the water and before starting the engine burp the seal by compressing the seal bellows. A little water will emerge.

Sizes: Graphite ring 70mm O/D x 33mm I/D x 32mm long 'O'rings 30mm I/D x 3mm.

Stainless ring 70mm I/d x 30mm O/D x 20mm with 3 x M5 countersunk screws.

Total length 130mm leaving approx 42mm clearance to gearbox.

Stern Tube Spigot 60mm x 30mm long.

Propeller Vetus Three blade LH 11" x 17" pitch. Nut,

Key, Tab & Anode Set - Vetus code SN30set 30mm shaft. Aft anode and tab renewed Apr 2011.

Cutlass bearing. Vetus RL3045 30mm shaft. S=45mm L=120mm. Bronze. Renewed 2007.

Cathodic Protection:

Negatively wired system to all metal skin fittings, propeller shaft and anodes.

Windlass - Lofran Kobra 8MM/4612 operated with Remote 80452/8030. Power switch to windlass just starboard of the battery selector switches.

Lubricant: Duckhams Keenol or substitute Waterproof Grease.

Tin - Cockpit Locker

The windlass suffers excess noise if dry. It is lubricated with a waterproof grease (Duckham Keenol or similar) which needs occasional checking (twice per year) for lubricant on the gears and for signs of emulsion caused by water ingress. The filler nut is also part of the gear assembly and the windlass must not be rotated when the filler nut is removed. The S/S filler nut threads are fine and easily cross thread in the aluminium body. A thread tap is on board.

When recovering chain, the chain pyramid may build to reach the underside of the windlass mounting board and prevents the chain falling through the recovery hole. Reach forward and under the mounting board to re-arrange the recovered chain. Do not attempt to redirect the chain through the hole from the topside or the chain will snatch risking badly trapped fingers.

Ground Tackle:

A Delta 16KG anchor is fitted with 50 meters of chain and 40 meters of cable. The chain is painted (2007) with more visible yellow marks adjacent to the previous markings. There are 2 marks at 20m, 3 at 30m and 4 at 40m and continuous 2m before the end of the chain. A smaller Danforth (approx. 20lb) proves an adequate stern anchor rigged inside the pushpit beside the back stay with a short length of heavy chain and braided line. It may be used to prevent swing in light summer weather or for stern anchoring bow to a wall with shallow sloping shoulders. A large Fisherman's anchor is stowed in the saloon bilge. It could be useful on a rocky or weedy bottom. There is a strong canvas bag containing a weight of old chain in the saloon bilge which may be employed as an anchor buddy.

Sun Canopies & Wind Chute:

The Saloon Cover fits over the boom and is held in place with the elasticised cords attached to the

shrouds, coach roof and/or handrails.

The Wind Chute - Yellow and white stowed in the fore cabin it hangs from the spinnaker halyard and fastens around the hatch.

Safety Equipment

Life raft. Ocean Safety Supplied June 2005. Key hanging with EPIRB in aft cabin.

Details: Life raft Code No: 96650690 Serial No: 79054550

Ocean Safety Saxon Wharf, Lower York Street, Southampton. SO14 5QF

Tel: 02380720800 Fax: 02380720801

Manufactured for Ocean Safety by Eurovinil, S.p.A. Italy

Fire Extinguishers:

Aft Cabin July 1998

Saloon Companionway Steps Red

Pilot Berth Red

Cockpit Locker Two Blue

Fire Blanket: Pilot Berth

Lifejackets (Check by David Coles May 08 some old items disposed)

Adult 150n Automatic Inflation Serial Number: 46617

Adult 150n Automatic Inflation Serial Number: 45575

Adult 150n Automatic Inflation Serial Number: 46623

Adult 150n Automatic Inflation Serial Number: 46098

Adult 150n Manual Inflation Serial Number: 7883

Adult 150n Manual Inflation Serial Number 7870

New lifejacket purchase Apr 2011. Kru XS, Red manual

Rota Adult Fe-Male Buoyancy Aid Red

Wildwater 35" Chest Buoyancy Aid Orange unopened packet.

Mothercare Size 1 Red

Two White Toddler size solid buoyancy aids.

Four Blue Harnesses with Safety Lines

Two Harnesses without lines.

Bosun's Chair

One Arm Strap with Strobe

One Emergency VHF Aerial

One Emergency Tiller

Selection of Rubber/ Wooden Plugs

Two Fog Horns plus one spare cartridge.

Flares: Two boxes in Safety Locker:

A Red box contains: 4 parachute flares and 1 smoke (due Aug 2006)

Clear Box for expired flares can be used as a grab bag for wallets, passports, phones, torch, strobe, etc.

Compasses:

Steering - Consul with Light Compass - Steering - Cockpit with light
Compass - Hand-bearing - Batteries two x Toshiba Lithium Cr 2025 3v- Chart Area
Instruments

EPIRB (JOTRON)

Located in the aft cabin requires periodic testing - please record in the log when tested. Unlike some models, this one will not float. Replacement batteries for the EPIRB are not available for our current model.

Entry revised March 2001

Garmin GPS: map 182C Purchased 2004 mounted on cockpit instrument panel with 12v supply. Bar Code: *61738005*

Garmin 45 GPS (now used as spare/ backup). Spare batteries in Chart Table Drawer.

Serial No 34701299 Purchased in 1995. If the GPS unit is switched on the batteries will be discharged in a few hours. Always leave a pack of 4 new AA batteries on board. Mounting Bracket 190-00079-00

Navtex NASA Target:

Updated receiver installed May 2000. Just ensure that you are looking at the current forecast -not yesterdays. Forecasts are numbered to help avoid this problem - instructions onboard in the RADIO FOLDER.

Note that the Navtex was hot wired in Feb 2001, so that it is permanently on receive. This is to avoid delays in receiving weather info when first powering up the boat.

Entry revised March 2001

Two Way Radios:

Purchased April 200. Instruction Manual aboard. Please keep pack of new batteries

Fixed VHF Radio

The fixed vhf was installed in March 2001 and is our prime means of communication. There is a comprehensive instruction book in the RADIO FOLDER It is a worthwhile read.

Please note that the radio has a 'smart' microphone handset, which will change frequencies for you - amongst other things. Be aware that the small button marked 'HIGH/LOW' changes the power of the transmission output from 1 watt to 25 watts and back. This is to provide a low output for close in work such as in the marina, and a high power setting when on the open water. The set defaults to HIGH power output when first turned on.

The handbook carries a warning that the engine should be running when the set is operated. This is because the radio uses 6 amps when transmitting, and in boats with small battery capacities there would be a risk of running battery power down below the level at which an engine start could be assured. This would not be a problem for us normally, but this high power consumption is worth bearing in mind if the engine cannot/will not run, and you need to make extended transmissions. In receive mode the set only uses 1.2 amps.

This entry Revised March 2001.

Manual On Board

VHF Aerial and Wind Direction Indicator renewed May/June 2005. Supplied by Sailspar. Indicator lost again in winter of 2006 and not replaced. Spare VHF aerial bracket on board.

New Handheld VHF Radio purchased Apr 2010.

Purchased March 98. Serial No 05614.. Charger in Saloon Cupboard. Do not press transmit button when the aerial is not installed.

Manual on Board in the RADIO FILE

Entry revised March 2001

Huger Digital Barometer:

Purchased 1996 Batteries AAA. Approximately 4mb inaccurate but still gives relative information
Manual On Board

Tacktick: wireless wind speed/direction indicator fitted in 2006. Manual On Board

Nasa Target Depth -fitted 1998 - Wired via instrument CB. Manual On Board

Auto-Pilot: - fitted 1999 - Wired via dedicated CB. Fitted to inner helm with hand held control to cockpit.

Manual On Board

Voltage Fluctuation - Effect on Instruments

Falling battery voltage can lead to erratic instrument functioning. A digital voltmeter is fitted on the chart table instrument panel. Just press the button to get an accurate reading of volts

Dinghy: Avon Rower 2.50 Air Design cat C. GB AVB 35445B101 Purchased early 2007

In the event of the dingy loosing pressure lubricate the valves with silicone spray.

12v Air pump (Saloon cupboard) operates from the Auto-helm socket.. Foot Pump in cockpit locker.
Spare Hand Pump in Aft Cabin.

Sails: A Mainsail, Genoa, Working Jib, Storm Jib and Cruising Chute make up the sail wardrobe.

Mainsail & Sailspar In-Mast Reefing:

Fitted 1997/98. Gowan Sail. The sheet and block are stowed in the cockpit locker. When sailing, avoid crewmembers sitting within the track of the mainsheet traveller, as they can become trapped when tacking. When not under sail, avoid over tightening of the preventers as they could strain the gas strut and/or will act as a fulcrum if the boom is then hauled tight by the topping lift. This will strain and has previously ruptured the fixings on the boom's mast fitting.

Headsail & Roller Sailspar Reefing:

Fitted 1997/98 - Gowan Sail. The sail must be raised to the masthead and be furled clockwise so as to expose the sacrificial strip, which is sewn on the port side of the sail (as is the leech line jammer cover). To enable exposure of the sacrificial strip on the fully furled sail, you must haul the lower section of the continuous furling line.

Always furl and unfurl the Main and Headsail head to wind.

The reefing gypsy of the main and headsail requires regular hosing with water to remove any foreign bodies.

Halyard wrap.

If any unused halyard is shackled forward of the mast it will become wrapped around the Headsail when furling.

Cruising Chute:

Successful operation of the cruising chute requires the following procedures:

Feed the tack through the bow shackle and attach to a bow cleat.

The sail and sheet are rigged with everything "outboard".

Hoist and deploy by lowering the snuffer.

Even in light airs the chute develops too much power for hand hauling the sheets.... winches must be used.

Snuff the sail before tacking.

Lower the snuffed sail direct into the sail bag and pack with care so that the next deployment is straightforward.

Shackles and Blocks for the Cruising chute are usually stowed in the boson's locker.

The cruising chute is designed for light airs and is best hoisted and lowered through the fore-hatch.

Under sail, the sheets will snag the fore-hatch if it is not closed.

Storm Jib:

Rig a temporary baby stay in a yoke arrangement passing through both bow mooring cleats using the uppermost (second) fore halyard in board of the forestay. Do not use the cruising chute halyard which has only light weight shackle and block at the very top of masthead which is above and outboard of the forestay. Secure the tack of the jib by a yoke to the bow mooring cleats and remove the Genoa sheets. Re-rig the sheets to the clew of the storm jib passing outboard of the shrouds and pass through the cars in their most forward position. Lash the clew of the Genoa in a tight wrap to prevent the sail unfurling. Hoist the jib using the lower and innermost (third) fore halyard. With wind forward of the beam then an edge of mainsail will be required to provide a balanced sail plan or heave too.

Close Quarter Manoeuvres:

Juli has like most vessels her own distinct characteristics. The following summarise the main ones and offers corrective solutions for common difficulties applicable at any.

Propeller - Paddle Wheel Effect

Forward - Slight to Starboard

Reverse - More Pronounced to Port.

Having high free board and large cabin areas, windage can hinder slow speed manoeuvres. Before beginning a manoeuvre think it through, including the escape route should you misjudge or be blown off course.

Preparation for leaving a berth:

Start Engine, Switch on Instruments & VHF. Lower Spray-hood.

Brief and Appoint Crew duties:

Bow & Stern Lines. Walkway and 240v supply. Position Dingy if towing.

Post a Lookout for the passage through the Marina.

Brief crew regarding the expected Berthing Procedure on Return.

Forward Departing Procedure.

Slacken off bow line - sufficiently to gain access to/ from the pontoon without the walkway.

Disconnect 240V supply and stow walkway.

Release downwind stern line and any spring lines. Lay them aside ready to pick up. All crew aboard. Engage forward tick-over. Juli will then tighten against the remaining stern line.

Release bow line, throw well clear and wait for it to sink.

Select Neutral - as Juli comes astern her final stern line can be cast off and thrown ashore.

Select forward tick over and ease from the berth. Even at slow speed paddle wheel effect will encourage Juli's amidships to Hug the gunnel of any vessel on the starboard side. Crew ready to fend off as required.

Caution - If the wind is on the starboard beam, Juli will be, (due to the effect of paddle wheel & windage) much slower turning to starboard. Crew to fend off, other crew to stand by with roving fenders. Forward lookouts to ensure opposite craft are clear.

At all times stay clear of other bowlines as they effectively reduce the available depth. When leaving a restricted berth, the combined effect of paddlewheel and moderate windage on the starboard bow can frustrates a starboard forward turn to a point when the manoeuvre cannot be completed. Proceed Dead Slow. Watch for other vessels.

Berthing:

Preparation and Planning pays off -

Brief and Appoint Crew Duties. Prepare Fenders and have a line to throw ashore.

Reverse manoeuvres over longer distance i.e. the Main Channel -: If the wind is abeam, plan to finish this manoeuvre as far to windward as reasonably possible. If the wind is following the boat, hull speed can increase and then because of the reverse water flow over the rudder at higher rudder angles, steering can be difficult and much less responsive .

In stronger following winds the bow (because of the furled Headsail) becomes particularly sensitive to windage.

During reversing manoeuvres, engaging neutral significantly increases rudder control and/ or if sufficient reverse way permits, engaging forward tick-over also improves rudder control as well as reducing boat speed.

When finally in the berth position - Adjust the stern fenders.

First crew-person ashore and make fast one or both stern lines. If either of the adjacent berths are vacant and the breeze is strong, - Juli will be blown down wind into any vacant berth.

Use a spring line e.g. - If the port side berth is vacant and the wind is to starboard, - use and tighten a starboard spring to the mid-ship cleat prior to fixing the stern lines. With a little forward throttle and rudder control, even in strong winds, Juli is particularly easy to hold steady and/ or re-adjust her berth position using a single spring line.

If the starboard Berth is vacant and the wind is on the port sidereverse the spring line technique.

Locate the walkway (if time permits).

Engage forward tick-over, to tighten Juli against the stern-lines/ spring and adjust the rudder to position Juli in her berth but stay clear of the bow recovery line.

Keeping the bow recovery line tight to the pontoon and thereby clear of the rotating propeller, recover and make fast both bow lines, securing the longer bow line, to the starboard side.

Engage neutral and turn engine off.

Hand-over Arrangements:

A well-kept boat is central to our agreement, success & harmony of the syndicate.

Clean and prepare the vessel for the next member. Wash all crockery etc. Wipe down berth cushions and work surfaces air all used bedding. Remove all perishable food. Remove all personal items and

replenish the ship stores:

Ensure the vessel's fuel tank, spare petrol tank, spare gas bottles, and water tanks are full. If used renew supplies of lubricating oils. Distilled water. Disinfectant, Soap, Waxpolish. Insect spray Zapper Tablets.

Leave on board 5lt drinking water. Coffee, tea & long life milk.

In the interest of pest control please do not bring cardboard boxes aboard.

Ensure all the boat equipment is correctly and securely stowed. (See Hand-over Sheet).

Do not leave Hatches on Vent Lock as strong winds can drive rain water in.

Ships Log & Records

The Ships Log, including any fuel uplift recorded at the back of the log, and users must complete Maintenance Log. Helpful holiday information for example marinas, restaurants, places to visit and favourable anchorages should also be reported. On return to the UK a short letter to be sent to other members to outline any problems and list any items/ replacement spares that need to be taken from the UK.

If any urgent items/ replacements are required to be taken out by the next member on holiday and there is no break in the vessels use, the departing member shall immediately inform the outgoing member by phone of the need to acquire such items/ replacements.

If the incoming member is not arriving on the island until after a departing member leaves, the boat must be left at a secure Marina berth and the berthing costs paid up until the day the new member is expected to arrive. (The cost is refundable from syndicate funds). The out-going member must adequately complete the Hand-over Report and if the boat is not at its permanent berth, leave UK contact details with the Marina/ Port Office

Weather Information:

Navtex

Installed May 1997 closest stations are coded K (Korfu) X, G, T, W, & R. Just ensure that you are looking at the current forecast -not yesterdays. Forecasts are numbered to help avoid this problem - instructions onboard. Messages **B** Gale Warnings **E** Weather info.

31 March 2006 VHF Channel 16.

is usually a maritime content and flavour to the broadcasts.

Corfu VHF weather channel 02 Kefalonia 27 Times: 09.00 13.00 19.00

Normal Stowage

Chart Table Area:

Radio Cupboard: Hand Held VHF, Stow Holds 12v Torch & chargeable spot light.
Manuals & Catalogues

Beneath the Chart Table Top:

Charts, Stationary Items

Under the Chart Table: Cool Box, Bosch Cordless Drill, Large Fan

Chart Table Drawer:

Outboard Sheer pin. GPS Batteries Log impeller "O" rings

Saloon Table Area:

Forward Small Cupboard:

Binoculars. Cordless Drill & Charger. VHF Charger. Multimeter.

Aft Small Cupboard: 240v Drill, 12v Air Pump and adapters. Elec. Covers for Instruments. Compass, Winches.

Window Stowage: Mosquito Nets, Bike Gear, Flags, Winch Handles

Safety Locker: Life-Jackets, Lifelines Flare Packs, Air Horn, Various Bungs, Spare VHF Aerial, Danbuoy Throw-bag, 2nd Horseshoe, Spare Tiller, Radar Reflector.

Pilot Berth Footlocker: Fan Heaters. Tubular Heater Above Water Tank Freezer Packs Spare Cord

Forward Cabin: Sails, Spare Halyards

Aft Cabin - Below Berth: Electrical Spares, Spare Perkin's Hoses, Belt, Engine spares Spare Seacocks 1x3/4" & 1x1/2", Spare Winch Pad, Spare Shrouds & Stays, Hub Extractor (Propeller)

Saloon Bilge: Danforth Anchor, Fisherman's Anchor, Heavy towline, Spare Washboards

Leisure Stowage: Masks & Fins, Air Tank, Fishing Tackle, Spare Fuel Cans .

Heads Starboard Cupboard: Zapper Plugs & Tablets, Domestic Cleaners, Hose connections, First Aid Kit, Suntan Lotions

Heads Under Washbasin Cupboard:

Drain plunger, Bathroom Cleaner

Cockpit Locker: End of Season Storage: Horseshoe Life Belt. Mooring Lines. Tools, Petrol Cans Lubricants, Deck Brushes, Oars, Buckets

Out of season the Outboard Motor. Mainsheet & block Dinghy. Cockpit Table and Water Hose are kept in the Cockpit Locker.

Cockpit Bilge: Hose & Chain

Below Steps: Grey Toolbox, Red Electrical Toolbox, Socket Set

Parts & Other Inventory Items

Pilot Berth Locker:

Spare Blocks & Shackles, Boson's Tools & Line, Winch Handles, Jubilee Clips, Oil & Fuel Filters. Oil Flush.

2 x 30mm shaft anodes, 1 x prop anode, 1 x Cutlass bearing.

New 1.5" Forespar Marlon Sea Valve (For toilet direct to sea waste).

Engine Spares:

Oil Filter: P2654403 or Wix 51806 or Fram PH2821A.
 Oil Filter Removal Tool in Bosuns Locker
 Fuel Filter: P26561117 or Fram C1191PL. in Bosuns Locker
 Fresh Water Cooling Pump: P35615. In Aft Cabin
 Fuel system: Injector Pump. P2645698. No Spare
 Alternator: Motorola 9AR 2958P. in Aft Cabin
 Alternator Belt: Perkins 2614B536Y fitted, recognised Perkins part is P2614B636
 (2 in a pack but otherwise the same) OR 2614B036X. Spare Belts above Port Side Water Tank
 Raw Water Cooling Pump: PU5MW0054 in Aft Cabin
 Cooling Fresh Water Pump: P24880114 in Aft Cabin
 Electrics: Ignition - Lucas Relay. Relay 2BRA 333 75E44-84 No Spare
 Engine Meters Engine Hour Meter: Round 12/24 volt 34731 No Spare

Outboard Spares:

Spare shear pin in Chart Table Drawer.
 Service Tools in Big Toolbox in Cockpit Locker.
 Petrol Can, Two stroke oil - Fuel Mix 50:1 in Cockpit Locker.
 Gearbox EP90 Gear Oil in Cockpit Locker

Bilge Pumps: Service Kit SK224

Impellers: Cruisermart 6303-0003

Pilot Berth Locker:

Winch Handles: 4 x Lewmar 10" Service Kit 29140010 Pilot Berth Locker
 Propeller: Three blade LH 11" x 17" pitch. Spare in Aft Cabin
 Cutlass Bearing: 120mmx45mm o/d x 30mm i/d shaft. Max Cutter space 24mm Pilot Berth Locker
 Jubilee Clips: Selection in Pilot Berth Locker
 Rip Saw
 Chain and Halyard Bolt Croppers

Antifoul. Two layers of Copper Shield added to epoxy repaired fibreglass in Apr 2010. Minor patching in 2011, 2017

Washboard Sizes: 750mm x 366mm & 750mm x 360mm

Shower Tray: 480mm x 440mm x 18mm (24mm with rubber strips). 24 holes.

Oven Space: 525mm wide x 530 high (plus lower trim) x 420 deep but centre position can be deeper.

Syndicate Members

Members	Home Phone	Mobile	email
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