

NAUTICAL SERVICES, INC.
MARINE SURVEYOR AND CONSULTANT

2011 Viking 70' Convertible
"Reel Fire"



MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

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Report of Marine Survey

Of The Vessel

"Reel Fire"

2011 Viking 70' Convertible

Conducted by
Nautical Services, Inc. Dennis Heine / A.M.S

PREPARED EXCLUSIVELY FOR:

Mr. Chris Ferrara

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I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of Mr. Chris Ferrara, the attending surveyor did attend onboard the Viking 70' Convertible "Reel Fire" motor vessel beginning on, 6/24/2015 @ 0900 hrs where an "out-of-water survey" was conducted at Gulf Shores, AL. The Hull Identification Number VKY70701H011 was also verified from the vessels starboard aft quarter. The reason for the survey, was to ascertain the physical condition and value of the vessel. Moisture readings taken and referenced if applicable throughout the body of the report, were taken with the Electrophysics GRP33 Moisture meter. AC and DC power WAS used to check operation of the electrical systems specified in this report only. No reference or information should be construed to indicate evaluation of the internal condition of the engines or the propulsion system's operating capacity. Electronic equipment was checked for "power up" and operation only.

This vessel was surveyed without removal of any parts, including fittings, tacked carpet, screwed or nailed boards, anchors and chain, fixed partitions, instruments, clothing, spare parts and miscellaneous materials in the bilges and lockers, or other fixed or semi-fixed items. Locked compartments or otherwise inaccessible areas would also preclude inspection. Owner is advised to open up all such areas for further inspection. Further, no determination of stability characteristics or inherent structural integrity has been made and no opinion is expressed with respect thereto. This survey report represents the condition of the vessel on the above dates, and is the unbiased opinion of the undersigned, but it is not to be considered an inventory or a warranty either specified or implied.

CONDUCT OF SURVEY:

THE MANDATORY STANDARDS PROMULGATED BY THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CODE (USC); TITLE 33 AND TITLE 46, CODE OF FEDERAL REGULATIONS (CFR), AND THE VOLUNTARY STANDARDS AND RECOMMENDED PRACTICES DEVELOPED BY THE AMERICAN BOAT AND YACHT COUNCIL (ABYC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAVE BEEN USED AS GUIDELINES IN THE CONDUCT OF THIS SURVEY.

The use of the word "appears" is intended to indicate that a close or complete inspection was not possible or it was not deemed appropriate at the time of this survey. The deficiencies reported herein reflect the conditions observed at the time the survey was conducted.

Use of asterisks * in the body of the report will indicate that a finding will be listed in the *Findings and Recommendations* section pertaining to the asterisked item, following the body of the report.

II. GENERAL INFORMATION

GENERAL INFORMATION

FILE NUMBER: 70015C
SURVEY PREPARED FOR: Mr. Chris Ferrara

NAME OF VESSEL: "Reel Fire"
TYPE OF SURVEY: Condition and Value
OVERALL VESSEL RATING: ABOVE AVERAGE
ESTIMATED MARKET VALUE: \$4,000,000.00
ESTIMATED REPLACEMENT COST: \$7,000,000.00
YEAR/MAKE/MODEL OF VESSEL: 2011 Viking 70' Convertible
BUILDER: Viking Yachts
YEAR BUILT: 2010
MODEL YEAR: 2011
MODEL OF VESSEL: Convertible Sport Fishing
HULL IDENTIFICATION NUMBER (HIN): VKY70701H011
USCG DOCUMENTATION NUMBER: 1231073 No "official number placard sighted"
Affix placard per USCG requirements".
PLACE OF SURVEY: Gulf Shores, AL
DATE/TIME OF SURVEY: 6/24/2015 0900 hrs
HULL MATERIAL: FRP (Fiber Reinforced Plastic)
HULL TYPE: Modified-V, planing type, with flared bow,
raked stem, hard chines, prop pockets and 15
degrees of deadrise aft.

LENGTH OVER ALL (L.O.A.): 75' 2" (as reported)
(L.O.D) LENGTH ON DECK: 70' 11" (as reported)
BEAM: 19' 7" (as reported)
DRAFT: 5' 6" (as reported)
DISPLACEMENT: 123,876 lbs.
PROPULSION SYSTEM: Two (2) MTU Diesels
FUEL TYPE: Diesel.
FUEL CAPACITY: 2600 Gallons. (as reported)
AC POWER: 120/240 volt.
DC POWER: 12/24 volt.
FRESH WATER CAPACITY: 370 gallons (as reported)

DEFINITION OF TERMS

The terms and words used in this report have the following meanings as used in this *Report of survey*:

APPEARS:

Indicates that a very close inspection of the particular system, component or item was not possible due to constraints imposed upon the surveyor (e.g. no power available, inability to remove panels, or requirements not to

II. GENERAL INFORMATION

DEFINITION OF TERMS: *(continued)*

conduct destructive tests).

FIT FOR INTENDED USE:

Use which is intended by Survey Purchaser (present or prospective owner).

SERVICEABLE: ADEQUATE:

Sufficient for a specific requirement.

POWERS UP:

Power was applied only. This does not refer to the operation of any system or component unless specifically indicated.

EXCELLENT CONDITION:

New or like new.

ABOVE AVERAGE CONDITION:

Above average for the year model vessel. Generally in very good condition with upgraded components and/or electronics.

AVERAGE CONDITION:

Average, with only minor discrepancies or deficiencies noted.

FAIR CONDITION:

Denotes that system, component or item is functional as is with minor to moderate repairs.

POOR CONDITION:

Unusable as is. Requires repairs or replacement of system, component or item to be considered functional.

USE OF *:

Use of * in the body of this report will indicate that a finding will be listed in the *"Findings and Recommendations"* section pertaining to the * item.

Asterisks * in this General Information section refers to the source of such information as follows:

*** Per Manufacturer's Specifications**

**** Refer to Summary and Valuation Section**

***** Per USCG Documentation**

****** Per Buc Book**

Other sources include, but are not limited to:

Buc

Abos

Powerboat Guide

Soldboats

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE: Modified-V, planing type, with flared bow, raked stem, hard chines, prop pockets and 15 degrees of deadrise aft.



HULL#

MATERIAL: FRP (fiber reinforced plastic)

EXTERIOR HULL: Dark Blue gelcoat with White boot top.



HULLSIDE

BULKHEADS: Athwartships reinforcement enhanced by wood bulkheads bonded and tabbed to the hull with FRP (fiber reinforced plastic). Intact and serviceable where sighted.

STRINGERS: Hull stiffness provided by FRP foam filled longitudinal and transverse stringers. Complete inspection not possible due to limited access. Intact and serviceable where observed.

TRANSOM: Reinforced, FRP Transom and (tuna door) to port. Intact and serviceable.

BILGE: (Below decks) bilge provided good to very good appearance and maintenance.

CHAIN LOCKER: The chain locker is forward with an access hatch at the foredeck and stowed "Fortress" Anchor and rode. Intact and serviceable.

LIMBER HOLES: Limber holes are of adequate size and clear where sighted.

DECK CONSTRUCTION

TYPE: FRP (fiber reinforced plastic) construction Baltek cored with white non-skid surface at the foredeck and bridge. Intact and serviceable.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

DECK CONSTRUCTION (continued)

* TYPE: (continued)



FOREDECK AFT

MATERIAL: Cored FRP (fiber reinforced plastic) with white gelcoat, molded non-skid surface.

* **COCKPIT:** [C1] FRP (fiber reinforced plastic) with white gelcoat and teak mezzanine deck system style cockpit with a live-well in the starboard aft quarter and transom, ice hold to port, freezers and storage at the mezzanine deck, tuna door with security latch to port, and tackle station forward to port, lazarette access hatch on-center aft, and an engine room access hatch on center forward. Intact and in serviceable condition.



TACKLE CENTER



CRACKED FRAMEWORK

HULL-TO-DECK JOINT

TYPE: Hull has overlap type laminated flange for the deck joint. Intact and serviceable where sighted.

DECK FITTINGS

TOE RAILS: Molded 5" FRP (fiber reinforced plastic) toe rails, part of deck layup. Intact and serviceable.

VENTILATION: Provided by hatches topsides and deck. One (1) Bomar hatch at the foredeck for egress and ventilation. Intact and serviceable.

SCUPPERS: Decks drain overboard and through aft deck drain system and scuppers.

CHOCKS AND CLEATS: Cleats intact with appropriate chocks. Intact, secure and serviceable.

WINDLASS/GIPSY: Windlass "Lewmar" with foot switches. Intact and operable.

DECK SURFACE: White gelcoat with molded in non-skid. Condition is intact and serviceable.

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

DECK FITTINGS *(continued)*

DECK HATCHES: One FRP engine room lift deck hatch, FRP and teak lazerette deck hatch's at the cockpit deck sole, and multiple storage lockers. intact and serviceable.

GRAB RAIL: Tower framework and painted aluminum rails and stanchions along main cabin and vessel perimeter for hand holds. Intact, secure and adequate.

ANCHOR PLATFORM: Stainless steel anchor hold. Intact and serviceable.

SUPERSTRUCTURE

MATERIAL: Cabin house and deck are one unit molded FRP (fiber reinforced plastic) and cored. Intact and serviceable.

WINDOWS/PORTS/DOORS: Large fixed windows on the sides and forward cockpit, One (1) FRP auto/electric sliding entrance hatch to the saloon. Intact and serviceable.

SUPERSTRUCTURE HOUSE TO DECK JOINT: Molded F.R.P and Gelcoat. Intact and in serviceable condition.

BRIDGE & TOWER

TOWER: Palm Beach Aluminum welded framework and superstructure with engine controls and digital RPM displays, wrap around coaming pads, bench seat, hard top and electronics. Intact and in serviceable condition.



OVERALL TOWER

- * **BRIDGE:** [B1] Flybridge provides a pod style helm station with protected recessed electronics, radios and switches with digital engine displays, steering and single lever throttle/clutch controls. The helm station exhibits no apparent or unusual visual restrictions to the operator and provides an overhead electric operated drop down electronics locker, three (3) "Murray Brothers" helm chairs and bench style crew seating with storage lockers, molded-in sink basin with on center forward freezer and white canvas and Isinglass.



LID SHOCKS DEGRADED



BRIDGE FWD

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

BRIDGE & TOWER (continued)

* BRIDGE: (continued)



BRIDGE AFT

SEATS: Three (3) High gloss wood and stainless steel "Murray Brothers" helm seats with multiple FRP fixed bench seats with white vinyl cushions. Intact and serviceable.

SAFETY RAIL SYSTEM: Welded aluminum aft deck stanchions and safety rails with rocket launchers. Intact and serviceable.

LIGHTING: Recessed LED multi-color overhead lighting. Intact and operable.

ADDITIONAL EQUIPMENT AND ACCESSORIES

- * **ACCESSORIES:** [B2, B3] 1. Two (2) "Glendinning" CM-7 24 VDC shore power Cablemaster units Serial#'s 724G11673M & 724G11828M. Intact and operable.
2. Two (2) deep freezers located: in the forward cockpit and forward flybridge.
3. One (1) central vacuum system. Intact and operable.
4. One (1) set "Ariston" washer and dryer. Intact and operable.
5. KVH "Tracvision" Intact and operable.
6. "Eskimo" ice machine Model# E1540D-230 Serial# 31998428. Intact and operable.
7. Bow thruster "Side Power" 24V Serial# 8917070. Intact and operable.
8. "Closed Circuit TV".
9. "WillyVac" system.
10. "Badger" garbage disposal. Model 1-83 Serial# 10021683919. Operable.
11. Four (4) "Ocean" LED transom underwater lights. Intact and operable.
12. "FLIR" thermal imaging.



OVERALL



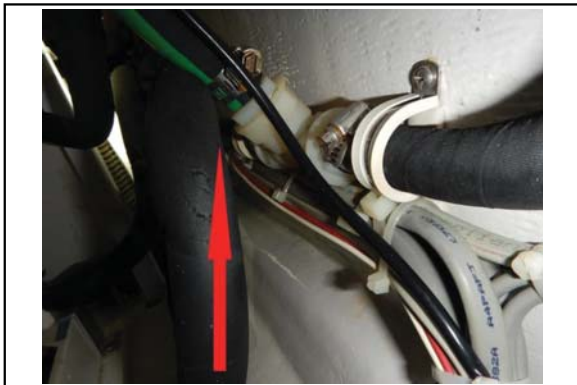
REPAIRED AREA

III. SYSTEMS

HULL DECK AND SUPERSTRUCTURE

ADDITIONAL EQUIPMENT AND ACCESSORIES *(continued)*

* ACCESSORIES: *(continued)*



DEGRADED HOSE



DEGRADED HOSE

CANVAS AND COVERS: White canvas cockpit cover and bridge canvas with Isinglass. Intact and serviceable. Excellent condition.

FENDERS: Normal and customary for size and type vessel.

DOCK LINES: Normal and customary for the size vessel.

SPREADER LIGHTS: The vessel exhibits three (3) spreader lights, two (2) aft, and one (1) forward. Intact and operable.

FISHING EQUIPMENT

FIGHTING CHAIRS: One (1) cockpit pedestal mounted "Murray Brothers" Fighting chair. Intact and serviceable.

LIVE BAIT WELLS: The vessel exhibits a live-well at the stbd aft quarter cockpit deck sole and centerline transom. Intact and operable.

WASH DOWN SYSTEM: The vessel exhibits fresh and raw water wash downs.

FISH BOX(S): The vessel exhibits fish box's aft in the cockpit sole. Intact and serviceable condition.

OUTRIGGERS: The vessel exhibits "Rupp" anodized aluminum "Rupp" hydraulic actuated quad spreader outriggers with two (2) "Miya Epoch" US-9R 24 VDC Teaser reels, and one (1) center rigger. Intact and serviceable.

TUNA TOWER: The vessel exhibits a Palm Beach aluminum pipe welded tuna tower with helm recessed electronics, steering, throttle/clutch controls and RPM digital gauges, hard top with recessed lighting and bench seating. All was well fitted and in excellent condition.

MAIN CABIN / SALOON

INTERIOR DESCRIPTION:

JOINERY AND FINISH: The joinery and finish of the interior was nicely fitted where sighted.

III. SYSTEMS

MAIN CABIN / SALOON

INTERIOR DESCRIPTION: *(continued)*

* JOINERY AND FINISH: *(continued)*



MAIN CABIN FWD

CABIN BRIGHT WORK: The satin gloss varnish finish on all wood doors and trim exhibited a very good condition.

INTERIOR BULKHEADS: Nicely fitted where sighted.

STORAGE AREAS: The cabinets, lockers, drawers, and shelving were well crafted and finely fitted where sighted.

HEADLINERS: Headliner material in the berth's and main cabin is intact and in serviceable condition.

DOORWAYS: Wood cabin and head doors throughout vessel. Intact and serviceable.

FABRIC AND CUSHIONS: Misc. brown and multi colored fabrics for dinette, saloon and berths. Intact and in serviceable condition.

FLOOR AND WINDOW COVERINGS: Floor coverings are carpet in the saloon and "Amtico" floor system for the cabins, saloon and galley. Intact and in serviceable condition.

HEADS: Four and a day head 4 1/2 - "Headhunter" electric flush. Intact and serviceable. The MSD (Marine Sanitation Device) is a type III.

SHOWERS: There are stand up shower enclosures in each full head, all drain to respective greywater sumps. Intact, operable and serviceable.

FAUCET FIXTURES: The faucet fixtures and sinks were operable in heads, galley, cockpit and bridge.

LIGHT FIXTURES: Misc. recessed LED multi-color recessed lighting and closet and below deck automatic lights throughout the vessel. Intact and operable.

AIR CONDITIONING UNITS: Cruise Air chilled water system, and digital controls. Intact, serviceable and operable.

CABIN HEATING: Reversible Cruise air system for heat.

TELEVISIONS: Five (5) total, "Samsung" flat screens. All intact and operable.

STEREO, ETC.: Bose Home theater, "Sole" DVD players and "Fusion" exterior system. Intact and operable.

GALLEY

LOCATION: Port side main cabin with Corian counter tops and three (3) bar stools pedestal mounted at Corian countertop island.

III. SYSTEMS

MAIN CABIN / SALOON

GALLEY (continued)

* LOCATION: (continued)



OVERALL GALLEY



OVERALL GALLEY

SINKS: Molded-in stainless steel with Corian counter tops. Intact and serviceable.

REFRIGERATION: Three (3) two drawer 700BR & 700BF "Sub Zero" Refrigerator/Freezers. Intact and operable.

STOVE/OVEN: Four (4) burner "Kenyon" electric surface mounted cooktop - Intact and operable.

ACCESSORIES: 1. One (1) "Kenmore" Elite three cycle clear ice maker. Intact and operable.

2. One (1) "Kenmore" trash compacter. Intact and operable.

SINK ACCESSORIES: The galley exhibits a "Badger" Disposal and "Franke" Insta Hot water dispenser. Intact and operable.

COUNTERTOPS: The vessel exhibits polished Corian counter tops. Intact and in serviceable condition.

PROPULSION

MAIN ENGINES

TYPE: Two (2) Diesel.



ENGINE ROOM CTR AFT



PORT ENG ROOM

III. SYSTEMS

PROPULSION

MAIN ENGINES (continued)

* TYPE: (continued)



STBD ENG ROOM

MANUFACTURER: MTU

MODEL: 2009 16V2000CR

SERIAL NUMBERS: Port - 516100166 Stbd - 516100167



PORT ENG DATA



STBD ENG DATA

HORSE POWER: 2600

INDICATED HOURS: Port - 2966 Starboard - 2963



PORT ENG HOURS



STBD ENG HOURS

III. SYSTEMS

PROPULSION

MAIN ENGINES (*continued*)

THROTTLE CONTROLS: "MTU". Intact and serviceable.

EMERGENCY SHUT DOWN: At helm and engine room.

ENGINE MOUNTS AND BED: Main engine beds consists of longitudinal I-beam stringers inboard and outboard. Adjustable motor mounts are bolted to the steel I-beam stringers, and the motor mounts to engine. The mounts and engine beds are intact and serviceable.

LUBRICATION: Level and Condition: Appears serviceable. Filters: Engine mounted spin on/off canister type filters.

VENTILATION: Natural, flow ventilation provided by hull vents. Intact and adequate.

ENGINE ROOM BLOWERS: Four (4) "Delta T systems" Power blowers. Natural, flow ventilation provided by hull vents. Intact and adequate.

EXHAUST SYSTEM: The engine exhaust discharges to stainless elbows to FRP down stream collectors, which transitions aft via spun FRP to flexible connectors to O/B thru-hull discharge outlets. Intact and serviceable.

LUBE TRANSFER: "Leeson" oil transfer pump and manifold. Intact and serviceable.

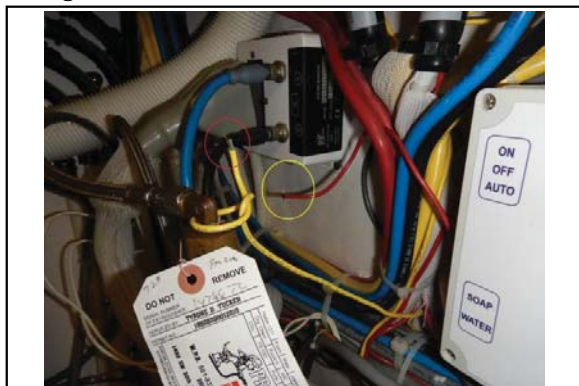
FUEL TRANSFER (PUMPS): "Leeson" fuel transfer and primer pumps. Intact and serviceable.

PROP SHAFTS: 4" S/S propeller shafts. intact and serviceable.

ENGINE SHUT DOWN: Helm and engine room.

STUFFING BOX: "Tides" Dripless seals. intact and serviceable.

* **OTHER:** [B4] The port forward engine space at the fixed fire suppression cascade bulkhead exhibits open-ended wiring/conductor.



OPEN ENDED WIRING

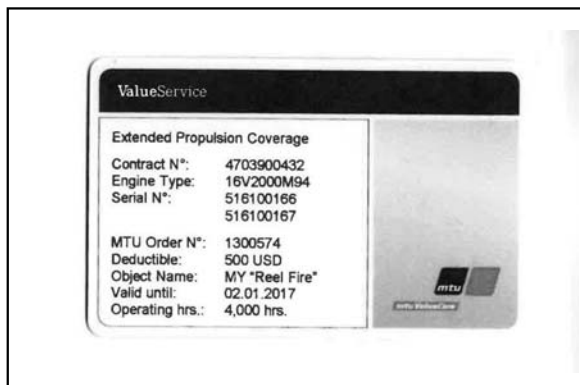
ENGINE WARRANTY: The vessel's MTU engine's have an extended warranty to 4,000 HRS or until 02/01/2017, whichever comes first.

III. SYSTEMS

PROPULSION

MAIN ENGINES (continued)

* ENGINE WARRANTY: (continued)



WARRANTY DATA

COOLING SYSTEM

TYPE: Freshwater heat exchanger internal cooling with raw water cooled wet exhaust.

RAW WATER STRAINERS: Hull external strainers. Intact and serviceable.

COOLANT LEVEL: Normal level observed.

HOSES AND CLAMPS: Double clamped where sighted. Intact and serviceable.

BELTS AND PULLEYS: Belts condition appeared intact.

SEACOCKS: Groco bronze ball valve raw water seacocks. Intact and operable.

EMERGENCY BILGE PICK-UPS (ENGINE): Emergency bilge pick-ups with gate valves. Intact and operable.

TRANSMISSIONS

TYPE: Straight line.

MANUFACTURER: "ZF"

MODEL: ZF 3070

DRIVE TYPE: In-Line

SERIEL: Port - 50029020 Stbd - 50029019



STBD GEAR DATA



PORT GEAR DATA

III. SYSTEMS

PROPULSION

TRANSMISSIONS (*continued*)

GEAR RATIO: 2.773:1

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE: Diesel.

MATERIAL: FRP (fiber reinforced plastic) integral. Intact.

NUMBER OF TANKS: Three (3)

TANKS CAPACITY: 2600 Gallons total. (as reported)

MANUFACTURING LABEL: Sighted

FILL PIPE MATERIAL: USCG Type A2. Intact where sighted.

HOSE CONNECTIONS, CLAMPS: Double clamped and intact where sighted.

FUEL LINES AND FITTINGS: "Aeroquip". Double clamped and intact where sighted.

RETURN LINES: "Aeroquip". Double clamped and intact where sighted.

SHUT-OFF VALVE: Ball valves at tanks, filters and manifold. Intact and serviceable.

FUEL FILTERS: Dual "Racor", and Separ fuel polisher with "Algae-X". Intact and serviceable.

FILTER/FUEL CONDITION: Intact, clear and serviceable.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE: 12/24 volt system.

BATTERIES: Eight (8) "Odyssey" Group 31 1150 CCA batteries in the engine space aft, and two (2) "Odyssey" group 31 1150 CCA on the bridge. Intact and serviceable. (In-service dates May, 2014)

MAIN BATTERY SWITCHES: Rotary vapor tight. Intact and serviceable.

PANEL: Overcurrent Protection: Breaker type fuses, circuit breakers and "Moritz Octoplex" digital monitoring/operating system. Location: side cabinet port side Saloon and bridge. Access: Serviceable.

BREAKERS/FUSES: Nine (9) individually marked low voltage toggle breakers, and three (3) momentary at the saloon panel, Fourteen (14) toggle breakers with twenty (20) push to reset type including spares at the bridge panel with two (2) "Octoplex" panels. Intact and serviceable as sighted.

TYPE CONNECTORS: Round Lugs: Captive type, where sighted. Condition: Intact and serviceable.

ROUTING/SUPPORT: Well routed, supported and secured where sighted.

CHARGING SYSTEM: Alternators on main engines and generator. Intact and serviceable.

CHARGING SYSTEM (BATTERY CHARGER): Two (2) "Master Volt", one (1) 24/60-3, one (1) 24/100-3 chargers in the engine space, and one (1) 24/100-3 at the bridge. Intact and serviceable.

ELECTRICAL SYSTEM (A.C. SYSTEM)

SHORE POWER INLET: Forward cockpit. Intact and serviceable.

SHORE POWER CORD: Cord: Two (2) : 125/250 volt. Condition: Appears in good condition. intact and serviceable.

AC SOURCE SELECTOR SWITCH: Manual selector switch for shore or ship power. Location: Main panel.

BRANCH BREAKERS: Number: Six (6) 120/240 Volt double throw individually switched branch breakers and six (6) push to reset at the main panel and "Moritz "Octoplex" at the main electric panel.

CIRCUIT LOAD MONITORS: "Moritz Octoplex" at the main electric panel.

III. SYSTEMS

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (A.C. SYSTEM) *(continued)*

WIRE TYPE (SIZE AND RATING): Size and rating per ABYC, where sighted, serviceable for intended use.

ROUTING: Mainly well routed and supported where sighted.

OUTLETS: Various A.C. outlets available throughout yacht, appear adequate and conveniently located.

POLARITY: Checked: At A.C. outlets, polarity normal.

ISOLATION TRANSFORMER: Two (2) "Charles" PM3 Isolation and master control system transformers. Intact and serviceable.

GENERATORS

MANUFACTURER: Two (2) total: one (1) Cummins "Onan" Model# 27.5 MDKBT-6619, and one (1) Cummins "Onan" Model# 27.5 MDKBT-6620

SERIAL: E080183856 & H080203873



PORT GEN SET DATA



STBD GEN SET DATA

FUEL TYPE: Diesel.

KILOWATT RATING: 27.5 KW

VOLTAGE RATING: 120/240

INDICATED HOURS: Port - 2321.9 Stbd - 2083.4



PORT GEN HOURS



STBD GEN HOURS

LOCATION: Port and starboard aft engine space.

COOLING SYSTEM: Closed coolant and raw water wet exhaust type. Intact and serviceable.

III. SYSTEMS

ELECTRICAL SYSTEMS

GENERATORS (*continued*)

FUEL SUPPLY: Fuel System: Engine mounted mechanical pump.

FUEL FILTER: Racor remote filter/water separator and engine mount spin on/off type. Intact and serviceable.

EXHAUST SYSTEM: Water lift type FRP (fiber reinforced plastic). Raw water cooled canister. Intact and serviceable.

ACCESSIBILITY: Good.

SEACOCK AND STRAINER: Painted Bronze ball valve type seacocks and painted bronze alloy sight style strainers. Intact and serviceable.

FRESH WATER SYSTEM

FRESH WATER SYSTEM:

CAPACITY: 370 gallons. (as reported)

PUMPS: "Headhunter" Mach 5. Intact and operable.

FILTERS: In-Line canister pre-filters and "Sterilight" Model# S12Q-PA Serial# 100708320 Ultraviolet filtration. Intact and serviceable.

HOSES AND CLAMPS: Various. - Spinnaker and quest type for fill and distribution. Appears intact and serviceable.

DOCK SIDE PRESSURE REGULATOR: Pressure regulator in-line hose connection, port engine space.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE: Electric

MANUFACTURER: "Seaward" Model# H-2850E-W Serial# 836580

CAPACITY: 28 gallons.

PRESSURE RELIEF VALVE: Copper pressure relief valve built into tank. Drainage: Reinforced plastic hose directed overboard.

FRESH WATER SYSTEM (WATER MAKING SYSTEM)

TYPE: Reverse Osmosis

MANUFACTURER: Aqua Matic "Sea Recovery". ("water maker filters and misc. systems undergoing maintenance at time of survey")

ELECTRICAL CONNECTIONS: Appears serviceable.

BONDED: Yes.

SEACOCKS AND THRU-HULLS: Painted Bronze ball valve seacock and painted bronze sight style strainer assembly. Intact and serviceable.

SANITATION

(BLACK WATER)

MANUFACTURER: Headhunter

MANUAL OR ELECTRIC TYPE: Electric

NUMBER OF HEADS: Four (4) and a day head.

M.S.D TYPE USCG SYSTEM: Certification Type: MSD U.S.C.G. Type III. and holding tanks.

RAW WATER SUPPLY AND CLAMPS: Intact and serviceable where sighted.

DISCHARGE HOSES AND CLAMPS: Painted bronze ball valve seacocks with sanitation hose and double stainless clamped. Intact, serviceable and operable.

PUMP-OUT LOCATION: Gunwale, deck fitting marked for waste.

III. SYSTEMS

SANITATION

(BLACK WATER) *(continued)*

MACERATOR: "Sealand" macerator pumps. Intact and operable.

"Y" VALVES: Intact and serviceable.

HOLDING TANK: FRP (fiber reinforced plastic). Intact and partially serviceable.

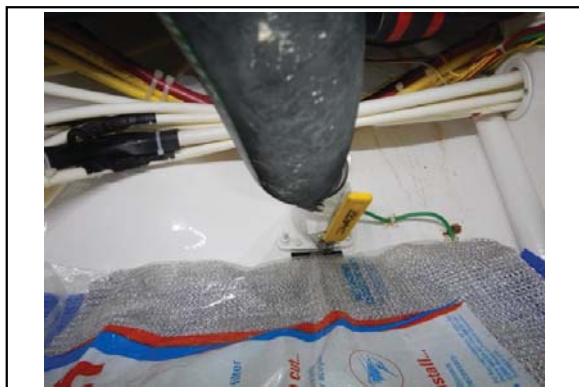
* **SEACOCKS:** [B5] Bronze ball valve O/B discharge seacocks at the respective discharge points and (forward bilge below decks). Serviceable.



DISCHARGE SEACOCK FROZE



DISCHARGE SEACOCK FROZE



DISCHARGE SEACOCK FROZE

(GREY WATER)

SUMP TANK LOCATION: Respective bilge area. Intact and operable.

MATERIAL: Plastic, specific type not determined. Intact and serviceable.

PUMPS: Rule.

STEERING SYSTEM

STEERING SYSTEM

TYPE: Hydraulic, where sighted is intact and serviceable.

MANUFACTURER: "Jastram"

NUMBER OF STATIONS: Two (2), bridge station and tower.

MODEL #: "Jastram" hydraulic dual ram independent rudder system. Intact and serviceable.

III. SYSTEMS

STEERING SYSTEM

STEERING SYSTEM (*continued*)

- LINES AND FITTINGS:** Reinforced flexible hose with metallic fittings. Intact, secure and serviceable.
- ACTUATOR CYLINDER:** Dual, Independent steering rams. Intact, secure and serviceable.
- MOUNTING:** Cylinders and ram actuators are well secured.
- RUDDER STOCK:** 3 1/2" rudder stock. Intact and serviceable.
- RUDDER POSITION INDICATOR:** Electro-mechanical type. Intact and serviceable.
- UPPER RUDDER BEARING SUPPORT:** Harken bearing. Intact and secure.
- TILLER ARM AND TIE BAR:** The vessel exhibits bronze tiller arms with bronze clevis fittings and stainless steel fasteners. Intact and serviceable.

GROUND TACKLE

GROUND TACKLE

- ANCHORS:** "Fortress" anchor stowed forward in fore deck anchor locker with 1/2" nylon rode. Intact and serviceable.
- WINDLASS:** "Lewmar". with foot switches. Intact and operable.

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

- VHF:** Two (2) - Icom IC-M604, with repeater for the tower. Operable.
- RADAR:** Three (3) "Furuno" NavNet 3D Radar w/ open array antenna. Powered-up
- CHART PLOTTER:** Three (3) "Furuno" NavNet. Powered-up
- AUTO PILOT:** "Simrad" AP 24. Operable.
- DEPTH SOUNDER:** Two (2) "Furuno" RD-30. Powered-up
- COMPASSES:** Two (2) "Ritchie" at bridge & tower - 5" & 3". Intact and serviceable.
- ANTENNAS:** All antennas sighted appeared to be well mounted and secure.
- ELECTRONICS LOCKER:** The vessel exhibits an electronics framed plexiglass enclosure. Intact and serviceable.
- DISPLAYS:** Three (3) large heads up display monitors for electronics. Intact.

ELECTRONICS (ENTERTAINMENT)

- BRIDGE STEREO SYSTEM:** "Fusion" MS-IP600. Intact and operable.

BONDING SYSTEM

BONDING SYSTEM

- MAIN BONDING CONDUCTOR:** The bonding system is well established where sighted. A corrosion test was not performed, therefore the level of protection is unknown. The bonding system is using individual green insulated wire to fittings and components and is intact and serviceable where sighted.
- THRU-HULL FITTINGS:** The thru-hull fittings as well as all sighted underwater fittings are bonded where sighted and show no corrosion.
- RUDDER SHAFTS AND SHAFT LOGS:** Rudder shafts and rudder shaft logs are bonded.
- SEA STRAINERS:** All sea strainers where applicable are bonded.
- PUMPS AND MOTOR HOUSINGS:** Pumps and housings are bonded, where sighted.
- ENGINES AND GENERATORS:** Bonded and grounded.
- ZINC (HULL ZINC):** Two (2) zinc (diver plate), on centerline at the transom. Serviceable 20% degraded.

III. SYSTEMS

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S: Twelve (12) type II USCG approved PFD's adult, two (2) type II child.

NUMBER OF THROWABLE PFD'S: One (1) Type IV Sighted..

FIRE EXTINGUISHERS: Misc. type "Kiddie" ABC. Intact and serviceable.

VISUAL DISTRESS SIGNALS: Flares were 12 gauge Day/night visual distress signals and hand held flares.

SOUND DEVICES: Horn: Yes. Tested and Operable.

POWER EXHAUST BLOWERS: Intact and operable.

NAVIGATION LIGHTS: Navigation lights are intact and operable.

INLAND NAVIGATION RULE BOOK < (12M-39'4"): Sighted.

"NO OIL DISCHARGE" PLAQUE: Found properly displayed.

TRASH DISPOSAL PLACARD: Found properly displayed.

AUXILIARY SAFETY EQUIPMENT

LIFE RAFT: The vessel exhibits an Eight (8) man life raft Serial# 11329122, certified to 05/2016. Location: bridge hardtop. Intact and serviceable.

E.P.I.R.B.: SAT Alert, class B mounted on the hardtop.

* **SMOKE DETECTOR:** [A1] Sighted and tested.



TESTED INOPERABLE

BILGE WATER ALARM AND SAFETY SWITCHES: All tested operable.

* **FIXED FIRE EXTINGUISHING SYSTEM (CO2):** [A2] "Kiddie Marine" SBS Series in the engine space.

III. SYSTEMS

SAFETY EQUIPMENT

AUXILIARY SAFETY EQUIPMENT *(continued)*

- * FIXED FIRE EXTINGUISHING SYSTEM (CO2): *(continued)*



CERTIFICATION EXPIRED

SEARCH LIGHT: Forward on-center of bridge hardtop. Intact and operable

- * **CO DETECTORS:** [A3] None sighted.

- * **REBOARDING LADDER:** [A4] None sighted.

BILGE PUMPS

- * **LIST:** [A5] Bilge pumps and float switches are operable.



PUMP ADIFT

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

PROPELLER(S): Two (2) Six blade 42 X 70.75 "Veem" Interceptor nibrals with variable pitch, installed on the vessel, and two (2) five blade "Veem" spares. Intact and serviceable.

III. SYSTEMS

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY *(continued)*

* PROPELLER(S): *(continued)*



PORT PROP DATA



STBD PROP DATA



OVERALL RUNNING GEAR

PROPELLER SHAFT(S): 4" stainless steel. Intact and serviceable.

PROPELLER SHAFT (LOGS) TUBE(S): Intact and serviceable.

SHAFT BEARING (CUTTLASS BEARING): Cutlass bearings. Intact and serviceable.

STRUTS: Single I configuration cast bronze struts. Intact and serviceable.

RUDDER(S) MATERIAL: Bronze rudders. Intact, secure and serviceable.

* **RUDDER(S) MOUNTING:** [B6] Both stainless rudders are mounted to the hull (typical stem mounting). Intact and serviceable.

III. SYSTEMS

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY (continued)

* RUDDER(S) MOUNTING: (continued)



RUDDER PORT



RUDDER PORT

TRIM TABS: Hydraulic trim tabs. intact and serviceable. (Service to center tab in progress)

TRIM TAB PUMP: Bennett pump. Intact.

UNDERWATER LIGHTS: The vessel exhibits four (4) transom mounted "Ocean LED" underwater lights. Intact and operable.



STERN VIEW



STERN VIEW

THRUSTERS: "Side Power" bow thruster with two (2) four bladed props and nose zincs. Intact and serviceable.

THRU-HULLS: Intact and serviceable.

TRANSDUCERS: All intact and serviceable.

STRAINERS/SCOOPS/SCREENS: Clear, secure and serviceable.

ZINCS: Diver plates. 20% degraded

CONDITION OF HULL (WETTED SURFACE)

BLISTERS: None Sighted.

CONDITION OF BOTTOM PAINT: Combination of "VC Offshore" bottom paint from the planning prism aft, and typical anti-fouling forward. Serviceable condition.

III. SYSTEMS

OUT OF WATER INSPECTION

CONDITION OF HULL (WETTED SURFACE) *(continued)*

* CONDITION OF BOTTOM PAINT: *(continued)*



BOTTOM PAINT TRANSITION

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

MANUFACTURER: Cruise Air water chilled system.

THRU-HULL STRAINER: Two (2) sight style. Located: In the below decks, engine space. Intact and serviceable.

HOSES, CLAMPS AND CONNECTORS: Appear to be adequately sized and serviceable for application.

RAW WATER COOLING PUMP: "Scott" Motorpump Serial# A376J472B20AG and "Emerson" Model# T63CXCPK-1454. intact and operable.

SEACOCK: Two (2) painted Bronze ball valve seacocks. Intact and serviceable.

IV. FINDINGS AND RECOMMENDATIONS

Deficiencies noted under "SAFETY" should be addressed before vessel is next underway. These findings represent an endangerment to personnel and/or the vessel's safe and proper operating condition. **Findings may also be in violation of U.S.C.G. regulations.**

Deficiencies noted under "OTHER DEFICIENCIES" should be corrected in the near future so as to maintain standards and to help the vessel to retain it's value.

Deficiencies will be listed under the appropriate heading:

- A. SAFETY DEFICIENCIES
- B. OTHER DEFICIENCIES NEEDING ATTENTION
- C. SURVEYORS NOTES AND OBSERVATIONS

A. SAFETY DEFICIENCIES:

FINDINGS	RECOMMENDATIONS
A.1 (PAGE 19) SMOKE DETECTOR: Smoke detector tested inoperable.	<i>NFPA 302-44 12.3 Smoke Detection: All vessels 26 ft (8m) or more in length with accommodation spaces intended for sleeping shall be equipped with a single station smoke alarm that is listed to UL 217</i>
A.2 (PAGE 19) FIXED FIRE EXTINGUISHING SYSTEM (CO2): Inspection or certification tags on fixed fire suppression equipment in engine room is expired.	<i>Recommend: full service and inspection by an authorized Fire Suppression expert. Compliance with ABYC and NFPA standards and procedures for fixed fire fighting equipment. Extinguishing cascade should be removed, inspected and re certified for use and compliance.</i>
A.3 (PAGE 20) CO DETECTORS: No "CO" detectors observed in accommodation spaces.	<i>Recommend: installation of Carbon Monoxide "CO" detectors in accommodation spaces in keeping with accepted marine requirements per ABYC A-24.7.1</i>
A.4 (PAGE 20) REBOARDING LADDER: No re-boarding ladder sighted.	<i>Recommend: Installation of "man overboard" re-boarding ladder or equivalent re-boarding device.</i>
A.5 (PAGE 20) LIST: The aft lazerette bilge pump is adrift on strainer housing.	<i>Recommend: Investigate further and correct or repair as necessary.</i>

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS	RECOMMENDATIONS
B.1 (PAGE 6) BRIDGE: The forward freezer deck lid gas shocks are at their service life end.	<i>Recommend: Replace shocks as needed.</i>

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

FINDINGS	RECOMMENDATIONS
B.2 (PAGE 7) ACCESSORIES: The "Willy Vac" system tank exhibits what appears to be a temporary repair.	<i>Recommend: Further investigate. repair or replace plug housing as needed in keeping with accepted marine repair practices. Full service by an expert.</i>
B.3 (PAGE 7) ACCESSORIES: Line item #6 Eskimo Ice and CruiseAir raw water discharge hose transitioning aft, after in-line T connection, exhibits degraded hose. Location: port side engine space.	<i>Recommend: replace as needed in keeping with accepted marine repair and maintenance practices. Full service by an expert.</i>
B.4 (PAGE 12) OTHER: The port forward engine space at the fixed fire suppression cascade exhibits open-ended, un-terminated wiring/conductor.	<i>Recommend: Investigate further. Repair or properly terminate wiring as needed. Full service by an expert.</i>
B.5 (PAGE 17) SEACOCKS: The forward and below decks bilge O/B discharge seacocks were froze or difficult to operate to a closed position.	<i>Recommend: repair, exercise free or replace if needed of overboard discharge seacocks. Prove to operate/function to an open or closed position as needed.</i>
B.6 (PAGE 21) RUDDER(S) MOUNTING: Both port and starboard rudder ports between the rudders and palm fairings exhibit FRP and fairing material degradation from cavitation.	<i>Recommend: Further investigate and repair as needed. Full service by an expert.</i>

C. SURVEYOR'S NOTES AND OBSERVATIONS:

FINDINGS	RECOMMENDATIONS
C.1 (PAGE 5) COCKPIT: The port forward cockpit tackle locker framework exhibits gelcoat chips and cracked framework.	<i>Recommend: Repair and/or refinish as needed with like kind materials in keeping with accepted marine repair practices.</i>

V. SUMMARY AND VALUATION

STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

It is the surveyor's experience that develops an opinion of the **OVERALL VESSEL RATING OF CONDITION** After a the survey has been completed and the findings have been organized in a logical manner.

The grading of condition, developed by **BUC RESEARCH**, and accepted in the marine industry, for a vessel at the time of survey, determines the adjustment to the range of base values in the **BUC USED BOAT PRICE GUIDE**, for a similar vessel sold within a given time period, as a consideration to determine the Market Value.

The following is the accepted marine grading system of condition:

"EXCELLENT (BRISTOL) CONDITION", is a vessel that is maintained in mint or bristol fashion - usually better than factory new - loaded with extras - a rarity.

"ABOVE AVERAGE CONDITION", has had above average care and is equipped with extra electrical and electronic gear.

"AVERAGE CONDITION", ready for sale requiring no additional work and normally equipped for her size.

"FAIR CONDITION", requires usual maintenance to prepare for sale.

"POOR CONDITION", substantial yard work required and devoid of extras.

"RESTORABLE CONDITION", enough of hull and engine exists to restore the boat to usable condition.

As a result of my investigation, as shown in the **SYSTEMS AND FINDINGS AND RECOMMENDATIONS** section of this **REPORT OF SURVEY**, and by virtue of my experience, my opinion is
OVERALL VESSEL RATING: ABOVE AVERAGE

STATEMENT OF VALUATION:

1. The **"FAIR MARKET VALUE"** is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and each acting in what they consider their own best interest.
- c. A reasonable time is allowed for exposure in the open market.
- d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- e. The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Therefore, after consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel, it is your surveyor's opinion that the **"FAIR MARKET VALUE"** of the subject vessel is:

\$4,000,000.00

Four Million Dollars and Zero cents

2. The **"ESTIMATED REPLACEMENT COST"** indicates the retail cost of a new vessel of the same make/model with similar equipment offered by the same manufacturer. **"ESTIMATED REPLACEMENT COST"** of the subject vessel is:

\$7,000,000.00

Seven Million Dollars and Zero cents

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the 2011 70' Viking Convertible vessel "Reel Fire", and for the purpose of evaluating its present condition and estimating its Fair Market Value and Replacement Cost, I herewith submit my conclusion based on the preceding report. The subject vessel was personally inspected by the undersigned on **24 June, 2015**, and was found to be a well constructed, appointed and comfortable vessel suitable for its intended use.

The value of this vessel is subject to, the correction of deficiencies listed in the deficiency section, any repairs necessary to maintain the value of the subject vessel, and any maintenance necessary to maintain the vessel's value and suitability for service of it's intended use.

SURVEYOR'S CERTIFICATION:

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.

I have no present or prospective interest in the vessel that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

My compensation is not contingent upon the reporting of a predetermined value or direction in value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulate result, or the occurrence of a subsequent event.

I have made a personal inspection of the vessel that is the subject of this report.


This report is submitted without prejudice and for the benefit of whom it may concern. "This survey sets forth the apparent condition of the vessel and its areas open to inspection; including hull, machinery, equipment, fittings, fastenings and gear. Unless expressly stated otherwise; there have been no borings, no removal of bulkheads, panels, ceilings or other portions of her structure not otherwise accessible for inspection. Also, unless expressly stated, there has been no operation or opening or removal of any portion of her machinery, electronics, auxiliaries, tanks or fittings for internal examination.

Unless expressly stated herein; sails, lights aloft, spars aloft and rigging aloft were not examined; nor was any evaluation made of the vessel's stability. This survey represents the surveyor's honest and unbiased opinion of the vessel's condition. This survey is not a warranty of condition, express or implied, nor does it create any liability on the part of the surveyor or his employers arising out of the reliance on the information contained herein by third persons who are not parties to this survey. Information furnished by others is assumed correct, but the surveyor makes no warranty as to the correctness of information not capable of being confirmed readily by inspection."

The digital pictures that may be contained or separate of this report were taken by the attending surveyor(s). We certify that the content of these pictures have not been changed and/or altered."

"This report is based on the facts at the time of survey only, and is presently available to the surveyor in attendance which is submitted without prejudice to the right of whom it may concern. The right to amend and/or supplement this report should additional information be made available is, reserved.

ATTENDING SURVEYOR:

Attending Surveyor: 
Dennis Heine AMS# 914

