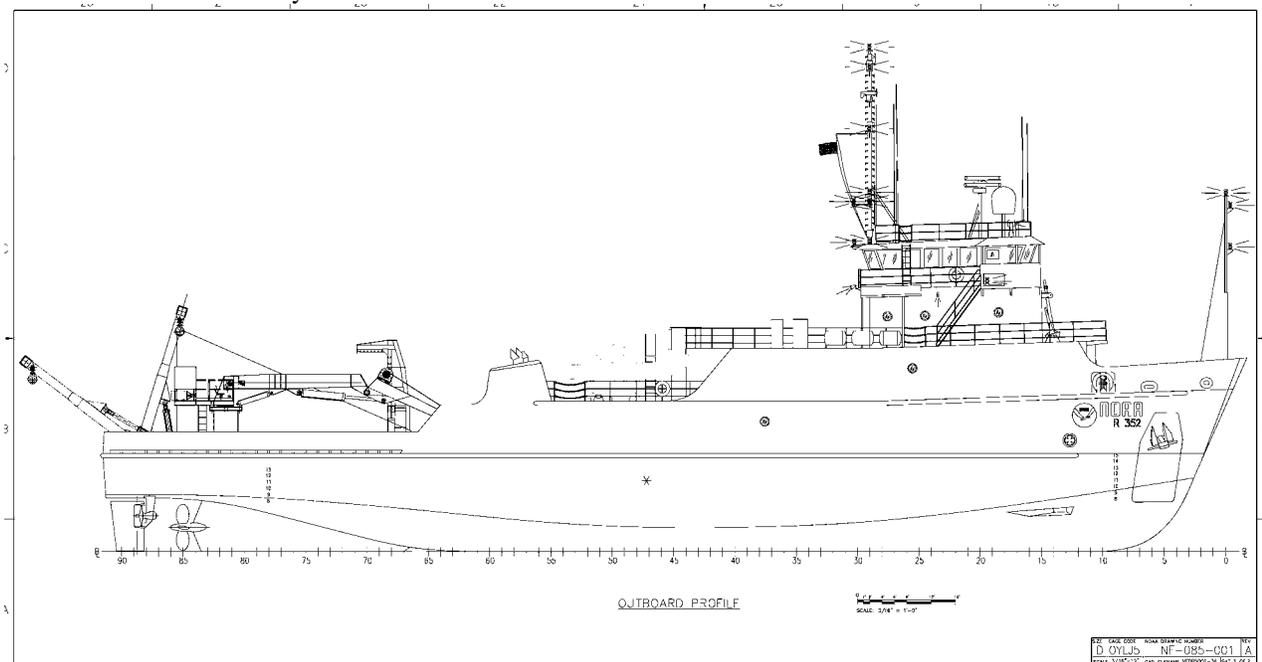


NANCY FOSTER

NANCY FOSTER was originally built as a Navy yard torpedo test (YTT) craft. The Navy transferred the vessel to NOAA in 2001 and NOAA outfitted the ship to conduct coastal research along the U.S. Atlantic and Gulf coasts. **NANCY FOSTER** is named for Dr. Nancy Foster, in tribute to her outstanding contributions in advancing NOAA's mission through her leadership within the National Marine Fisheries Service and National Ocean Service from 1986 until 2000.

NANCY FOSTER continues the work of its predecessor, **FERREL**, in support of NOAA's Office of Ocean and Coastal Resource Management and the National Sea Grant College Program. Operations include the characterization of various habitats in NOAA's National Marine Sanctuaries, pollution assessment, and studies to improve understanding of the connection between marine habitats and estuaries. **NANCY FOSTER** is capable of trawling for bottomfish, sediment sampling, conducting side-scan sonar surveys, providing support for an ROV, and servicing oceanographic/atmospheric surface and subsurface buoys.



Design

- Designer: McDermott, Inc. Amelia, Louisiana
- Builder: McDermott, Inc. Amelia, Louisiana
- Delivered to U.S. Navy: 1991
- Transferred to NOAA: 2002
- Commissioned: TBD
- Hull Number: R352
- Call Letters: WTER
- Home Port: Charleston, SC
- Length (LOA): 187 ft. (57 m)
- Breadth (moulded): 40 ft. (12.1 m)
- Draft, Maximum: 10 ft. (3.0 m)
- Hull: Welded steel
- Displacement: 1186.5 long tons
- Gross Tonnage: 894 tons

Speed & Endurance

- Cruising Speed: 10.5 knots
- Range: 3,500 nmi
- Endurance: 14 day
- Endurance Constraint: Food

Complement

- Commissioned officers: 5
 - Licensed engineers: 3
 - Crew: 10
 - Scientists: Up to 15
-

Food Service Seating Capacity

- General Mess: 16

Berthing

- Single staterooms: 3
- Double staterooms: 7
- Quadruple staterooms: 4
- Total bunks: 33

Medical Facilities

- Emergency and first-aid equipment aboard administered by trained vessel personnel and certified MPIC/EMT.
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Scientific Laboratory Facilities

- Dry Oceanographic lab (fwd): Dimensions 17' long X 16' wide, 272 sq. ft.
 - Wet Oceanographic lab (aft): Dimensions 26' long X 16' wide, 416 sq. ft.
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Cranes

- Forecastle deck crane
 - Type: Detroit diesel
 - Maximum length: 35 ft
 - Lifting Capacity: 3000 lbs
 - Main deck crane
 - Type: Goodcrane, electric
 - Maximum Length: 40 ft
 - Model: knuckle boom crane model 40KSC10000
 - Capacity: 10,000 lbs at max reach
-

J-Frames and Winches

- J-Frame
 - Location: port side
 - Type: Electrohydraulic
 - Clearance over side: 6ft
 - Vertical clearance: 13 feet 11 inches
 - Maximum load: 5,000 lbs
 - Oceanographic winch
 - Maximum Pull: 6,000 lbs
 - Wire size: 0.25 inch
 - EM winch
 - Type: Markey Dash 5
 - Cable: 10,000 meter of 0.322 inch conducting cable
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Ground Tackle

- Bow Anchor
 - Quantity: 2
 - Type: Stockless
 - Weight (each): 2000 lbs.
 - Manufacturer: KOHEMA
 - Anchor Chain
 - Size: 6" links
 - Length: 7 Shots each side
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Small Craft

- SeaArk (NF3)
 - Length: 21 feet
 - Weight: 3900 lbs
 - Cradle Weight 200lb
 - Motor: 225 hp mercury outboard motor
 - RHIB (NF2)
 - Length: 17.5 feet
 - Weight: 1,364 lbs
 - Motor: 50 hp Johnson outboard motor
 - Rescue Boat (NF1)
 - Motor: power twin 60 hp outboard motor
-

Engineering

General

- Cruising Speed: 10.5 Kts
 - Range: 3500 nmi
 - Power: 1250 Shaft Horsepower
 - Fuel Capacity: 56,757 gallons
 - Fuel Consumption: 83.3 gallons/hr at full ahead
 - Fuel Type: #2 Diesel
 - Endurance: 14 days
 - Endurance Constraint: Food
-

Propulsion Plant

- Main Propulsion
 - Quantity: 2
 - Model: Cummins KTA 50M
 - Cylinders: 16
 - Horsepower: 300
 - Shaft Horsepower: 1250
 - Displacement: 3067 cu. In.
 - Propeller
 - Quantity: 1
 - Type: fixed pitch
 - Manufacturer: Nakashima
 - Diameter: 90 inch
 - Blades: 4
 - Bowthruster
 - Type: Omnithruster
 - Power: 400 hp
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Freshwater System

- Freshwater system
 - ALFA Laval Freshwater generator JWP-16-C40/50
 - Everpure Bromine Feeder
 - Daily Output: 75 gallons/hr at full ahead. Approx. 1800 gallons per day
 - Holding capacity of potable H2O: 15,016 gallons
 - Consumption: ~ 1,000 gallons/day
-

Pollution Control

- Dry type: electrochemical
 - MSD Unit: Omnipure
 - MSD System Holding Tank: 8177 gallons
- Oily Water Control
 - Manufacturer: Village Marine Tec
 - OWS flow rate: 4.2 gallons/minute.
 - Oily water tank capacity: 1195 gallons

Note: Nancy Foster is a zero discharge ship, both gray and black water are treated through the system

Electrical System

- Generator
 - Quantity: 3
 - Model: Cummins model VTA28GS/GC
 - Cylinders: 12
 - Design: V-type turbo charged
 - Power: 700 hp at 1800 RPM (each)
 - Output: (3 phase) 416-480 Volts, 200 amps, at 60 hz.
 - Emergency Generator
 - Model: Cummins model NT855,
 - Cylinders: 6
 - Design: In-line turbo charged, 4-stroke engine
 - Power: 355 bhp at 1800 RPM.
 - Output: 125 Kw
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Communication equipment

- VHF radios
 - Land lines in port
 - Cellular telephone
 - NAVTEX-receives marine safety information, operational range is 200-400 nautical miles offshore
 - Weather fax-hooked into GMDSS equipment, receives distress signals and marine safety information
 - Hand held radios -ship to launch communications, deck communications
 - INMARSAT-B
 - E-mail (E-mail Address: CO.Nancy.Foster@noaa.gov)
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Acoustics

- Echo sounder: Abyss IES-10
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Navigation

- 2 TRANSAS monitors equipped with Navi-Sailor Program (ECDIS)
 - DGPS Receivers
 - Gyrocompass
 - port and starboard radar X-Band and S-Band W/ ARPA
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Scientific Equipment

- Shipboard Environmental DATA Acquisition System (SEAS)
 - CTD
 - 12 Bottle Niskin System
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