Survey Report

23 & 24/03/2021 **M/Y (CONFIDENTIAL)**















General Particulars

Name:(CONFIDENTIAL)Port of registration:(CONFIDENTIAL)Official No(CONFIDENTIAL)IMO number(CONFIDENTIAL)

Classification <u>RINA</u>

Class Notation $\underline{C + HULL * MACH - Ych (MCA) - LY II}$

Type: <u>Motor Yacht</u>

Model: (CONFIDENTIAL)

Builder: Falcon Yachts (Italy)

Year of Build: 2008
Construction: GRP

 LOA:
 31.6 m (103ft 4in)

 Beam:
 6.5m (21ft 3in)

Draft: <u>2.2m (7ft 2in)</u>

Propulsion: <u>Two MTU 16V M96 1492 KW – shaft drives</u>

Fuel Capacity: 10500 litres
Water Capacity: 2500 litres

Type of survey: <u>Condition survey</u>

Survey commissioned by: (CONFIDENTIAL)

Date of survey: <u>In water system survey 23/03/2021</u>

Out of Water Structural survey 24/01/2021

Place of survey: (CONFIDENTIAL)













Table of Contents

1	INTRODUCTION	1
2	GENERAL DESCRIPTION:	1
3	DEFINITIONS OF TERMS IN SURVEY	DEFECT LISTS 4
4	CONSTRUCTION DETAILS	5
4.1		5
4.2		5
	HULL AND DECK:	9
4.4 4.5	HULL MOISTURE:	11 11
	SUPERSTRUCTURE: BULKHEADS	11
	STRENGTH MEMBERS	11
5	WATERTIGHT INTEGRITY	11
5.1	WATERTIGHT DOORS	11
5.2	WATERTIGHT BULKHEADS	11
5.3		11
5.4	THROUGH HULL FITTINGS	11
6	LIFESAVING EQUIPMENT	12
6.1	PERSONAL FLOTATION DEVICES	ERROR! BOOKMARK NOT DEFINED.
6.2		ERROR! BOOKMARK NOT DEFINED.
6.3	` ,	ERROR! BOOKMARK NOT DEFINED.
6.4		ERROR! BOOKMARK NOT DEFINED.
6.5	FIRST AID KIT	ERROR! BOOKMARK NOT DEFINED.
7	FIRE FIGHTING EQUIPMENT	12
	FIXED SYSTEMS:	ERROR! BOOKMARK NOT DEFINED.
7.2	PORTABLE EXTINGUISHERS:	ERROR! BOOKMARK NOT DEFINED.
8	BILGE PUMPING SYSTEMS	13
8.1	NUMBER AND TYPE OF PUMPS:	13
9	PROPULSION SYSTEMS	13
9.1	GENERAL:	13
9.2		14
9.3	VENTILATION:	14
9.4	ENGINE ROOM INSULATION:	14













10 S	ECONDARY SYSTEMS	15
10.1	BOW THRUSTER	15
10.2	WATER MAKER:	15
	AIR CONDITIONING:	15
	TRIM TABS:	15
	OTHER:	15
11 F	UEL SYSTEMS	16
12 E	LECTRICAL SYSTEMS	16
12.1		16
12.2	BATTERY CHARGERS:	16
12.3	BATTERIES:	16
12.4	SHORE POWER CONNECTION:	16
12.5	CATHODIC PROTECTION:	18
Ligh	TING:	18
13 N	OORING EQUIPMENT	18
13.1	GROUND TACKLE:	18
13.2	WINDLASS:	18
13.3	CAPSTONS:	18
14 N	AVIGATION, COMMUNICATION EQUIPMENT AND ELECTRONIC	
CON	TROLS	18
14.1	ELECTRONIC EQUIPMENT:	18
14.2	ELECTRONIC CONTROLS:	18
14.3	INTERCOM:	18
14.4	NAVIGATION LIGHTS & SHAPES:	18
15 A	CCOMMODATIONS SPACES	20
15.1	CABINS:	20
15.2	SALOON	20
15.3	GALLEY SYSTEMS:	20
16 T	ANKS	21
16.1	FRESH WATER SYSTEMS:	21
16.2	GREY AND BLACK WATER SYSTEMS:	21
17 T	ENDER AND OUTBOARD	21
18 O	THER	21













03 April 2011	The Ionians Ltd.
18.1 UPHOLSTERY AND CUSHIONS 18.2 ELECTRIC CRANE 18.3 FENDERS / SHORE LINES 18.4 GANGWAY 18.5 RAILS AND STANCHIONS	21 21 21 21 21
19 CONCLUSION	22
20 LIST OF POINTS TO BE ADDRESSED	22
21 PHOTOS	ERROR! BOOKMARK NOT DEFINED.













1 Introduction

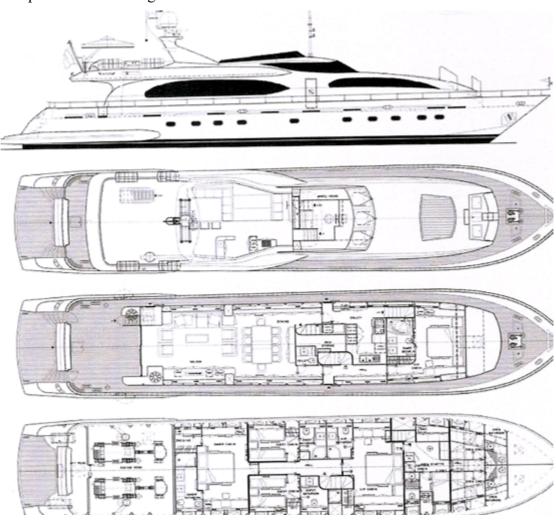
The survey was commissioned by <u>(CONFIDENTIAL)</u>. in order to attain the condition of the vessel. This survey was conducted in two stages.

The first was an in water systems survey (23/03/2011) followed by an out of the water structural survey (24/03/2011). The in-water survey included a sea trial (with good weather conditions and calm seas) which took place in the south coast of France but without the presence of an MTU authorized engineer.

2 General description:

"Hero" is a white hull <u>(CONFIDENTIAL)</u> motor cruiser built to full specification. It is fitted with a twin engine diesel x 2MTU 16V M96 1492KW tied to two five blade shaft driven propellers. She was built in 2008 by Falcon Yachts Italy (Viareggio) and constructed from GRP. The scantlings generally are in keeping with the cruising intention of the yacht.

She is was built to high classification standards. Has maintained full class and she is certified to MCA LY II code. The yacht can comfortably accommodate up to 15 quests in 5 luxury cabins with a crew of up to 6. In particular she has 3 double bed cabins en suite, 2 twin bed cabins en suite with Pullman beds. The crew living quarters can comfortably accommodate 5-6 crew members in 3 crew cabins with an independent crew living room.















The yacht was commissioned by a very experienced yacht owner and is crewed by a qualified professional captain, engineer and crew since delivery. The crew has maintained a full ISM (International Safety Management code) on a voluntarily basis ensuring that the yacht's maintenance regime was strictly followed with no major deficiencies.

Her interior decoration was done by Deborah Kenny giving the yacht a standing and status seldom in her class.

She has a five-stateroom, five-head layout that includes a Master Suite with a double queen mattress, master bathroom and dressing room located on the forward main deck. A pair of double-berth quarters just, amidships of the lower deck two VIP cabins each fitted with a luxury bathroom. Two luxury VIP suite located in the front and aft lower deck of the boat. Both are fitted with their own en suite luxury bathrooms and dressing rooms. The crew living quarters are located in the forward lower decks and include 3 double berth cabins along with a living room.

The boat's interior is of an Italian style and the decor is highlighted by a ceiling with lacquered wood, light fabrics and treatments, a sofas and arm chairs in white fabrics, and chrome and stainless steel. The heads also keep to the theme with wood soles, designer glass basins, and luxury shower heads.

The helm area is located on the forward mid ship upper deck of the yacht. This position provides the skipper with excellent open views of the seaway through large forward windows. The navigational electronic aids together with the engine electronic displays are also hosted, along with additional navigational aids. In the helm area is located a sofa covered in leather giving guests excellent views of the forward view of the yacht.

Located on main deck is the living room area and forward is the dinning room area. On the port side is the galley that is fully equipped and spacious, giving access to the dining area. One the starboard side of the the dinning is the alley way giving access to the forward master cabin. A quest luxury toilet is also located in the same level and ring next to the stair case leading to the lower quest quarters.

Further aft is a large, comfortable saloon with seating and an entertainment area that features a C-shaped sofa in white fabrics with a coffee table and two armchairs in cream leather. Opposite the seating area is the entertainment center housing HDTV hidden in its own electrically operated cabinet.

Outside, the aft deck is spacious and includes a dining area. Fly bridge is spacious includes an L-shaped sofa BBQ with a bar area, and plenty of sun bathing area. To launch the tender a crane is used which is located in the aft part of the fly bridge.













The yacht was fitted out with the following equipment.

Standard Equipment:

Communication Equipment

- Inmarsat
- Sailor SSB HF Radio
- Sailor VHF with DSC X2

Navigation Equipment

- GEONAV Colour Chartplotters (X2)
- Furuno X Band ARPA Radar

- Inter-ship Telephone System
- GSM Interface for Incoming Calls
- 3G+ WIFI around Ship (X2 Guests & Crew)
- Simrad Autopilot (X2)
- Raymarine Anometer & Repeaters

Entertainment Equipment

- Flat-screen Televisions in Salon & cabins
- SKY Boxes/Humax in all Cabins
- **GALLEY & LAUNDRY EQUIPMENT**
- Twin Fridge / Twin Freezer
- Oven/ Six ring plaque
- X2 Siemans Dishwasher

- BOSE Multi-Zone Surround Sound System
- CD Players & IPOD connections throughout
- Wine Fridge
- Extraction Hood with CO2 safety System
- Siemans Washing Machine & Dryer













3 Definitions of Terms in Survey Defect Lists

Dangerous (D): System to which defect referred to is a serious hazard. Should not be used until the defect has been put right as a matter of immediacy.

Urgent (U): The defect referred to should be attended to at the soonest possible

moment. If left or used before rectification, the defect/system/vessel

may become dangerous.

Priority (P): A defect not as serious as (D) or (U), but one that should not be left

unattended until the next planned maintenance.

Advisory (A): A defect or shortcoming, which is not an immediate hazard or in

need of priority attention, but needs to be recorded. Allowances should be made, and consideration given to rectification at next refit

or out of season lay-up period.

Limitation (L): Defines a limitation of this survey.













4 Construction Details

4.1 <u>General description</u>

The hull is GRP. Polyester gelcoat, with a vinyl ester resin reinforced with different types of cloths, depending on hull part, such as mats, unidirectional and biaxial cloths. The HULL, MAIN DECK and SUPERSTRUCTURES are stratified inside by hand with a composite of G.R.P. and "sandwich".

The STRATIFICATION is realized in conformity/approval and built under the supervision of the Italian Registry of Shipping RINA.

Laminate materials are the followings:

POLYESTER RESIN: ISOFTALICA DSM 288

o GEL COAT: NORPOL NPG

o SANDWICH: DIVINICELL or equivalent

o FIBER GLASS:

- CHOMARAT: MAT TYPE 450

- ROVIMAT TYPE 1250 - UNITAPE TYPE 1000

The thermal acoustic insulation is as follows:

The partition bulkheads of the engine room are made up of a sandwich of plywood and rock wool, insulated inwardly to Fire Barrier Class A60 and finished in white lacquered pinhole sheet-aluminum.

All the fittings of main deck are, deck-bollards, fairleads, hawses, guardrail and portholes are in stainless steel AISI 316 L.

Wheelhouse window stainless steel is painted with enamel paint. Aft saloon door is in stainless steel AISI 316 L and tempered glass.

All the remaining surface of the engine room is insulated to Fire Barrier Class A60 and finished in white lacquered pinhole sheet-aluminium.

Partition bulkhead between guest and crew cabins are soundproofed with panels of rock wool with interposed lead foil and double marine plywood, total thickness 50 mm.

Panels of glass wool mm. 50 covered with metallic paper insulate the whole boat.

Fire system in engine room with galvanized steel pipes and C02 bottles in the lazarette connected to the system with high-pressure hoses type approved by the RINA Classification Society.

The glasses of the windows are tempered monolithic glass of a thickness approved by the Classification Society.

4.2 Certification

The vessel was built in 2008 for the European Market. During the building of the yacht RINA classification society had the building supervision and approval of all on board installations

Throughout she followed and maintained a strict survey regime in compliance with both RINA classification and MCA LYII code. The last records of MCA coding survey was on 26th of April 2010 with only minor observations. A full class status history can also be seen on the below list that clearly indicates that all has been kept and followed in accordance with international rules and regulations:

Urgent (U): in order to maintain class and MCA LY II code all annual surveys are to be urgently arranged















Index of Certification.

Number	Document	Issue Date	Expiry Date	Validity
1	Registration Certificate	29/03/2010	29/03/2015	N/A
2	Llloyd's Register Fairplay	18/12/2009	N/A	N/A
3	Builders Certificate	25/03/2010	N/A	N/A
4	Power of Attorney		N/A	
5	Certificate of Incorporation		N/A	
6	Carving & Marking Note	31/03/2010	N/A	N/A
7	Record of Equipment LYII	ТВС	ТВС	5 Years
8	Minimum Manning Cert.	ТВС	ТВС	N/A
9	Yacht Insurance	25/03/2010	25/03/2011	Annual
10	Deviation Card	27/05/2010	27/05/2010	Bi-Annual
11	Cayman Is. Survey Report		N/A	













RINA Classification Society

1	Certificate of Class	16/12/2010	03/06/2015	Annual
2	International Tonnage Cert.	29/03/2010	29/03/2010	5 years
3	International Load Line Cert.	15/03/2011	03/06/2015	Annual
4	Certificate of Survey	29/03/2010	29/03/2015	5 Years
5	ISPPC	15/03/2011	03/06/2015	Annual
5	IOPPC (LYII r.25) report	15/03/2011	N/A	5 Years
6	Air Pollution VI Statement	15/03/2011	N/A	5 Years
7	Anti-Fouling Compliance	15/03/2011	N/A	Annua

RADIO CERTIFICATES

1	GMDSS Contract Certificate	10/03/2011	09/03/2012	Annual
2	Ship Radio Station Licence	19/05/2010	05/05/11	Annual
3	Conformance Test Report	28/10/2010	N/A	N/A
4	Dec. of Survey Ships Equip.	24/05/2010	N/A	N/A
5	Cargo Ship Safety Checklist	24/05/2010	24/05/2011	Annually
6	Record of GMDSS Installation	n 24/05/2010	24/05/2011	Annually
7	EPIRB Inspection Certificate	24/05/2010	24/05/2011	Annually
8	EPIRB Database	19/05/2010	N/A	N/A
9	EPIRB Registration Card	06/04/2010	N/A	N/A
10	AIS Test Report	24/10/2010	24/10/2010	Annual













LSA CERTIFICATES

1	Load Test Certificate RB	25/01/2011	25/01/2011	Annual
2	Load Test certificate Tender	25/01/2011	25/01/2011	Annual
3	Load Test Certificate Garage	16/03/2009	16/03/2010	Annual Exp
4	Load Test Certificate Passer.	24/02/2009	N/A	N/A
5	Proof Test LYII Crane	08/04/2009	N/A	N/A
6	Immersion Suits Test Cert.	05/09/2009	05/09/2010	Annual
7	1 Life raft inspection Cert.	05/03/2011	05/03/2012	Annual
8	2 Life raft inspection Cert.	05/03/2011	05/03/2012	Annual
9	3 Life raft inspection Cert.	05/03/2011	05/03/2012	Annual
10	4 Life raft inspection Cert.	05/03/2011	05/03/2012	Annual
11	5 Life raft inspection Cert.	05/03/2011	05/02/2012	Annual
12	Lifejacket Servicing Cert.	08/03/2011	07/03/2012	Annual
13	Fire Extinguisher (Port) Cert.	24/02/2011	24/02/2012	Annual
14	Fire Extinguisher (Fix) Cert.	24/02/2011	24/02/2012	Annual
15	Fire Extinguisher (Fix(Cert.	24/02/2011	24/02/2012	Annual
16	Soft Furnishings Fire Retard.	12/05/2010	12/05/2012	Bi-Annual
17.	Stability Book	13/10/2010	N/A	N/A













4.3 Hull and Deck:

Priority (P): Below

waterline cleaning and

Advisory (A): Outer

hull polishing is required

Advisory (A): Minor surface GRP cracks that

need to be repaired as

Advisory (A):

Handrail teak needs

attention as necessary.

necessarv

antifouling treatment.

The vessel was seen in and out of the water on the same day. It must be noted that although the vessels hull bottom was clean a new coat of antifouling should be applied. (see photo 2)

According to the builder instructions for boero treatment application it should be as follows:

1 spray coat of delta UC Rosso 40 MY

3 spray coats of delta UC HB 10 MY

2 roller coats FO anifouling 60 MY per coat.

According to on board documentation provided by the captain last dry docking was carried out 19-27/04/2010. (See Photo 1)

During the survey the topsides had apparent dull areas. The hull is in need of polishing and the following deficiencies were identified:

- Anchor handling (see photo 2)
- Rope handling and normal wear and tear (see photo 3)

Below list of items found identified on board tested and operated satisfactorily in the areas of hull and main deck:

- o TEAK HANDRAIL. Needs attention as necessary (see photo 5)
- o TEAK MAIN DECK 16 MM THICK. D 6 DECK-BOLLARDS.
- o 10 STAINLESS STEEL FAIRLEADS.
- 2 ELECTRIC ANCHOR-WINCHES 3000 WATT 380V WITH CONTROL FROM BOW, WHEELHOUSE AND FLYING BRIDGE.
- STAINLESS STEEL MOORING HAWSEHOLES WITH FENDER PLATES FOR ANCHORS.
- o 2 CHAIN LOCKERS WITH CHECK DOORS.
- 2 ANCHORS (los KG EACH) TYPE HULL.
- o CHAINS 125 MT EACH, HIGH RESISTENCE 0 14 MM.
- o STAINLESS STEEL GUARDRAIL AND FENDER BAR.
- 10 FENDERS IN STAINLESS STEEL HOLDERS AND 2 ROUND-SHAPED ONES
- o SUNBATHING AREA WITH SKAI CUSHIONS AT BOW
- CURTAINS FOR FRONT AND SIDE WINDOWS.
- o SIDE ACCESS DOOR TO THE ENGINE ROOM.
- AFT TABLE AND 10 CHAIRS "DIRECTOR" TYPE.
- ELECTRIC DOCK SOCKET.
- o INLETS FOR ANTIFIRE / BOAT WASHING SYSTEM.
- FRESH WATER HOSE WITH DOCK SOCKET.
- o AFT AND BOW DECK EXTRACTABLE HOT/COLD SHOWER.
- DOUBLE STAIRS TO THE STERN BATHING PLATFORM WITH TEAK STEPS.
- o BATHING PLATFORM IN G.R.P. AND TEAK WITH LIGHTS UNDERNEATH.
- BATHING LADDER.
- RETRACTABLE ELECTRIC-HYDRAULIC GANGWAY.

ec











Professional Member of:

o SUNBATHING AREA ON FORWARD DECKHOUSE WITH SKAI CUSHIONS.

- 2 AFT WARPING CAPSTANS 2000 WATT.
- SPEAKERPHONE SYSTEM ON THE BRIDGE, ENGINE ROOM, BOW, COCKPIT, FLY AND LAZARETTE.
- CLOSE CIRCUIT TV CAMERA IN AFT DECKHEAD

Below is the list of items that found and operated with satisfactorily results on the fly bridge area:

- o ACCESS TO THE FLYING BRIDGE WITH INSIDE STAIRS AND FROM THE AFT DECK.
- WINDSCREENS IN TEMPERED GLASS WITH STAINLESS STEEL FRAME.
- DASHBOARD WITH STEERING WHEEL AND ENGINE CONTROLS. The FURUNO PLOTTER GEONAV 11C needs replacing. (see photo 6)
- o CONTROL LEVERS, ENGINE REVERSE GEARS AND ACCELERATORS M.T.U.
- MAGNETIC COMPASS.
- o RUDDER ANGLE INDICATORS.
- TRIM-TABS ANGLE INDICATORS.
- o TRIM-TABS CONTROLS.
- ECHO SOUNDER AND LOG REPEATER.
- AUTOMATIC PILOT REPEATER NAVICONTROL AP 303 GOLD.
- o VHF REPEATER (HANDSET) FROM WHEELHOUSE.
- VHF /DSC
- GPS

Urgent (U):

Priority (P):

Starboard Search Light

needs repair as necessary

bridge.

FURUNO PLOTTER needs replacing on fly

- o TV, VHF, SSB AND GPS ANTENNA.
- o EPIRB.
- SART RADAR TRANSPONDER.
- o NAVIGATION LIGHTS.
- INTERCOM.
- PILOT SEAT.
- o G.R.P. MAST FOR RADAR, ANTENNA, LIGHTS ETC.
- o 1 TABLE WITH TOP IN TEAK AND SOFA IN LACQUERED G.R.P. WITH SKAI
- o CUSHIONS.
- 2 STEREO SPEAKERS.
- o SEARCH LIGHT (P&S) WITH REMOTE CONTROL (ALSO FROM WHEELHOUSE). (SEE PHOTO 7)
- o PNEUMATIC REGULATION HORN.
- 2 MULTIUSE LOCKERS FOR FRIDGE, ICE MAKER AND SINK.
- o SANGUINETI ELECTRO-HYDRAULIC CRANE FOR TENDER WITH TELESCOPIC ARM LOADING CAPACITY 800 KG.
- o BIMINI TOP.
- 1 G.R.P. SUNBATHING AREA WITH SKAI CUSHIONS.













4.4 Hull moisture:

Limitation: The hull could not be assessed for osmosis

This could not be assessed as the vessel was lifted out of the water the day of the survey and 1 hour later she was put back in the water. This meant that there was insufficient time for the hull to dry properly so that moisture meter readings can be taken and the wetted surface area checked for osmosis.

4.5 <u>Superstructure:</u>

The vessels superstructure was visually examined. No apparent structural cracks, signs of fractures, or delamination were seen. The gel coat finish was good. The windows, hatches, skylights and ports were found in good condition and show no signs of crazing.

4.6 Bulkheads

The bulkheads throughout the vessel were examined (where accessible) and no evident signs of de-bonding or cracking from impact or overloading were found.

4.7 <u>Strength Members</u>

The vessel's matrix system was closely examined and no significant structural damage was evident.

5 Watertight integrity

5.1 Watertight doors

All watertight doors were examined and found that rubber seals are of no need of replacing. (see photo 9)

5.2 Watertight bulkheads

Forward collision bulkhead and engine room bulkhead were examined and found in good condition.

5.3 Hatches and doors

The gaskets and hinges were visually inspected and found to be in good condition.

5.4 <u>Through hull fittings</u>

The following through hull skin fittings inlet /outlet valves were visually inspected and turned and found to be in satisfactory condition.

- Black, Gray and Bilge water pumps
- Sea water intakes for engine cooling
- Engine exhausts discharge
- Generator inlet and discharge
- Water maker inlet and discharge













6 Lifesaving and Fire Fighting Equipment

Priority (P): All fire fighting and lifesaving equipment is due for annual testing.

The yachts life saving appliances are following the highest standards and are in fully compliance with latest international and European standards.

Following careful on board examination all items have undergone their annual testing regimes with all service records and certificates being up to date. It is although highly recommended annual testing and servicing records to be revisited for the 2011 and were applicable to be tested.

Life rafts (Zodiac x 4 10 persons) have been duly tested and all certificates and records found on board. Same is applicable with sailor EPIRB's & SART with hydrostatic releases, Immersion suits and man overboard, life jackets (SOLAS approved) and a up to date first aid kit that contains everything with detailed list of all medicines and their respective expiry dates. (See related photos 8)

The Fire fighting systems included a CO2/FM200 fixed suppression system with an upgraded Akron fire guns for use on any class of fire. The emergency lighting is also upgraded with illuminating 24V.

A list of all safety items is as follows:

- ➤ WATER INTAKE FROM DOCK WITH PRESSURE CONTROL.
- > ELECTRIC SHORE POWER CABLE WITH SOCKET.
- > TOOL KIT.
- ➤ 2 BOAT-HOOKS.
- > SPARE SET OF BULBS AND FUSES.
- > 21 LIFE JACKESTS WITH A LIGHT & WHISTLE.
- CHILDREN'S LIFE JACKET.
- ➤ 2 LIFEBUOY WITH LIGHT & SMOKE.
- ➤ BOAT NAME ON THE STERN AND LIFE BELTS
- ➤ 2/4 LIFE BELTS.
- > 17 IMMERSION SUITS.
- ➤ 20 RINA HOMOLOGATED SAFETY BELTS.
- ➤ 4 SOLAS SELF-INFLATABLE IOMAN LIFE RAFTS.
- ➤ 4 MOORING ROPES (2 WITH CHAIN).
- ➤ 1 TOW ROPE MT 1 00.
- > REGULATION HORNS.
- > SAFETY STANDARD PORTABLE EXTINGUISHERS AS PRESCRIBED BY CLASSIFICATION SOCIETY & MCA.
- > SET OF FLARES AND ROCKETS.
- ➤ 6 ROCKET PARACHUTE FLARES.
- ➤ 1 LINE THROWING APPLIANCE (4 charge + 4 rope).
- > SET OF INTERNATIONAL FLAGS AND UP TO DATE CHARTS
- NATIONAL FLAGS.
- ➤ 2 SHIPYARD JACKS.
- > SET OF BOAT TECHNICAL DRAWINGS













7 Bilge pumping systems

7.1 Number and type of pumps:

The bilge pumping system is comprised of a centralized suction system, and a number of immersion pumps. Each system can work automatically and independently

- Main Bilge pump
- Manual Bilge pump
- Automatic Bilge Pumps
- Engine room emergency bilge pump

All were tested and found in good operational conditions together with the emergency systems and the fire emergency pump located in the aft deck area. A full diagram/layout of the on board bilge system can see at the end of the report as Photo 10.

8 Propulsion systems

8.1 General:

Priority (P): both

engines needs to be serviced by authorised

their annual

dealer and attended by an electrician as part of

maintenance schedule

The vessel is powered by two MTU 16V M96 1492KW. The transmission is to two ZF BW 2555. The gear box is BCS electrohydraulic with emergency lazaretto crossover which is then connected to two main shafts.

The port side engine had 671 hours and the stbd engine had 670 hours. Both engines were found to be in good condition with full service history on board.

The ZF transmission system was visually inspected and appeared to be in good condition with also full service history. The yacht throughout her life had a fully qualified engineer on board following and implementing a detailed service regime. All records on board that were examined indicate no problems.

A detailed list of all items in the engine room includes:

- ACCESS FROM SIDE GANGWAY THROUGH LADDER.
- > ACCESS WATERTIGHT DOOR ON THE TRANSOM.
- MAIN ENGINES SUBMERSED GAS EXHAUST PIPES IN STEEL AND GRP AND GENERATORS EXHAUST PIPES WITH SMOKE TRAPS WITH VIBRATION DAMPING JOINTS.
- ➤ EXHAUST PIPES IN STEEL COVERED WITH CERAMICS CLOTH AND STAINLESS STEEL OUTSIDE COVERING.
- > THERMAL INSULATION AND SOUND PROOFING
- ➤ 3 RACOR FUEL FILTERS FOR EACH ENGINE.
- > 2 SEA CHESTS WITH WATER FILTERS FOR MAIN ENGINE COOLING.
- ➤ 1 LUBRICANT OIL SUCTION EL/PUMP 24V.
- ➤ 2 EL/PUMPS FOR FUEL TRANSFER, ONE 24V AND ONE 380V.
- > STAINLESS STEEL SINK WITH TAP.
- ➤ 2 ELECTRIC AND 1 MANUAL FUEL TRANSFER PUMPS.
- ➤ 1 TRANSOM WITH 2 SEA CHESTS WITH FILTERS FOR GENERATORS AND UTILITY.













➤ ENGINE ROOM VENTILATION: 2 EXTRACTORS 380V AND 2 CENTRIFUGAL BLOWERS 380V.

- ➤ 2 BLOWERS 220V FOR LAZARETTE.
- ➤ MAIN ELECTRIC PANEL FOR PRIMARY DISTRIBUTION 380V /24V IN LAZARETTE.
- > OILY WATER TANK.
- ➤ 2 BILGE/FIRE AND CHAIN WASH ELECTRIC PUMPS 230/400V FLOW RATE 7.2-14.4 M3/H.
- ➤ 1 BILGE ELECTRIC PUMP 380V FLOW RATE 14 M3/H. THE ABOVE MENTIONED PUMPS ARE SPARE ONE ANOTHER THROUGH MANUAL BY-PASS.
- ➤ BILGE MANIFOLD WITH 6 FIXED INTAKES AND 1 PORTABLE.
- ➤ 1 EMERGENCY M/PUMP PORTABLE 9/m3/h
- ➤ GREY WATERS AND SEWAGE TANK AUTOMATIC EMPTING SYSTEM THROUGH TWO PUMPS 380V WHICH ARE SPARE ONE ANOTHER THROUGH A BY-PASS FLOW RATE 4.8 M3/H.
- ➤ 2 AUTOCLAVE PUMPS FOR FRESH WATER INTERFACED ONE ANOTHER: N. 1 IS 24V AND N. 1 IS 220V FLOW RATE 70 L/MIN.
- ➤ 2 TECNICOMAR WATER MAKER L. 140/H.
- ➤ WATERPROOF LIGHTING SOCKETS 24V AND 220V.
- > INTERPHONE BRIDGE/ENGINE ROOM AND EMERGENCY STEERING/BRIDGE.
- > ANTISLIP PLYMETAL FLOOR.
- ➤ C02 FIRE SYSTEM WITH REMOTE CONTROL AND REMOTE CLOSING OF FUEL VALVES AND AIR INTAKE IN ENGINE ROOM.
- ➤ FIRE SYSTEM FE 227 WITH MANUAL CONTROL FOR LAZARETTE,
- ➤ ELECTRIC PANEL AND ELECTRIC GENERATOR AREA.
- ➤ 1 AIR COMPRESSOR WITH L. 25 TANK.
- > CLOSE CIRCUIT CAMERA WITH TRAINING.
- > BENCH WITH VICE.
- ➤ 2 ELECTRIC 380V BOILERS L. 100 EACH.
- ➤ 1 AFT GREY WATER TANK WITH SUBMERSED EMPTING EL/PUMP.

8.2 Exhausts:

The exhaust system of the engines and generators was found to be in good order and maintained.

8.3 Ventilation:

The engine room had 4 natural ventilation inlets and 6 blowers. Both blowers were tested and found operational. Minor corrosion on the inlet grills was evident.

8.4 Engine room insulation:

The engine room insulation was found to be deteriorated in some areas, mainly around the ventilation areas and the gangway retraction box due to water ingress.













9 Secondary Systems

9.1 Bow thruster

The hydraulic bow thruster operated satisfactorily. (see photo 10)

Priority(P): the water maker needs 2 control boards changing and servicing of filter

Priority(P): annual

servicing of air conditioning

9.2 <u>Water maker:</u>

The yacht has two Tecnomara water maker 140 lts/hrs was operational during the survey and will require the two control boards need changing and servicing of filters.

9.3 Air Conditioning:

The system was switched on in all cabins and the pumps, condenser units, and fan coils were examined and found to be in good working order. According to the captain, the system was serviced according to on board records a year ago. In detail:

- ➤ AIR CONDITIONING SYSTEM CAPACITY 180.000 BTU/H IN SUMMER CYCLE AND 225.000 BTU/H IN WINTER CYCLE.
- ➤ 1 UNIT CWS MODUL 1803 RC VECO CLIMMA 50HZ WITH THREE COMPRESSORS.
- ➤ R 407-C REFRIGERANT.
- > FAN COILS OF VARIOUS POWERS ADEQUATE TO THE ROOMS.
- > 2 SEA WATER PUMPS WITH BRONZE BODY AND IMPELLER 380V 50HZ.
- ➤ 2 TREATED WATER CIRCULATION PUMPS WITH BRONZE IMPELLER 380V 50 HZ.
- > ELECTRONIC PANEL WITH ALL STARTING AND CONTROL EQUIPMENTS.
- > THERMOSTATS WITH DIGITAL DISPLAY

9.4 Trim tabs:

Two electrohydraulic actuated trim tabs are attached to the vessels transom. They were found operational.

9.5 Other – Propelling system:

- **BOW THRUSTER.**
- ➤ N. 2 FOUR BLADED NIBRAL PROPELLERS.
- N. 2 AISI 630 PROPELLER SHAFTS.
- > SHAFT BEARINGS IN BRONZE OTS WITH SELF-LUBRICATING RUBBER CUTLASS "P" BRACKETS.
- 2 STAINLESS STEEL FAIRED RUDDERS.
- > 2 ELECTROHYDRAULIC FLAPS.
- ➤ 2 STUFFING BOXES













Professional Member of:

Advisory (A): fuel tanks to be cleaned and treated for fuel bug.

Urgent (U): Both generators to be serviced by authorised dealer and attention to the fuel injector pumps. Starboard gen battery needs replacing

10 Fuel Systems

The vessel has tank capacity of 10500 litres. All tanks and associated systems were inspected and found to be in good order. However it is still recommended the fuel tanks be cleaned and treated for fuel bug.

11 Electrical Systems

11.1 Generators:

The Vessel has two 2 Kohler 27 KVA generators (240/120V) with approximately 2000 hours on both. The generators had been serviced by the on board engineer and were found to be in good working order. It is recommended that both be serviced by an authorised engineer and on both the fuel injector pumps need attention and servicing. Starboard generator battery needs replacing.

11.2 Battery Chargers:

Battery charges were surveyed satisfactorily.

11.3 Batteries:

The vessel has two separate battery banks. One system of batteries for the engine, MTU electronics and generator starting (12V) located in the engine room and another system of batteries fwd under the accommodation area. Both systems were inspected and appeared to be in satisfactory condition.

The systems were found to be safe and working satisfactorily and all switches and circuit breakers were labelled.

11.4 Shore power connection:

The yacht has power connection to shore on the main switch board that is located in the engine control room. All operated satisfactorily.

Detailed list of on board electric installations includes the following:

Materials and installation in accordance with RINA rules. There are two different voltage systems on board:

- ➤ Alternating current for various power services;
- ➤ Direct current for emergency lightning, navigation systems, telecommunications and for main engine ignition.

A.C. will be fed by main generators or directly from SHORE with 27 kW power. Batteries for 24V D.C. systemis lead type.

- 2 MAIN GENERATORS 220/380V A.c. THREE-PHASE WITH NETRUAL 50 HZ 27 KW EACH NOT PARALLEL PRESET AND PROVIDED WITH MAGNETIC-THERMAL SWITCH.
- ➤ SHORE POWER UNIT WITH SHORE CONNECTION 380/400V A.c. THREEPHASE 40 KV A.
- ➤ 1 LEAD-ACID STORAGE BATTERY FOR SERVICE USE MADE UP OF 12 CELLS VOLTAGE 2V 595 AH 24V CONNECTED.
- ➤ 1 LEAD-ACID STORAGE BATTERY FOR MAIN ENGINE IGNITION MADE UP OF 4 BATTERIES VOLTAGE 12V 220 AH 24 CONNECTED 440 AH.













➤ 1 LEAD-ACID STORAGE BATTERY FOR MAIN ENGINE CONTROL MADE UP OF 4 BATTERIES VOLTAGE 1 2V 100 AH CONNECTED 24V 200AH.

- ➤ 1 LEAD-ACID STORAGE BATTERY FOR AUXILIARY GMDSS MADE UP OF 2 BATTERIES VOLTAGE 12V 155 AH 24V CONNECTED.
- ➤ 1 LEAD-ACID STORAGE BATTERY FOR EMERGENCY MADE UP OF 2 BATTERIES VOLTAGE 12V 155 AH 24V CONNECTED.
- ➤ 2 LEAD-ACID BATTERIES FOR GENERATOR IGNITION 12V 120 AH EACH.
- ➤ 2 AUXILIARY GENERATORS 80 A 24V D.C. RUN BY THE MAIN ENGINES, ONE FOR SERVICE BATTERY CHARGE AND ONE FOR MAIN ENGINE IGNITION CHARGE.
- ➤ 2 AUTOMATIC BATTERY CHARGERS 100 A EACH IN PARALLEL 24V FOR SERVICE BATTERIES.
- ➤ 1 AUTOMATIC BATIERY CHARGER MASTERVOLT 50 A 24V FOR MAIN ENGINE IGNITION BATTERIES.
- ➤ 1 AUTOMATIC BATTERY CHARGER MASTERVOLT 50 A 24V FOR AUXILIARY GMDSS BATTERIES
- ➤ 1 AUTOMATIC BATTERY CHARGER MASTERVOLT 25 A 24V FOR EMERGENCY BATTERIES.
- > PARALLEL FOR BATTERIES.
- > SWITCHES TO DISCONNECT SERVICE AND IGNITION BATTERIES.
- ➤ LIGHTING AND SOCKETS 24V AND 220V.
- ► EMERGENCY LIGHTING 24V.

ELECTRIC PANEL IN THE LAZARETTE:

- ➤ IT WILL CONSIST OF TWO SECTIONS, ONE 220/380V AC AND ONE 24V DC. MAGNETOTHERMAL SWITCHES TO PROTECT THE FEEDER LINES OF THE MAIN POWER SOURCES.
- > CONNECTING AND DISCONNECTING CONTACT MAKERS FOR ELECTRIC GENERATORS AND SHORE POWER
- ➤ AUXILIARY CIRCUITS OF THE MAIN POWER SOURCES
- > 24V DC POWER SECTION + CHANGE-OVER SWITCH FOR 24V DC USERS ON TWO DIFFERENT SETS OF BATTERIES (SERVICES AND STARTER)
- > STARTING CIRCUITS 220/380V AC / 24V DC TO CONTROL THE VARIOUS LOADS
- > VARIOUS SIGNALS AND CONTROLS













Priority (P): all anodes to be replaced as necessary

11.5 Cathodic Protection:

The anodes of the vessel were replaced back in 2010. It is recommended they be replaced at the next dry docking.

Lighting:

All lights (deck led, cabin, saloon etc) were switched on and were operating satisfactory.

12 Mooring Equipment

12.1 Ground Tackle:

An automatic anchor and chain washing system was in place which was fully operational.

The outfit is in good condition and suitable for the intention of this vessel.

12.2 Windlass:

The windlass was tested and found in operational condition.

12.3 Capstons:

The electrical mooring capstons, located on the stern (port and stbd) were tested and found to be in good order.

13 Wheelhouse Navigation, Communication Equipment and Electronic controls

13.1 Electronic Equipment:

All systems were operational. However the auto pilot could not be properly assessed. Furthermore the camera was not operational. And the EPIRB needs annual testing.

13.2 <u>Electronic Controls:</u>

Most of the electronic controls were tested during sea trial and found to be in good condition.

13.3 Intercom:

The vessels intercom system between rooms was operational.

13.4 Navigation lights & shapes:

All navigation lights were properly located and in good working order.

Detailed list of bridge equipment includes:

- > CEILING COVERED IN LEATHER
- ACCESS STAIRS TO FLYING BRIDGE.
- > WALLS AND FURNITURE ARE IN CHERRY WOOD.
- > SEMIGLOSSED TEAK FLOOR.
- > WOOD AND ALUMINIUM STEERING WHEEL.
- ➤ LEATHER PILOT SEAT.
- > ELECTROHYDRAULIC STEERING.
- > STEERING POSITION WITH ENGINE INSTRUMENTATION.
- > THREE SEAT LEATHER SOFA.













Professional Member of:

- > CHART TABLE WITH CHART HOLDER.
- ➤ BAROMETER, CLOCK, THERMOMETER.
- ➤ LOCKER FOR SIGNAL FLAGS.
- ➤ ELECTRONIC REMOTE CONTROL LEVERS FOR MAIN ENGINE THROTILE AND REVERSE GEARS.
- > RUDDER INDICATOR INSTRUMENTS.
- MAGNETIC COMPASS.
- ➤ ELECTRIC PANEL WITH SYNOPTIC DASHBOARD WITH ALARMS, PILOT AND SAILING LIGHTS LOG AND ECHO SOUNDER.
- > WIND STATION.
- > GPS WITH PLOTTER FLASH 11 COLOR.
- ➤ VHF /GMDSS SAILOR RT 5022.
- ➤ SSB 1 50-WATT SAILOR PROGRAMME 5000 GMDSS.
- ➤ RADAR 64 MILES JRC JMA 5106 BLACK BOX DISPLAYS 15" LCD MINIARPA FUNCTION.
- ➤ AUTOMATIC PILOT NAVICONTROL AP 3003 GOLD INTERFACED WITH GPS.
- ➤ NAVTEX RECEIVERJRC NCR 333A.
- > TRIM-TABS CONTROLS.
- > INMARSAT SYSTEM F33 PLUS SAILOR WITH FAX MACHINE.
- ➤ GENERAL ELECTRIC PANEL TO USE AND CHECK AC AND DC. o ELECTRIC INSTALLATION.
- > CLOSE CIRCUIT TV MONITOR WITH CAMERA CONTROL PANEL
- > STATION CONTROL FIRE-FIGHTING SYSTEM THORNE SECURITY AND SENSORS IN ANY ROOM AND HEAT DETECTOR IN ENGINE ROOM AND GALLEY.
- > ELECTRIC PANEL IN WHEELHOUSE:

A PANEL IN TWO SECTIONS, OPERATING AS CONTROL AND DISTRIBUTION SUBPANEL FOR AC AND DC NETWORKS; AS A RULE CONSISTS OF:

- > START AND STOP CONTROLS FOR GENERATORS
- ➤ CONNECTION AND DISCONNECTION CONTROLS FORGENERATORS AND SHORE POWER.
- > 2 VOLMETERS FOR THE CONTROL OF THE GENERATORS
- ➤ 2 AMMETERS FOR THE CONTROL FO "A" AND "B" BARS
- ➤ 1 VOLTMETER AND 2 AMMETER FOR THE CONTROL OF SERVICE BATTERIES AND STARTING BY COMMUTATOR
- ➤ 1 VOLTMETER AND 1 AMMETER FOR RADIO BATTERY CONTROL
- > 2 AMMETERS FOR THE CONTROL OF THE ENGINE ALTERNATORS
- CARD FOR NAVIGATION LIGHT ALARMS
- > CARD FOR BILGE HIGH LEVEL ALARM
- > CHANGE-OVER SWITCH FROM MAIN TO EMERGENCY FEEDING LINE FOR NAVIGATION LIGHTS
- ➤ INSTRUMENT LIGHT SWITCHES AND CONTROLS
- > ENGINE ROOM VENTILATION AND EXTRACTION STOP CONTROLS
- VARIOUS SIGNALS AND CONTROLS













14 Accommodations Spaces

14.1 Cabins:

All cabins were found to be in good condition with no damages except from common wear and tear consideration her age.

14.2 Saloon

The saloon area was also well maintained with no visible faults. The following list of items found on board

- > STAINLESS STEEL AND TEMPERED GLASS BACK DOOR WINDOWS.
- > WALLS AND FURNITURE ARE IN CHERRY WOOD.
- > CEILING IN LORICA OR ALCANTARA WITH CHERRY WOOD PERIMETRICAL FRAMES.
- ➤ MINI BAR AND ICE MAKER.
- > COFFEE TABLE.
- > STEREO HI-FI AND CD WITH SPEAKERS IN F /B AND COCKPIT.
- > TV COLOR PLASMA 37" WITH UP&DOWN DEVICE AND DVD.
- > INTERPHONE.
- > SOFA AND ARM-CHAIRS COVERED WITH CLOTH.
- ➤ PIECE OF FURNITURE WITH ENTERTAINMENT APPLIANCES.
- > CURTAINS AND CARPET.
- ➤ LIGHTING AND CEILING LIGHTS 24V.
- ➤ HOT AND COLD AIR CONDITIONING

DINING AREA

- > CEILING IN LORICA OR ALCANTARA WITH CHERRY WOOD PERIMETRICAL FRAMES.
- WALLS AND FURNITURE IN CHERRY WOOD.
- ➤ DINING TABLE WITH 10 CHAIRS.
- ➤ LOCKERS FOR GLASSES, CUTLERY, TRAYS AND DISHES
- > FURNITURE WITH DRAWERS AND SHELVES.
- ► HOT AND COLD AIR CONDITIONING.
- > CURTAINS AND CARPET.
- ➤ CEILING LIGHTING 24

14.3 Galley systems:

All appliances were tested and found in good operational order. In detail:

- ➤ CEILING, WALLS AND FURNITURE IN LACQUERED WOOD, COLOU CERAMIFLEX FLOOR.
- > 2 REFRIGERATORS 220V A.c. L. 246 OF WHICH L. 67 FREEZER.
- > STAINLESS STEEL DOUBLE SINK.
- > OVEN 90 CM WIDE.
- ➤ 1 MICROWAVE OVEN.













- ELECTRIC HOOD.
- COOKING PLATE WITH 90 CM.
- > DISHWASHER.
- ➤ GRANITE TOP.
- > WINDOWS.
- ➤ HOT/COLD AIR CONDITIONING

15 Tanks

15.1 <u>Fresh Water Systems:</u>

The vessel has one 1760 lit water tank located under the fwd cabin. The tank, gauges, alarms and associated piping were found to be in good condition.

15.2 Grey and Black Water Systems:

The vessel has grey and black water tanks, both were inspected and the tank, gauges, alarms and associated piping were found to be in good condition. (see photo 25)

16 Tender and Outboard

No tender found on board.

17 Other

17.1 <u>Upholstery and cushions</u>

The upholstery and cushions were found to be in good condition.

17.2 Electric crane

The electric/hydraulic crane which is located on the fly bridge is used for launching and storage of the tender boat. It was tested and found to be in good condition.

17.3 Fenders / Shore lines

All fenders and shore lines found in good condition.

17.4 Gangway

The gangway system was fully operational.

17.5 Extras Installed

- Domotics system for lighting/TV /Hi-Fi control
- Satellite TV antenna Sea Tel C24
- Satcom JRC F33 + fax machine
- BOSE Lifestyle 18 in saloon
- Parquet floor in saloon

17.6 Rails and Stanchions

The rails, stanchions and pulpit stainless steel work were in good condition and showed no signs on deformation.













18 Conclusion

In conclusion, <u>(CONFIDENTIAL)</u> is a luxury well-equipped yacht. Her propulsion systems allow for her to cruise at 26 knots very efficiently with a maximum potential of 26 knots with a fuel consumption of 500 ltrs/h @ 22 knots.

The vessel as inspected within the limitations of the scope of the survey inspection was found in satisfactory condition with no operational, structural or mechanical defects noted that would affect the continued of the vessel.

The vessel exterior was found in satisfactory condition with no significant damage or defects noted, but the vessel has sustained some cosmetic gelcoat damage to the edges of the freeing ports but this is cosmetic damage which is due to be attended to during the winter yard period.

The vessels paperwork was inspected and was found in order with no outstanding items noted that would affect the commercial operation of the vessel.

The vessel is well maintained and follows a planned ISM maintenance schedule. The model lends itself well to both charter and private use and has proven to be a popular choice with charter guests. The vessel is quite simple in terms of machinery and its electrical systems and I feel that this should be regarded as a positive aspect of the vessel.

19 List of points to be addressed

Dangerous:

n/a

Urgent:

- Both generators to be serviced by authorised dealer and attention to the fuel injector pumps. Starboard gen battery needs replacing
- FURUNO PLOTTER needs replacing on fly bridge.
- in order to maintain class and MCA LY II code all annual surveys are to be urgently arranged

Priority:

- all anodes to be replaced as necessary
- annual servicing of air conditioning
- the water maker needs 2 control boards changing and servicing of filter
- both engines needs to be serviced by authorised dealer and attended by an electrician as part of their annual maintenance schedule
- All fire fighting and lifesaving equipment is due for annual testing
- Starboard Search Light needs repair as necessary
- Below waterline cleaning and antifouling treatment.













Advisory:

- fuel tanks to be cleaned and treated for fuel bug.
- Handrail teak needs attention as necessary.
- Minor surface GRP cracks that need to be repaired as necessary
- Outer hull polishing is required

Limitation:

- The hull could not be assessed for osmosis, damages and/or repairs to the wetted surface area and topsides
- Sea trials were not attended by authorised engineer so the engine status could not be properly assessed.

Surveyor

The Ionians Ltd.

Signed Date: 25/04/2021













Section 21

Photo 2

































Photo 4

















Photo 5































Photo 6















Photo 7



Photos 8



































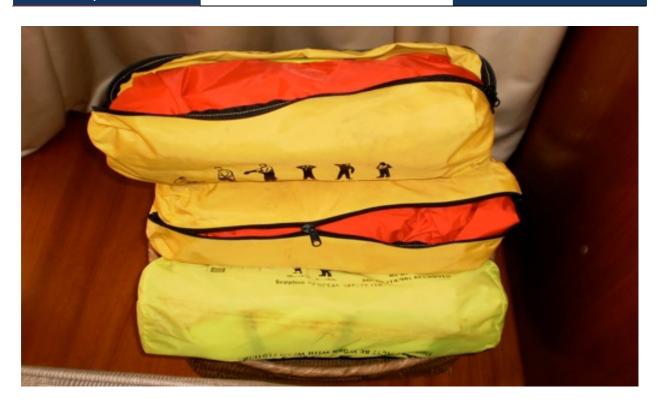






























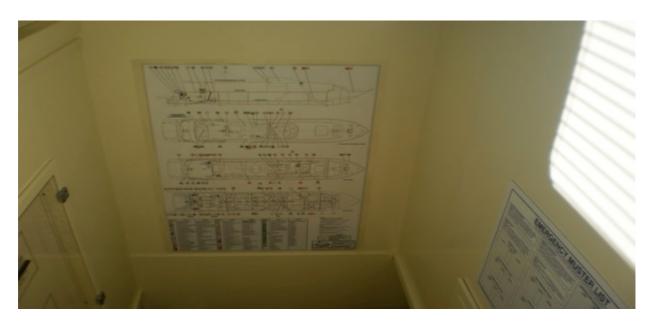














Photo 9





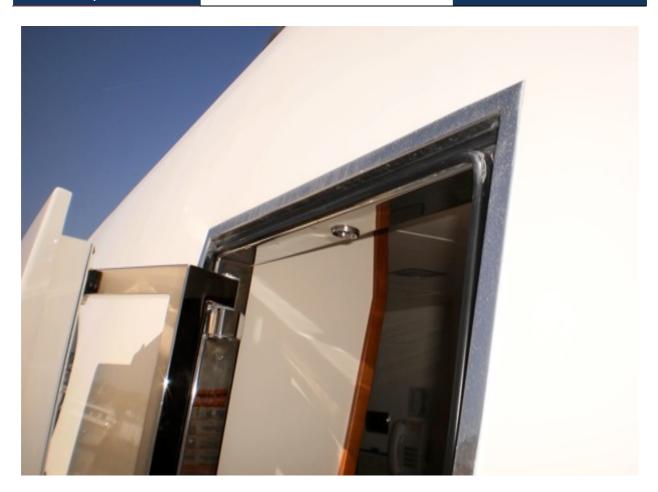


























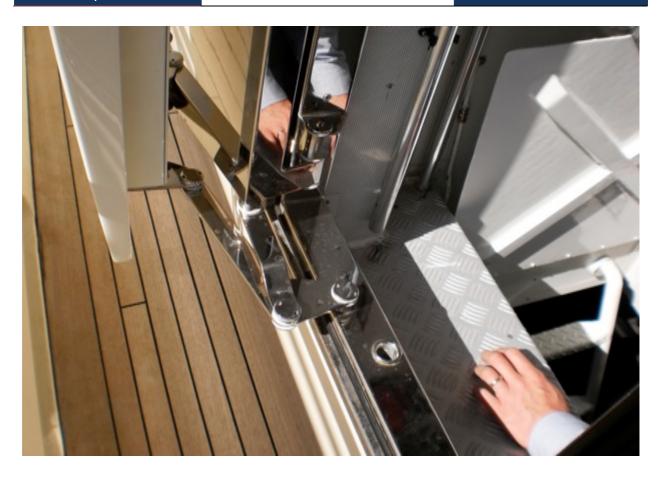


Photo 10





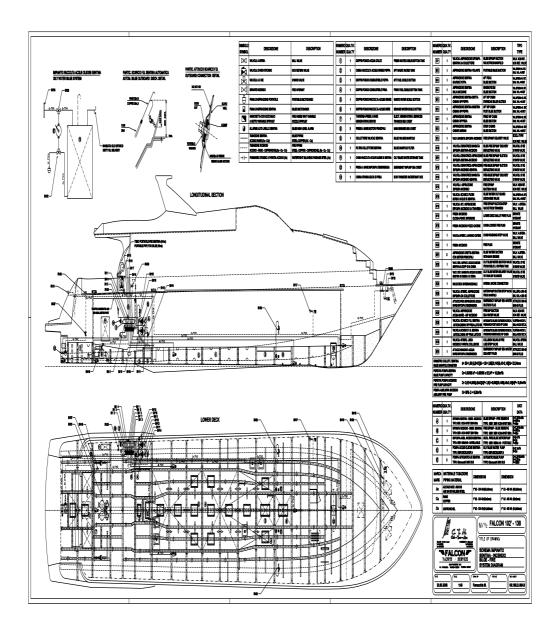
























Various Photos

