Duffy 37 Gizmo info, equipment & disclosures

Addendum to main Gizmo listing, 7/1/25 version, with more to be added

Info

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, but approx 17' with mast lowered to included crutch, which can be done by two people and leaves flybridge hatch fully opening plus the bimini up

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

Equipment

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 with Wave design gypsy (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 2014l

Hydraulic steering probably by <u>Marine Hydraulic Engineering</u> 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

Navigation

Primary: Furuno TZT2 12 multifunction display on flybridge with DRS4D-NXT doppler radar and 520-PLD 600W transducer networked with PC running TimeZero PC 4.1 in pilothouse and synchronized with included iPad running TZ iBoat (and various other boat apps). A route created on one screen goes to all screens.

The Intel DC-powered NUC7i5BNK PC can display to both a Wimaxit 15.6-inch touch screen and 26-inch Vizio M261VP LED HD TV & monitor. The PC is controlled at either station with Logitech Bluetooth K810 Illuminated keyboard and M720 mouse, which can alternately control the iPad or a third device.

Simrad GO5 multifunction display at lower helm provides redundant chartplotting as well as side scanning sonar and more, which can be mirrored on the boat iPad running the Simrad Link app. The GO5 can also display and configure the Simrad AC12 autopilot.

Dual NMEA 2000 sensor networks and multiple Furuno and Maretron instrument displays for extensive system monitoring as well as redundant critical navigation data. **See Gizmo Info Spreadsheets for much more detail**.

Garmin Cortex (2021) <u>advanced AIS & VHF</u> 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 <u>Wave WiFi Rogue Reach dual band high-power bridge</u> 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

<u>Airmar DST810 (2022)</u> -- #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, powered either by the Victron 3,000W inverter or 30a SmartPlug shore power inlet and about 90 feet of cable (and adaptors for various outlets). New in 2025 is Blue Sea 30a ELCI ground protection (in starboard forward cockpit cabinet) and Promariner Prosafe Failsafe 30a galvanic isolator (with Victron DC gear in engine compartment). The only fixed AC equipment now on board are the microwave, the 26-inch Visio display and the chargers for 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

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 Ii Washdown Pump Ultimate 5.0 Gpm, 60psi. Max draw 16A, fuse 20A. *Current panel breaker sometimes trips, may need replacement or upsizing.*

Bilge: Primary Amarine Made 1500GPH pump new 2025 (aft, bilge #2 breaker) along with Blue Guard BG-One oil-detecting switch (configure and test pump with BGI app). Amarine Made 3700 GPH backup pump -- active only if the primary fails or is overwhelmed -- new 2025 along with solid-state switch and Blue Guard high water alarm and test switch.

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 <u>Force 10</u> <u>model 63351</u> with built-in mount. *All burners work but burner ignition systems do not and the 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 <u>Sea Frost BD</u> 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. As of June 2025, the forward freezer plate is controlled by the Victron Cerbo relay #1 via a Victron BatterySaver 65, so plate can be switched remotely and also shuts down at low voltage.

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

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

Marinco 10036 Shorty Horn -- dB(A) 123, frequency 290Hz -- with buttons at both helms (2025)

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

8 lifejackets

<u>Sirius Signal C-1001 LED Electronic visual distress signal</u> (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 <u>switch to SOS strobe or tricolor modes</u>)

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: Propspeed 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

Disclosures:

- As mentioned in my opening comments, Gizmo's exterior cosmetics are more workboat than yacht. It doesn't really show in photographs, but expect blotchy Cetoled teak trim, chalky superstructure gelcoat, and dull topsides.
- The interior varnish is also aged, particularly the cabin soles, and the boat has various other dings and scratches reflecting 25 years under 4 owners and about 3,700 hours of engine use.
- Also, the foam backing to the white vinyl cabin headliner is failing in several places, and while I'm experimenting with temporary fixes, a more permanent yet fairly easy solution is not obvious (at least, to me).
- The light gray nonskid deck paint is stained or chipped in a few places, and I have not been able to match the color.
- The transom moisture detected in the 2007 and 2009 buyer surveys is still there. There's also some moisture in the aft end of the cabin top, and probably elsewhere where water found a way into the balsa coring. However, I have not seen any signs of the hull or superstructure losing integrity, such as spongy panels or cracks due to core freezing.
- The exception to the overbuilt coring is that some flybridge furniture panels were very thinly skinned to minimize weight, and the result of balsa core failure there is panel weakness. I have repaired most problem areas with added structure and/or injected adhesives.
- In some places, the aluminum main cabin window frames and antenna mast are slowly oxidizing and pushing off paint, but spot-sanding and repainting is easy and lasting.

- The fuel tank calibrations may be inaccurate since the original Wema senders were switched over to Victron Cerbo, but the tanks can be measured with an included marked stick and the electronic calibration improved during future refuelings.
- The waste tank sender is sometimes inconsistent, despite tank cleaning, but it too can be sticked, and a state of fullness is often indicated by starboard list and/or
- The seacock for the waste tank overboard pump is currently stuck in the open position.
- It's quite rare, and usually keyed to wet weather and lack of use, but the lower helm engine control can stutter on startup and even slip into gear. Contact cleaner on the cable connectors directly below the control helps, and it's best practice to lock the control in neutral if leaving the helm. Similarly the flybridge engine control will sometimes fail to advance the throttle to full RPM, but the lower control always has.
- Maretron digital switching of nav, engine room, and mast lights is functional via DSM displays but the physical switches at both helms are not yet fully installed. Also, the forward LED floodlight and bow spotlight -- both on the digital switching -- are currently not working. I know that the failed flood problem is a broken power cable in the antenna mast, but not sure what's happening with the bow light, though I suspect it's functional if powered.
- A small odd detail, but worth noting: The high-power dual USB charger at the chart table creates enough EMI in use to substantially reduce Cortex VHF reception (while the other high-power USB chargers onboard do not).
- The TimeZero TZ Navigator software on Gizmo's PC, and the TZ iBoat app on the iPad, are both under non-transferable review licenses. So for continued use, the new owner must purchase new licenses as well as digital charts. (But the Furuno TZT2 12 and Simrad GO5 are transferable and include US charts.)