

Duffy 37 Gizmo equipment & info

Addendum to main Gizmo listing, 9/3/24 version, with more to be added

Legal

FCC Call Sign: WDE9010

FCC MMSI: 367412350

USCG Doc. No.: 1160869,

Hull Number: ABH37003A000

Lengths and Drafts

As Documented: LOA 36.8' Beam 13.2' Draft 4' 1"

Total Vessel Length = approx 40'

Air draft = approx 24' as rigged

Drafts as measured, for transducer-to-keel, or to-waterline, corrections

	Waterline			
Draft	Feet	Inches		
Deepest aft keel	4.3	52		
			Keel	
Transducers			Feet	Inches
Aft (Ray, CHIRP)	1.3	15	-3.1	-37
Med (UDST)	1.9	23	-2.4	-29
Fwd (Furuno, SS)	2.6	31	-1.8	-21

Anchors:

Working: Kingston K-45 (45lb) plow style with Maxwell rode new 2023 (20' 5/16" chain & 200' 5/8" Nylon Yacht Brait)

Spare: Danforth 35 with 3 strand rode and chain, about 200'

Storm: Fortress 55 (32 lb.) with heavy braid rode and chain, about 200'

Maxwell RC-10 Capstan version windlass (2023)

Propulsion, Steering & Thruster

Volvo Penta TAMD74C-A (EDC) 450 HP @ 2600 RPM, Aka Volvo TAMD74C-A or TAMD74C-EDC
7.8 L, turbocharged aftercooler, Serial No: 2071126531
Gear: Twin Disc MG 5075 A E Shift 2.05:1 Ratio, Serial No: 5GF890

2" stainless prop shaft, with Evolution Marine razor cutter 4 11/16" OD, .75" wide, 2010
Improved cutlass bearing (by Lyman Morse) and new PYI PSS dripless shaft sea in about 2014!

Hydraulic steering probably by [Marine Hydraulic Engineering](#) of Rockland, Maine with double ram at rudder head by National Marine (rebuilt 2024) and autopilot solenoid a Nachi Solenoid model 33-GO1-C4-R-D1-E30

Lewmar 185TT 4kw 12v bow thruster Tag: 591807, 185TT 040607 154461 001

Electronics

Furuno TZT2 12" MFD with DRS4D-NXT doppler radar and 520-PLD 600W transducer networked with Intel DC-powered NUC7i5BNK PC running TimeZero PC 4.1 in pilothouse and displayed on Wimaxit 15.6-inch touch screen and 26-inch Vizio M261VP LED HD TV & monitor. PC controlled at either station Logitech Bluetooth K810 Illuminated keyboard and M720 mouse, which can alternately control the iPad or a third device.

Dual NMEA 2000 sensor networks and multiple Furuno and Maretron instrument displays for extensive system monitoring as well as redundant critical navigation data Redundant Simrad GO5 chartplotter with side scanning sonar and AP controls. **See Info Spreadsheets for more detail.**

Garmin Cortex (2021) [advanced AIS & VHF](#) with H1 color handset at lower helm, additional handsets available. Cortex includes cellular off-boat monitoring, limited use for free, more by subscription.

Standard Horizon GX2400 (2024) VHF & AIS receive only with fist mic at lower helm and RAM4X wireless mic for flybridge or elsewhere

Simrad AC12 autopilot (low in starboard cabinet behind wheel) with controls at both helms

Internet/Entertainment

Netgear WiFi router with local wireless networking with Cortex, Furuno, Simrad, and ipad. Also wired connections to Victron Cerbo GX, Fusion stereo, and a [Wave WiFi Rogue Reach dual band high-power bridge](#) for shore WiFi access, or as easy way to distribute a cell phone hotspot around the boat. There's also a Cel-Fi high-performance cell booster, and Starlink or similar could be easily added to the system.

Garmin Fusion Apollo WB670 hideaway stereo with ERX400 wired remote, xxx wireless remote, and app control. Zones 1 & 2 in main cabin with pairs of Fusion and Bose speakers, zone 3 on fly bridge with separate amp and Fusion speakers.

Sonar transducers

Active in bold

Furuno 520-PLD thru-hull, 600w (10-Pin) -- #1 fwd centerline

[Airmar DST810 \(2022\)](#) -- #2 fwd centerline, configures with CAST app

Simrad LSS StructureScan -- #3 fwd centerline

Maretron DST110 (by Airmar) -- midships port

Airmar B75 medium CHIRP 1kW for Garmin or Simrad -- #1 aft starboard

Raymarine xxx (old) -- #2 aft starboard

Raymarine CPT120 CHIRP Sonar & DownView -- #3 aft starboard

* Inactive transducer cables in lower helm cabinet

Electrical

AC: There are seven double AC outlets distributed around the boat, with the three most forward ones GFI. However, two of the main cabin outlets -- one in the aft starboard cabinet, the other on the forward side of the port settee -- are not currently working. But the only fixed AC equipment now on board are the microwave, the 26-inch Visio display and the chargers for the Icom handheld VHF, the Dyson vacuum, and the Torqeedo battery.

DC: There are approximately nine USB chargers around the boat, several of them type C PD capable of fast charging hungry Apple and Android devices

Head and other pumps

Head: [Lavac "Popular" model](#), seat and gaskets replaced 2018

Head pump: Jabsco 50890 Series Marine Filter-less Waste Pump Robust Single Diaphragm Design, 5 GPM, 1.5 inch, service kit SK890, Max Draw: 8 Amp, Fuse: 10 Amp. *Lower joker valve clogs fairly easily -- as on many boats -- but can sometimes be cleared with blue water pic stored in adjacent locker.*

[Recommend careful use of Scott Rapid-Dissolving toilet paper.](#)

Waste overboard: Whale Gulper Toilet Pump MODEL: BP2552B, new 2016. Diaphragm and joker valves (Service Kit AK1557) replaced 2023. 10A fuse with max draw 6.5A. *Its switch is hidden in the cabinet over the head, right side, and needs Head Pump breaker on. Fully pumped out indicated by sound and breaker panel ammeter.*

Fresh Water: Upgraded 2018 to SHURflo Aqua King II Premium 4.0 GPM, 55 PSI Max. Also, the pressure system accumulator was replaced in 2021 with new cutoff and drain, along with new hot water tank bypass and extended drain. *Thus water system winterization requires minimal use of antifreeze.*

Washdown: Upgraded 2022 to Shurflo Pro Blaster li Washdown Pump Ultimate 5.0 Gpm, 60psi. Max draw 16A, fuse 20A. *Current panel breaker sometimes trips, may need replacement or upsizing.*

Bilge: Primary Rule 02 1500 GPH pump replaced 2016 (aft, bilge #2 breaker). Float switch replaced in 2021 with Blue Guard BG-One oil-detecting switch (configure and test pump with BGI app). The larger forward Rule pump -- active only if the primary fails or is overwhelmed -- was reinstalled with solid-state switch and easier service access in 2022.

Galley

Double SS sink with dish rack. Rotating faucet with sprayer new about 2011.

Force Ten propane stove with three top burners, oven, and ceramic broiler. Believed to be [Force 10 model 63351](#) with built-in mount. *All burners work but burner ignition systems do not and thermacouples may soon need replacement, parts available from Sure Marine.*

Panasonic Microwave Oven NN-SD372S Stainless Steel with Inverter Technology and Genius Sensor, 0.8 Cu. Ft, 950W, new 2016

Two independent [Sea Frost BD](#) refrigeration compressors (Danfoss) and SS cold plates, with both mounted in the freezer section. *This strategy provides system redundancy and also flexibility regarding how the freezer and refrigerator sections are used. Also, both compressors were serviced and recharged with r-134a in August 2024 and are working very well, and plate #1's thermostat was replaced about 2016, spare onboard*

SS propane barbecue stored in port lazarette with v-clip mounts in cockpit and on flybridge. *Not used in a long time.*

Misc Equipment

Wipers

Port and starboard: AFI Wiper WWF12C1 720, .5" drum pivot, arm about 14", blade 18". *Good fitting blades are hard to find, Sea Dog 414218S best so far.*

Center window, new 2012: Imtra RC533221 Coastal Plus Wiper Motor, RC536318 Pantograph Arm, RC520922 22" Wiper Blade

Safety

Custom [Lightning Electrotechnologies masthead lightning inhibitor](#) (2010), *not yet tested (thankfully ;-)*

S-2A Fireboy Xintex propane fume detector with solenoid valve control
10 square foot fire blanket next to stove

2 Kidde Mariner 110 marine 2.5lb fire extinguishers (2024), *meets USCG requirements*
2 Flag model ABC-050-G 5lb fire extinguishers, *more than 15 years old but self-inspected*
1 engine room automatic fire extinguisher, *more than 15 years old*

Icom M36 floating handheld VHF w AC charger

8 lifejackets

[Sirius Signal C-1001 LED Electronic visual distress signal](#) (instead of flares)

[Marinebeam Ultra Long Range flashlight](#)

[Weems & Plath Personal Rescue Strobe](#)

Navigation Lights

Steaming light: [Marinebeam NavLight series USCG certified 3nm LED](#) (2014)

Side lights: Marinebeam NavLight USCG 2nm LED (2024)

Stern light: Perko (*MarineBeam replacement on board but not yet installed*)

Anchor light: Marinebeam Smart LED (can [switch to SOS strobe or tricolor modes](#))

Zincs & Paints

Collar zinc 2" Camp C10 4" OD, 1.5" wide (0 spare)

Transon zinc 8x3 Camp N1 (0)

Rudder round zinc 4" R4 (1)

Skeg tear drop (1, never changed)

VP engine zincs (8)

Lewmar Thruster zinc : Ref 25C16, 589350 185 Anode Kit (1)

Lewmar Thruster 185 Prop, 589351 (1)

Bottom paint: Dark Blue Pettit Odyssey HD Multi-Season ablative

Wheel & rudder: Pettit zinc spray plus non-copper bottom paint if available

Transducers: Prop speed Foulfree

Fluids & Filters

Engine:

Shell Rotella T4 15W-40 -- about 5 gallons change (buy 6)

Transmission: 30w

Oil Filter NAPA 1798, WIX 51798 -- 32 Micron

Oil Filter NAPA 1040, WIX 51040, Fram PH3387A -- 21 Micron

Fuel Filter Fram p4102A, Wix 33358; Napa 3358;

Fuel Filter Fram PH3545 or NAPA 3358

Antifreeze/Coolant --

Hydronic Boiler -- same low silicate, green recommended 50/50 mix

Racor 2040SM -- 2 micron often, or 10

Hydraulic Steering filter -- WIX 51551

Hydraulic Steering oil -- AW 32 means anti-wear & about 10 weight