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Curt & Mary Epperson requested this survey. Captain Geoffrey Williams, principal marine surveyor for West Indies Marine Surveyors Ltd. surveyed the said vessel in the water at Nanny Cay Resort & Marina on Tortola in the British Virgin Islands on the 17<sup>th</sup> May 2013. A sea trial was completed on the same day. The vessel was inspected out of the water at Nanny Cay Marina Boatyard on the 14<sup>th</sup> May. This survey has been compiled by the surveyor in good faith and is confined to the parts of the vessel outlined by this report. Only areas accessible for inspection were surveyed and no destructive testing or dismantling of equipment or machinery was undertaken. The owner, Curt & Mary Epperson and Clive Allen of BVI Yacht Sales were present during the survey.

## *Pre-purchase Condition Survey*

BOAT NAME: s/v “LANGUEDOC”

DATE: 17<sup>th</sup> May 2013



KIND OF VESSEL: Ketch rigged, auxiliary powered fiberglass sailing vessel.  
BUILDER: Chantiers Amel, La Rochelle, France. Naval Architects: Henri Amel & Jacques Carteau  
HULL IDENTIFICATION NUMBER (HIN): AML21787  
VESSEL MODEL: Amel Maramu.  
YEAR OF MANUFACTURE: 1987  
PORT OF REGISTRY: Newport, RI, USA (Documentation in progress / expired 30/10/2003).  
OFFICIAL NUMBER: 1034412  
GROSS TONNAGE: 23t  
LOA: 46ft.  
BEAM: 13ft. 6in.  
DRAFT: 6ft. 6in.  
DISPLACEMENT: 26 500lb.  
OWNER: Proof of ownership was not verified.  
**ESTIMATED VALUE: \$190 000.00US** – Hull & Machinery – based on an Internet search of similar vessels.



## HULL CONSTRUCTION

**HULL MATERIAL:** Glass reinforced plastic (GRP) – solid laminate.

**COLOR:** Painted white (Awlgrip) – with dark blue accent and boot stripes.

**FRAMING:** Composite fiberglass transverse webs, with plywood core, are laminated directly to the hull. Marine plywood bulkheads and transverse webs are bonded to the hull with fiberglass tabbing.

**DECK & CABINTOP:** Composite fiberglass using balsa core - some ironwood is used below cleats and below the windlass. The side decks, the cockpit deck and cockpit seats have a molded fiberglass 'faux teak' (imitation teak) finish. The side decks have been painted.

There is a molded fiberglass spray dodger forward of the cockpit with acrylic forward windows (with an opening window at the helm) + canvas with clear plastic side panels. There is an acrylic observation window above the helm.

**HULL to DECK JOINT:** The deck is laminated to the hull with six layers of bi-axial fiberglass tabbing.

**RUBRAIL:** A full length rubber rubrail around the hull to deck joint, below a molded fiberglass toerail.

**BULKHEADS:** Mahogany faced marine plywood.

**CEILINGS:** Foam backed vinyl with wood trim.

**KEEL:** A long integral fin keel – 8 820lb of cast iron ballast is bolted to the bottom of the keel.

**RUDDER:** A skeg supported fiberglass rudder (hollow structure – with a drain hole) - supported with a bronze skeg-mounted shoe. The rudderstock is stainless steel.

**BOW & additions:** A raked bow with a stainless steel stem fitting with two anchor supports.

There is a 10hp / 12-v 'Amel' designed retractable bow thruster.

**STERN TYPE & additions:** A counter stern with a slight reverse transom.

**THROUGH HULL FITTINGS (below w/l):** Bronze skin fittings with bronze bodied ballvalve type seacocks.

**DECK HATCHES:** 4 'Goïot' aluminum framed deck hatches.

**OPENING PORTLIGHTS:** 2 'Goïot' aluminum framed portlights.

**FIXED CABINTOP WINDOWS:** 4 acrylic, stainless steel framed, side windows.

**HULL REPAIRS VISIBLE:**

- None.

**HULL DAMAGE:**

- None.

**OSMOTIC BLISTERING:** No blisters were visible on the lower hull or rudder. Moisture readings were taken around the lower hull, keel, skeg and rudder. The readings taken on the hull were within acceptable levels (see a comment on the skeg).

*It appears that the gelcoat has been removed from the wetted surface area of the hull and replaced with an epoxy barrier coating.*

**HULL SOUNDING:** The hull, keel and the rudder were sounded and no delamination was detected.





**CONDITION**

	Good condition	Fair to good condition	above average wear & tear
Topsides & cabintop	Very good - painted during a refit 2011/12		
Deck	Good / the side decks have been painted		
Cabintop	Cabintop - a few hairline cracks in the gelcoat		
Bulkheads	All well bonded, where visible		
Railings & stanchions	Generally good / one bent & scratched stanchion – starboard amidships		
Interior – general condition	Good		
Cabin sole (teak & holly)	Good		
Hatches	Fair to good / the acrylic is crazed from UV exposure (no leaks found)		
Portlights	Good		
Fixed cabintop windows	Fair to good – crazed acrylic (no leaks found)		
Seacocks	Good		
Skin fittings	Good		
Rudder	Good		
Skeg	High moisture readings were found in areas – see comment		
Keel	Generally good – some corrosion on the steel ballast		
Antifouling	Good smooth surface – painting with antifouling is needed (power washed)		

**COMMENTS & RECOMMENDATIONS**

\* All hatches, ports & windows were tested for leaks using dockside water pressure.

1. Hatches, ports & windows:

- Deck hatches – the acrylic is moderately crazed from UV exposure. The hinges need adjusting to enable them to remain open.
- Fixed side windows – the acrylic is crazed. The port forward window is cracked at the aft side.

2. Fiberglass & gelcoat:

- Skeg – high moisture levels were detected around the SSB ground plate, which is attached to the starboard side of the skeg, and at the bottom of the skeg.

The ground plate will need to be removed for re-bedding. The skeg needs possible draining and the laminate should be dried and epoxy coated, where necessary.

- Hull (starboard side amidships) – a 3 x 3-inch area where the power wash has peeled off an area of epoxy barrier coating exposing the laminate.

Dry the fiberglass, sand and apply an epoxy barrier coating to seal the hull laminate.

- Cabintop – there are a number of hairline cracks in the gelcoat. See the combing on the port side of the helm position, and areas on the cabintop forward of the cockpit.

Repair with matching gelcoat.

- Mizzen mast support (observation) – the top aft side of the fiberglass module, which supports the mizzen mast, has separated from the cabintop.

3. Woodwork:

- Varnish work is needed on the wooden trim around the deck hatches and the side windows.

4. Hardware:

- Stainless steel railings – a starboard amidships stanchion is scratched and bent. An adjacent welded pipe joint has partly separated.
- Bow thruster – there is some corrosion on the motor which raises and lowers the thruster. Service.

5. Keel:

- There is some corrosion bleeding through the steel on the keel ballast.

Grind off the rust, clean the metal, prime and paint with an epoxy coating to help prevent further corrosion.



## **PROPULSION MACHINERY**

ENGINE: 'Cummins B3.3M' four-cylinder, naturally aspirated diesel engine (New 2012).

Engine number: 68313466

ENGINE HOURS: 424 hours

GEARBOX: 'Hurth HBW 250-3R' iA: 2,74 iB: 2,73 (Rebuilt in 2012)

HORSEPOWER: 60hp.

Maximum 45kW @ 2200 RPM

DESIGNED BOAT SPEED: 7 knots.

ENGINE COOLING: Fresh water cooling through a heat exchanger.

ENGINE EXHAUST: Wet exhaust – mixing elbow to a fiberglass waterlock through looped reinforced flexible exhaust hosing to a port side mounted skin fitting.

ALTERNATORS FITTED: 2 x 100A / 12-v alternators (charge the house).

1 x 45A / 14-v alternator (charges the engine start battery).

\* attached at the aft side – a shaft driven alternator for re-generation (while sailing).

SHAFT & COUPLINGS: A stainless steel propeller shaft to a rigid gearbox coupling.

PROPELLER SHAFT SEAL: A bronze flax-filled stuffing box.

PROPELLER: A three bladed fixed bronze propeller.

PRIMARY FUEL FILTER: 'Racor 75500MAX' dual filter system - water separator / fuel filter.

ENGINE STOP: Electric stop.

PANEL & ALARMS: A panel with tachometer and alarms + voltmeter, ammeter, oil pressure & temperature gauges.

ENGINE CONTROLS: 'Morse' cables.



**CONDITION**

	Good condition	Fair to good condition	Above average wear & tear
Engine – general condition	Very good (as new)		
Engine mounts	Good		
Shaft & coupling	Good		
Gearbox operation	Good		
Hoses & clamps	Good		
Wiring	Good		
Fuel filters (Racor filter bowl)	Clean fuel		
Oil condition – engine	Good		
Oil condition – gearbox	Good		
Coolant	Good		
Propeller stuffing box	Good		
Exhaust elbow	Good		
Exhaust waterlock	Good		
Exhaust hose	Good		
Oil leaks	None detected		
Fuel leaks	None detected		
Water leaks	None detected		
Propeller	Good		
Cutlass bearing	A little wear – within acceptable tolerances		
Propeller shaft alignment	Good		
Engine controls & cables	Good		
Engine compartment blower	Tested ok		

**SEA TRIAL:** At sea off Nanny Cay Marina.

ENGINE RUN – in & out of gear:      Duration: 40min      Maximum RPM: 2500

Cold start	Good	
Smoke and water emissions	Normal	
Vibrations	Normal	
Noises	Normal	

## TANKAGE & PIPING

WATER TANKS: 285 gallons in a fiberglass tank – fitted in the keel (below the saloon sole amidships).  
 DIESEL: 127 gallons in a single stainless steel tank – outboard side of the starboard passageway to the aft cabin.  
 HOLDING TANK: A 20 gallon stainless steel tank – forward head (there is no holding tank for the aft toilet).  
     Gravity drain discharge or deck pump out.  
 COOKING GAS: 2 x 20lb fiberglass propane tanks.  
     2 x 10lb steel butane tanks.  
 MARINE SANITATION DEVICES: 2 ‘Groco’ manual marine toilets.  
 SEACOCKS: Bronze bodied ballvalves.  
 HOT WATER: 11-gallon insulated water heater – water is heated via the heat exchanger or 220-v element.

PRESSURIZED FRESH WATER SYSTEM: 1 ‘Flojet’ 3.3 GPM / 35 PSI diaphragm pump.

PRESSURIZED SALT WATER SYSTEM: A ‘JDREX’ diaphragm pump – cockpit outlet and anchor chain wash down.

### DEWATERING SYSTEMS

BILGE PUMPS – Electric: 1 x ‘Rule 2000’ 2000 GPH (estimated) submersible pump (bilge forward of the engine).  
     Automatic switches: None.  
     Manual: ‘Henderson Mk V’ pump (at the companionway stairway).  
     High Water alarms: Yes – ‘Rule’ float switch activated.

GRAY WATER DISCHARGE: The showers and head sinks drain to the main bilge sump.

FOOT PUMPS: Galley – fresh water.

PIPING & HOSE CLAMPS – Diesel: Approved fuel hose.

Propane & butane: Flexible gas hose and copper pipe.

Freshwater: Rigid plastic pipe & reinforced flexible plastic hose.

### CONDITION

	Good condition	Fair to good condition	Above average wear & tear
Water tank	Apparently good – no visible leaks		
Fuel tank	Appears good – limited access for inspection		
Holding tank	Appears good – limited access for inspection		
12-v bilge pump	Tested ok		
Bilge alarm	Tested ok		
Manual bilge pump	Tested ok		
Hoses & plumbing	Good		
Hose clamps	Good		
Fresh water pump	Tested ok		
Salt water pump	Tested ok – secure the pump		
Hot water tank	Good		
Toilets	Tested ok		
Propane system	Good		
Butane system	Appears good – not tested / some corrosion on the steel bottles		

### *COMMENTS & RECOMMENDATIONS*

1. <u>Pumps:</u>
• The salt water pressure pump should be secured.
2. <u>Plumbing:</u>
• A corroded T connection for the forward head shower sump needs replacement.



### **MAST, RIGGING, SAILS & CANVAS**

*\* Both masts and the standing rigging was inspected aloft.*

DESCRIPTION: Ketch rigged with a triatic stay and an adjustable main mast backstay.

MASTS: Make: Custom 'Amel' masts by 'Nirvana' – both with in mast furling.

Material: Painted aluminum (Awlgrip 2012)

Spreaders: Mainmast – two sets of straight spreaders.

Mizzenmast – a single set of straight spreaders.

Stepped: Both are deck stepped.

SPARS: 2 whisker poles with associated short 'jockey' poles.

STANDING RIGGING:

1 x 19 stainless steel wire to swaged terminals and bronze open-bodied turnbuckles.

RUNNING RIGGING: Pre-stretched Dacron.

WINCHES: Primaries: 2 'Lewmar 48' two-speed, self-tailing winches.

Aft deck: 1 'Lewmar 40' two-speed winch.

Mainmast: 2 'Lewmar 30' two-speed, self-tailing winches.

2 'Lewmar 40' two-speed, self-tailing winches.

Mizzenmast: 3 'Lewmar 16' single speed, self-tailing winches.

1 'Lewmar 30' two-speed, self-tailing winch.

FURLING GEAR: Genoa – a 12-v furling drum on the forestay.

Main sail – a 12-v in the mast furling system + 12-v outhaul.

Mizzen – a manual furling system (in mast furling).

CHAIN PLATES: Stainless steel chainplates are bolted to the molded fiberglass toerails.

SAILS – Furling Main.

Furling Genoa.

Main Staysail

Furling Genoa – for light airs.

Storm Jib.

Furling Mizzen.





**CONDITION**

	Good condition	Fair to good condition	Above average wear & tear
Masts and booms	Good (painted 2012)		
Standing rigging	Good – all new in 2012		
Chainplates	Good		
Running rigging	Good		
Deck hardware	Good		
Main, Genoa, Mizzen	Fair to good - serviceable condition (2004)		
Light Genoa, storm jib	Good		
Staysail	Good		

***COMMENTS & RECOMMENDATIONS***

1. Furling systems:

- Main mast – there was a slight oil leak from the sail furling motor.

Oil was used during the service of the motor. Apparently the use of winch grease might be the best option.





## ELECTRICAL SYSTEMS



**DC – SYSTEM:** House batteries: 6 x 12-volt ‘Lifeline GPL-31XT’ AGM batteries (starboard side of the engine).  
**12-v** Engine start: 1 x ‘Trojan GP-31’ 125Ahr lead acid battery (starboard side of the engine).  
 Generator start: Starts off the house.  
 Circuit protection devices: Rotary isolator switches.  
 Power distribution system: Labeled 12v and 220v/110v panels.  
 Battery management panels: ‘Victron Energy VE Net Blue Power Panel’

Charging systems: 2 x 100A engine mounted alternators + an ‘Ample Power V3’ smart regulator.  
 1 x 45A alternator – for engine battery charging.  
 Regeneration shaft driven alternator (capacity not verified).  
 120A / 220-v battery charger.  
 ‘Air Breeze’ wind generator (new 2013).

**REFRIGERATION:** ‘Frigoboat’ – 12-v air cooled compressor (freezer) – below the port forward settee.  
 ‘Isotherm’ – 12-v free standing, side opening, refrigerator – air cooled.

**AC – SYSTEM:** Generator: 5kW ‘Northern Lights M-643’ diesel generator.  
**220-v** Engine hours: 1429 hours (173 on the hour meter + 1256 hours – old meter).  
 Generator start panel: ‘Dynagen GSC300’ remote generator start & control panel.  
 Inverter/battery charger: ‘Victron Energy Quattro 12/3000/120 – 3000W 12v/220v inverter / 120A charger.  
 Voltmeter: Analogue dual function 110v / 220v voltmeter.

Shore power: 50A / 250v cable.  
 15A / 230V European cable.

**110-v** Transformer: ‘Victron Energy Autotransformer 120/240’

**POWER RECEPTACLES:** 220v / 110v & 12v

**AIR CONDITIONING:** 16 000 BTU ‘Marine Air Systems’ compressor.

### NAVIGATION SYSTEMS:

**G.P.S CHART PLOTTER/RADAR:** 2 x ‘Northstar 6000i’ color chart plotter with radar.

**AUTOPILOT:** ‘Raymarine ST6002’ with a rotary drive.

**DEPTH:** ‘B&G Hercules Depth’ (navigation station).

‘B&G Depth’ (helm).

**BOAT SPEED:** ‘B&G Boat Speed’ (helm).

**REPEATER:** ‘B&G Hornet 4 Sailing Monitor’ (navigation station).

**WIND:** ‘B&G’ wind speed (helm).

‘B&G’ wind direction (helm).

COMMUNICATION SYSTEMS: 'ICOM IC-M700 Pro' SSB transceiver with a skeg mounted Dyna plate.  
 + 'Pactor III' modem - data receiver.  
 'Shipmate RS800' VHF (backup VHF).  
 'Icom IC-M502' DSC (primary) VHF.

STEERING COMPASS: 'Ben Marco Polo' pedestal type magnetic compass.



**CONDITION**

	Good condition	Fair to good condition	Above average wear & tear
House Batteries	Appear good (new 2012) – see comment		
Engine start battery	Good (new 2011)		
Navigation instruments	Chart plotter / radar – tested ok VHF (primary) – tested ok VHF (back up) – tested ok / faulty squelch Autopilot – tested ok during the sea trial SSB – powered up ok Depth & Boat speed – tested ok		
Navigation lights	Tested ok		
Generator condition	Good – tested ok		
Wiring & connections	Good		
Shore power & charger	Tested ok		
Alternators – charging	Tested ok		
Wind generator	Not tested – stowed for summer storage		
Inverter	Tested ok		
Air Conditioning	Tested ok		
Refrigeration	Tested ok		

**COMMENTS & RECOMMENDATIONS**

- |  |
|--|
| 1. <u>Batteries:</u> <ul style="list-style-type: none"> <li>The battery terminals and electrical busbars should be covered and protected.</li> </ul> |
|--|

## **SAFETY EQUIPMENT**

PERSONAL FLOTATION DEVICES: 2 x USCG Type V PFDs – inflatable adult lifejackets.  
 1 x USCG Type I PFD – adult offshore lifejacket.  
 6 x junior (coastal) lifejackets.  
 1 x USCG Type I child (offshore) lifejacket.

THROWABLE DEVICES: 1 x ‘Lifesling’ overboard rescue system.

SOUND SIGNALS: Aerosol air horn & bell.

VISUAL DISTRESS SIGNALS: Expired.

NAVIGATIONAL LIGHTING: Sidelights, stern, steaming and tricolor/anchor light combination.

LIFE RAFT: 6-person ‘Switlik’ liferaft in a valise (s/n: MD2-982)  
 Next service due: 09/2013.

LIFE LINES: Stainless steel railings.

FIRST AID KIT: Yes.

EPIRB: ‘ACR Satellite 406 GPS’.  
 Battery expiry date: 06/2009 Registration expiry: 27/9/11

FIRE EXTINGUISHING SYSTEMS: 1 x 5lb Halotron extinguishers.  
 1 x 3lb Halon 1211 extinguisher.  
 Service dates: None / show charged.

VAPOR DETECTORS: None.

SEA ANCHOR: Parachute drogue.

## **COMMENTS & RECOMMENDATIONS**

1. Safety Equipment:
- The expired distress flares should be replaced.
  - The Epirb battery and registration have expired.



## **GROUND TACKLE**

PRIMARY ANCHOR: 45lb ‘CQR’  
 Chain / rode: Approximately 200ft x 10mm galvanized steel chain.

SECONDARY ANCHORS: 45lb ‘Britany’ + ‘Fortress FX-37’.  
 Chain / rode: Not attached – approximately 200ft chain & nylon rode (unknown length).

WINDLASS: ‘Lofrans Tigres’ 12-volt / 1200W windlass with foot switches + helm control.

### CONDITION

	Good condition	Fair to good condition	above average wear & tear
Primary anchor	Good		
Anchor chain	Good		
Secondary anchors	Good		
Shackles	Good		
Windlass	Tested ok		



### **STEERING SYSTEM**

**DESCRIPTION:** A single wheel to a 'pull-pull' cable steering system – an aluminum tiller is attached to the rudderstock.

**EMERGENCY STEERING:** A stainless steel tiller through a deck cap to the rudderstock.

**CONDITION**

	Good condition	Fair to good condition	above average wear & tear
Rudder bearings	Within acceptable tolerances		
Steering system	Good		
Rudderpost seal	Good		
Emergency tiller	Good		
Steering wheel	Good		



### **SHIPBOARD AMENITIES**

**INTERIOR DESCRIPTION:** A cabin forward with two bunks, a head (toilet & shower) to port, saloon with settees to port and to starboard with a dining table to port, galley to port, navigation station to starboard and a passageway to starboard leading to a double stateroom aft with a head (toilet & shower) to port.

**COOKING FACILITIES**

STOVE: 'Force 10' 2-burner stove with oven & grill.

FUEL: Propane or Butane.

LOCATION & LOCKER DESCRIPTION: Dedicated storage locker aft (propane) + a cabintop locker to port of the helm position (butane).

VENTILATION: Both have bottom drain to atmosphere.

PIPING: Flexible propane hose and copper pipe.

SOLENOID & PRESSURE GAUGE: On the propane system only.

MICROWAVE OVEN: 'Samsung'

CABIN HEATER: 'Eberspächer' diesel powered cabin heater.



STEREO: Replacement needed.

TENDER: 10ft 'AB' rigid bottom inflatable (2010) – ID plate missing / in the gelcoat – OX?180I809

15hp 'Yamaha 15FMH' two-stroke outboard engine (2013) s/n: 684K S 1114355C

25hp 'Mercury' two stroke outboard engine (1999) – repairs are needed.

**CONDITION**

	Good condition	Fair to good condition	above average wear & tear
Saloon settee	Good		
Stove & oven	Tested ok – the igniter system is not working		
Microwave oven	Tested ok – control knob missing		
Bunk cushions	Good		
Stereo & speakers		Replacement is needed	
Dinghy	Good		
Outboards	Not tested (Yamaha – new) / Mercury – repairs needed		

**COMMENTS & RECOMMENDATIONS**

1. Ceilings:

- The foam backed ceiling vinyl has lost its bond in areas.

2. Stereo:

- The radio needs replacing.



“Languedoc” Summary of Comments & Recommendations  
 SURVEY DATE: 17<sup>th</sup> May 2013

**COMMENTS**  
**General maintenance issues.**

<p>1. <u>Hatches, ports &amp; windows:</u></p> <ul style="list-style-type: none"> <li>• Deck hatches – the acrylic is moderately crazed from UV exposure. The hinges need adjusting to enable them to remain open.</li> <li>• Fixed side windows – the acrylic is crazed. The port forward window is cracked at the aft side.</li> </ul>
<p>2. <u>Fiberglass &amp; gelcoat:</u></p> <ul style="list-style-type: none"> <li>• Skeg – high moisture levels were detected around the SSB ground plate, which is attached to the starboard side of the skeg, and at the bottom of the skeg. The ground plate will need to be removed for re-bedding. The skeg needs possible draining and the laminate should be dried and epoxy coated, where necessary.</li> <li>• Hull (starboard side amidships) – a 3 x 3-inch area where the power wash has peeled off an area of epoxy barrier coating exposing the laminate. Dry the fiberglass, sand and apply an epoxy barrier coating to seal the hull laminate.</li> <li>• Cabintop – there are a number of hairline cracks in the gelcoat. See the combing on the port side of the helm position, and areas on the cabintop forward of the cockpit. Repair with matching gelcoat.</li> <li>• Mizzen mast support (observation) – the top aft side of the fiberglass module, which supports the mizzen mast, has separated from the cabintop.</li> </ul>
<p>3. <u>Woodwork:</u></p> <ul style="list-style-type: none"> <li>• Varnish work is needed on the wooden trim around the deck hatches and the side windows.</li> </ul>
<p>4. <u>Hardware:</u></p> <ul style="list-style-type: none"> <li>• Stainless steel railings – a starboard amidships stanchion is scratched and bent. An adjacent welded pipe joint has partly separated.</li> <li>• Bow thruster – there is some corrosion on the motor which raises and lowers the thruster. Service.</li> </ul>
<p>5. <u>Keel:</u></p> <ul style="list-style-type: none"> <li>• There is some corrosion bleeding through the steel on the keel ballast. Grind off the rust, clean the metal, prime and paint with an epoxy coating to help prevent further corrosion.</li> </ul>
<p>6. <u>Pumps:</u></p> <ul style="list-style-type: none"> <li>• The salt water pressure pump should be secured.</li> </ul>
<p>7. <u>Plumbing:</u></p> <ul style="list-style-type: none"> <li>• A corroded T connection for the forward head shower sump needs replacement.</li> </ul>
<p>8. <u>Furling systems:</u></p> <ul style="list-style-type: none"> <li>• Main mast – there was a slight oil leak from the sail furling motor. Oil was used during the service of the motor. Apparently the use of winch grease might be the best option.</li> </ul>
<p>9. <u>Safety equipment:</u></p> <ul style="list-style-type: none"> <li>• The Epirb battery and registration have expired.</li> </ul>
<p>10. <u>Ceilings:</u></p> <ul style="list-style-type: none"> <li>• The foam backed ceiling vinyl has lost its bond in areas.</li> </ul>
<p>11. <u>Stereo:</u></p> <ul style="list-style-type: none"> <li>• The radio needs replacing.</li> </ul>

## RECOMMENDATIONS

### Vessel's integrity & safety issues.

1. Batteries:
  - The battery terminals and electrical busbars should be covered and protected.
2. Safety equipment:
  - The expired distress flares should be replaced.

*The vessel shows a very good standard of maintenance. The general condition is above average for a vessel of its age.*

This survey is submitted Without Prejudice by West Indies Marine Surveyors Ltd. and is issued subject to the condition that it is understood and agreed that neither this office nor any surveyor or any employee thereof is under any circumstances whatsoever to be held responsible in any way for any error in judgment, default, or negligence, nor for any inaccuracy, omission, misrepresentation or misstatement in this report, and that the use of this report shall be construed to be an acceptance of the foregoing conditions.

*\*This vessel is considered being a satisfactory risk for underwriters when the Recommendations are satisfactorily completed to USCG / ABYC standards.*



**Captain Geoffrey H. Williams** Merchant Navy Deck Officer Class 1 (unlimited)  
**SAMS® - Society of Accredited Marine Surveyors (USA) / Accredited Marine Surveyor #608**  
**SCMS - The Society of Consulting Marine Engineers and Ship Surveyors (UK) / Member.**  
**FEMAS – The Federation of European Maritime Associations of Surveyors and Consultants (European Union).**

