

TESS is a Chincogan 520 designed by Tony Grainger as a performance cruising catamaran and built by Peter Coram of Chincogan Catamarans at Murwillumbah in northern N.S.W. Australia. Approximately eight of these catamarans were built by Peter Coram/Chincogan Catamarans and TESS was the last one built and was launched in December 2008.

Length: 16.0m/52Ft

Beam: 8.3m/27ft

Draft: 1.5m

The layout comprises of 4 cabins, two aft being queen and two forward being doubles. Each hull is serviced with separate heads and showers. The up-galley has two fridges and one freezer, ENO marine oven with a SMEV cooktop. Water is provided by Jabsco Dual water pump.

Hot water is provided by 2 x Quick 20L boilers, which can be powered by either, shore power, inverter or from engines.

Electrical power is provided by 650 Amp Lithium amp battery bank and is charged by 8 x 175w solar panels or 100amp alternators on each engine.

Water is provided by a Spectra 60LPH desalination unit.

Fridge/Freezer: All fridges and Freezers are 'Frigboat', 12 v; Galley has 1 x 115L and 1 x 215L (front Loading) and one freezer 115L

The cockpit has 1 x fridge and 1 x icebox.

Tank Capacities:

Fuel: 800L, 400L each side

Water: 800L, 400L each side

Grey Water: 250L each side

Black Water: 150L each side

Hulls

The hull underwater exterior is hand laid vinyl-ester resin.

The above waterline and interior are hand laid polyester resin with foam core finished in two pack paint system.

Steering

Steering is provided by a cable and pulley system, with a balance bar arrangement, giving a positive feel at the helm. Two helm positions on either side of vessel with throttles at both positions.

Sails Drives/Engines

Yanmar 54Hp diesel engines (4JH4E naturally aspirated) fitted with SD50 sail drives. Propellers; Autostream 3 Bladed Feathering.

Fuel System

Fuel tanks hold 400 liters per side, all fuel is filtered by Racor 500MA Fuel Filters, filtering fuel to 2 micron, fitted to each engine.

Anchor System

Anchor windlass: Muir VR3500, controlled by a Muir Cordless anchor controller.
Anchor Chain: 80 meters of 80mm steel galvanized
Anchor: 'Ultra' stainless steel 35Kg

Rigging & Sails

The sailing set up is for 'Single Handed Sailing' with all sheets returning to cockpit area. The main is controlled by a 'Bridle System'.

Winches: 2 x Harken electric on foredeck for halyards; 2 x Harken electric for sheeting foresails; 2 x Harken electric for furling foresails; 2 x Harken manual for the 'main Bridle System'.

The sail wardrobe comprises of main sail, head sail, screecher and A3 (top down furling spinnaker).

Electronics and Navigation

A complete Raymarine package was upgraded in June 2018: --

Raymarine I50 Depth, i50 Speed and i60 Analogue wind instruments fitted to cockpit.

Raymarine P70 Autopilot and i70 Multifunction colour Display fitted to port helm station.

Raymarine Chart Plotter, AXIOM 12, fitted in saloon.

Raymarine VHF; RAY260, with station at port helm station and in saloon at chart plotter.

Raymarine AIS700 (Class B)

Raymarine Radar, Quantum 2 with Doppler (24nm range)

Tender

Tender: Achilles 3.1m Rigid Aluminum Hull (HB-310AX) fitted with 'Active Boat Wheels'. New October 2017, vinyl tube cover made June 2021.

Major Refit

During 2018 TESS was removed from the water at The Boat Works Coomera and placed on the hardstand for 6 months for a major refit as follows: -

- 1) All antifouling was removed via a blasting process and Sealing/Bonding coats were applied to hulls as per International paints recommendations and International Micron 66 Antifouling applied (works carried out by Complete Antifouling Systems).
- 2) New Sail Drive to Hull Gap Seals fitted.
- 3) All steering pulleys removed, and cables inspected, cleaned, lubricated and support plates refabricated. Rudder alignment rigging checked, adjusted and tensioned.
- 4) New Carbonautica helm wheels were fitted.

- 5) All new 'Black Water' and 'Grey Water' Hoses replaced and holding tanks flushed and cleaned.
- 6) Both 'Heads' upgraded to Jabsco Deluxe Flush Series, along with associated pumps and switches.
- 7) All taps and sink fittings replaced in galley and both bathrooms.
- 8) Water filter fitted to sink in galley
- 9) Shower holding tanks sump pumps replaced with new Jabsco Whale Gulper 220 and new Rule Float switches.
- 10) Pump-out pumps overhauled, (new diaphragms and seals fitted)
- 11) New Jabsco water pump (Jabsco Dual Max 28 LPM) fitted.
- 12) Water Filter fitted to galley sink
- 13) New fridge seals fitted to all 4 fridges and cockpit ice chest.
- 14) Hatch handles replaced and resealed.
- 15) All new floor coverings fitted throughout interior, carpet runners in cabins and vinyl in saloon, all work completed by Craft Coverings.
- 16) Fly Screens replaced in all cabins and sliding fly screen door (Freedom Retractable Screens) fitted to saloon.
- 17) New 'ENO Marine Oven' installed.
- 18) Gas Detector (BEP 600 Series) and new regulator fitted to gas system.
- 19) New side covering, and clears fitted to cabin by Craft Coverings
- 20) New Sovereign BBQ fitted.
- 21) New 'Deck Shower & Tap Assembly' (Nuova Rade)
- 22) Anchor windlass serviced, and new sensor and pickup fitted.
- 23) New Muir Cordless anchor control fitted.
- 24) All hydraulics to do with sailing removed, hydraulic power unit, rams for main sheet and headsail sheet, head sail furler and associated switch and hose and pipes removed.

- 25) All standing rigging replaced by Allyacht Spars Australia.
- 26) Main boom replaced along with cradle.
- 27) All hydraulic controls, pump, actuators etc. removed
- 28) Head sail furler renewed with 'Furlex 404S'
- 29) Screecher furler renewed with a 'Facnor'
- 30) A3 Furler, 'Seldon CX40' serviced.
- 31) Main sheet 'Bridle System' installed including all new, winches, blocks and sheets and associated hardware fitted by Noosa Marine.
- 32) Main Halyard, Screecher Halyard and associated sheets renewed, halyards and blocks overhauled or replaced June 2018 by GC Rigging Consultants
- 33) 2 x electric winches for furling headsail and screecher are placed Port and starboard near helms – Harken Radial Unipower Winch' - work carried out by Noosa Marine
- 34) 2 x Manual winches for main bridle system – new Harken Radial winches fitted, all work carried out by Noosa Marine
- 35) New Samsung 32" LCD smart TV fitted along with new omni directional aerial.
- 36) New Boom Bag made and fitted by One Sail Brisbane
- 37) Seahawk Feathering Propellers were removed and overhauled new seals and bushes fitted along with new anodes.
- 38) Sail drives dismantled, inspected and new output seals fitted, cone clutches lapped and reassembled.
- 39) Engine Raw water pumps, 1 x new, 2 x Overhauled (1 overhauled pump is kept for spare).

Ongoing Maintenance and Upgrades

March 2020

- 1) New Spectra Cape Horn desalination unit fitted along with Zion short term storage system.
- 2) New side awnings made by Craft Coverings
- 3) New rear cockpit blind made and fitted by Craft Coverings
- 4) Cockpit side awnings made and fitted by Craft Coverings

June 2020

- 1) New Daewood Mini Washing Machine fitted.

March 2021

- 1) 80 meters of 'Australian made' 10mm galvanized anchor chain.
- 2) Instrument glass covers replaced.
- 3) Engine tachometers replaced due to LCD fading on engine hours.
Hours on old Tachometers; Port: 1,253.9 Hours
Starboard: 1194.7 Hours
Engine tachometers checked for properly reading.
- 4) Sail drive clutches removed and 'Upgrade Kit' fitted, included changing thrust washers to thrust bearings, reshimming and fitting breather to sail drive.

May 2021

- 1) Replace solar panels with 8 x Sunman eArc 175w (1400 watts)
- 2) 4 x Victron Smartsolar Charge Controllers MPPT 100/30
- 3) Lithium LiFePo4 Batteries fitted 650-amp hour
- 4) R.E.C. Battery Monitoring System
- 5) Optima AGM Emergency Battery fitted
- 6) Victron Inverter/Charger Multiplus 12 volt/3000va/120 amps
All of the above is monitored/controlled by a Victron Control Unit either manual onboard or via Wi-Fi/internet.
- 7) All underwater thru-hull fittings and ball cocks replaced with 'TruDesign' certified fittings.

July 2021

- 1) New Main Sail: Double Taffeta, Carbon Membrane made by Evolution Sails Gold Coast.
- 2) Hulls cleaned and PPG ABC3 antifoul applied.

February 2022

- 1) New Screecher made by Evolution Sails Gold Coast
- 2) New Solar Film applied to all hatches.
- 3) Cockpit seat cushions and backs recovered by Classic Marine Trimming

May 2023

- 1) Saloon head lining replaced, and new LED lights fitted by Craft Coverings
- 2) Trampolines replaced, made by Gordon Myers of Multihull Tramps
- 3) Cockpit Floor Carpet replaced by Craft Coverings
- 4) Hot water elements, thermostats and anodes replaced.
- 5) Freshwater pump accumulator replaced.
- 6) New Dometic/SMEV Cooktop fitted.
- 7) Engines serviced:
Oil and filter changed.
Tappets set.

Fuel filters replaced.

Injectors removed and spray pattern tested.

Cooling system flushed and filled with new coolant.

Heater exchanger removed, cleaned and new 'O' rings fitted.

Raw water pump impellers replaced.

All of the above maintenance carried out as per Yanmar Maintenance Instructions. Carried out at:- Port: 1664.4 Hours

Starb: 16612.8 Hours

- 8) Fuel tanks cleaned and fuel polished, Racor fuel filters replaced.
Propellers cleaned and 'Propspeed' applied, and props greased.
- 9) Antifoul applied to sail drives and hull antifoul touched up where need.

January 2024

- 1) New Head Sail fitted made by Evolution Sails
- 2) New Boom bag fitted.
- 3) All sail winches inspected and lubricated.
- 4) Self-tacker track removed and 'balls' replaced on traveler.
- 5) Both engines serviced, oil and Filters changed, new raw water pump impellers, new fuel filters.
- 6) Fuel tanks cleaned and fuel polished.
- 7) Sail drive oil changed.
- 8) Anodes on sail drives removed and cleaned (deoxidized)
- 9) Rudder bushings replaced.
- 10) Hulls antifouled with PPG ABC3
- 11) All black and grey water tanks cleaned and flushed.
- 12) All black water hoses cleaned of calcium/salt build up.
- 13) Paint and anti-slip paint repairs carried.
- 14) Boat polished and waxed.