



# DREAM WEAVER

120' (36.58m) 2013 Christensen Custom  
Tarragona Spain



## OVERVIEW

**\$11,250,000**

Manufacturer:	Christensen		
Engines:	4 MTU	Hull Material:	Fiberglass
Engine Model:	12V2000 M72	Cruise Speed:	12 Knots
Engine HP:	1450	Max Speed:	15 Knots
Beam:	25' 2"	Cabins/Heads:	5 /
Max Draft:	6' 10"	Fuel Type:	Diesel
Water:	1200 G (4542 L)	Fuel:	7000 G (26497 L)



## Data Sheet

Category: Motor Yachts  
Condition: Used  
Model Year: 2013  
Beam: 25'2" (7.67m)  
Max Draft: 6' 10" (2.08m)  
Min Draft: 1' 5" (5.00m)  
LOA: 120' (36.58m)  
LWL: 102' (31.09m)  
Cabins: 5  
Sleeps: 10

Captain's Quarters: Yes  
Crew Sleeps: 7  
Maximum Speed: 15 Knots  
Cruise Speed: 12 Knots  
Range NM: 2750  
Fuel Type: Diesel  
Hull Material: Fiberglass  
Hull Shape: Semi Displacement  
Air Conditioning: Yes

Gross Tonnage: 287  
Displacement: 190 tonnes  
Fuel Tank: 7000 gal (26497 liters)  
Fresh Water: 1200 gal (4542 liters)  
Holding Tank: 7000 gal Classification: ABS  
MCA Certified: Yes  
Builder: Christensen  
Interior Designer: Evan K. Marshall  
HIN/IMO: 9652856  
Stock #: c75189e3-abf2-e911-a811-000d3a591abb

## Engines/Generators

### Engine 1

MTU  
12V2000 M72  
Inboard  
1450HP  
Fuel: Diesel  
Hours: 7382  
Year: None

### Engine 2

MTU  
12V2000 M72  
Inboard  
1450HP  
Fuel: Diesel  
Hours: 7382  
Year: None

### Engine 3

MTU  
12V2000 M72  
Inboard  
1450HP  
Fuel: Diesel  
Hours: 7469  
Year: None

### Engine 4

MTU  
12V2000 M72  
Inboard  
1450HP  
Fuel: Diesel  
Hours: 7469  
Year: None

## Summary/Description

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### OVERVIEW

DREAM WEAVER was built to ABS+1 and is MCA compliant. She meets all of the key metrics of a much larger yacht while still able to dock and explore in the most desirable cruising grounds. Interior volume is greater than that of a Westport 130. The five stateroom, tri-deck arrangement plan does not overreach; staterooms and common spaces are expansive. Crew comfort, with accommodations forward on the lower deck, was a major consideration; captain's cabin is adjacent to the pilothouse.

The design was met with critical acclaim (see AWARDS) at launch. Conceived by Ocean Alexander and built by Christensen Yachts, this is not just another white motoryacht but a fresh design of superb quality that does all things well. DREAM WEAVER is arguably the finest, US built, motoryacht of her size to be launched in the last decade.

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### AWARDS

Best Overall Boat of the Year: AIM Marine Group Editor's Choice Award – 2012

World Superyacht Awards – Tri-Deck, Semi-displacement Finalist – 2013

Showboats Design Awards Finalist in the following categories - 2013

- Interior Design and Styling
- Exterior Design and Styling
- Interior layout

MTU main engines: Full warranties through November 2023

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## ACCOMMODATIONS

### INTERIOR:

Access to the yacht is via twin transom stairways or amidships into the starboard foyer. The aft deck features a centerline table that accommodates ten, one of four al-fresco dining options onboard. Forward to port is an elegant, full function bar with stool seating.

Push-button glass doors open to a foyer with granite soles and etched glass cabinets to each side. The interior styling reflects Even K Marshall's tasteful blend of Art-Deco and ultra-modern which combines contrasting textures and colors. Surfaces and materials include satin varnished black walnut and maple, granite, etched glass, earth-tone carpeting, multicolored stone and full height windows wherever possible.

The main saloon is grand and gracious with appropriate seating and entertainment options. The dining area is forward with a white marble sole, a corridor to starboard leads to the midship foyer, day head and to the upper and lower deck stairs. A discreet door to port connects the dining area with the galley. Stairs from the galley lead down to the crew area. Of note, there is a crew lounge in addition to three cabins, allowing the dinette in the galley to remain free for owners and guests.

Owner's suite is full beam and forward on the main deck. King sized berth is on centerline with innerspring mattress, nightstands to each side and custom headboard. Appropriate amenities include cedar-lined closets, lighted dressing table, intimate seating area and a generous desk. "His and her" bath includes enclosed port & starboard heads, one with bidet, oversized shower and separate Jacuzzi bathtub. Finish materials include marble, burlled hardwoods, chrome and glass. Portlights are oversized throughout the suite merging the space with the sea.

Four additional staterooms are on the lower deck; two offer king sized berths and two feature twin berths. The lower deck foyer includes a linen locker and refrigerator. Bath fixtures are of the highest quality and the same captivating décor utilized on the main deck is replicated throughout. Of note, each stateroom has an abundance of natural light via oversized hull ports.

The skylounge is aft of the wheelhouse with comfortable seating, game table and impressive views of the surroundings. The corner desk serves as an owner's business center which conceals when appropriate. As it is throughout, window size is striking, views are panoramic.

The semi-circular pilothouse is fitted with vertical windows, twin Stidd chairs, settee with breakfast / snack table, panels for monitoring systems / ship's controls and an elaborate suite of navionics, (see Navigation). Captain's cabin is aft to port with double berth and ensuite head with shower.

### GALLEY:

Galley is just forward of the dining area with sidedeck "grocery" door. Soles and counters are granite, cabinets are finished in maple burl and all appliances are in stainless. A four-seat dinette is forward, adjacent to the walk-in pantry.

- Dacor 5 burner induction cooktop
- Dacor oven
- Sub-Zero wine cooler
- Asko dishwasher
- GE Profile microwave oven
- Liebherr refrigerator / freezer
- Kitchen-Aid trash compactor
- Sub-Zero drawers (2)
- Stove hood with integral wet-chem fire suppression

#### EXTERIOR:

With the aft deck, the foredeck alcove, the bridge deck and the sun deck, there are four separate areas for al-fresco dining, breakfast or evening cocktails. The aft deck will seat ten, the bridge and upper-deck areas will seat eight and foredeck alcove (most suitable for Med privacy) will seat four. Both aft and upper decks offer outdoor, three-seat bars. The sun deck with jacuzzi tub and lounge chairs allows for both sun and shade, privacy and unobstructed views. Sidedeck and foredeck layout allows the crew to remain unobtrusive.

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- Asko dishwasher
- GE Profile microwave oven
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- Sub-Zero drawers (2)
- Stove hood with integral wet-chem fire suppression

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## SYSTEMS

#### FUEL SYSTEM:

The fuel oil storage tanks are FRP integral, construction with aluminum baffling and hydro-tested to ABS requirements. The fuel day tanks and aft trim tanks are fabricated from aluminum; formed, welded and hydro-tested to ABS requirements.

Fuel storage tanks are filled via fill station connections located on the port and starboard weather decks. Fuel storage tanks, aft trim tanks and the fuel day tanks are connected to an expansion tank, which is then vented to the atmosphere. The fuel vent expansion tank will capture approximately 80 U.S gallons (302.8L) of overflow before it escapes through the vent. Installed low in the tank is an alarm float switch that provides a warning that tanks are full and that fill operations should be stopped or modulated.

Either the AC or DC electric fuel transfer pumps may be used for transfer operations. Main engines and gensets draw fuel independently from the day tanks through the separate fuel service manifolds.

- Fuel Transfer Pump No. 1: Viking Pumps, model HJ475M, 1 hp, 208V AC
- Fuel Transfer Pump No. 2: Viking Pumps, model H475M, 1 hp, 24V DC
- Fuel Transfer Filter/Water Separator: Henek Manufacturing Inc., model HFS-251-3-DP-CP (or equal), 30 gpm (nom.)
- Fuel flow meter: GPI model FM-530
- Fuel Filter/Water Separator (Main Engine Supply): Racor, model 79/1000MAVM30, triple filter style, with valving

- Fuel Filter/Water Separator (Generator Supply): Racor model 500MAM30
- Main Engine Fuel Priming Pumps: Federal Mogul (or equal), 24v DC
- Generator Fuel Priming Pumps: Federal Mogul (or equal), 12v DC

#### GASOLINE SYSTEM MAIN COMPONENTS:

The auxiliary gasoline tank is fabricated from stainless steel and formed, welded, and hydro-tested to ABS and MCA requirements. The gasoline transfer pump and filter are permanently mounted and hard piped from the auxiliary gasoline tank.

- Gasoline capacity: 200 gallons (757L)
- Gasoline Transfer Pump: GPI, model M-240SMU, 1/5 hp, DC; explosion proof motor, CSA certified flammable liquid dispenser with hose and dispensing nozzle
- Gasoline Filter

#### LUBE OIL SYSTEM:

A lube oil transfer pump is supplied loose, with hose and couplings provided for drain or transfer service. The main engines, reduction gears, generator engines, new lube oil tank and used oil tank are fitted with quick-disconnect couplings and isolation valves.

- Lube Oil Transfer Pump: Haight Pumps, model 5UR, 3/4 hp, with relief valve and flow meter.
- New Lube Oil Tank: Aluminum
- New Lube Capacity: 100 gallons (379L)
- Used Lube Oil Tank: Aluminum
- Used Lube Oil Capacity: 80 gal. (303L)

#### FRESH WATER SYSTEM:

The freshwater system incorporates a potable water holding tank that can be filled from either a shore water supply source or by water maker systems. A large silver-impregnated activated carbon filter and 5-micron cartridge sediment filter are installed after a 100-micron water strainer on the discharge side of the freshwater pumps. Freshwater hose bibs are installed on the sun deck, bridge deck, main deck forward, port and starboard side decks amidships, engine room and at the sports deck.

- (2) Freshwater Pumps: Grundfos Model CHI4-50, 208v AC
- (2) Reverse-osmosis water makers, 1,200 gallons per day (4,543L per day)
- Hot Water Circulator: Grundfos, model UPS 15-55SFC
- Water Heater: Water Heater Innovations, "Marathon" model MR85245, 85 gallon (321.7 L) capacity
- Hydro-Pneumatic Pressure Tank: "Watts", Model PLT-12, 4.5 gallon water capacity
- Discharge Strainer: Honeywell-Braukmann, model F76S1049, 100 micron screen.
- Sediment Filter: Clean Water Systems, 5-micron element



- Carbon Filter: Clean Water Systems, model CFO-01900, with silver-impregnated activated carbon filter media
- FCI Watermakers, Model "Max-Q" MQ1226S, 1,200 GPD capacity ea.
- Silver Ion Sterilizer: Jowa Ag, model Ag-S

#### BLACK WATER SYSTEM:

A sewage collection and treatment system is installed to provide collection and discharge of black water via the IMO & USCG certified Marine Sanitation Device (MSD). Sewage pump activation is controlled either automatically or manually. In the event the CHT reaches a pre-set high level, an alarm switch will disable the operation of all toilets, and prevent overfilling or overflowing of the sewage collection and holding tank. An ozone system is installed to treat odors from the sewage system.

- Headhunter toilets
- Black water capacity: 350 gallons (1,703 L)
- Main sewage pump: Continental Pump Co., model CPML-56, 1 hp
- Marine sanitation device (MSD): Tecnicomar, model "Ecomar 8", USCG Type II, IMO MEPC 159 (55) Certified
- Sewage CHT odor control system: Del Industries, model "Eclipse 2" ozone generator, with builder control system
- Sewage drains, vent pipes and fittings are Sch. 40 PVC
- Sewage pump suction and discharge piping is Sch. 80 PVC
- An international connection flange complying with MARPOL 73/78 Annex IV Regulations is supplied loose with adapters

#### GREY WATER SYSTEM:

Grey water drains into a grey water collection holding tank from various fixtures. Grey water pump activation is controlled either automatically or manually. In the event that the grey water pump is not operable, the main sewage pump may be utilized to pump grey water tank contents directly overboard.

- Grey water capacity: 400 gallons (1,514 L)
- Grey water pump: Continental Pump Co., model CPML-56, 1 hp
- Grey water odor control ozone system: Del Industries, model "Eclipse 2" ozone generator with control system
- Grey water drain and vent pipes and fittings are Sch. 40 PVC
- Grey water pump suction and discharge piping is Sch. 80 PVC
- Pipe and fittings for these systems are either Sch.40 PVC or Sch.80 PVC
- An international adapter flange is supplied

#### BILGE DRAIN SYSTEM:

There are two bilge drain systems. The main bilge drain system consists of the main pump and a main suction manifold. An independent bilge suction for the engine room is provided and labeled "for emergency use only". A diesel fire/bilge back-up pump is installed in the tender garage. This diesel fire/bilge pump has suction capability for the watertight subdivisions forward and aft of the engine room, as per MCA requirements. Back-up bilge suction for the engine room is



provided via this pump.

- Main Bilge Pump: MP Pumps, "HHLF" model 29618, 5 hp
- (4) Submersible Bilge Pumps: Rule, "3700" model 16A, 24 vdc
- Main bilge suction manifold; with Groco, model ARG-2500 strainer
- The main bilge drain pipe and fittings are Viega "Seapress" copper-nickel alloy

The secondary bilge drain system will consist of submersible style 24v dc pumps.

These pumps provide additional bilge drainage capacity in the bow thruster compartment, accommodations, Lazarette and swim step/steering compartment. The secondary bilge drain system pipe and fittings are Sch. 80 PVC. Bilge alarm switches are installed in all compartments with bilge suction inlets or submersible pumps.

#### COMPRESSED AIR SYSTEM:

This system provides general compressed air for sea chest blow-down, hydro-pneumatic tank charging, air horn, ozone treatment systems, pneumatic cylinders, sliding watertight door gaskets, and various air service quick-disconnect stations.

- Air Compressor: Campbell-Hausfeld (or equal) 2 hp, 120/208v AC with 20 gallon air receiver and regulator.
- Air Horn: Kahlenberg, fig. 311, model T-1
- Secondary Air Receiver (Air Horn service): 7-gallon capacity.
- Manual desiccant air dryer, with coalescing pre-filter and after filter.

#### FIRE FIGHTING:

A seawater fire hose system is installed, with a minimum of (5) fire hose stations located throughout the vessel as required by ABS and MCA.

- Main fire pump: MP Pumps, HHLF model 29618, 5hp.
- Back-up diesel fire & bilge pump: Diesel America West, model DPL48-2PT, Yanmar model L48AE 4.7hp diesel driven.
- (5) 1 ½" 50' fire hoses with combination nozzles.

#### ENGINE ROOM FIRE SYSTEM:

A fixed FM-200 fire extinguishing system is installed for protection of the engine room. Agent cylinders, discharge manifold piping, and system controls are located outside of the protected space. Per regulatory requirements, system discharge is manually initiated from either the fire control station on the aft deck, or local to the agent cylinders and manifold.

FM-200 equipment and piping is installed in compliance with U.S. Coast Guard rules for FM-200 ECS series engineered fire suppression systems. Also in accordance with applicable ABS rules and MCA requirements.

#### GALLEY FIRE SUPPRESSION SYSTEM:

A fixed wet chemical fire suppression system is installed for protection of the galley range, range hood, and hood exhaust ducting.

#### AIR CONDITIONING & HEATING SYSTEMS (HVAC):

A Dometic marine HVAC system is installed serving the inside living areas, and Lazarette. The Dometic tempered water system is a reverse cycle heat pump, so it provides heating as well as cooling. The chiller is comprised of (4) stages of 6-ton compressor each, for a total of 24-tons. The Lazarette is provided with (1) 24,000 BTU air handler with 3kW electric auxiliary heating strip to provide a comfortable level of heating and air conditioning. The cooling-heating capacity for interior spaces to be based on the following design conditions:

#### Summer

- Outside conditions: 95F dry bulb and 85F wet bulb
- Inside conditions: 72° F, 60% RH
- Seawater temperature: 90F

#### Winter

- Outside temperature: 35F
- Inside temperature: 70F

#### MAIN HYDRAULIC SYSTEM:

The main hydraulic system is an integrated type providing hydraulic power and control to the bow thruster, stern thruster, anchor windlasses, mooring capstans, deck crane, and the stabilizer system. The integrated hydraulic system incorporates two main engine pumps to provide power when main engines are operating. Generally, only one pump is required to provide power for either deck equipment or stabilizers while underway. When the main engines are shut down, the electric motor driven power unit provides power to various hydraulic equipment, including stabilization at anchor.

- (2) Hydraulic pumps: Main engine gearbox driven.
- Hydraulic pump HPU: 25hp electric motor driven hydraulic pump, 20 gallon hydraulic reservoir assembly with heat exchanger, filtration, and alarms.
- Seawater cooling pumps, hydraulic driven: (1) main and (1) back up.
- Hydraulic manifold and valving to power bow thruster, stern thruster, anchor windlasses, stern capstans, stabilizer system, deck crane, and tender garage door.
- 16" Bow thruster: ABT/Arcturus Marine model 16 TRAC, 65hp.
- 16" Stern thruster: ABT/Arcturus Marine model 16 TRAC, 50hp.
- Stabilizer system, with stabilization at rest: ABT/Arcturus Marine model TRACstar 440Pro, with (2) stabilizer fins.
- Anchor windlasses: Maxwell, model VWC-6000, with hydraulic drive motor, band brake, chain wheel, and chain stopper.
- Stern capstans: Maxwell, model VC-3500, with hydraulic drive motor.
- Tender garage door operating system.
- Optional equipment tender retrieving system.

#### STEERING SYSTEM:

The vessel is provided with two complete and independent electro-hydraulic steering and control systems. Either system is fully capable of operating the vessel's steering independently. Steering controls consist of a full follow-up electric helm wheel and non-follow-up jog lever.

#### HYDRAULIC POWER PUMPS:

- (1) Jastram supplied, variable displacement type (main engine driven).
- (1) Jastram supplied, fixed displacement type (electric motor driven).

Hydraulic steering manifold assemblies:

- (1) Jastram for main engine driven pump system.
- (1) Jastram for electric motor driven pump system (back-up steering).

Hydraulic reservoir assemblies, including filtration and alarms:

- (1) for main engine driven pump system (main steering)
- (1) for electric motor driven pump system (back-up steering)

Hydraulic cross-port relief valve manifold: Jastram model DARB

Hydraulic steering cylinders: Jastram, model S-300; ABS type approved.

Electric helm wheel: Jastram, model EW2, with 24" destroyer style helm wheel.

Rudders: Hydrofoil shaped rudders fabricated from 316 stainless steel, with rudderstocks.

#### STABILIZER SYSTEM:

The stabilizer fin actuator assemblies are installed approximately aft of amidships. The stabilizers are powered by the integrated hydraulic system. Each actuator is enclosed in a transparent, watertight coffer dam.

- ABT/Arcturus digital stabilizer system, with "TRACstar" stabilization at rest/anchor.
- ABT/Arcturus stabilizer 3-term digital control system, with touch-screen user interface panel.
- ABT/Arcturus fin position sensor, astern sensor, and optical speed sensor kits.
- ABT/Arcturus model 440 pro fin actuator assemblies and 20 square feet extended chord fins for stabilization at rest/anchor.
- ABT/Arcturus supplied hydraulic control valving, fail-safe fin locking mechanism, noise suppressors, and fittings kits.

#### BOW ANCHOR WINDLASSES:

(2) 6,000lb capacity, Maxwell model VWC-6000 hydraulically powered vertical windlasses with single capstans are installed at fore deck area. Hawse pipes are provided with seawater nozzles for wash-down. Polished SS roller, stopper tensioner assembly provided at each windlass. The assemblies include roller, pawl type stopper and devil's claw tensioner for 5/8" (16mm) stud link chain. Stainless steel bar provided at stern for hull protection.

#### BOW ANCHORS & CHAINS:

(2) 460lb HHP, pool type, fully balanced bow anchors. Anchors are 316 stainless steel with electro-polished finishes.

Stainless steel shackle and swivel are included with the anchors. (2) 450' (137.1m) of 5/8" (16 mm) diameter GR-2 stud link chains are provided. Last link of chain is securely connected under deck with provisions for release in an emergency.

## SYSTEMS

### FUEL SYSTEM:

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- Fuel Transfer Pump No. 2: Viking Pumps, model H475M, 1 hp, 24V DC
- Fuel Transfer Filter/Water Separator: Henek Manufacturing Inc., model HFS-251-3-DP-CP (or equal), 30 gpm (nom.)
- Fuel flow meter: GPI model FM-530
- Fuel Filter/Water Separator (Main Engine Supply): Racor, model 79/1000MAVM30, triple filter style, with valving
- Fuel Filter/Water Separator (Generator Supply): Racor model 500MAM30
- Main Engine Fuel Priming Pumps: Federal Mogul (or equal), 24v DC
- Generator Fuel Priming Pumps: Federal Mogul (or equal), 12v DC

### GASOLINE SYSTEM MAIN COMPONENTS:

The auxiliary gasoline tank is fabricated from stainless steel and formed, welded, and hydro-tested to ABS and MCA requirements. The gasoline transfer pump and filter are permanently mounted and hard piped from the auxiliary gasoline tank.

- Gasoline capacity: 200 gallons (757L)
- Gasoline Transfer Pump: GPI, model M-240SMU, 1/5 hp, DC; explosion proof motor, CSA certified flammable liquid dispenser with hose and dispensing nozzle
- Gasoline Filter

### LUBE OIL SYSTEM:

A lube oil transfer pump is supplied loose, with hose and couplings provided for drain or transfer service. The main engines, reduction gears, generator engines, new lube oil tank and used oil tank are fitted with quick-disconnect couplings and isolation valves.

- Lube Oil Transfer Pump: Haight Pumps, model 5UR, 3/4 hp, with relief valve and flow meter.
- New Lube Oil Tank: Aluminum
- New Lube Capacity: 100 gallons (379L)
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- (2) Reverse-osmosis water makers, 1,200 gallons per day (4,543L per day)
- Hot Water Circulator: Grundfos, model UPS 15-55SFC
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- Hydro-Pneumatic Pressure Tank: "Watts", Model PLT-12, 4.5 gallon water capacity
- Discharge Strainer: Honeywell-Braukmann, model F76S1049, 100 micron screen.
- Sediment Filter: Clean Water Systems, 5-micron element
- Carbon Filter: Clean Water Systems, model CFO-01900, with silver-impregnated activated carbon filter media
- FCI Watermakers, Model "Max-Q" MQ1226S, 1,200 GPD capacity ea.
- Silver Ion Sterilizer: Jowa Ag, model Ag-S

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- Marine sanitation device (MSD): Tecnicomar, model "Ecomar 8", USCG Type II, IMO MEPC 159 (55) Certified
- Sewage CHT odor control system: Del Industries, model "Eclipse 2" ozone generator, with builder control system

- Sewage drains, vent pipes and fittings are Sch. 40 PVC
- Sewage pump suction and discharge piping is Sch. 80 PVC
- An international connection flange complying with MARPOL 73/78 Annex IV Regulations is supplied loose with adapters

#### GREY WATER SYSTEM:

Grey water drains into a grey water collection holding tank from various fixtures. Grey water pump activation is controlled either automatically or manually. In the event that the grey water pump is not operable, the main sewage pump may be utilized to pump grey water tank contents directly overboard.

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- Grey water drain and vent pipes and fittings are Sch. 40 PVC
- Grey water pump suction and discharge piping is Sch. 80 PVC
- Pipe and fittings for these systems are either Sch.40 PVC or Sch.80 PVC
- An international adapter flange is supplied

#### BILGE DRAIN SYSTEM:

There are two bilge drain systems. The main bilge drain system consists of the main pump and a main suction manifold. An independent bilge suction for the engine room is provided and labeled "for emergency use only". A diesel fire/bilge back-up pump is installed in the tender garage. This diesel fire/bilge pump has suction capability for the watertight subdivisions forward and aft of the engine room, as per MCA requirements. Back-up bilge suction for the engine room is provided via this pump.

- Main Bilge Pump: MP Pumps, "HHLF" model 29618, 5 hp
- (4) Submersible Bilge Pumps: Rule, "3700" model 16A, 24 vdc
- Main bilge suction manifold; with Groco, model ARG-2500 strainer
- The main bilge drain pipe and fittings are Viega "Seapress" copper-nickel alloy

The secondary bilge drain system will consist of submersible style 24v dc pumps.

These pumps provide additional bilge drainage capacity in the bow thruster compartment, accommodations, Lazarette and swim step/steering compartment. The secondary bilge drain system pipe and fittings are Sch. 80 PVC. Bilge alarm switches are installed in all compartments with bilge suction inlets or submersible pumps.

#### COMPRESSED AIR SYSTEM:

This system provides general compressed air for sea chest blow-down, hydro-pneumatic tank charging, air horn, ozone treatment systems, pneumatic cylinders, sliding watertight door gaskets, and various air service quick-disconnect stations.

- Air Compressor: Campbell-Hausfeld (or equal) 2 hp, 120/208v AC with 20 gallon air receiver and regulator.
- Air Horn: Kahlenberg, fig. 311, model T-1

- Secondary Air Receiver (Air Horn service): 7-gallon capacity.
- Manual desiccant air dryer, with coalescing pre-filter and after filter.

#### FIRE FIGHTING:

A seawater fire hose system is installed, with a minimum of (5) fire hose stations located throughout the vessel as required by ABS and MCA.

- Main fire pump: MP Pumps, HHLF model 29618, 5hp.
- Back-up diesel fire & bilge pump: Diesel America West, model DPL48-2PT, Yanmar model L48AE 4.7hp diesel driven.
- (5) 1 ½" 50' fire hoses with combination nozzles.

#### ENGINE ROOM FIRE SYSTEM:

A fixed FM-200 fire extinguishing system is installed for protection of the engine room. Agent cylinders, discharge manifold piping, and system controls are located outside of the protected space. Per regulatory requirements, system discharge is manually initiated from either the fire control station on the aft deck, or local to the agent cylinders and manifold.

FM-200 equipment and piping is installed in compliance with U.S. Coast Guard rules for FM-200 ECS series engineered fire suppression systems. Also in accordance with applicable ABS rules and MCA requirements.

#### GALLEY FIRE SUPPRESSION SYSTEM:

A fixed wet chemical fire suppression system is installed for protection of the galley range, range hood, and hood exhaust ducting.

#### AIR CONDITIONING & HEATING SYSTEMS (HVAC):

A Dometic marine HVAC system is installed serving the inside living areas, and Lazarette. The Dometic tempered water system is a reverse cycle heat pump, so it provides heating as well as cooling. The chiller is comprised of (4) stages of 6-ton compressor each, for a total of 24-tons. The Lazarette is provided with (1) 24,000 BTU air handler with 3kW electric auxiliary heating strip to provide a comfortable level of heating and air conditioning. The cooling-heating capacity for interior spaces to be based on the following design conditions:

##### Summer

- Outside conditions: 95F dry bulb and 85F wet bulb
- Inside conditions: 72° F, 60% RH
- Seawater temperature: 90F

##### Winter

- Outside temperature: 35F
- Inside temperature: 70F

#### MAIN HYDRAULIC SYSTEM:

The main hydraulic system is an integrated type providing hydraulic power and control to the bow thruster, stern



thruster, anchor windlasses, mooring capstans, deck crane, and the stabilizer system. The integrated hydraulic system incorporates two main engine pumps to provide power when main engines are operating. Generally, only one pump is required to provide power for either deck equipment or stabilizers while underway. When the main engines are shut down, the electric motor driven power unit provides power to various hydraulic equipment, including stabilization at anchor.

- (2) Hydraulic pumps: Main engine gearbox driven.
- Hydraulic pump HPU: 25hp electric motor driven hydraulic pump, 20 gallon hydraulic reservoir assembly with heat exchanger, filtration, and alarms.
- Seawater cooling pumps, hydraulic driven: (1) main and (1) back up.
- Hydraulic manifold and valving to power bow thruster, stern thruster, anchor windlasses, stern capstans, stabilizer system, deck crane, and tender garage door.
- 16" Bow thruster: ABT/Arcturus Marine model 16 TRAC, 65hp.
- 16" Stern thruster: ABT/Arcturus Marine model 16 TRAC, 50hp.
- Stabilizer system, with stabilization at rest: ABT/Arcturus Marine model TRACstar 440Pro, with (2) stabilizer fins.
- Anchor windlasses: Maxwell, model VWC-6000, with hydraulic drive motor, band brake, chain wheel, and chain stopper.
- Stern capstans: Maxwell, model VC-3500, with hydraulic drive motor.
- Tender garage door operating system.
- Optional equipment tender retrieving system.

#### STEERING SYSTEM:

The vessel is provided with two complete and independent electro-hydraulic steering and control systems. Either system is fully capable of operating the vessel's steering independently. Steering controls consist of a full follow-up electric helm wheel and non-follow-up jog lever.

#### HYDRAULIC POWER PUMPS:

- (1) Jastram supplied, variable displacement type (main engine driven).
- (1) Jastram supplied, fixed displacement type (electric motor driven).

Hydraulic steering manifold assemblies:

- (1) Jastram for main engine driven pump system.
- (1) Jastram for electric motor driven pump system (back-up steering).

Hydraulic reservoir assemblies, including filtration and alarms:

- (1) for main engine driven pump system (main steering)
- (1) for electric motor driven pump system (back-up steering)

Hydraulic cross-port relief valve manifold: Jastram model DARB

Hydraulic steering cylinders: Jastram, model S-300; ABS type approved.

Electric helm wheel: Jastram, model EW2, with 24" destroyer style helm wheel.

Rudders: Hydrofoil shaped rudders fabricated from 316 stainless steel, with rudderstocks.

#### STABILIZER SYSTEM:

The stabilizer fin actuator assemblies are installed approximately aft of amidships. The stabilizers are powered by the integrated hydraulic system. Each actuator is enclosed in a transparent, watertight coffer dam.

- ABT/Arcturus digital stabilizer system, with "TRACstar" stabilization at rest/anchor.
- ABT/Arcturus stabilizer 3-term digital control system, with touch-screen user interface panel.
- ABT/Arcturus fin position sensor, astern sensor, and optical speed sensor kits.
- ABT/Arcturus model 440 pro fin actuator assemblies and 20 square feet extended chord fins for stabilization at rest/anchor.
- ABT/Arcturus supplied hydraulic control valving, fail-safe fin locking mechanism, noise suppressors, and fittings kits.

#### BOW ANCHOR WINDLASSES:

(2) 6,000lb capacity, Maxwell model VWC-6000 hydraulically powered vertical windlasses with single capstans are installed at fore deck area. Hawse pipes are provided with seawater nozzles for wash-down. Polished SS roller, stopper tensioner assembly provided at each windlass. The assemblies include roller, pawl type stopper and devil's claw tensioner for 5/8" (16mm) stud link chain. Stainless steel bar provided at stern for hull protection.

#### BOW ANCHORS & CHAINS:

(2) 460lb HHP, pool type, fully balanced bow anchors. Anchors are 316 stainless steel with electro-polished finishes. Stainless steel shackle and swivel are included with the anchors. (2) 450' (137.1m) of 5/8" (16 mm) diameter GR-2 stud link chains are provided. Last link of chain is securely connected under deck with provisions for release in an emergency.

## ALARMS AND MONITORING

The vessel monitoring system is a programmable logic based system designed to meet or exceed the requirements of American Bureau of Shipping (ABS) rules. The system is powered by the vessel's service batteries for continuous operation even during an AC power failure. The system uses color touch screen operator interface terminals located in the pilothouse, crew quarters, and Lazarette. The system displays alarms and monitors various systems including fuel and water tank levels. Multiple screen pages and the generous screen size allow for easy to read graphical display of location and type of alarms and monitored systems.

#### MONITORING:

The system monitors the operation of the AC system, including system load KW and online sources. The levels of each fuel tank and the water tank can be read. Each tank has its own sensor and tank levels can be easily calibrated with the touch screen interface. Internal watertight doors between various areas are monitored. The voltage of the batteries for ships service and engine starting can be displayed.

#### ALARMS:

The system program logs all alarms with time and date stamp, easily accessed via any of the touch screens. All bilge

areas are monitored for high level, and indication is provided for DC bilge pump operation. Engine raw water flow is monitored. Backup alarms for each genset are provided, including oil pressure, water temperature, and cooling water flow. Multiple alarms are provided to monitor the sewage and grey water pumping and treatment system for proper operation and tank high levels. The freshwater and day tanks have low level alarms. The fuel overflow tank is monitored, and extra audible indicators are provided to alert the crew during fueling operations. Security alarms include all external doors and deck sensors to alert of intruders and to provide for safety while underway. The hydraulic power pack is monitored for low level and high temperature. The DC ship's service and engine starting systems are monitored for voltage level alarms.

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## **AUDIO & VISUAL EQUIPMENT**

The versatility and scope of the AV system is exceptional. Each accommodation or common area space is equipped with audio/video entertainment equipment which provides for a variety of choices, satellite based radio and television, dockside cable service as well as on board sources including Blu Ray, DVD, CD, iPod and central movie server.

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## NAVIGATION AND COMMUNICATIONS

### NAVIGATION:

- (2) Furuno radar FAR2117BB, standard ARPA plotting.
- (5) 19" NEC Hatteland Series X
- Interphase SE200C forward looking sonar
- Nobeltec Trident software
- Weather interface
- B&G HY3-SYST-1 Hydra 3000 Cruise Pack. Includes: GFD 3000 Display & Hydra 3000 CPU
- ACR - RapidFix 406 EPIRB, Cat 1 with GPS Interface
- Simrad autopilot AP50 Kit w/J50, RPU80
- VHF Icom M604B
- Standard-C Furuno Felcom 15 SatCom system. (GMDSS)
- VHF Furuno FM8800 radiotelephone
- Weather fax: Navtex Furuno NX700P (IMO)
- GPS navigator w/graphic screen modes / with back-up
- AIS Furuno FA150 AIS transponder w/display
- ACR VHF survival radio, waterproof/floats (GMDSS)
- ACR Globalfix 406 EPIRB w/intergral GPS
- Night Vision Camera: Flir Navigator II
- CCTVs: Pan, Tilt & Zoom
- CCTVs: Fixed rugged IP mini domes for the main and aft decks
- ACR searchlight

### COMMUNICATIONS:

- Satellite Communications (SatCom Dome)
- SailorTT-7016A VSAT

### TELEPHONE SYSTEM:

Panasonic advanced hybrid wired/wireless control unit initially configured with 4 extension ports, RS232 port, USB port, paging port. System is expandable to 8 CO's and 24 extension ports.

- Panasonic two channel cell station unit
- (3) Panasonic executive hands free cordless phone
- (13) Panasonic KXT7736 backlit phones
- Cellular Phone: Cellular SX7T GSM 850 / 1900 cellular phone

### TV ANTENNA (DOME)

KVH TracVision HD7 antenna with Tri-Americas LNB allowing the boat to travel throughout the Americas and switch seamlessly between services (High Definition TV)

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## SAFETY & FIRE PROTECTION

#### LIFE RAFTS:

- (3) Inflatable life rafts, Zodiac, with hydrostatic release, 10-person capacity, SOLAS approved in accordance with "A" pack requirements. Life rafts are stowed in a painted stainless steel cradles.
- Four (4) Life Rings
- MCA Life Gear

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## DECK EQUIPMENT

### DECK CRANE:

Nautical Structures hydraulic telescoping crane with 3,500 lbs. capacity at 16'/4.9m maximum reach @ 0° luffing angle, constructed from welded marine-grade aluminum, with stainless steel truck assembly and stainless steel hardware. The crane has 24 VDC fully proportional controls for hydraulic power operations, with handheld cordless remote. The crane is stored inside the sun deck aft coaming. An FRP hatch cover, pneumatically operated, conceals the crane. Crane hydraulic power will normally be provided by the central hydraulic system. Emergency back-up hydraulic power provided from the tender garage door DC hydraulic power packs with reserve-power batteries, allowing operation of the deck crane in a dead-ship condition to meet MCA requirement for rescue tender launching operations.

### TRANSOM GULLWING DOOR:

A large transom gullwing door is hydraulically operated with manual dog closure hardware, and an inflatable pneumatic seal to make watertight per ABS requirements and constructed of composite.

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## BOARDING ARRANGEMENTS

### SIDE-BOARDING LADDER:

Marquipt (9) nine-steps, with swivel platform, side-boarding ladder is provided on main deck coaming. Clevis brackets are installed at (3) side gates to accommodate ladder installation.

### PASSARELLE:

Aritex S-55 aluminum 19' (5.8m) reach hydraulic telescoping passarelle is furnished and installed at the transom, starboard side. The passarelle is stowed in an aluminum watertight box mounted below the main aft deck, is constructed from marine grade aluminum with etched finish, primed and painted with Awlgrip "Matterhorn" white. The walkway has teak decking with casters at the end of the gangplank. The unit is fitted with a hydraulic power pack controlled from a push-button panel installed in the lazarette. Operations include: deploy and retract, telescoping, raise & lower @ 20 degree each.

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## ENGINES

### MAIN ENGINES:

- (2) MTU model 12V 2000 M72, EPA Tier 2 & IMO compliant
- 12-cylinder, 4-stroke marine diesel engines.
- Maximum rating 1,450hp @ 2,250 rpm.
- Direct injection, water-cooled
- Exhaust gas turbochargers, with charge air after-cooling
- MTU Extended Propulsion Coverage: Parts and Labor into November 2023
- The M72 denotes Continuous Duty rating; anecdotal information from MTU suggests overhaul intervals of 20,000 hours.

### MAIN ENGINE REDUCTION GEARBOX:

- (2) ZF Gear, model 3055A
- 10 down-angle output
- Forged-n output shaft collar, w/ prop-shaft companion flange
- Engine/gear, w/torsional coupling between engine and gearbox
- Oil pump, oil level dip stick, oil cooler and control valve
- Trailing pump
- SAE "C" pump drive power-take-off (PTO)

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## ELECTRICAL

#### GENERATORS:

- (2) Caterpillar Model 4.4 76KW in sound reduction enclosures: approx. 7000 hrs. (3/2023)
- Continuous rating: 76 KW at 1800 rpm, 120/208 volt, 3 Phase, 60 Hz.
- Prime movers: Turbocharged, 4-stroke cycle, in-line diesel engine, EPA emission compliant
- Freshwater cooling system, with expansion tank and seawater cooled heat exchanger
- 12 volt starter & 12 volt alternator for battery charging
- Vibration isolation mounting system
- Generator KW carefully calculated and fitted with load cells to run all hotel systems plus At Rest Stabilization on a single generator.

#### SHORE POWER CONDITIONING CONTROL & CONNECTION:

The Atlas ShorePOWER® SPA System is provided. The shore power system is designed to automatically convert the available dockside power into clean, well-regulated power, at the voltage and frequency required by the vessel. This permits connection to any shore power source in the world. Integrated dual-cord input is included with no additional equipment required.

The vessel is equipped with (2) Glendenning shore power inlets with connected cables and FRP cable storage tub. These cables are 8' (2.43m) with a mating connector to the main shore cables, and are provided to allow direct dock connections without the removal of the shore power connectors on the main cables.

- (2) Glendenning shore power reels with 75' (22.8m) cord
- Atlas Model No. SP SPA 75K X6 X3 X120/208-UD
- 75KVA capacity
- Input frequency code X = any frequency 40 to 70 Hz
- Output frequency code 6 = 60 Hertz output
- Input phase code X = any phase single or three-phase
- Output phase code 3 = 3-phase output
- Input voltage code X = any voltage input (180-530 VAC)
- Output Voltage = 120/208VAC, 4-wire "wye" output.
- Integrated dual cord input capability

#### AC ELECTRICAL SYSTEM:

An Atlas TecPOWER™ B Series Main Switchboard is provided for the operation and control of the generators and shore power system.

Single bus configuration with ground and neutral buses.

The switchboard enclosure contains power-input sections and bus & distribution sections. Each power-input section

contains a power-input circuit breaker, meters and control switches for a power source. Shore power input may be combined in a generator power input section.

Input power circuit breakers are molded case type, available in 160, 250 or 400amp frame sizes

#### DC ELECTRICAL SYSTEM:

The engine and genset starting, and ships service systems are all independent of each other and each has more than one means of charging. The ship's service system consists of (8) size 8D, 12-volt, maintenance free type batteries, wired as a two 24- volt banks for each engine. Each bank may be selected separately or the banks may be paralleled in an emergency. Each bank has a 24-volt 80 amp battery charger. Two distribution panels are provided, one in the pilothouse and one aft in the Lazarette.

The genset starting system consists of a 12-volt, maintenance free type battery, sized as appropriate. Each battery is charged by its respective genset alternator as well as a single 12-volt 20-amp multi-bank battery charger.

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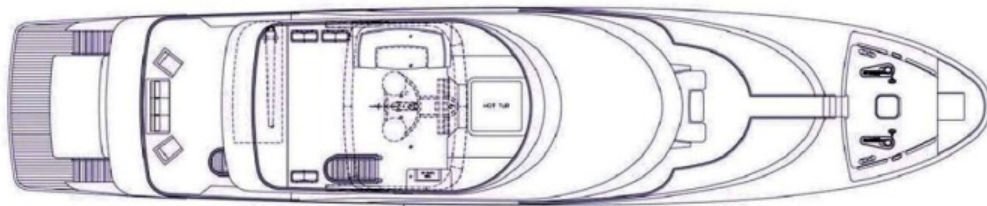
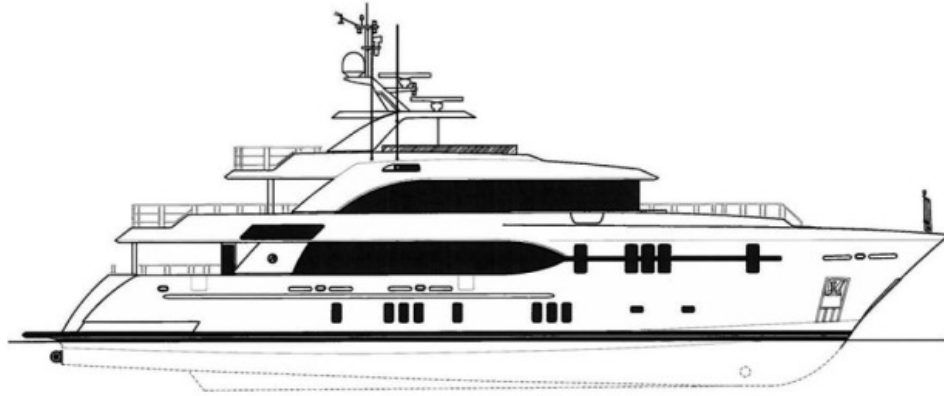




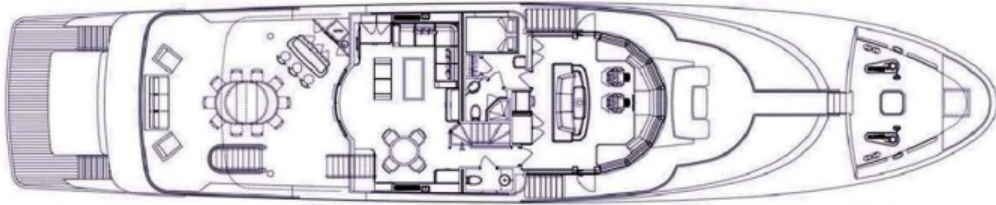




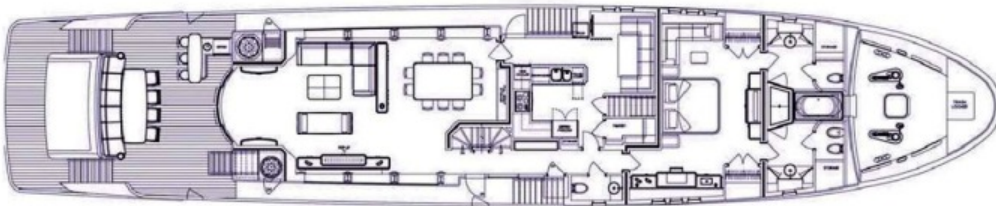




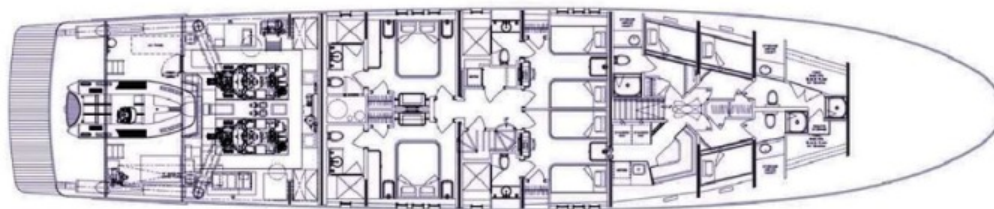
SUN DECK PLAN



BRIDGE DECK PLAN



MAIN DECK PLAN



LOWER DECK PLAN