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Capt. Robert BXXXXXX
Expert N: 70894 CESAM



At the request of the owner and with the agreement of the requester Sam DXXXXX, this document is a copy of the original report. From expert, all names and contacts information are removed for use by brokers. To access the full data report, ask your broker or the owner.

Report: 241024/008. Trimaran.
Vessel: Trimaran "CXXXX".
Applicant: Mr. Sam DXXXXX
Subject: Market Value Appraisal.



EXPERT REPORT

France, November 30th 2024

At the request of Mr. Sam DXXXXX, France, who wishes to acquire the vessel "CXXXX," registered at the home port of RHODES under the registration number NP 54 on 07/10/2020, owned by NEREIS Yachting M.C.P.Y. – L 3182/030.

We, undersigned

Robert BXXXXXXXX, Marine Surveyor, recommended by CESAM, commissioned to assess the general condition of the vessel "CXXXX," registered in GREECE, have observed and evaluated the following:

General Information:

"CXXXX," a 23.90-meter trimaran sailboat, was presented to us on 24/10/2024, anchored in the bay of Marmaris, TURKEY, in the presence of the applicant, Mr. Sam DXXXXX, and the skipper/owner.

Note:

This survey is a visual inspection of the primary components of the vessel, aimed at determining its general condition and providing a global estimate of its market value. It should not be regarded as a complete survey, particularly regarding the internal condition of the mechanical elements of the engine.

A full survey would require extensive technical investigations, including analyses, soundings, radiography, etc., necessitating specific preparation of the vessel and the disassembly of components to be examined.

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Name : CXXXX
Category : Trimaran Sailboat
Model : Custom Design
Naval Architect : Michel Joubert (France)
Type : Trimaran Sailing Yacht, Sloop-Rigged
Builder : Shipyard "TECHNIQUE" – Fouras (France)
Year : 1987
Materials : GRP Sandwich – Epoxy, Polyester/Vinylester
Length : 23.90 meters
Waterline Length : 22.35 meters
Beam : 8.40 meters
Draft : 2.10 meters
Gross Tonnage : 79.99 tons
Displacement : 45 tons
Flag : Greek
Registration : NP 54
Sail Area : 200 m²
Engines : 2 x PERKINS Prima M60, 60 hp (outer hulls) +
And Volvo Penta TAMD 61 A / 305 hp (Central hull) .
Generators Powers : 16 kw and 8,5 kw Westerbeke



Preamble:

The sailboat "CXXXX" is listed on a sales website. After reviewing and verifying the content, I confirm the accuracy of the information (photos, video) available on the site, including the comments in the video. Additionally, I will incorporate select high-quality images from the site into this report. To avoid redundancy, I will provide a concise description of the accommodations, focusing on my observations.

For practical purposes, I have evaluated the vessel in its crewed configuration (owner couple) rather than in charter mode (refer to photos and video).

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Website link:

<https://www.multihull-pro-blue-water.com/>

YouTube link: "The Trimaran Cxxxx":

<https://www.youtube.com/watch?v=iOJGpW5VHxY&t=51s>

Fundamentals:

- **Naval Architect:** Michel Joubert

A renowned naval architecture firm specializing in racing and cruising multihulls, managed by Michel Joubert in collaboration with Bernard Nivelte, based in France and New York. Joubert is notably credited with designing the US catamaran that won the 1988 America's Cup.

- **Builder:** "TECHNICOQUE" Shipyard

A prestigious shipyard specializing in multihulls, known for constructing iconic vessels such as "Charente Maritime 1" (26 meters, Joubert design), a winner of multiple transoceanic races.

- **Concept:** "Cxxxx" is an ocean-going trimaran designed with tunnel heights ranging from 1.10m to 1.60m from the waterline to the platform. The central hull provides buoyancy and volume, ensuring a smooth, cushioned passage through rough, short seas, particularly when sailing upwind. Unlike catamarans, she avoids the harsh impacts of waves against a broad platform.



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- **Construction:**

Structural bulkheads play a crucial role in unifying the hulls. "CXXXX" features two main structural bulkheads (mast and aft), with the mast bulkhead bearing the most constraint due to the added compression from the mast itself.

Important: in trimarans, compression is distributed down to the central hull's keel.

The mast bulkhead has an exceptional height of 1.70m, constructed from 30mm marine plywood, reinforced with epoxy resin and bi-axial/unidirectional (UD) fibers. This bulkhead is further strengthened by the mast supports, three secondary bulkheads, saloon furniture, and two omega beams.

The structural bulkhead door cutouts are specific places that require reinforcement. On "CXXX," these sensitive areas are oversized with UD/epoxy reinforcements:

- **Starboard:** Reinforcements are 12 cm thick and 26 cm high.
- **Port:** Reinforcements are 9 cm thick and 30 cm high (with only one door instead of two).
- **The aft bulkhead** is 80 cm high, reinforced with UD/epoxy, and includes a 38 cm high door cutout. It integrates seamlessly with the maneuvering cockpit, forming a single monolithic structure.

An important design feature is the trimaran's relatively moderate beam of 8.40m, which significantly reduces the bending and torsional forces on the structural bulkheads.

Safety Features:

The vessel is equipped with watertight bulkheads, crash boxes, and long keels with thick grounding soles (10cm).



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- **Material Composition:** "CXXXX" is constructed using Airex PVC foam-core sandwich composite with polyester, vinylester, and epoxy resins. Unlike steel or aluminum, composite materials are resistant to time-related degradation and alternating constraint. All hull-deck bonding stratifications are completely free of cracks or any signs of structural weakness.

- **Particularities:**

Full Beam Design:

"CXXXX" is designed with a "Full Beam" or raised deck concept, a rare feature in multihull design. This innovative approach has been adopted by a few prominent naval architects, including Marc Van Peteghem of VPLP (the world's leading cruising/racing multihull design firm), as seen in the 28-meter catamaran "Cilliam." The concept is well explained on the <https://www.multihull-pro-blue-water.com/design/> and my inspection confirms its practical application on "Conan."

Unsinkability:

Following a thorough inspection of the compartment heights and the tank volumes across all three hulls, I can confirm that "CXXXX" is effectively unsinkable, even in the event of significant flooding (except in the rare scenario of simultaneous fractures in all three hulls). This feature is a hallmark of the "Full Beam" design for cruising multihulls, a characteristic not found in standard catamarans.



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FREEBOARD & SUPERSTRUCTURE:

- ☞ We first notice the profiling of the boat which reduces wind resistance, beneficial for upwind sailing or anchoring in strong winds.
- ☞ Sturdy dual bow roller system (chain and rope) ensuring the anchor is well-clear of the bow to avoid contact damage.
- ☞ No fixed plexiglass panels or portholes; instead, there are 34 opening hatches for excellent ventilation.
- ☞ Robust chainplates supporting the shrouds.
- ☞ Paints: colors snow white, oyster white with a gray stripe, in good condition despite the absence of polishing. A polish would enhance the aesthetic appeal of this high-quality paint.
- ☞ New paintwork on the upper starboard and port sides using Map Yachting/Sicommin alkyd-urethane paint (also used for Airbus and Ariane rockets). Except non slip deck paint, all paints are Map Yachting/Sicommin alkyd-urethane paint.
- ☞ Large bathing ladder with a shower on the port side.

DECK :

- The deck is coated with a cream-colored two-part non-slip paint, providing grip without being too abrasive, making it easy to clean. Additional non-slip mats are strategically placed around the deck shower.



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- Windlass: GDI / 2000 W / 24V, equipped with 2 gypsies and 1 winch. Two electrical controls, including one in the cockpit for helm operation.
- Custom oversized relay box rated at 350A (operating current: 80A max), easily accessible in the forward starboard cabin.
- **Primary Anchor:** 85 kg custom stainless steel Spade anchor (ranked #1 in tests in the US, France, Germany), with 140m of 14mm chain, extended by 30m of 32mm rope.
- **Secondary Anchor:** 60 kg FOB anchor, plus a grapnel with 3m of 12mm chain for coral anchoring, supported by 100m of 28mm auxiliary rope.
- The windlass/chain/bow roller setup is on the deck, offering optimal accessibility and safety for anchor handling.
- Large anchor locker (2m x 1m x 1.7m), with easy access, revealing solid composite construction reinforced with omega structures.
- Spare equipment: 45 kg anchor, two grapnels, and 100m of 28mm rope in storage.

MAST & RIGGING:

- **Mast:** “Marechal” mast, designed for multihulls, 22m long with an inertia of 15.5 kg/m, engineered by JP3 (France).
- Recently painted with Sicomin paint in 2021; complete refurbishment including wiring and equipment upgrades.
- New masthead designed to accommodate future equipment.
- Two oversized halyard sheaves custom-built with a mix of rollers, Ertalon, and bronze.



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- Spinnaker halyard. Additional anchorage points. No signs of corrosion, especially at the mast base.
- The mainsail track system (Marechal) uses Ertalite skates, more reliable but less efficient than ball-bearing systems.
- Mainsail can be hoisted manually up to a third, with the windlass needed for full hoisting. Lowering is smooth and efficient.

Rigging Oversizing:

- Shrouds and diamonds: Diameter (D) 16
- Intermediates, lower shrouds, Solent and genoa stays: D14
- Gennaker stay and runners: D12
- No corrosion or weaknesses in the crimping or monotoron cables.

All rigging was replaced in 2011 by Soromap (La Rochelle, France), including turnbuckles and all stainless-steel components (Uginox/France). Rigging was tested under load by Soromap, and old fittings were cut out, inspected, showing no signs of internal corrosion or weakness.

Notable Feature:

- Two runners completely secure the mast in heavy downwind conditions, even if they were optional according to JP3.

Additional Protection:

- Plastic profiles surround the four shrouds and spreaders to shield the mainsail.



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SAILS AND RIGGING

Sails:

All sails are from **Voiles Système** (La Rochelle, France) and optimized for heavy-duty use:

- **Mainsail (GV):** 100 m² – Original, reinforced heavy Dacron (12 oz). Double halyard and reefing lines.
- **Heavy Gennaker:** 110 m² – 2010.
- **Heavy Genoa:** 85 m² – 2010.
- **Self-tacking Heavy Solent:** 60 m² – Original, reinforced.
- **Asymmetrical Spinnakers (2):** 180 m² each.
- **Heavy Downwind Spinnaker:** 130 m².

Condition and Recommendations:

- All sails were inspected by **Elvstroem** in October 2024. They are rated "heavy-duty," particularly the mainsail and Solent. See report.
- Solent replacement is recommended in the coming years.
- For increased performance, Elvstroem suggests enlarging foresails by 15-20% and switching to a square-top mainsail. Extending the boom by 1-2m is also feasible.
- UV-protection bands on foresails made from durable **Sunbrella** fabric.

Furling Systems:

All three foresails are mounted on **manual furlers P52 Proengin**.



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Rigging and Accessories:

- Epoxy battens (26mm diameter!) for the mainsail.
- Spare mainsail halyard installed.
- Easy access to the mainsail via the boom.

DECK PLAN AND WINCHES

- All sail controls, except six mast halyards, are centralized around the cockpit for easy handling.

- **Winches:**

- 11 Lewmar self-tailing winches:

- 2 x 65'
- 5 x 56'
- 4 x 52'

- Oversized cleats and clutches for sail control and mooring.



Maneuvering cockpit :

- Protected by a **hard top** providing shelter from sun and rain.
- **Sliding opaque hatch** allows standing and sitting positions with excellent panoramic visibility.
- Comfortable cockpit seats with **access to navigation instruments**.

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Navigation and Instrumentation

- **Radar:** Furuno 1715.
- **depth sounder:** Garmin Striker Vivid 5C (new) + Garmin Fish Finder 250 + EchoPilot forward-looking sounder.
- **Autopilot:** Raymarine ST6001 with rudder angle indicator ST60. The autopilot is easily accessible from the helm seat.
- **VHF:** Recent, merchant marine-approved.
- **Compass:** Contest 130 and electronic compasses by VDO (tacking and 360°).
- **Wind Instruments:** Cetrek CNet 2000 connected to an ultrasonic wind sensor.
- **Multi-instrument:** Cetrek displaying depth, wind, and speed.
- **Engine Controls:** The controls for the 3 engines are all well laid out .

Storage and Amenities

Cockpit storage:

- o 4 large lockers for lines, fuel cans (6), and large-capacity gas bottles (4), all with drainage.
- o Additional compartments for maintenance products and spare parts.



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Deck Lounge :

- o Large table for **14 people**. Protected by hard top (5m x 5 m) providing shelter from sun and rain Two lounge areas for four people each. Sunshade roller blind for full shading.
- o 9 lockers containing:
 - **Bauer Utilus 10 dive compressor.**
 - **Two 20-person life rafts.**
 - Fenders, diving, and snorkeling gear, ropes.



Other Notable Features

- **Dinghy Davits:** Electric (24V) with manual backup for a 4.20m dinghy with a **70 HP Yamaha engine**.
- **Rainwater Collectors:** Double system using teak channels.
- **Sun Deck:** Hardtop holds 5 sun mattresses, two kayaks, and a gangway.
- **Emergency Steering:** Emergency tillers can be mounted on port and starboard rudder heads in case of steering failure.

INTERIOR LAYOUT AND FEATURES

The interior of the yacht is strikingly spacious due to its **full beam design** (<https://www.multihull-pro-blue-water.com/design/>).

The raised floors of this rare concept provide vast technical rooms (engine rooms, etc.), tanks and storage areas that are unique for a boat of this size.

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MAIN SALON AND GALLEY AREA

This full beam concept provides saloon and galley on the same level (as well cabins/bathrooms), measuring **6.50m x 5m**. The main features include:

- **Exceptional Ventilation:**
 - 5 opening panels, including 4 with sea views.
 - A **large hard opening panel** (1.50m x 1.90m) with 2 integrated hatches, refurbishment in 2023.
 - Ventilation optimized throughout by eliminating fixed Plexiglass panels (no greenhouse effect). **Hatches strategically placed providing an airflow in all cabins.**
- **Dining Table:** Teak table for **8-10 people**, located directly beneath a removable panel for engine extraction.
- **Storage:** Extensive around the table and banquette storage.
- **Furnishings:** Elmwood satin varnish on bulkheads is in excellent condition, though some localized varnish restoration is needed around the table and drawers.

The saloon ,galley and all rooms underwent a complete refurbishment in 2022/2023, including:

- Updated **LED lighting** throughout.
- Houses for two desktop computers .
- Features 2 video monitor with a DVD player (including one in the master cabin), a printer, and a hi-fi system.



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- Radar and two depth sounders are visible from the helm station.
- **Power Inverters:** Located under the monitor unit, there are **two Enag 24 v/2000 W sinus wave inverters** (one active, one for spare).

Flooring

- The flooring, while covered by new rugs and carpets, is made of an original sound-insulating and easy-to-maintain material.
- **Condition:** It shows some localized wear and imperfections but remains functional.

Salon Cushions

- Equipped with "charter" protective covers overlaid with crew-specific covers for additional durability.

Navigation Table and Systems

- **Navigation Table:** Measures 0.90 m x 1 m, includes three drawers, and holds an extensive collection of nautical charts.
- **Navigation Panel:** Recently replaced and ready for customization by the future owner.
- Removed equipment: SSB radio and GPS (still functional but outdated and can be reinstalled).
- Remaining equipment: VHF radio, electronic compass compensator, and Perkins engine hour counters.



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Steering System

- Access: By lowering the navigation panel, the entire installation of navigation instruments and the Giot steering system can be accessed.
- Description:
 - The steering wheel, connected via a gear and chain mechanism, is linked to a dual stainless-steel cable system (8 mm) routed through pulleys to the Giot rudder quadrants.
 - Rudder shafts:
 - Made of 100 mm aluminum, encased in 140 mm epoxy rudder tubes, sufficiently elevated to prevent seawater backflow at high speeds.
 - The rudders can be removed while the boat is afloat.
 - **A system reliable straightforward, and dependable.**

Autopilot

- Primary Motor: 24V rotating motor with an automatic clutch for the Raymarine autopilot.
- **Spare Motor:** Present in storage area.

Battery couplers and Charging Systems

- **Battery Couplers:** Allows connection between the 24V Volvo engine batteries and the 24V service batteries + 12V Perkins engines and 12v services batteries : **All for emergency power.**



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- **Battery Chargers:**

- Located behind the navigation table:

- 220V/12V charger.

- 220V/24V/50A Mersan charger (used only when the boat is plugged onshore).

- **Located under the aft starboard cabin:**

- 220V/24v/100A Mersan charger (primary).

- 220V/24v/80A Cristec charger.

- **Control:** The 100A and 50A chargers **can be adjusted** from the electrical panel.

- **Safety Features:** Audible alarms for overvoltage and undervoltage on both 12V and 24V systems.

Electrical Panels

- **Original Design:** The electrical system consists of four large custom panels, which can be concealed behind curtains.

- **Content:**

- Control panels for:

- Two generators.

- Air conditioning (CLD/WEBASTO).

- Inverters.



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- Cooling systems.
- Lighting (220V, 24V, and 12V indicators).
- Freezer temperature.
- Fuel and water gauges.
- Circuit breakers (total: **75**).
- Rotary selectors.
- Battery couplers.
- Audible alarms, etc.



- **Accessibility:** Behind the panels are additional circuit breakers, a 24/12V converter, and other components.

Safety Features

- **220V Circuit Protection:**
 - Includes numerous circuit breakers and a **30 mA differential circuit breaker** for personal safety.
 - Electronics are safeguarded by special circuits with **24V and 12V regulators and surge protectors**.

Ease of Maintenance

- **Accessible Wiring:** Panels, circuits, components, and cables are easy to reach.
- **Modular Design:** Removable cable pathways allow for effortless addition, removal, or installation of new components.

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- **Power Outlets:** Available in **220V, 24V, and 12V** in all areas of the boat.

COOLING SYSTEMS

- **Freezer:** 120 x 72 x 90 cm.
- **Refrigerator:** 135 x 64 x 90 cm.
- **Professional Installation:** Utilizes eutectic plates (cold accumulators).

Freezer System

- **Primary System:**
 - One **2000W hermetic compressor** (+ an identical spare inactive compressor) powers three eutectic plates (**2 x 60 x 42 x 13 cm** and one **44 x 34 x 8 cm** for the refrigerator).
- **Secondary System (redundancy):**
 - A **1000W compressor** powers two additional plates (**2 x 60 x 40 x 4 cm**).

Refrigerator System

- **Primary system:**
 - See above under “freezer primary system”
- **Spare/ redundancy:**
 - A **400W compressor** powers two eutectic plates (**80 x 60 x 3 cm**).



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Performance

- The **2000W compressor** alone can maintain the freezer and refrigerator systems for 24 hours.
- Verified cooling performance: **-14°C to -22°C** achieved in **45 minutes** for deep freeze (5° for refrigerator) only with 2000 w compressor.

Accessibility

- All components for the 2000W and 1000W systems are easily accessible.
- The 400W compressor requires the refrigerator to be moved in case of troubleshooting.

Important Details

- All compressors operate on **220V**, ensuring widespread availability and reliability.
- Hermetic compressors are known for their robustness and durability.
- Seawater Cooling Pumps: Two pumps for the cooling system are easily accessible in the central engine room.
- Notice : freezer/refrigerator door seals require replacement.

GALLEY (KITCHEN)

- **Spacious Dimensions:** Measures **5 m x 2.10 m**, a rare size for a boat of this length.
- 5 opening panels, including 4 with sea views.



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- **Main Features:**

- **Professional Gaudin cooker (French-made):**

- Four gas burners + oven (45 x 54 x 38 cm).

- Exhaust Hood.

- Two Large American Sinks: Each 43 x 43 cm.

- Professional Faucets.

- 2 marble worktops

- **Appliances:**

- Food processor.

- Espresso machine.

- **Storage:**

- 31 drawers and lockers.

- 5 large fruit/vegetable baskets.

- 9 shelves.

Ventilation and Lighting

- Equipped with **five deck hatches**, ensuring ample natural light and airflow.



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Engine Access

- Hinged floor panels provide immediate access to the starboard engine room.
- **Soundproofing:**
 - The **M60 engines** are relatively quiet.
 - Additional insulation and surface treatments reduce noise further.

Structural Reinforcements

- **Large Laminated Reinforcement:** Supports the chainplate on the starboard side (as well the port side).

CABINS AND BATHROOMS

Cabins

- **Cabins conform to website (as well all the boat):**
 - 7 double en-suite cabins (minimum bed width: 1.40m).
 - 1 sailor cabin.
- **Ventilation:**
 - 3-4 deck hatches per cabin.
 - Air conditioning and 24V fans.
- **Storage:**
 - Wardrobes, drawers, and ample storage spaces.



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- **Renovations:**
 - **2022:** Outer hull cabins.
 - **2016:** Central hull cabins.
- **Overall Condition:** Bright, clean, and modern.



Bathrooms

- Ventilated with 1-2 deck hatches.
- Includes large wardrobes, sinks, showers, and toilets.
- **Unique Feature:**
 - All toilets are above the waterline. Waste flows by gravity to the holding tank or directly to the sea/or pumping via large valves.
 - Simple, reliable system that allows flushing with paper without clogging (70mm piping).

WORKSHOP

- Equipped with:
 - Vise, electric grinder, various tools, spare parts, and hardware.
- Spacious and functional for onboard repairs.

AIR CONDITIONING

- **System:** CLD/WEBASTO water-cooled with fan-coil units.
- **Design:** Twin 220V compressors for redundancy; one is sufficient for cooling six cabins (12,000 BTU each) and the master cabin (16,000 BTU).

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- **Heating:** Reversible system for heating.
- **Efficiency:** Minimal usage due to optimized insulation and ventilation.

HOT WATER

- **Dual System:**
 - Engine heat (port side).
 - Electric resistance. /Generator

POWER AND FUEL/WATER SYSTEMS

Batteries

- Tubular service batteries: **24V/700A** (12 elements of 2V each).
- **Safety:** Interconnected pipes for venting gases externally.

Fuel Tanks

- **Capacity:** 5,000L (3,500L + 1,000L + 500L).
- Equipped with transfer pumps for fuel management.

Water Tanks

- **Capacity:** 4,800L (1,500L + 1,500L + 700L + 700L + 400L).
- Transfer pumps allow water redistribution.



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SAFETY SYSTEMS

Gas System

- Professional Gaudin stove with thermocouples.
- Copper gas supply with 50cm flexible connection.
- External bottles with the same setup.
- Gas detector on the electrical panel.

Bilge Pumps

- Oversized system:
 - **Compartments:**
 - Starboard and port: 2 x Rule 3500 (13,000 L/h each) + 1 x Rule 500 (1,800 L/h).
 - Central engine compartment: 3 x Rule 3500 + 1x Rule 500.
 - Forward and aft extremities: 5 x Rule 500 (3 for shower drainage).
 - **Features:**
 - High-water level detectors with audible alarms.
 - Accessible seacocks and clamps, in good condition.



Firefighting Equipment

- Independent systems with two pumps (fore and aft) are alimenting 280 mm diameter fire hoses. Numerous smoke detectors.

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Capt. Robert Billard
Expert N°: 70894 CESAM



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- **Extinguishers:**

- 10 portables.
- 6 automatic sprinklers spread around machine compartments (engines and generators).

Navigation safety gear

All necessary safety gear for 15 persons (1st category):

- Two class-1 life rafts “Yulong Khy 10” (N° : D98050 & N° : D98076 valid until 11/2025) for 2 x 10 people.
- EPIRB distress beacon N° : 0160811041U.
- Signal flares, first aid kit.
- Life jackets, and harnesses, for 16 people.
- Annual inspection by Greek authorities.



ENGINE ROOM - Engines/Generators:

Starboard Hull : Generators 16 kw (1563 hours) and 8,5 kw (3432 hours) Westerbeke /December 2024.

Port and Starboard Hulls: Immediate access and visibility by lifting the soundproofed floor panels. **Thanks to the full beam design**, these technical zones are spacious: 4.10 x 1.70 m on the starboard side and 3.10 x 1.70 m on the port side. All engines/generators (except the Volvo engine) can be removed using the mainsail halyard and transported ashore via the tender. The original lead/composite soundproofing foam is aged. The bilges are clean but could benefit from a fresh coat of paint.

Fundamental and Safe Design: Access around the engines/generators and bilge pumps is excellent, allowing easy maintenance of all components.

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Propeller Shafts: Straight shafts offer optimal efficiency, reliability, and simplicity. With a diameter of 40 mm, they are appropriately sized for the engine power. These shafts are of the "floating" type with a single flexible and removable support bearing, tolerating moderate misalignments. For reference, the owner has personally replaced the propeller shaft bearing twice (removing and reinstalling the shaft) while the boat was afloat. The same process was carried out once for a rudder stock.

Shaft Sealing: The sealing of the 3 propeller shafts is ensured by stainless steel seals rotating on an Ercem carbon bushing (Maucour/France) fixed via a bellows on the stern tube. The owner replaced the standard carbon bushing with thicker ones, ensuring a lifespan of at least 20 years.

Shaft Coupling: The propeller shaft-to-reduction gear coupling (Hurt 250) is flexible, tolerating also a moderate misalignment.

- All three engines are equipped with an additional Bosch alternator (160 A/24V) for charging service batteries. Each engine has its own dedicated battery, which can be interconnected for troubleshooting via couplers on the electrical panel.
- The seawater pumps for the two Perkins engines and both generators have been upgraded with custom heavy-duty pumps featuring rotary seals and using standard impellers.
- A customized setup of additional thermal sensors is installed on the exhaust systems of all engines/generators, providing audible alarms for quick response in case of seawater cooling failure. The temperature trigger threshold is adjustable.
- A custom fuel air inlet monitoring system is installed for all engines/generators.
- Large decanter filters (1 meter tall) are fitted on all engines/generators to manage any water contamination in the fuel.



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- Valves and thru-hulls are fully accessible.
- Engine/transmission controls use durable CBA ball-bearing cables (France) since the original build—a costly but highly reliable choice.
- Two additional Perkins M60 engines, fully refitted, are stored in the engineer's workshop, ready for use.

Central Hull:

Engine Room: The engine room is 5 meters long. Visually, we notice the detail of the sandwich construction of the hull, showing vinylester monolithic connection zones (epoxy stratification), longitudinal omega reinforcements, and, most notably, the impressive thickness of the epoxy laminates that weld the hull to the structural bulkhead of the mast.

Accessibility: Perfect access around the engine/propeller shaft, as well as to all equipment in this spacious area (bilge pumps, cooling pumps for refrigeration compressors, thru-hulls, desalination unit, etc.).

Ease of Engine Removal: The Volvo engine can be extracted easily by unscrewing the automatic fire extinguishers and the removable ceiling above it, directly below the saloon table and the large opening hatch.

Volvo Engine Customizations: The Volvo engine features the same modifications as the Perkins engines:

- Upgraded filters
- Additional thermal sensor
- Fuel air intake monitoring system
- 160 A/24V high-power alternator



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Transmission: The hydraulic reduction gear is a **Twin Disc MG 5050A** with a reduction ratio of 2.5:1.

- Flexible coupling: **ERMAKSAN** coupling, tolerating up to 2° misalignment.
- Propeller shaft: 70 mm in diameter, equipped with **ERCEM/Maucour (France)** sealing bushing.
- Shaft support: Two bearings (entry and exit).
- Sealing performance: All three ERCEM seals are flawless, with no leaks, whether stationary or running.
- Engine running : No abnormal noise, vibrations, or misalignments detected during engine and shaft operation. No black or white smoke observed at cruising speed.

Air Supply: Like the Perkins engines, fresh air intake for the Volvo engine comes from the interior, ensuring the absence of saline humidity. Four large extractors expel hot air from the Volvo engine (only one extractor is used per Perkins engine).

Desalination Unit:

- Capacity: **360 liters per hour** via two American membranes (180 liters per hour each).
- Simplified control panel, customized by the manufacturer, with all electronics removed. Only the high- and low-pressure safety switches remain.
- Filter upgrades: Standard 10- and 2-micron filters (25 cm) replaced with 2 larger 50 cm filters.



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- **Accessibility:** All components, including pre-pumps and high-pressure pumps, are easily accessible.
- **Spare parts:** A replacement high-pressure pump head is stored on board.

Lightning Protection: A power coupler connects the mast to a copper grounding plate via a 75 mm² cable. The grounding plate is positioned both above and below the waterline. Removable cables with wing nuts allow quick connection to the forestay and both shrouds during a thunderstorm.

Engine Hours and Maintenance Records:

- **Starboard Perkins M60** (Serial No. WFMI588): Rebuilt in December 2022, **357 hours** as of December 2024.
- **Port Perkins M60** (Serial No. WFMI598): Rebuilt in May 2023, **138 hours** as of December 2024.
- **Volvo TAMD 61 A** (Serial No. 1101018416 / 38259): **5895 hours** as of December 2024.

TENDER :

Specifications :

- **Type:** 4.20 m Joker semi-rigid inflatable.
- **Upgrades:** The tubular PVC flexible section was fully replaced in 2023.
- **Engine:** 70 HP Yamaha (2020) with a console.
- Steering cable recently replaced.
- **Protection:** Comes with two heavy-duty protective covers (crew + charter use).



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- **Lifting System:** Two davits with 24V electric winches (with manual troubleshooting system) lift the dinghy to a height of 2.30 m, safely out of reach of rear waves.

SPARE PARTS INVENTORY:

An exceptional stock of spare parts is stored, including **two Perkins engines** and **one Yamaha 40 HP** engine ready onshore.

Notable Inventory (non-exhaustive):

Perkins Engines:

- 1 engine block
- 1 cylinder head block
- 2 Perkins injection pumps
- 4 seawater pumps
- 1 freshwater pump
- 2 heat exchangers
- 2 alternators
- 2 starters
- 2 sets of injectors
- 1 ERCEM bellows
- 1 flexible coupler
- 1 stop solenoid



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- 2 HURT 250 reduction gears

16 kW Generator:

- 1 injection pump
- 1 set of injectors
- 1 starter
- 1 alternator
- 2 seawater pumps
- 1 freshwater pump

8.5 kW Generator:

- 1 freshwater pump
- 1 seawater pump
- 1 starter
- 1 alternator

Volvo Engine:

- 1 turbo
- 1 starter
- 1 ERCEM bellows with carbon ring



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Windlass:

- 1 24V motor

Desalination Unit:

- 1 high-pressure pump head

Yamaha 40 HP Engine:

- Steering cable

Consumables and Tools:

- Extensive stock of consumables: filters, belts, etc.
- Complete specialized tools for engines, generators, propeller shafts, propellers, and more.

SUMMARY:

Strengths:

- **Design and Build Quality:**
 - Designed by a globally renowned naval architect.
 - Built by a reputable shipyard specializing in performance multihulls.
- **Unique Full Beam Concept:**
 - Offers remarkable advantages including unsinkability, near-level interior area, spacious engine/technical compartments and more.....



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- **Robust Custom Construction:**

- Structurally reinforced for long-distance voyages, as evidenced by the boat's history.
- Constructed with materials resistant to aging and alternate constraint.

- **Blue water Trimaran Design:**

- Superior performance in rough seas with no harsh impacts against the two tunnels, unlike catamarans' wide platforms.

- **Oversized gear:**

- Oversize mast, rigging, deck fittings, and sail fabric weight for added durability.

- **Optimized Deck Layout:**

- Customized for ease of handling by a couple.

- **Reliability and Accessibility:**

- Simple, redundant systems ensure dependability.
- Excellent accessibility for maintenance due to numerous removable elements.



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- **Tropical Suitability:**

- Naturally optimized ventilation with no fixed Plexiglass panels causing a greenhouse effect.
- Insulated sandwich deck reduces reliance on the air conditioning system, which has been rarely used since its installation in 1998 for marketing/charter purposes.

- **Sun Protection:**

- Dual hardtops provide optimal shade for the helm station, maneuvering cockpit, and deck saloon.

- **Energy Efficiency:**

- Limited daily generator use (~1.5 hours) for freezing, battery charging, and hot water.

- **Exceptional Autonomy:**

- Remarkable range of 4,000 nautical miles under engine power (Perkins).

- **Numerus Storage:**

- Considerable storage capacity both inside and outside the boat.

- **Extensive Spare Parts Stock:**

- Includes two spare Perkins engines, estimated at €70,000.

- **Ease for Hauling Out:**

- Designed for rolling sled or travelift haul-out with reinforced long keel for stability. center of gravity in the middle.



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- **Hull Condition:**

- No signs of osmosis (Epoxy laminate shield), previous repairs, or hidden defects.

Weaknesses:

- **Aging Sails:**

- Main sail and Solent are particularly old.

- **Running rigging:**

- Some ropes are old and need replacement.

- **Interior Wear:**

- Original flooring has localized damage in the saloon.
- Carpets or rugs are recommended for charter use.
- Some furniture, drawers, and stairs require varnish touch-ups.

- **Plexiglass Issues:**

- crazing observed on the entry hatch and some opening hatches.



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CONCLUSION

This custom trimaran stands out for its innovative concept and structural robustness. With considerable technical expertise, the owner-skipper has demonstrated consistent optimization and meticulous maintenance of the vessel over the years. It is evident that this large blue water trimaran is perfectly suited for a couple planning distant or tropical navigation or for charter operations. After inspection, I noted several main points:

- This blue water trimaran has a distinguished history and is well-known among agencies in the Eastern Mediterranean.
- The boat undergoes annual safety inspections by Greek authorities.
- It is listed on Mediterranean Yacht Broker Association (MYBA).

The current owner, wishing to retire, is seeking a successor. This vessel is not only an amazing work tool but also ideal for a restricted crew or a couple wishing to live aboard permanently. Considering the following:

- This boat is a rare offshore cruising trimaran, more costly to construct than a catamaran (three hulls versus two).
- Unique "**full beam**" concept, unmatched in the market.
- Sale includes the NEPA company and its associated benefits, including a valid charter license (2025, 2026).
- New build price estimated at €4–5 million.

Taking into account neither the current economic uncertainties nor international tensions, I estimate its value at **€1,200,000** (one million two hundred thousand euros).

Below are various photos taken at different locations on the trimaran.



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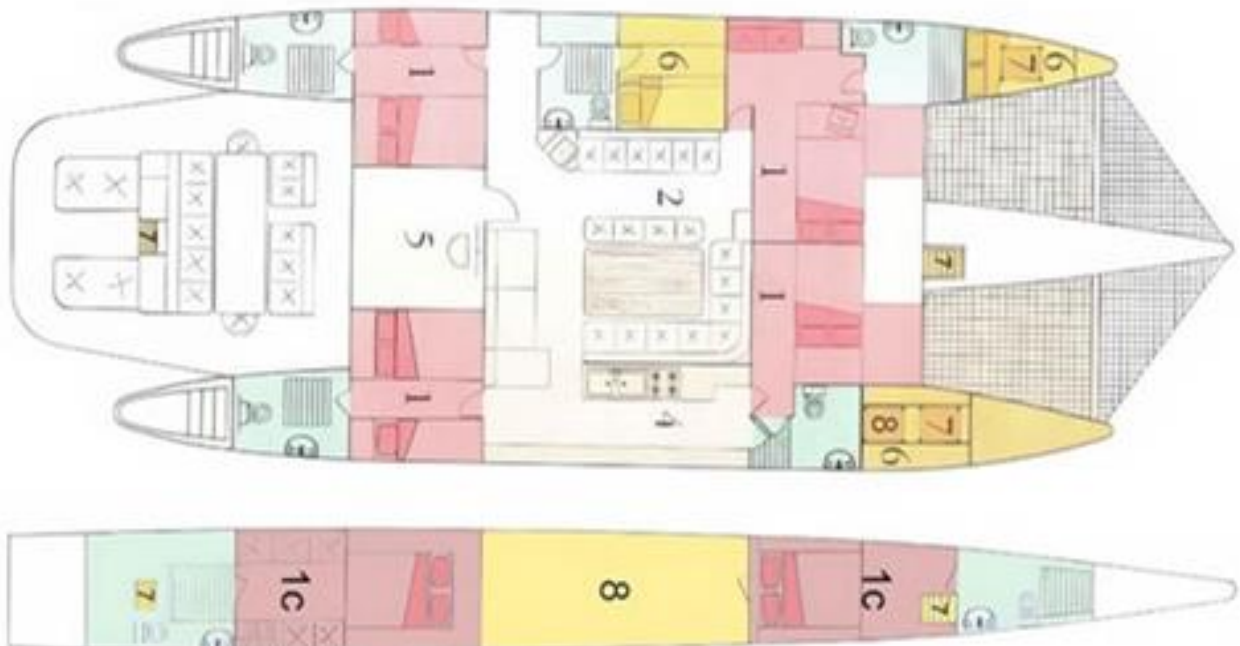
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Issued in France,

November 30th 2024



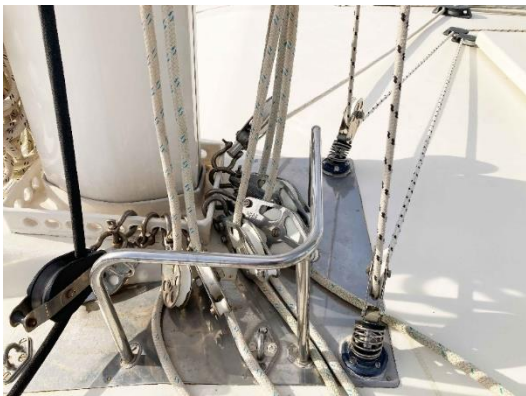
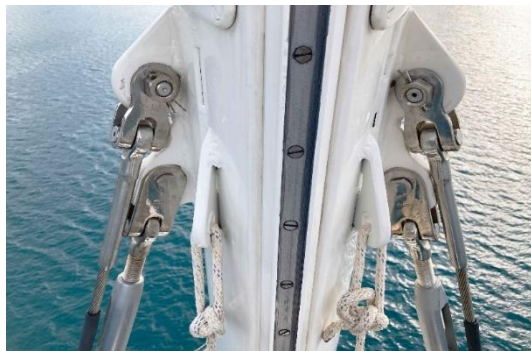
Robert BXXXXXXXXX

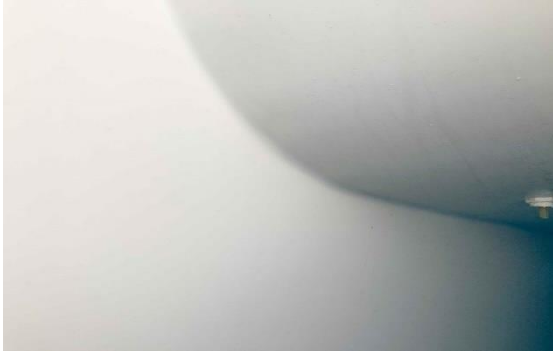
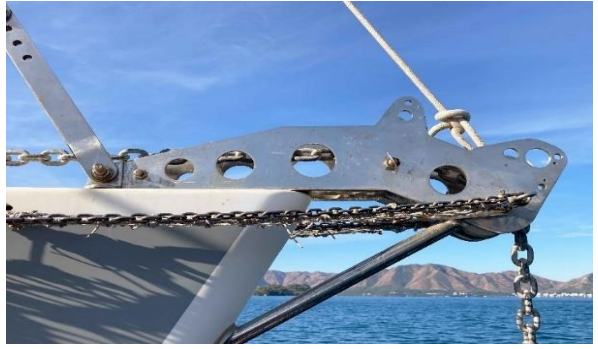






Ultrasonic anemometer





Starboard front 2 constraint zone_OK

Stardoard front constraint zone_OK



Port front 2 constraint zone_OK

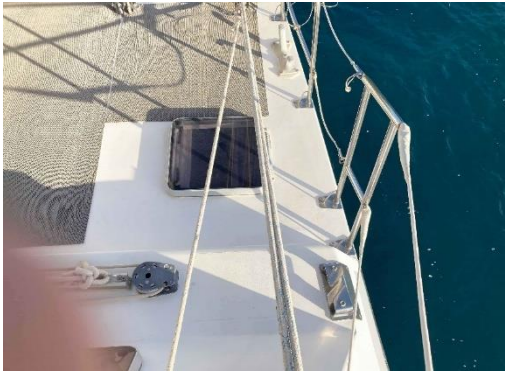
Port front constraint zone_OK



Port aft constraint zone_OK

Starboard aft constraint zone_OK









Mast bulkhead



Automatic pilot control



Electric panels



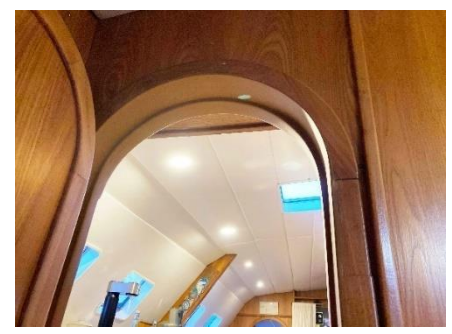
Curtains



Large navigation board



Reinforced cut out structural bulkhead starboard side



Reinforced cut out structural bulkhead starboard side 2



Reinforced cut out structural bulkhead port side



Reinforcement omega port side



Reinforcement omega starboard side



Reinforced cut out structural bulkhead aft side



Drawers front central cabin



Crew cabin



**Central engine 305 HP
Volvo**



**Volvo flexible coupling and
rotating joint**



Water maker membranes



Water maker pumps



Deep freeze and fridge pumps



Port engine room



Starboard engine room



Perkins engine and generator 2



**Customized heavy duty sea
water pump**



**Perkins flexible coupling and
rotating joint**



Domestic 24 v battery



Central rudder



2 Spare engines



Spare parts 1



Spare parts 2



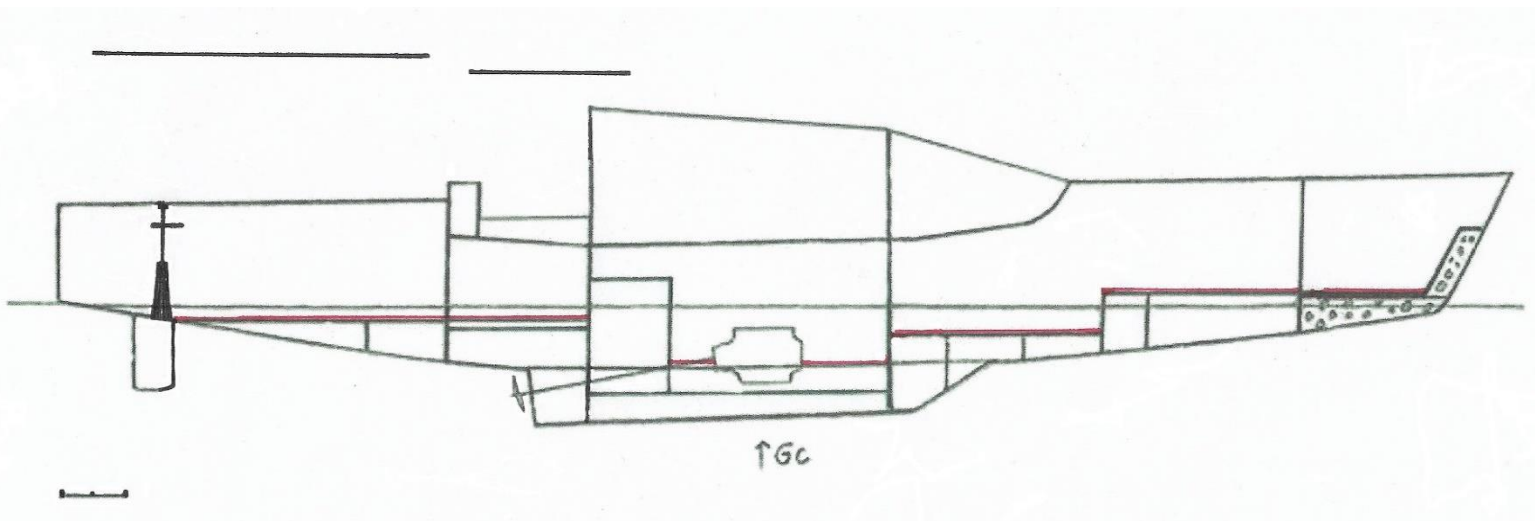
Spare parts 3 and port rudder

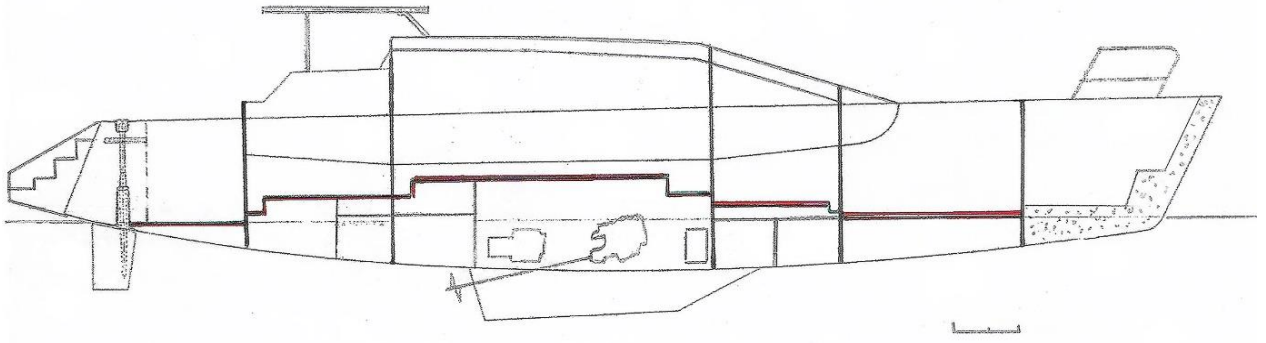


Spare parts 4

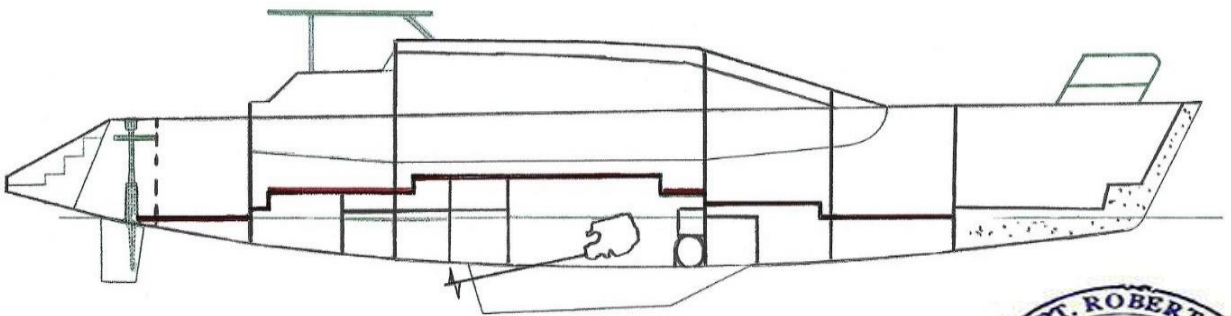


Spare parts 5





Starboard hull



Port hull



[Handwritten signature]

