# Timothy Simms A.M.S SAMS Marine Surveyor

Martin County, FL 561-676-6990

22-12345

# Report of Survey XXXXX

**22 February 2022** 



#### **SURVEY INFORMATION:**

**Date of Survey Inspection**: 22 February 2022

Name of Vessel: xxxx

Vessel: 2009 Nordhavn 56 Motorsailer

**Buyer:** xxxxx **Address:** xxxxx

Purpose of survey: pre-purchase

By Request of: buyer

**In Attendance:** Buyer, and buyer & seller's brokers, and surveyor.

#### **Scope of Survey Inspection:**

- -This survey was conducted by means of visual and aural inspection and non-destructive testing, such as "tapping" a laminate and listening for acoustic anomalies. (a.k.a. "percussion testing.") (It should be noted that given the nature of materials, the vessel may have undergone minor or significant fiberglass repair which is hidden at time of survey.)
- -Electronic, electrical, mechanical and other equipment was energized or activated if possible, and observed in operation.
- -Electronic equipment is tested for power-up only.
- -Through-hull valves were exercised and some through-hulls were "scratch-tested", where appropriate (Note that scratch-testing does not *always* reveal deteriorated bronze.)
- -Some through-hull valves were not tested due to inaccessibility.
- -Any damage, malfunctions or deficiencies are described in the "RECOMMENDATIONS" and "NOTES" sections of this report.
- -All areas accessible without the opening or removal of locked compartments and breaker panels, paneling, screwed or nailed boards, bulkheads, tacked carpet, clothing, spare parts, miscellaneous materials in the bilges, lazarette and lockers or other portions of her structure, anchors and anchor chain and without the testing of or opening up of propulsion or auxiliary machinery, or disassembly of valves, were tested and/or inspected.
- -The undersigned does not attest to the absolute condition of wood concealed by paint fiberglass or other materials.
- Wiring is not fully accessible for inspection over its entire length; surveyor cannot speak as to its condition in inaccessible areas.
- -Tanks are not fully accessible for inspection, and surveyor cannot speak as to the condition of hidden surfaces.
- -Liquid leakage above the tank level cannot be detected in slack tanks.
- Propeller shafts and rudder stocks were not sighted where they pass through the glands, Pedro hoses, logs, rudder ports and cutlass bearings; surveyor cannot speak as to their condition.
- -This report is not an engine survey; a brief cursory inspection of the machinery was conducted and no opinion of its overall condition has been formed.
- -The engines and generator were operated during survey at "no-wake speed".

-Engine zincs were not removed, fluid samples were not taken, and compression testing was not conducted.

Sails were not opened during survey.

- Vessel's rigging was not examined aloft.
- -This report does not include a rigging survey. —
- -Surveyor recommends that the rigging should be professionally surveyed by a qualified rigging professional.
- -No determination of stability characteristics has been made and no opinion is expressed with respect thereto.

# **Survey condition definitions:**

**Excellent (Bristol)** – As new or new condition. Repairs not required. Additional and/or custom equipment. Minimal or no wear.

**Very Good** – Exceeds average condition, with extra equipment and/or well maintained. Slight repairs may be required.

**Good (average)** – Average condition and/or equipment. No major repairs are required. May require normal scheduled maintenance.

**Serviceable-** Noticeably used but still fit for its intended purpose

**Fair**— One step below good or average and requires additional maintenance and repairs to bring into average condition.

**Poor**— System requires maintenance and significant repair in all areas in order to be put back into usable or serviceable condition.

#### NOTE:

Condition of all listed items range from very good to good, and operate as intended unless otherwise stated.

#### **SURVEY CONDITIONS:**

Weather: Cloudy & windy with periods of rain, 75°F-80°F Afloat: on 22 February 2022 at The Bluffs Marina, Jupiter, FL

Hauled: on 22 February 2022 at Seminole Marine, Palm Beach Gardens, FL

The vessel was not adequately sea-trialed due to inclement weather and extreme sea conditions on the day of survey.

#### **VESSEL INFORMATION:**

This vessel is a 2009, single diesel inboard pilothouse motor-sailer of modified vee bottom, modified full keel, transom-ended design and fiberglass reinforced plastic construction, with exterior pedestal and pilothouse steering and engine controls.

Builder: Nordhavn At: Ta Shing, Taiwan Year: 2009

Type/Model: Nordhavn 56 MS Accommodations: sleeps 4

Hull ID No: xxxxxxxxxx (sighted) Color: Grey Trim: white

USCG Documentation No.: xxxxxxx

Hull No.: xxxx

Hailing Port: Miami, FL

The hull was properly labeled with the name and homeport on the transom.

#### **DIMENSIONS:**

LOA: 57'5" LOA: 52'6" Beam: 16'7" Draft: 7' Ballast: 17,500 lbs.

Displacement: 95,000 lbs. (specs taken from Nordhavn sales document)

#### **CONSTRUCTION:**

- -Primary material: (FRP) fiberglass reinforced plastic mat and woven roving, resin and various core materials.
- -Support structure: 7 FRP longitudinal stringers and vertical web frames, transverse floors/bulkheads, located throughout, bonded to the hull with FRP tabbing. These were found to be sound, with no sign of rot or water damage.
- -Hull: Isopathalic gelcoat, vinyl ester resin, FRP mat and woven roving reinforcements.
- -Hull-to-deck joint: over-lapping double flanged hull-to-deck joint bonded with ½" mechanical fasteners and adhesive. Condition: good where sighted.
- -Superstructure: Klegecell cored FRP sides and Airex cored FRP roofing.
- -Decking: 1" end grain balsa cored FRP with non-skid mats, supported by bulkheads and longitudinal stringers.
- -Deck Fittings: thru-bolted stainless-steel with backing plates.
- -Thru-hulls: bronze ½ turn ball valves, thru bolted with backing plates

#### **INTERIOR**:

- -Decking: teak & holly
- -Overhead: textile headliner
- -Bulkheads- varnished hardwood
- -Windows/Ports: safety glass, with no apparent leakage
- -Salon furnishings- U-shaped settee w/fixed table stbd., bench settee, port
- -Staterooms- master and VIP with separate heads/showers
- -Galley- downstairs, starboard
- -Lazarette- below aft cockpit
- -Lighting- 24V/DC interior & exterior

#### **THROUGH HULL FITTINGS:**

- -Valve type: cast bronze \(^1\)/4 -turn ball type, (22) at or below waterline
- Condition: Operated and found in working order.
- -Valves and adjacent hoses and hose clamps appear to be in good condition unless otherwise described in **recommendations** or **notes** towards the end of this report.

#### **NAVIGATION EQUIPMENT:**

- -Compass: (2) spherical 5" Ritchie (pilothouse & pedestal)
- -Colregs Nav. Lights: red, green stern by Aqua Signal, Anchor and steaming lights
- -VHF radios: Furuno FM3000
- -Icom M504
- -Furuno FA50, Class B AIS system
- -Furuno 4kw radar w/ 3.5 open array antenna
- -(2) Furuno Navnet TZ touch 14" monitors w/ 3D C-map charts
- -Furuno Network sounder
- -Simrad AP28 autopilot w/ Accu-Steer HM 250 autopilot pump
- -Simrad wireless remote-control unit #WR20
- -Newmar 40-watt hailer
- -Furuno FI-501 & FI-503 wind display reported in-operable (masthead windex damaged)

#### **MACHINERY:**

- -The engines were only operated at no wake speed during survey due to speed restricted waters.
- -Engine zincs were not removed for inspection.
- -Analog engine hour meter shows 3019 hours.
- -Pumps, and other auxiliary machinery were in operable condition, unless otherwise reported in the **recommendations** or **notes** towards the end of this report.

-Engine: (1) Alaska Diesel Electric, Inc. - Lugger, L1066T model, Type: diesel, 6-cylinder, fresh water cooled, turbo charged, 4-cycle Displacement: 6.8 Liter Rated HP: 165 @ 2400 rpm (rptd.)

Serial Number: xxxx-xxxx

- -Foundation & mounts: fiberglass over hardwood stringers, Thru-bolted stainless steel flat-bar, lightly rusted, but serviceable
  - -Hoses/clamps: serviceable where sighted
  - -Exhaust: wet riser Double clamped: yes
    Muffler: Sundown Classic water drop exhaust silencer
- -Sea strainer: Bronze, Groco ARG2000-S
- Engine alarm: operational
- -Drive: inboard, direct drive, Twin Disc MG 5050 marine gear Reduction gear: 3:1 Serial Number: xxxxxx
- -Propeller shaft and propeller: Hundstead VP-4FR-ELC include a nibral, 4 blade, 36" propeller & hub, electric pitch control unit and a 2.95" stainless steel shaft. (see notes)
- -Stern tube bearings: (2) rubber cutlass, appear serviceable where sighted, minimal play noted.
- -Engine Controls: Pilothouse: dual-lever Teleflex- Morse Controls NB 31001-001 Twin S, dual lever at Edson Pedestal
- -Steering: hydraulic system by Kobelt Manufacturing Co.
- -Rudder: FRP, Skeg hung w bronze foot

Panel Instrumentation: Analog (1) each tachometer, water temp, oil pressure, alternator voltage, exhaust temp, turbo boost pressure, transmission pressure

Digital: Murphy Power View diagnostic module

Pumps: Electric: (1) primary- 24V Jabsco 10.8 gpm bilge with Ultra Safety Systems float, (1) 24V Rule 3700 gph high water bilge with Ultra Safety Systems float (pilothouse high water alarm: panel by Ultra Safety Systems)

(1) fresh water, (2) macerator, (2) 24V Whale Gulper 220 shower sumps

Manual: (1) Edson 638AL, mounted diaphragm bilge location: under cabin stairway, port

- -Engine Room Ventilation: natural
- -Bilge cleanliness: very clean
- -Fuel filters: 3- Racor
- Fuel transfer and polishing system (not tested)
- -Oil Change system: Reverso (not tested)
- -Propeller shaft glands: dripless packing-type, pedro hose was double clamped on both ends (In the interest of preventative maintenance, all hose clamps (4), packing material and the cooling water fitting was replaced with new while vessel was hauled for survey)

- -Side Power SP240-TCi, 24V, 15hp bow thruster Condition: serviceable
- -Side Power SP240TCi, 24V 15hp stern thruster Condition: serviceable
- -Side Power thruster remote control

#### **HULL BOTTOM:**

Bottom paint condition: appears to be in serviceable condition

# **ELECTRICAL SYSTEM:**

- -Circuits appear to have proper circuit protection with circuit breaker properly labeled.
- -The AC panels have a digital voltage and amperage meters, and main disconnects, and a power indicator light.
- -The 12V/DC panel has a main disconnect and main power indicator light.
- -The 24V/DC panel has a main disconnect main power indicator light and 6 digital status meters. Voltage, panel current, 12V panel current, battery current, engine alternator current, house alternator current.
- -The batteries have 9 battery isolation switches switch located lazarette, stbd. side.
- -Batteries are secured, ventilated, contained, and terminals are covered.
- -Batteries were not load-tested during survey; however, at the time of the survey 12/24V/DC systems were operational as general usage would demand, unless noted in the recommendations.
- -Bonding System: 2 copper bars, port & stbd. near waterline, tinned copper 6 AWG (green) wires connected to zinc anode plates.
- -Bonding system effectiveness not verified but it appears to be working as designed and Connections appear to be intact.
- -Wiring is non-metallic sheathed copper.
- -GFCI outlets are installed in all required places and have been tested operational.
- -Isolation transformer: (1)120/240VAC 60HZ to 240VAC 60HZ, Olsun Electric Corp. Cat# G512YY-0, 12 KVA, isolation transformer.
- Balance transformer: (1) 240VAC to 120VAC 60 HZ Olsun Electric Corp. Cat# 7.5HD-2-15-15SS power transformer
- -AC distribution panels: (1) 240V/60HZ ship service with ship service/shore voltage selector switch, (1) 240V/60HZ HVAC service, (1) 120V/60HZ inverter service

#### 12V/DC Batteries:

- (2) 12V Lifeline AGM 8-D, bow thruster batteries, (4/2019) (wired in series for 24V bank)
- (2) 12V Lifeline AGM 8-D, stern thruster batteries, (12/2015) (wired in series for 24V bank)
- (6) 12V Lifeline AGM 8-D, house batteries (12/2015) (wired in series for 3, 24V banks)
- (2) 12V Lifeline AGM 4-D engine (4/2019) (wired in series for 24V bank)
- (2) GPL31T Lifeline AGM generator batteries (12/2015) (wired in series for 1, 24V bank)
- (1) 12V AGM com battery (5/2018)
- -Inverter/charger: Outback Power Systems VFX 3524, 24V, 3.5 KW, invert & pass thru modes
- -Battery charger: Newmar PT95U, 95 amp
- -Shore power connection: , 2-50Amp, 1-30amp connections, (2) 240VAC 60HZ, (1) 120/VAC, Location: starboard transom.

Shore power accessories:

- (1) 50 Amp Marinco shore power cord
- (2) 30 amp Marinco shore power cords
- (2) 50 to 30 amp Marinco shore cord adapter
- (2) 30amp to 50 amp reverse "y" adapters
- -Generator: (1) Northern Lights 12KW/120V

Model: M843NW2 Serial No.: xxxxxxx

Engine: diesel, naturally aspirated, 3-cylinder, 4-stroke

- -Analog hour meter shows 2858 hours
- -Auxiliary generation: (1) 24V/DC,175 amp engine mounted alternator

#### **TANKS AND HEADS:**

- -Tank deck fill fittings are labeled.
- Liquid leakage above the tank level cannot be detected in slack tanks.
- -Tanks are not fully accessible for inspection, and surveyor cannot speak as to their condition, but they do not appear to leak at this time.
- -Fuel tanks: (3) Fiberglass Capacity: 800 gallons total (owner's man.)

Located: aft of engine room port / starboard and day tank under aft berth

Vented: to atmosphere Filling Lines: to deck Fuel supply plumbing: fuel lines were all proper USCG type A hose.

-Water tanks: (1) Fiberglass Capacity: 250 gallons total (owner's man.)

Located: under galley

-Holding tanks: (1) fiberglass Capacity: not determined

(Tank Watch 4 black water monitoring system)

-Heads: (2) electric, freshwater marine sanitation devices

-Other Tanks: (1) 11-gallon Atwood electric water heater

## **GROUND TACKLE:**

-Primary anchor: Aritex 105 lb. stainless-steel anchor stowed on bow, with 400' 3/8 high test chain rode

Bitter end: not observed (see notes) Condition of chain: fair

-Secondary: Delta w/ 30Ft' chain and nylon rode

-Winch: Maxwell VWC 3500, 24V, vertical anchor capstan winch

-Stainless steel double anchor chock

#### **RIGGING AND SPARS:**

- -From examination on deck, the rigging appears to be in good condition.
- -Rig: Masthead sloop
- -Mast: 74Ft' extruded aluminum keel stepped double spreader mast by Forespar Corp.
- -Boom: 23'9" aluminum by Forespar Corp. with Forespar Leisure Furl in-boom hydraulic furling system and a Navtec 850A hydraulic boom vang.
- -Roller furler: Harken, hydraulic assisted

#### -Winches & Controls:

24V Lewmar Commander 400 power pack (fwd engine room stbd.)

Mainsail & Headsail hydraulic halyard winch – Lewmar 48 HST (fwd. stbd of mast)

Main sheet hydraulic winch- Lewmar 54 HST (lower mast)

Genoa sheet hydraulic winches- Lewmar 54 HST (p&s outboard of pilothouse)

Gennaker sheet hydraulic winches- Lewmar 54 HST (p&s aft cockpit)

Halyard manual tensioner winch- Lewmar 8 (inboard of hydraulic mainsail & head sail winch)

Halyard manual backup winch- Lewmar 48HST (lower mast)

Manual winch handle #: 29141111 (10'in alloy lock-in)

#### -Hardware:

Mainsheet blocks: Lewmar Synchro # 29921051 (3 on boom)

Lewmar # 2990 1802 (1 on pilothouse roof)

Genoa track: 8' Lewmar "T" track 2916 6424 w/ end stops (Lewmar #29172016)

Genoa Car: Lewmar #29043702 size 3 Jib & mainsheet cleats: 8" Hirschoff

-Standing rigging: 1/19 stainless steel wire Condition: good where sighted (deck level only)

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-Running rigging: dacron Condition: serviceable

-North sails include: 8.5oz full batten main, 130% cruising Genoa w/ UV leech & foot

Norlon 150 % asymmetrical Gennaker

Condition of sails: good

#### **GALLEY EQUIPMENT:**

-Stove: 3 burner, Force 10, 63356 model, gimballed w/sea rails

-Shutoff Solenoid/fume detector: Xintex S-2A fume detector/valve control panel

- -Refrigeration: built-in 120V/AC, U-line refrigerator & freezer in galley, U-line freezer in lazarette
- -GE microwave and trash compactor
- -Stainless steel single sink
- -600 GPD reverse osmosis water maker

#### **SAFETY & POLLUTION:**

-Portable Fire Extinguishers: (6) rechargeable Test Date: June 2019 (see recs) Mounted conspicuously: yes

#### -Safety reminder:

(The following pertains to the handheld dry chemical fire extinguishers onboard.

They must be conspicuously installed, and located as described in ABYC 4.6.3

They must be inspected monthly per ABYC A-4 Ap.5.4.1.

They must be serviced annually per ABYC A-4 Ap.5.4.2.

Rechargeable extinguishers must be recharged or replaced after discharge, or each 6 years per NFPA 10/7.3.3.1.

Nonrechargable handheld dry chemical extinguishers as defined by NFPA 10/A.3.4.2. must be replaced after discharge, or every 12 years per NFPA 10/7.3.6.3.)

-Safety railing: 2 course stainless steel foredeck handrails, and stainless-steel deck grabrails

#### -Personal Flotation Devices:

Throwable: (1) life ring Stowed: in lazarette

Wearable: (see recs)

#### -Life Rafts & EPIRBS:

Global FIX Pro EPIRB: reg.number xxxxxxxxx

Oceanmaster 6 man life raft\* (expired)

\*There are no service interval requirements for liferafts on pleasure vessels. Most manufacturers recommend service at one-year intervals. Most servicers recommend an interval of not greater than three years.

-Distress Signal Kit: yes Expiration: current (2023)

-Horn / Sound Signal: yes

-First Aid Kit: yes.

-Oil placard present: yes

-Garbage (MARPOL Annex V) placard present: yes

-Escape hatches: (4) alloy and acrylic on foredeck

-Smoke detectors: yes

#### **TENDERS:**

210, Aquapro DMOR1101 model, serial #xxxxx, 11 ft 5 in rigid (aluminum) inflatable, Hull ID no. xxxxxxxxxxx with 20 hp Honda outboard.

Condition: dinghy appears serviceable (motor not started)

## In addition to the above listed equipment, the vessel is also fitted with:

Teak cockpit deck aft

Magma LPG ss BBQ grill

Brownies Huka System w/ electric Compressor with 120' hose (2-20' hoses, 2-40' hoses and 2 regulators)

Life lines/harness (x2)

Exterior canvas window covering

Stidd "Admiral" helm chair

Raymarine CCTV cameras (cockpit, engine room)

Sirius satellite radio and Sirius satellite weather

Fresh and salt water washdowns

Airtex TV lift

Samsung 40" & (2) 32" LED flatscreen TV's

4 Cruiseair, air conditioning units w/ SMX controls

Granite counter tops

Aft deck galley station w/ sink & refrigerator and electric BBQ grill

Intellian i4 US marine satellite system

DirecTV H24 HD satellite and receiver

Bose entertainment system

Fore and aft deck speakers

Newmar 40-watt hailer/horn

Asko washer and dryer

Spare filters and engine impellers

Stainless-steel dorade vents (x2)

Spreader lights

LED deck & running lights

Fenders and docking lines

#### **OPERATIONAL TESTS:**

No indicates that the item was not tested. Yes indicates the item was tested and operational, unless there is an associated recommendation or note. "Yes" items listed in this report were tested for proper operation at time of survey ONLY. Surveyor's report of the operability of machinery, auxiliaries and subsystems is not a warranty of the continued operation or durability of the equipment tested. Operability testing does NOT include calibration, adjustment or repair of equipment. Only the items listed in this section of the report were tested for operation.

VHF – yes

Bilge pumps – yes

Check for window leaks? – yes

Check for hatch leaks? – yes

Check for mast boot leaks? – yes

Anchor winch – yes

Stereo Entertainment electronics – yes

Navigation lights – yes Stove – yes

Cabin lights – yes

Spreader lights – yes

Sailing Winches – yes

Air conditioning – yes

GPS – yes

Radar – yes

Microwave oven – yes

Refrigerator – yes

Water heater – yes

Watermaker – no

Washer/dryer – yes

Head flush – yes

Depth sounder – yes Accessible through-hull valves – yes

Autopilot – yes

Bow & stern thrusters – yes

Shower sump pump – yes

Electric fresh water pump – yes

#### **CONCLUSIONS, NOTES, SUGGESTIONS AND RECOMMENDATIONS:**

The vessel's overall condition is **very good** 

(**Very Good** –Exceeds average condition, with extra equipment and well maintained. Slight repairs may be required.)

- -Housekeeping and general appearance are very good.
- -The vessel is well equipped for her size and type.
- -The hull topsides and weather deck have small areas of minor scratching/scuffing and small gelcoat nicks and chipping as expected with age and intended use.
- -The topsides and deck appear to be in good structural condition.
- -The deck was tested by percussion testing (as appropriate) with no soft deck noted.
- -The hull bottom was tested by percussion testing only, as appropriate; no notable anomalies were detected at that time (Note that the hull bottom cannot be tested in the way of the lifting slings.)

From examination afloat of accessible areas, this survey has found the vessel to be in sound structural condition insofar as sufficient structural strength remains. However, it should be appreciated that given the nature of materials, dismantling may reveal deterioration .

With recommendations complied with this vessel is suitable for its' intended purpose of coastal cruising.

# **VALUES:**

MARKET: \$825,000.00 to \$910,000.00

**REPLACEMENT: \$2,000,000.00** 



#### **Boat Detail Sheet**

NORDHAVN, DANA POINT, CA (MIC: PAI) PACIFIC ASIAN ENTERPRISES			
Model Year	2009	Hull Material	Fiberglass
Model	NORDHAVN 56 MS	Hull Configuration	Keel
Length Overall	57' 5"	Draft	6'
Length On Deck	57' 5"	Beam	16' 7"
Boat Type	Motorsailer- Plths-Only   Sloop Rig	Weight	70410 lbs.
Engine Type	Inboard Single 165D Alaska Diesel Electric/Lugger LUG 1066T		

Current Retail Value Range	\$763,500-\$839,000 120th edition.
Fair Market Value Adjusted for Better Condition in the South Atlantic & Florida	\$828,000-\$910,000

Replacement Value

\$1,825,000

All prices in US Dollars.

VALUATIONS ARE THE OPINION OF THE SURVEYOR, AND ARE INTENDED TO BE USED FOR INSURANCE OR FINANCING PURPOSES ONLY; THEY ARE NOT INTENDED TO INFLUENCE THE PURCHASE OR PURCHASE PRICE OF THE SUBJECT VESSEL. The surveyor has no interest in the vessel, financial or otherwise. Valuation is primarily determined by comparison to comparable vessels listed in the SoldBoats.com database, but may also be derived from consultation with manufacturers or knowledgeable boat brokers, personal experience, current listings of boats available for sale, and commercial boat value guides such as the BUC ValuPro and NADA online price guides. Current local market values may vary widely from such valuation resources due to current local market conditions. The term "Market Value" is defined by Uniform Standards for Professional Appraisal Practice (USPAP) standards.

#### **NOTES and DEFICIENCIES:**

- 1. Hoses on all systems were of the required type and in good condition where visible, unless noted in the recommendations.
- 2. The holding tank discharge pump and through-hull valve were not tested, due to the vessel's position in MARPOL-restricted waters.
- 3. The bitter end of the anchor rode should be verified as being connected to the vessel.

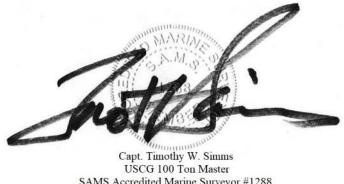
#### **SUGGESTED UPGRADES (at the owner's discretion, not required):**

- 1. Surveyor suggests that the engines should be professionally surveyed by a qualified marine engine technician.
- 2. A fixed fire extinguishing system should be installed in the engine and generator spaces.
- 3. Oil absorbent pads should be placed in the bilge under main engines.
- 4. A set of soft wood plugs should be maintained on board to plug any damaged through hull fittings in an emergency.
- 5. Batteries should have circuit protection within a distance of seven inches of the battery per ABYC 11.10.1.1.1.

#### **RECOMMENDATIONS:**

- 1. Minor prop shaft pitting was sighted forward of packing gland. Due to the length of the shaft (18ft) and restricted access, surveyor could not inspect entire shaft. Investigate and repair if deemed necessary.
- 2. The galvanic isolator light was intermittently illuminated. Diagnose and repair as needed.
- 3. The anchor chain is in fair condition. (moderately rusted) Renew or replace if deemed necessary.
- 4. A transmission cooler fitting is moderately corroded. Clean, evaluate and renew or replace as needed.
- 5. Minor corrosion was sighted on the lower portion of the mast. Monitor frequently.
- 6. Some of the handheld fire extinguishers currently aboard are due for annual inspection. (ABYC A-4 Ap.5.4.2.) (tags say last inspected in June 2019).
- 7. One type I, type II or type III PFD must be onboard for each person on board in accordance with 33CFR175.15.
- 8. PFDs on board must be stowed where they are ready for immediate use in accordance with 33CFR175.15.
- 9. The throwable floatation device (life ring) was stored in the lazarette. This item must be conspicuously mounted to comply with USCG regulations.
- 10. The vessel is equipped with smoke detectors. In the interest of additional safety, the installation of combination CO/smoke alarms is recommended.
- 11. The anchor shackle must be moused.
- 12. Title 33 CFR 151.57 requires all oceangoing vessels 40 feet or more in length equipped with a galley and berthing to have a written waste management plan.
- 13. The Propane tanks must be secured for sea conditions.

This survey report is issued without prejudice subject to the conditions that I, the individual surveyor, am under no circumstances to be held responsible for error, omission, negligence or misstatement. It constitutes a statement of my opinion based upon the conditions as I found them. It is **not a warranty** of the condition of the vessel or its hull or machinery.



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