

Christian & Company

MARINE SURVEYORS

STANDARD SURVEY

Client: Removed for privacy

Date of report: August 21, 2020

Our file #: 20 – 29843web

Current owner: Removed for privacy

This inspection was performed upon the request of the client listed above on August 19, 2020 while the vessel was hauled at Intrepid Boat Works, San Diego, CA and afloat in Marriott Marina, San Diego, CA and the client, his son, current owner and undersigned surveyor attended.

Scope of Services

The vessel was examined by surveyor and/or surveyor's agents from all accessible areas of the interior without removal of secured panels, destructive testing or disassembly. The hull bottom laminate, plating and/or planking was examined by percussion sounding and visual inspection only. No moisture content readings were taken, and no destructive testing was performed. The surveyor may have used a moisture meter if/when they deemed it useful or if specifically requested by client. Exterior hardware was visually examined for damage and drive components were tested by sight only. The inspection of engines, generators, machinery and related mechanical systems is not within the scope of this survey. Only a brief cursory inspection of the machinery was conducted, and no opinion of their overall condition was formed. Client shall retain the services of a qualified mechanic, engine surveyor or other expert to inspect such engine, generators, machinery and related mechanical systems. Tankage was inspected from visible surfaces only and no opinion was rendered as to their overall condition. On sailing vessels, the rig was not inspected aloft, nor were sails inspected unless they were visible during a sea trial. Client shall retain the services of a qualified rig surveyor or other expert to inspect sails, rigging and equipment. The electrical system was visually inspected where accessible, and electronic and electrical components powered only with permission of or in the presence of the vessel's owner or agent. No in-depth testing or examination of the electrical system or electric schematic was conducted. Specifications were taken from published sources, measurements if made, should be considered approximate. The recommendations are based on federal and state regulations, industry standards, and/or surveyor's own personal experience. The market value is based on research of available new/used comparable vessels, with consideration of geographic area where the vessel is located and reported sale prices where available. The surveyor will refer to and may reference CFRs, NFPA and ABYC recommendations (and/or other services) as the surveyor deems reasonable but not all regulations and recommendations will be applied nor should this report be relied upon as full compliance with the aforementioned entities. Every vessel inspection is different, and limitations may alter the scope of this survey, some limitations will be implied in the text of the report and some will be explicitly detailed. A Marine Survey Agreement which is reviewed and signed by the client details the terms governing this marine survey.

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VESSEL DESCRIPTION

Builder:	Ranger Tugs	Reg. #:	Removed for privacy
Model/type:	R-27 / tug	HIN:	Removed for privacy
Year:	2011	Engines:	One Yanmar
Length:	30' 6" (measured)	Name:	Removed for privacy
Draft:	2' 2" (measured)	Hailing Port:	None
Beam:	8'6" *	Weight:	20,000 lb. (travel lift's sling)
Displacement:	Unknown		* listing specifications

HULL & STRUCTURE

Keel & bottom: Molded fiberglass construction, unknown core, three hard chines, two lifting strakes per side, partial keel, black bottom paint

Topsides & transom: Molded fiberglass construction, unknown core, pistachio green gelcoat with green boot stripe, plastic rub rail with stainless steel strike rail

Decks & superstructure: Molded fiberglass construction, unknown core, molded nonskid deck surface, beige cockpit deck, white main deck, white superstructure with beige stripe, fiberglass toe rail, green accents

Deck hardware: Swim platform staples, cockpit hard top, two hard top hatches, six cabin top hatches, foredeck hatch, stainless steel bow rail, stainless steel stern rails, grabrails and ladder, set of stern cleats

Longitudinals/stringers: Fiberglass liner

Athwartships/bulkheads/frames: Plywood bulkheads

Layout/interior components: Aft cockpit, sliding door to salon, berth to port aft in salon, head to starboard in salon, galley to starboard, dinette to port, helm to starboard forward, V-berth forward

Bilge: Holding minimal water

Comments: The vessel was inspected while hauled, afloat and underway during a sea trial in San Diego Bay. The hull bottom was visually inspected and randomly sounded. There is light marine growth on the hull bottom. The bottom paint is thin. The hull bottom is in satisfactory structural condition. The hull sides and transom were visually inspected and randomly sounded. There are small chips in the gelcoat below the starboard California registration numbers. The hull sides and transom are in satisfactory condition. The deck and superstructure were visually inspected and randomly sounded. The engine hatch had a different sound when percussion tested compared to the other deck hatches. There are small cracks in the fiberglass aft of the antenna mast. The deck and superstructure are in satisfactory structural and cosmetic condition. The

condition of the coring material in the hull, stringers, deck and transom is beyond the scope of this survey. The deck hardware including safety rails, mooring devices and hatches was visually inspected and most hatches and the port lights were opened and closed. The support arms connected to the cockpit hardtop hatches are disconnected. Overall, the deck hardware is in satisfactory condition. The structural reinforcements including the stringers and bulkheads were visually inspected and randomly sounded. The structural reinforcements appear to be in "as-built" condition. The bilge is holding minimal water; the origin of the water is beyond the scope of this survey. The interior cabin spaces are neat, clean and orderly. The wood sole board aft in the salon is loose and is not fully adhered. The interior of the vessel is in satisfactory cosmetic condition. This survey is not a mold inspection.

Summary: Satisfactory

MACHINE SYSTEMS

Main engine: Yanmar, model 4BY2180, 132 k.w. at 4000 rpm

Engine application: Diesel, four cylinders, turbocharged

Serial number: 03840990

Transmission: Kanzaki KMH40A, ratio 2.04, serial number 02356, tag difficult to read

External/peripherals: Suitable application, satisfactory installation

Engine controls: Push / pull cables, single lever control

Exhaust systems: Wet system, flexible hoses, fiberglass water lift muffler, port aft hull side discharge

Propulsion gear/shaft log: PSS dripless shaft seal, 1" diameter stainless steel propeller shaft, bronze 3-blade 12" diameter (measured) RH propeller, unknown pitch

Steering system/rudder port: Bronze rudder, hydraulic steering, bronze packing gland, one helm station

Ventilation: Natural

Generator: None

Through hulls & components: Bronze through hulls with bronze ball valves, bonded

Location of through hulls as visible: One through hull on either side of the engine and a plug starboard aft on the keel

Seawater systems: Reinforced flexible hoses

Bilge pumps: Two Johnson submersible automatic bilge pumps in the engine room

Comments: The engine and transmission were visually inspected and tested during a sea trial. The wide-open throttle was recorded at 14.5 knots at 3770 rpm per the tachometer. This is not a mechanical survey; please consult with qualified technician for greater detail as to the condition of the machine systems. There is light surface corrosion on the engine, transmission and motor mounts. The external surfaces and peripheral components of the engine and transmission appear satisfactory. The engine's controls functioned normally. The exhaust system is properly arranged and installed. The propulsion components were visually inspected and appear satisfactory. We could not see the propeller's diameter and pitch on the propeller. The steering system was visually inspected and test operated. The steering system functioned normally. The through hulls were visually inspected and the valves were manipulated. The through hulls are in satisfactory condition. The seawater systems were visually inspected and most components were tested. Overall, the seawater systems are satisfactory. The electric bilge pumps were energized manually.

Summary: Satisfactory

TANKAGE

Fuel: 100 gallon plastic tank center aft in salon bilge

Fill & vent: Deck fill fitting to starboard on transom gunnel, marked "diesel", USCG type A2 flexible hose

Feed & return: USCG type A1 flexible hoses, remote Yanmar filter, valves on tank

Water: Deck fill fitting to starboard forward of amidships, marked "water", tank not seen

Holding: Plastic tank aft, deck fitting to port on transom gunnel, marked "waste"

Comments: The fuel system including the tank, fill, vent and feed lines was visually inspected as installed. Where visible the fuel system components are in satisfactory condition. The condition and age of the fuel, (water and waste) and the integrity of the tanks (fuel, water and holding) and hoses is beyond the scope of this survey. Please consider filling all tanks for a simple, practical test of their integrity. The water pressure system did not function normally. There was low water pressure at the galley sink faucet. The raw water pressure pump is inoperative. There is no hose connected to water heater's pressure relief valve. Accuracy of tank level gauges is beyond the scope of this survey.

Summary: Satisfactory

ELECTRICAL SYSTEMS

AC system: 120 volt system, 30 amp / 125 volt shore power cord, 30 amp / 125 volt shore power inlet

DC system: 12 volt system, four Deka group 31 12 volt AGM batteries to port aft in cockpit locker, battery switch in locker with batteries, four battery switches and ACR in starboard forward cockpit locker

Wiring: Suitable multi-strand wires

Circuit protection: Fuses in starboard forward cockpit locker, electrical distribution panel at the helm includes main AC circuit breaker, branch AC and DC circuit breakers AC and DC voltmeters

Comments: The electrical system including the shore power cord, shore power inlet, batteries, wiring, circuitry components and circuit protection equipment was visually inspected and most components were tested. We could not insert our outlet tester into the upper outlet in the head's GFCI outlet. The faceplate on the outlet below the dinette is raised up. The courtesy lights near the transom door are inoperative. The starboard courtesy lights aft and forward in the cockpit are inoperative. Overall, the electrical system is in satisfactory condition. The batteries are properly arranged and secured; however, they do not have lids. The condition of the batteries is beyond the scope of this inspection.

Summary: Satisfactory

SAFETY AND LIFE SAVING

Portable fire extinguishers: Two type B:C size I (2012) in aft berth

Fixed fire system: None

Flotation devices: One type IV cushion

Horn/distress flares: Four pistol launch distress flares (8/13), four pistol launch distress flares (7/17)

Navigational/anchor lights: Separate side lights and all-around light

Anchor & ground tackle: 7.5 k.g. claw anchor with chain and line rode

Other equipment: Dye marker, signal mirror, whistle

Comments: Safety equipment for fire fighting protection appears satisfactory, however the extinguishers have not been inspected, tagged and maintained per N.F.P.A. recommendations. Personal flotation devices appear suitable for near coastal use. No current distress signal flares are aboard. A suitable sound signaling device was seen. No CO alarms were seen. Oil and garbage placards were seen. The navigational and anchor lights are properly arranged and installed. The starboard navigational light is inoperative. The ground tackle including the anchor and rode was visually inspected as installed and appears satisfactory. There is no secondary anchor or rode. The entire

length of the anchor rode was not inspected and should be inspected prior to use. There is a camping type propane tank below the galley sink.

Summary: Satisfactory

LP GAS SYSTEMS

Tanks: One tank in dedicated box in aft cockpit locker

Devices: Pressure regulator, pressure gauge, electric solenoid switch

Comments: The LP gas system including the tank and tank locker was visually inspected and the electric solenoid valve was tested. The range's sparkers did not spark when tested. We energized the electric solenoid valve however we were unable to fully test the system as we could not ignite the range. Overall, the installation of the LP system is satisfactory. The vessel is not equipped with a propane or carbon monoxide alarm.

Summary: Satisfactory

ACCESSORIES

Oil placard, waste placard, internal sea strainers, fiberglass swim platform, seawater pressure pump, transom door, bow and stern thrusters, cockpit bench seat, Bennett trim tabs, ProMarine True Power Combi 1500 QS inverter / charger, Johnson freshwater pump, Seaward S-600 water heater, cockpit rope lights, cockpit courtesy lights, light and antenna mast, remote controlled spotlight, anchor roller, Lewmar Pro Series 1000 two direction electric windlass with foredeck foot switches and helm switches, four windshield wipers, tv antenna, two solar panels, head includes Jabsco electric head and sink with shower attachment, solar regulator, galley includes Princess two burner LP range, sink Nova Kool R4500 DC refrigerator and Contoure microwave, dinette, Fusion MS-CD 600 stereo, adjustable bench seat, helm chair, Garmin GPS map 5212 multifunction device with radar / plotter / sounder, Garmin 200 vhf, Garmin GHC 10 autopilot, Ritchie compass, Yanmar electronic engine display, HVAC unit below V-berth, Majestic tv, electric heater

SUMMARY

The vessel is a molded fiberglass tug equipped with a single diesel engine. The current owner reportedly purchased the vessel in 2017. The age of the bottom paint is unknown. The engine and transmission are original. The current owner reported that the vessel was on a trailer for a year and a half after purchasing the vessel. The current owner reported that the starboard aft deck hatch above the head is broken and the freshwater pressure inlet leaks inboard when connected to shore water. The current owner reported the vessel has not been used much in the last six months but was used the week prior to the survey for a sea trial. The current owner reported that he has installed the folding doors on the forward cabin and the aft berth, replaced the upholstery on the cushions, installed the cockpit hardtop and the cockpit seats. The current owner disclosed no knowledge of any incidents in the vessel's history, such as collisions, submersions, fires, etc. The vessel was inspected while hauled, afloat and underway during a sea trial in San Diego Bay. The vessel is basically structurally sound and upon completion of the recommendations should be suited for its intended purpose as a near coastal cruising vessel.

Overall Summary: Satisfactory – Good

Standard form key: We use subsection and overall ratings to summarize conditions found, based upon their appearance. Ratings include: Not examined, Not applicable, Faulty, Marginal, Satisfactory, Good, Excellent.

VALUES

ACTUAL CASH VALUE

Removed

NEW REPLACEMENT VALUE

Removed

INVESTMENT

N / A

The actual cash value is the value that our research approximates the selling price of this vessel should be, at the time and place of our inspection. Consideration is given to vessel's condition, geographic location, published listings and guides, comparable sales and listings, and market conditions. The new replacement value is the cost of this or a similar, new vessel, comparably equipped. The investment is the reported investment including purchase price and significant upgrades. No values include maintenance costs, storage or tax. The most relevant data found while researching the value is included below. We primarily use market value analysis methodology for determination of value.

Explanation of value opinion: The average historical sale price of similar vessels on Soldboats.com is \$104,333 USD and the average current listing price of similar vessels on Yachtworld.com is \$121,875. The owner has installed multiple items and the vessel is in satisfactory – good condition for its age. The boat market is currently experiencing a Covid-19 related demand and value surge and we are unsure how long the surge will last. When researching replacement cost, we could only find Ranger tugs equipped with outboard engines.

Selected Search Criteria:

Mfgr/Model : Ranger ([2692](#))

Sold: Since Jan 01, 2019 ([58448](#))

Length: Between 27 ft and 28 ft ([66856](#))

Year: Between 2010 and 2012 ([25440](#))

Total records found: 6

Click on one boat to view the full listing, or [view full listings for all the boats on this page](#).

[Revise Search](#)

Items: 1 - 6 of 6

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	Length	Boats	Year	Listed US\$	Sold US\$	Location	YachtWorld Member
<input type="checkbox"/>	27'	Range r Tugs 27	2012	112,500 (02/18)	112,500 (09/19)	NC, USA	Privilege Yard SpA
<input type="checkbox"/>	27'	Range r Tugs R-27	2012	140,000 (09/18)	130,000 (04/19)	WI, USA	Reed Yacht Sales - Grand Haven

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								Office
<input type="checkbox"/>	27	Range r Tugs R-27	201	105,00	(11/16	06/20	MA, USA	Tripp Marine Group
	'		2	0)	92,500)		
<input type="checkbox"/>	27	Range r Tugs R27	201	109,00	(04/19	105,00	WA, US	Inside Passage Yacht Sales
	'		2	0)	0)	A	
<input type="checkbox"/>	27	Range r Tugs R27	201		(07/19	07/20	CA, USA	Cruising Yachts
	'		1	99,999)	95,000)		
<input type="checkbox"/>	27	Range r Tugs R27	201		(04/20	05/20	CA, USA	Rubicon Yachts
	'		1	98,000)	91,000)		

Viewing 1 - 8 of 8

Sort By: Length: Long to Short

Ranger Tugs R27

US\$119,800 *

27 ft / 2011

San Diego, California, United States

SD Yacht Group

Ranger Tugs R-27

US\$149,900 *

27 ft / 2012

Painesville, Ohio, United States

Great Lakes Boats & Brokerage

Ranger Tugs R-27

US\$127,000 *

27 ft / 2012

Tiverton, Rhode Island, United States

Lawson Yachts LLC

Ranger Tugs R27

US\$129,900 *

27 ft / 2011

Bowdoinham, Maine, United States

JT Yacht Sales

Ranger Tugs R27

US\$99,000 *

27 ft / 2011

Alamo, California, United States

Sale Pending

Farallone Yachts

[Request Info](#)

Price Drop: US\$6,000 (Aug 18)

Ranger Tugs R-27 with trailer

US\$99,000 *

27 ft / 2011

Hyannis, Massachusetts, United States

Cahoon Yacht Brokerage

Ranger Tugs R-27

US\$134,900 *

27 ft / 2012

Racine, Wisconsin, United States

Sale Pending

Reed Yacht Sales - Grand Haven Office

Ranger Tugs R-27 Ranger Tug

US\$115,500 *

27 ft / 2011

Port Ludlow, Washington, United States

Sale Pending

Port Townsend Boat Company

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Removed for Privacy
2011 Ranger R-27 30'

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RECOMMENDATIONS

These recommendations are the surveyor's ideas and suggestions for addressing deficiencies with damaged or suspect components or systems found during survey or general improvements. The primary recommendations address safety items, structural issues, operational issues or deficiencies which the surveyor determines are of greater importance or more expense than secondary deficiencies. For instance, items that pose a risk to passenger safety or immediate property damage are listed under primary deficiencies and cosmetic concerns are addressed under secondary deficiencies. Most of the recommendations have been addressed in the comments and usually they are discussed at the time of the inspection.

PRIMARY

1. Repair or replace the starboard navigational light and prove it functional.
2. The two portable extinguishers are vintage 2012. Maintain the fixed and portable fire extinguishers per NFPA recommendations. Extinguishers should be inspected and tagged annually and inspected by a qualified technician or replaced every 6 years.
3. Provide federally required, approved and current distress signal flares.
4. Provide a secondary anchor and rode for use in emergencies or two anchor situations.
5. Repair or replace the GFCI outlets in the head and prove them functional.
6. Install a lid on the batteries.
7. Determine why the water pressure was low in the galley sink and address appropriately.
8. Repair or replace the raw water pressure pump and prove it properly functional.
9. Install a hose onto the water heater's pressure relief valve that drains into the bilge.
10. We could not test the galley range due to the range not sparking. Repair the sparkers and prove the range properly functional.
11. Remove the camping LP tank below the galley sink from the vessel.
12. Determine the cause of the surface corrosion on the engine, transmission, and motor mounts, eliminate the cause, clean and paint the components to allow detection of any future weeps or leaks.
13. The bottom paint is thin. Repaint.
14. The hull identification number on the vessel's registration document is missing a "1". Assure the hull number on the vessel matches the registration document.

SECONDARY

1. We could not see the diameter or pitch on the propeller. We measured the diameter of the propeller; however, this is an approximation.
2. Address the small cracks in the fiberglass aft of the antenna mast as desired.
3. The aft wood sole board in the salon is slightly loose on its corner. Address as desired.
4. Address the light marine growth on the hull bottom as desired.

5. Reattach or replace the support arms which are disconnected from the cockpit overhang's hatches.
6. The engine hatch had a different sound when percussion testing compared to the other cockpit hatches. Determine the significance of the sound difference and address if / as necessary.
7. Address the staining on the sideliner aft in the aft berth as desired.
8. Address the chips in the gelcoat below the starboard California registration numbers as desired.
9. Replace the faceplate on the outlet below the dinette which is raised.
10. The following components were not tested or inspected, and these were discussed with the client: solar panels.

This survey sets forth the condition of the vessel and components, as specifically stated only, at the time of inspection and represents the surveyor's honest and unbiased opinion. No part of the vessel was disassembled or removed and no assumptions should be made as to the condition of concealed components. Specifics were obtained from sources available at the time of inspection and are believed correct, but are not guaranteed to be accurate.

I/we certify that, to the best of my/our knowledge and belief:

The statements of fact contained in this report are true and correct. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my/our personal, unbiased professional analyses, opinions, and conclusions. I/we have no present or prospective interest in the vessel that is the subject of this report, and I/we have no personal interest or bias with respect to the parties involved. My/our compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event. I/we have made a personal inspection of the vessel that is the subject of this report. This report should be considered as an entire document. No single section is meant to be used except as part of the whole. This report is submitted without prejudice and for the benefit of whom it may concern. This report does not constitute a warranty, either expressed, or implied, nor does it warrant the future condition of the vessel. It is a statement of the condition of the vessel at the time of survey only. The submitting of this report creates no liability on the part of Christian & Company or the individual surveyor.

Christian & Company, Marine Surveyors, Inc.



August 22, 2020

By: Mr. Kells Manthei, SAMS Surveyor Associate

Date



And by Kells Christian
SAMS – AMS #301