

EDGEWATER MARINE SURVEYORS LLC

MEMBER SOCIETY OF ACCREDITED MARINE SURVEYORS (S.A.M.S.® AMS®)

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CONDITION AND VALUATION SURVEY F/V Challenger

Attend by Paul C. Fleenor April 11th, 2022

Dry docked at Northern Enterprises Boat Yard in Homer, Alaska



Picture above from previous survey, vessel is currently in enclosed structure in final stages of new raised fiberglass bulwarks capped w/ aluminum and installation of new 18-ton Cold Sea RSW system

CONDITION AND VALUATION SURVEY

This is to certify that on April 11th, 2022, Paul C. Fleenor, the below marine surveyor, at the request of Matt Alward, did attend the F/V Challenger while dry docked at Northern Enterprises Boat Yard in Homer, Alaska for a condition and valuation survey to obtain market value of vessel for financing and insurance renewal. The closing paragraph of the survey is incorporated wholly by reference here and will not be duplicated here.

GENERAL VESSEL INFORMATION:

Vessel Name: **F/V Challenger**

Vessel Owner: **Matthew J. Alward**


Vessel Type: Salmon Purse Seining Intended Service: Commercial Fishing ADF&G No.: 57480

Waters Navigated: Area 3A/ Kodiak Island, Alaska Hull ID No.: B-48-023/ not visible

U.S.C.G Doc. No.: 943644/ visible lazaret Certificate of Documentation: Issued 03/ 17/ 2016/ Expires 04/ 30/ 2017

Trade Indicator: Coastwise Unrestricted/ Fishery/ Registry Gross Tons: 36 Net Tons: 29

Hailing Port: Homer, Alaska Registry Port: Falling Waters, WV.

Hull Construction: Fiberglass Registered Length: 52' 5" (LOA 52' 5') Beam: 15' Depth: 7' Draft: 3.5'

Year Built: 1989 Built By: LeClerq Marine at Seattle, Washington

Estimated Cruise Speed: 8 Knots @ 1150 rpm Estimated Fuel Consumption: 14-gph combined

Estimated Hold Capacity: Main hold 27,000 lbs/ Sunday 18,000 lbs. insulated w/ 18-ton 208VAC driven IMS RSW

Last Dry-docked: Presently Reason: Seasonal storage and maintenance

GENERAL VESSEL DESCRIPTION and LAYOUT:

The F/V Challenger is a twin diesel engine w/ propellers powered vessel w/ molded hull constructed of fiberglass built by LeClerq Marine, in 1989. The vessel has one deck, one mast, raked stem, flat transom stern, hard chine's, twin keel w/ shallow draft tunnels. The cabin is forward w/ enclosed pilot house above, open self bailing work deck aft w/ raised fiberglass/ aluminum bulwarks. Vessel is rigged as a purse seiner; at the bow first are the anchor roller, anchor, cleats, line chocks and hydraulic anchor winch mounted to the fore deck. The walkways lead aft port and starboard to the main deck with pipe handrails mounted to the enclosed pilothouse.

The enclosed pilothouse is accessed by an aluminum ladder from port aft of the main cabin, thru an aluminum watertight door with full window to starboard. The pilothouse contains a hydraulic helm / jog steering to port with to the starboard jog control steering, engine controls, trolling valve controls, various electronics, a compass and a swivel bucket helm seat. Aft starboard corner contains a raised double bunk with storage underneath; pilothouse is heated with an 120VAC forced air cabin heater. The pilothouse has a watertight aluminum entry door with aluminum framed front/side sliding windows and aft windows. From starboard aft of the main cabin a watertight aluminum Dutch door enters the main cabin with window, taking three steps down.

RECOMMENDATIONS ON THIS SURVEY: YES NUMBERS: 2

GENERAL VESSEL DESCRIPTION and LAYOUT CONTINUED:

To the starboard of entry is an enclosed head with a Par electric marine toilet, stainless sink counter and cabinet. Next forward is a day-bunk with storage underneath, an entertainment center, RSW controls and a fire extinguisher are mounted above the day-bunk. Next forward the helm / dash with swivel pilot seat, full engine controls, instruments, gauges and various electronics. The forecabin bow bunk area is entered by open companionway amidships forward. The bunk area contains two sets of tiered bunks in the bow port and starboard w/ storage underneath bottom bunks. To the port of entry are electrical panels for bilge pumps and hydraulics. Next to the port of entry is access to the engine room through a hinged Formica covered door and removable hatch in the cabin sole. The engine room contains the main engines, transmissions, filters, aft sonar tube; tube is plugged at this time, sonar boom is in storage) 12VDC bilge pumps and 12VDC high water alarm; engine room lined w/ sound insulation; new 05/ 2021. Forward is a hatch in the cabin sole accessing dry storage and access to the forward sonar tube, hookah compressor, ships air compressor (for sonar air rams and utility air) hot water tank, fresh water pump, filter, holding tank for head, batteries, buss fuse panel and battery charger. Next to the port is the galley area w/ cabinetry w/ cupboard space and counter tops, microwave mounted above aft counter to the aft cabin bulkhead. Recessed into the cabinetry is a Dickinson Adriatic diesel cook stove with a 3-speed fan (stove/oven), fuel supplied by a filtered pulse pump from main tanks. Next forward is Formica counter top with raised Formica bar, cupboards, double stainless sink and Norcold refrigerator/freezer mounted under the counter and at the corner of the cabinet is a shore power electrical panel. Next forward is the galley table with fore and aft seating for six with storage underneath. The vessel interior is finished with a vinyl sole, Formica ceiling, vinyl/cloth cushions, Formica bulkheads and cabinets, teak trim w/ teak framed bolted Lexan front windows and side windows.

The main mast attaches to the aft cabin bulkhead / deck with forestays running forward attaching to the foreword bulwarks with side stanchions for boom rigging, port and starboard with dual exhausts integrated into the design. The life raft and a small AC freezer are mounted starboard aft of the pilothouse on the cabin lid. The crow's nest is accessed by an aluminum ladder up the mast and has full engine and steering controls. Antennas and Epirb are mounted to the pilothouse lid. Aft of the main cabin amidships is a hydraulic driven Tye #2 fish hold bilge pump. Amidships forward of the main hold is a self-pursing deck winch; port and starboard of the deck winch are the purse davits mounted on the bulwarks. Next aft is the main fish hold with a flush hatch coaming aluminum hatch cover. Main hold is divided into three sections by fore aft aluminum bin boards; hold is insulated and plumbed for RSW and seawater circulation. Next aft is a 24" x 24" Freeman aluminum watertight hatch that accesses the Sunday fish hold; Sunday hold plumbed for RSW. Next aft is a 24" x 15" Freeman aluminum watertight hatch that accesses the lazaret/ rudder/ machinery compartment. The lazaret/ rudder/ machinery compartment contains the fuel tanks, auxiliary diesel powered generator, RSW compressor/ chiller, steering gear, rudder shaft seals, two 12VDC bilge pumps w/ floats and 12VDC bilge high water alarm. The aft self bailing work deck is encompassed w/ fiberglass bulwarks capped w/ aluminum and 4" x 1" PVC rub rails on the hull, the stern has a stainless steel and PVC plastic guard.

CABIN EQUIPMENT:

New 2013; 120VAC Emerson microwave oven, (New 2013) Princess AC electric 3-burner stove/oven, 120VAC 3 cu. ft. refrigerator/ freezer, New 2016; 120VAC chest freezer mounted aft pilothouse bulkhead double stainless steel sinks, 120VAC forced air cabin heaters, Par 12VDC electric marine toilet with holding tank and sea valve system in forward dry storage, Emerson TV/VCR, JVC RX-208 AM/FM stereo cassette player, 12VDC red dot heater with ducting to forepeak, 12VDC pilothouse, cabin, engine room and lazaret/ rudder compartment lighting.

HULL / CABIN / DECK:

Hull Material: Molded / fiberglass sandwich w/ four longitudinal stringers

Cabin / Top house / Material: Fiberglass sandwich Bulkhead / Deck Material: Fiberglass sandwich

Guards and Rub Rails: 4" x 1" Black PVC caps/aluminum, stainless steel transom guard

UNDERWATER FITTINGS:

Thru Hull Fittings: Bronze below the water line w/ shut off valves and bronze above the water line

Anodes: New 2022 Propeller Shafts: Stainless steel 2 ½" w/ bronze two bolt compression propeller shaft seal

Propellers: 30" X 27 ½" ` 4- blade stainless steel w/ spare 30" X 27 ½" ` 4-blade stainless steel

Rudders: Deflector articulating stainless steel w/ 2 ½" stainless steel shaft, bronze compression two bolt shaft seals; owner reports installing new Deflector articulating stainless steel rudders 05/ 2019.

Rudder Shoes: Steel 1" x 6" w/ 1" x 4" steel Vee-struts aft of the propellers Transducers: Port bottom two

Cooling: Fernstrum double pass grid coolers; two 89" x 9" recessed port and starboard bottom for main engines Fernstrum grid cooler, one 57" x 7" recessed port side bottom for generator; owner reports installing new Fernstrum double pass grid coolers 05/ 2021.

Bow Thruster: Wesmar 12" dual prop hydraulic bow thruster w/ remote pilothouse control; new 2013

MAIN ENGINE'S & ASSOCIATED EQUIPMENT:

Main Engine's: Two Make: John Deere Model: 6090AFM inline 6-cylinder Fuel: Diesel

Serial Nos.: P-RG6090L140700/ S-RG6090L140695 Horsepower: 425 hp. Each/ 850 hp. total @ 2400 rpm

Hours: P-1,050.0/ S-1,050.0 (meters) Last Overhaul: Owner reports installed new 05/ 2021

Exhaust: Dry upward 5 ½" stainless exhaust lagged with mufflers; exhaust system replaced new 2010.

Alarms / Gauges: Engine-high temp water, low-pressure lube oil (lights/alarm) pyrometers, low-water

Engine Cooling: Keel cooled/ Fernstrum grid coolers recessed into bottom Starting System: 12VDC

Engine Room Ventilation: Natural thru aft cabin vents, and 12" x 12" hydraulic driven blower

Transmissions: ZF w/ electronic trolling valves w/ ZF Cruise Command control at pilothouse helm Model: 325-1A

Ratio: 2.41:1 Serial Nos.: P-20378648/ S-20379780 Last Overhaul: Owner reports installed new 05/ 2021

Alarms / Gauges: Marine gear-low pressure oil / gauges and alarms are located at starboard cabin helm

Clutch & Throttle Controls: ZF Cruise Command, 12VDC electric, 3- stations at pilothouse port and starboard sides and crow's nest; owner reports installing new ZF Cruise Command engine controls w/ electronic trolling valves w/ electronic controls pilothouse helm 05/ 2021.

Steering: Wagner hydraulic pilothouse port side and main cabin starboard side w/ 12VDC jog steering controls at port and starboard side pilothouse helms and crow's nest. Wagner steering control manifold w/ 12VDC switching valves and 7-gallon steel steering oil reservoir mounted starboard aft engine room bulkhead The lazaret has a hydraulic steering actuator connected to the port and starboard rudder quadrants w/ stainless steel tie bars. Steering system is plumbed w/ two wire hydraulic lines w/ steel crimped JIC fittings; owner reports new hydraulic steering actuator installed new 05/ 2019.

AUXILIARY ENGINE/ GENERATOR:

Make: Mer/ Isuzu **Model:** m/n MG30KMC-HE s/n unknown/ 4-cylinder engine w/

Meccalte generator/ m/n EC032-1L/4 s/n H002609/ 30.0 kW/ 3-phase 208VAC **Hours:** 10,531.2 (meter)

Last Overhaul: Installed new 2013 **Alarms:** High coolant temp, low oil pressure at pilothouse helm

Ventilation: Air inducted from engine room. **Fuel:** Diesel with FG 500 Racor fuel filter, in engine room.

Engine Cooling: freshwater cooled with seawater cooled heat exchanger; bronze seawater strainer

Starting System: 12VDC **Exhaust:** Seawater cooled **Intended Use:** House and RSW power.

HYDRAULICS / WASH DOWN / RSW / MISC. PUMPS:

(Located on port main runs deck/ anchor hydraulic systems) Vickers dual 30/40 GPM hydraulic pump, PTO driven off port main engine with Pitts 12VDC electric clutch; both pumps use 65-gallon aluminum reservoir with return filter and oil cooler

(Both Vickers pumps new 2015; located on starboard main runs bow thruster, power steering and blower for engine room ventilation) Vickers 3.8 cube load sensing variable volume hydraulic pump is piggy backed off front of Vickers 6.3 cube load sensing variable volume hydraulic pump, PTO driven off front of starboard main engine; both pumps use 65-gallon aluminum reservoir with return filter and oil cooler

(1) New 2013; Pacer 1 ½" RSW condenser pump driven by a Baldor 1.5 hp. 208VAC electric motor

(1) New 2014; Flow-Max 15 3" x 3" centrifugal RSW pump driven by Leeson 5 hp. AC 208- volt electric motor

(1) (New 2014) Pacer 3" hydraulic driven fish holds circulation/ discharge pump with valve and plumbing in engine room for emergency engine room bilge. (New 2014)

(1) Starboard aft lazaret/ rudder compartment IMS 18-ton RSW driven by a New 2013 MER 30 kW 208VAC auxiliary generator w/ copper nickel chiller, Carlyle compressor driven by 208VAC electric motor w/ FlowMax 15 4" x 3" stainless self priming centrifugal fish holds circulation/ discharge pump driven by a WEG 5 hp. 208VAC electric motor; owner reports installed new 05/ 2021 or w/ backup Pacer 3" x 3" self priming hydraulic driven fish holds circulation/ discharge pump. Pacer 2" x 2" self priming bilge/ seawater RSW condenser pump driven by a Baldor 1.5 hp. 208VAC electric motor seawater condenser pump; both pumps are hydraulic driven.

FlowMax 8 2" x 2" bronze self priming wash down/ emergency engine room bilge pump driven by a Weg 3 hp. 208VAC electric motor; owner reports installed new 05/ 2021.

(1) Tyee #2 bilge pump for fish hold, deck mounted, hydraulic / manual driven for fish holds.

(1) Campbell/ Hausfield MT-500 120VAC air compressor; port fwd dry storage air for sonar booms

ELECTRICAL DISTRIBUTION, WIRING & OVERLOAD PROTECTION:

Marine shielded copper strand wiring; electrical systems appear to be in good condition and properly installed, the wiring was upgraded in 2010.

12VDC system w/ 12VDC magnetic breaker distribution panels main cabin and pilothouse with battery bank selection panel, DC volt and amp monitoring panel and battery disconnect switches in engine room and engine room entry.

120/ 208VAC system w/ 120VAC breaker boxes main cabin and lazaret with AC 120/ 208-volt AC power / generator 208VAC 3-phase/ 120VAC 30 amp shore power monitoring and switch panel.

BATTERIES/ CHARGERS/ INVERTERS:

(2) 12VDC 8-D marine (house) batteries in plastic boxes with lids secured port and starboard forward dry storage. Batteries have vapor tight battery disconnect switch at engine room entry and are charged by 130-amp Leece Neville belt driven engine alternators and by 120VAC Lewmar Phase Three PT-80 Three Phase Smart Charger 12VDC battery charger: owner reports batteries new 05/ 2021.

(2) 12VDC 8-D marine (main engine starting) batteries in plastic boxes with lids secured port and starboard sides of engine room. Batteries have vapor tight battery disconnect switch inboard of each engine and are charged by 130-amp Leece Neville belt driven engine alternators and by 120VAC Lewmar Phase Three PT-80 Three Phase Smart Charger 12VDC battery charger: owner reports batteries new 05/ 2021.

(1) 12VDC 8-D marine (electronics) battery in box w/ cover (located enclosed pilothouse) Batteries have vapor tight battery disconnect switch under port pilothouse dash and is charged by 130-amp Leece Neville belt driven engine alternators and by 120VAC Lewmar Phase Three PT-80 Three Phase Smart Charger 12VDC battery charger: owner reports battery new 05/ 2017.

(1) 12VDC group 24 marine (generator start) battery in plastic box with lid secured next to generator in lazaret w/ disconnect switch and is charged by belt driven auxiliary engine alternator: owner reports batteries new 05/ 2020.

(New 2013) Lewmar Phase Three PT-80 Three Phase Smart Charger/ 120VAC 12VDC 80-amp battery charger mounted centerline forward dry storage

(2) Cobra 12VDC to 120VAC 400/ 600-watt power inverters for pilothouse and cabin AC electronics

TANKAGE:

Fuel: Diesel Number of Tanks: Two Construction Material: Aluminum ¼" w/ baffles (New 2014)

Location: Lazaret forward; port/ starboard Total Capacity: 550-gallons-each/ 1,100 total gallons

Shutoff Valves: At the tanks and fuel filter manifold

Fuel Feed Lines: Stainless steel tubing/ hydraulic lines(New 2014)

Tank Vents: Yes, aft deck Fill Connections: Flush with threaded caps on aft deck

Filters: Primary spin on w/ dual remote Racor 75/1000 FG water/ fuel separators/ two per engine

Fuel Transfer Pump: Tutthill Fillrite 1200G series 15-gpm 12VDC fuel transfer pump in lazaret

Fresh Water:

Number of Tanks: One Total Capacity: 200 (est.) gallons Construction Material: Fiberglass

Location: Lazaret amidships integral Pump: 12VDCPar with pressure accumulator and omni filter

Water Heater: AC 120-volt/ engine cooling hydronic water heater; Raritan 12-gallon forward dry storage

Holding Tank:

Number of Tanks: One Construction Material: Plastic Total Capacity: 35-gallons

Pumps: ITT Jabsco 12VDC head macerator pump Location: Amidships dry storage starboard side

NAVIGATION AND ELECTRONICS EQUIPMENT:

Radiotelephones:

- (2) Icom IC-V-8000 2-meter VHF/FM transceiver; one new 2015
- (2) Icom IC-M504 VHF/FM transceiver; new 2014
- (1) Standard Horizon Intrepid VHF/FM transceiver; new 2015
- (1) Motorola Triton II VHF/FM transceiver
- (1) SEA 156 VHF/ FM transceiver
- (1) Cobra 146 GTL CB transceiver
- (1) Stevens SEA-322 SSB
- (2) MSV satellite track phone; new 2014

Radar:

- (1) Furuno 1900, 24-mile radar dome scanner
- (1) Furuno, 32-mile radar dome scanner networked w/ Furuno NavNet TZtouch2 15.6" color touch screen display; radar new 2019.

GPS Plotter:

- (1) Furuno NavNet TZtouch2 15.6" color touch screen display networked w/ Furuno 32-mile radar/ GPS plotter w/ Noble Tec Time Zero 3.0 navigational software/ color video depth sounder w/ Furuno multibeam transducer; new 2018
- (1) Garmin GPS receiver interfaced with Toshiba laptop CPU networked with Dell 19" flat screen monitor; system runs Noble Tec 11.0 navigational software
- (1) Furuno GP-32 GPS/ WAAS GPS receiver

Depth Sounders:

- (1) Furuno NavNet TZtouch2 15.6" color touch screen display networked w/ Furuno 32-mile radar/ GPS plotter w/ Noble Tec Time Zero 3.0 navigational software/ color video depth sounder w/ Furuno multibeam transducer; new 2018
- (2) Furuno FCV-667 color depth sounders; main cabin/ pilothouse
- (2) Wesmar SS-265 sonar, aft boom in storage, aft tube is capped)

Autopilot:

- (1) Com Nav Marine, model #1001 w/ Com Nav rudder angle indicator and Com Nav 201 12VDC jog steering controls port and starboard pilothouse and crew's nest helms w/ Nobel Tec satellite compass and back up Dirigo flat top autopilot compass mounted to forward cabin dash.

Compass:

- (1) Ritchie 3 ½" bubble navigational compass at pilothouse helm

Other:

- (1) RDI Bridge alarm at pilothouse helm
- (1) Panasonic TV 13" screen for sonar (pilothouse/main cabin)
- (1) Emerson 13" TV/VCR, in main cabin.
- (1) JVC RX-208 AM/FM/Cassette, in main cabin.
- (1) Keene Industries hookah compressor
- (1) Campbell Hausfield ¾ hp ships air compressor (for sonar rams, utility air

Navigation Lights:

- 12VDC red fishing, white anchor, port and starboard running lights

Deck Lights:

- (2) 220VAC LED Sonlaray 250-watt aft deck lights mounted aft to the mast; owner reports installing new LED deck lights 05/ 2021.
- (2) LED 12VDC light bars, aft deck lights mounted aft to the mast.

Search Lights:

- (3) Ridge LED 12VDC 40" light bars, forward facing mounted to pilothouse forward lid and centerline mast.
- (3) Ridge LED 12VDC 20" light bars, forward facing mounted to pilothouse lid
- (2) Ridge LED 12VDC 30" light bars, forward facing mounted to pilothouse lid
- (1) LED 12VDC dual spot light, forward facing mounted centerline forward mast
- (2) Ridge LED 12VDC 12" light bars docking lights mounted port and starboard amidships pilothouse lid
- (3) 220VAC LED Sonlaray 250-watt search lights mounted forward on mast; owner reports installing new LED spot lights 05/ 2021.

MASTS/BOOMS/RIGGING:

6" schedule-80 aluminum pipe main mast with 3" aluminum tripod stays supports a Pullmaster PL-4 topping winch, rigged with galvanized steel blocks and 1/2" wire rope, mast is supported by an aluminum schedule 80 3" pipe fore stays running forward attaching to the foreword bulwarks and to the top of the mast with radar, lights and antennas mounted on cross bars in between the fore braces and a fiberglass crows nest with radio, steering and engine controls. The mast supports a 6" schedule-80 aluminum pipe reinforced main boom with stiffeners and a PL-5 split drum vanging winch, Pullmaster PL-4 picking winch, and Kolstrand SWIN-T purse block trolley winch; vanging and trolley winches rigged with wire rope and galvanized/ stainless steel blocks. The mast also supports two 5" schedule-80 aluminum reinforced pipe picking booms with Pullmaster PL-4 picking winches. Aluminum rigging stanchions are port and starboard sides with exhausts integrated into the design; mounted to deck and cabin.

(Owner reports All wire rope and lines for the main and picking booms have been replaced new 2020/ 2021)

ANCHOR WINCH:

Kinematics 20" x 20" aluminum with powder coating hydraulic anchor winch w/ stainless steel drum, control valve, locking dog w/ aluminum anchor roller mounted to bow bulwarks; owner reports anchor winch was installed new 05/ 2013.

ANCHOR RODE:

50 Kg. Lewmar plow anchor with 40' of 1/2" and 20' of 3/4" galvanized chain with 120' of Spectra and 300" of 7/8" three strand nylon anchor line; owner reports anchor rode was new 05/ 2013.

DECK & FISHING GEAR:

Kolstrand SW1N s/n hydraulic double headed self-pursing winch with line hauler.

Twin Kolstrand purse davit stations with movable roller davit.

Marco Purse King m/n PLH-17 s/n 102 hydraulic self pursing sheave; owner reports new 05/ 2014.

Marco m/n B-26/ 26" hydraulic power seine block w/ gripper wheel, tilt, swivel-new two speed; owner reports new 05/ 2012.

SAFETY EQUIPMENT:

Heat/Smoke/Vapor Detectors:

9VDC battery smoke detector/ alarm in main cabin.

Heat sensors in engine room and galley w/ audiovisual alarm at pilothouse helm.

Fire Extinguishers:

(4) Class 2:A 10:B:C Type/ size A:II B:C:I 5 lb. ABC dry chemical, mounted pilothouse, cabin and forecastle/ bunk area; inspected 06/ 2021.

Engine Room Extinguisher:

None

Helm Watch Alarm:

RDI Bridge watch alarm at pilothouse helm

Bilge High Water Alarms:

Audiovisual alarm at pilothouse helm, alarm floats in forward dry storage, engineroom and lazaret/ rudder compartment.

Bilge Pumps:

(1) 12VDC Rule #1500 gph bilge pump w/ float, forward dry storage; see recommendations

(1) 12VDC Rule #1500 gph bilge pump w/ float (engine room)

(1) Pacer 3" hydraulic driven fish holds circulation/ discharge pump with valve/ plumbing for emergency engine room bilge. (New 2014)

(1) FlowMax 15 4" x 3" stainless self priming centrifugal fish holds circulation/ discharge pump driven by a WEG 5 hp. 208VAC electric motor; owner reports installed new 05/ 2021

SAFETY EQUIPMENT CONTINUED:

Bilge Pumps:

- (1) backup Pacer 3" x 3" self priming hydraulic driven fish holds circulation/ discharge pump.
- FlowMax 8 2" x 2" bronze electric driven self priming wash down/ emergency engine room bilge pump; owner reports installed new 05/ 2021.
- (1) Hydraulic driven Tye #2 fish hold pump, port foreword aft deck
- (1) 12VDC Rule #3700 gph bilge pump w/ float lazaret
- (1) 12VDC Rule-Mate #1100 gph manual bilge pump lazaret/ rudder compartment

Other:

- Safety railings 3/4" and 1 1/4" aluminum pipe.
- Belt guard on front of generator

LIFESAVING / EMERGENCY EQUIPMENT for FIVE PERSONS:

- (5) Adult (large) survival suits with whistles, lights, reflectors, hi-rise rings, marked with vessels name
- (5) Adult type II life jackets
- (1) ACR RLB-32 Cat 1/ Class 2 SAT 406 MHz Epirb; battery due 09/ 2023/ hydrostatic release due 05/ 2021; Epirb mounted centerline pilothouse lid.
- (1) Zodiac 6-person self launching inflatable life raft w/ solas A pack; repack due 05/ 201/ hydrostatic release due 05/ 2018; self launching inflatable life raft mounted port side pilothouse lid.
- (1) 24" orange life ring marked with vessels name and has 60' feet of floating retrieval line.
- Marine First Aid Kit
- Marine flare kit good for service area; expires 05/ 2021
- Blaster manual air horn
- All USCG required placards posted in cabin

FINDINGS & RECOMMENDATIONS:

1. Found/ Recommended: Found port side 12VDC main engine start battery disconnect switch is missing. Recommend replacing missing port side 12VDC main engine start battery disconnect switch before vessel is placed back into service.
2. Found/ Recommended: Found portable fire extinguishers due for service. Recommend servicing portable fire extinguishers to be U.S.C.G. compliant.

GENERAL COMMENTS AND CONDITION:

It is the responsibility of the Vessels Owners and Masters to keep the Vessel in compliance with all applicable Federal and State rules and regulations, which apply, to the vessel service and area of operation.

The F/V Challenger was surveyed while in dry storage at Northern Enterprises Boat Yard in Homer, Alaska for a condition and valuation survey to obtain market value of vessel for financing and insurance renewal. Vessel appears sound and well-built and to accepted standards and practices in a workmanship like manner. The hull, decks and cabin appear to be in good condition with normal wear and use; coatings are intact and clean. Owner reports the aft fish hold bulkhead was moved aft 18" and an additional bulkhead was installed to create a Sunday hold aft of the main fish hold 05/ 2014.

Vessels interior is in good condition for vessels age, clean w/ no apparent leaks in the windows noted. Owner reports installing new 12VDC main engine start/ house batteries and new 220VAC LED spot lights and deck lights 05/ 2021. Owner reports pilothouse navigation electronics were upgraded in 2018/ 2019. Owner reports a new AC chest freezer was installed 05/ 2015 and new radio transceivers and LED 12VDC exterior light bar spot lights were installed 05/ 2014. Owner reports aft pilothouse bulkhead was moved aft 18" to accommodate better aft deck visibility and pilothouse had a new watertight aluminum entry door w/ windows, aluminum framed aft rear windows and a double bunk w/ storage underneath installed 05/ 2013.

GENERAL COMMENTS AND CONDITION CONTINUED:

The vessels engine room and equipment are clean and appear to be in good condition w/ signs of ongoing maintenance and a clean bilge space. Owner reports installing two new John Deere main engines, refurbishing main engine exhaust systems, installing new ZF transmissions w/ electronic trolling valves and new ZF Cruise Command 12VDC engine controls 05/ 2021. 05/ 2021; main engine exhaust system was replaced w/ new stainless steel exhaust pipe, mufflers and new silicon impregnated lagging along w/ associated ships fittings 05/ 2010. The main engines and auxiliary diesel driven generator exhaust systems appear to be in good condition w/ adequate lagging, clearance and ventilation were visual access allowed inspection.

Owner reports installing new FlowMax 15 4" x 3" stainless electric driven self priming centrifugal circulation/ discharge pump and new FlowMax 8 2" x 2" bronze electric driven self priming wash down/ emergency engine room bilge pump and associated fittings 05/ 2021. Owner reports installing two new Vickers 6.3/ 3.8 cube load sensing variable volume hydraulic pumps were installed on the starboard main engine w/ associated new ships fittings 05/ 2015. Owner reports installing new Mer/ Isuzu auxiliary w/ 30 kW 208VAC three phase diesel powered generator, a new generator engine exhaust system, a new RSW condenser pump and a new 12" Wes Mar hydraulic bow thruster 05/ 2013. Owner reports installing an engine oil filtration system for the vessels main engines from Filtration Solutions Worldwide to extend engine life 05/ 2012.

Owner reports installing new Marco Purse King hydraulic pursing sheave and all rigging blocks, wire rope and lines were renewed 05/ 2014. Owner reports installing new Kinematics hydraulic anchor winch and new anchor rode were installed 05/ 2013. Owner reports installing new Marco 26" hydraulic seine block and new stainless steel pipe and associated ships fittings were installed for deck valve bank and main boom hydraulics 05/ 2012.

The vessels lazaret/ rudder compartment equipment appears to be in good condition w/ signs of ongoing maintenance and a clean bilge space. Owner reports new hydraulic steering actuator was installed w/ new articulating stainless steel rudders 05/ 2019. The lazaret/ rudder compartment was refurbished and had new 12VDC bilge pumps, new aluminum fuel tanks w/ new stainless steel tubing and hydraulic hose fuel lines and stainless steel tubing and hydraulic hose steering lines installed w/ associated new ships fittings 05/ 2016.

The vessels bottom and associated underwater fittings appear to be in good condition and maintenance w/ no damages or repairs noted during bottom inspection. Owner reports installing new Fernstrum double pass grid coolers 05/ 2021. Owner reports installing new Deflector articulating stainless steel rudders and refurbishing the rudder shaft seals 05/ 2019. Vessels bottom coatings are in good condition and maintenance, owner reports zinc anodes will be serviced before the vessel goes back into service.

The vessel has a crash bulkhead glassed into the bow, this is an added safety feature designed into the vessel for fishing in shallow water. Vessel has under gone a Commercial Fishing Safety Examination done dockside by the United States Coast Guard; decal #226402 for documented vessels in cold water beyond the boundary line <12 NM, this inspection expires 06/ 2018. Vessels safety, life saving and emergency equipment is currently off the vessel being serviced for the upcoming season.

Vessel is currently in the final stages of having the self bailing aft deck fiberglass bulwarks raised and capped w/ aluminum guards and the lazaret is being refurbished and a new Cold Sea 18-ton 208VAC RSW unit w/ associated new fittings is currently being installed. A revised survey w/ current pictures will be completed before vessel is placed back into service on or before 05/ 2022.

The Challenger shows pride of ownership through ongoing upgrades and maintenance to the vessel. Vessel was in layup during my inspection no systems were tested for operation. After this inspection it is the opinion of the attending surveyor that this vessel appears to be in suitable condition for operation in its intended service, subject to the above Findings and Recommendations and General Comments and Condition.

ESTIMATED VALUES:

Market Value: **\$725,000.00**

Replacement Value: **\$2,600,000.00**

Values are estimated by comparisons of similar vessel type, horsepower and characteristics thru; recent sales, marine brokers, advertised listings, various on-line services, local market conditions, Boat Builders and vessels current condition.

Potential buyers are recommended to do a pre-purchase inspection/ sea trial on vessel and have a have a certified mechanic do a pre-purchase inspection on motors and associated mechanical systems.

Acceptance and use of this report by the client acknowledges the client understands that the report has been composed of information that is believed to be true after reasonable investigation and inquiry but is not warranted to be so. The information was obtained without drilling, diving, ultrasonics, cleaning or opening up to expose parts or conditions ordinarily concealed. There were no tests for tightness or soundness conducted other than the conditions noted visually.


Acceptance and use of this report acknowledges the client's understanding that no determination of stability or structural strength has been made and no opinion is expressed.

Acceptance and use of this report acknowledges the client's understanding that Edgewater Marine Surveyors LLC and/or it's employees does not accept any responsibility for damage or deterioration not found or discovered during the course of survey, nor for consequential damage, deterioration or loss due to any error or omission.

The Client hereby undertakes to keep the Surveyor/Consultant and its employees, agents and subcontractors indemnified and to hold them harmless against all actions, proceedings, claims, demands or liabilities whatsoever or howsoever arising which may be brought against them or incurred or suffered by them, and against and in respect of all costs, loss, damages and expenses (including legal costs and expenses on a full indemnity basis) which the Surveyor/Consultant may suffer or incur (either directly or indirectly) in the course of the services under these Conditions.

Notwithstanding the above clause, in the event that the Client proves that the loss, damage, delay or expense was caused by the negligence, gross negligence or willful default of the Surveyor/Consultant aforesaid, then, save where loss, damage, delay or expense has resulted from the Surveyor's/Consultant's personal act or omission committed with the intent to cause same or recklessly and with knowledge that such loss, damage, delay or expense would probably result, the Surveyor's/Consultant's liability for each incident or series of incidents giving rise to a claim or claims shall never exceed a sum calculated on the basis of ten times the Surveyor's/Consultant's charges.

Submitted Without Prejudice
Edgewater Marine Surveyors LLC


Paul C. Fleenor, AMS® #1101
Accredited Marine Surveyor SAMS®

