

NOAA Ship *Nancy Foster*



NOAA ship *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. She received three NOAA Bronze Medals for her conservation accomplishments and a Department of Commerce Gold Medal for leadership in providing stewardship of the Nation's living resources.

The NOAA ship *Nancy Foster*, homeported in Charleston, S.C., is one of a fleet of research and survey vessels used by NOAA to improve our understanding of the marine environment. It is a highly capable, multipurpose platform involved with a wide variety of coastal oceanographic research projects.

Nancy Foster was originally built for the U.S. Navy as a yard torpedo test craft (YTT). The Navy transferred the vessel to NOAA in 2001 where it was converted to conduct coastal and estuarine research along the U.S. Atlantic, Gulf, and Caribbean coasts. *Nancy Foster* has 20 permanent crew members and berthing for up to 15 scientists.

Equipped with two cranes, an A-frame, J-frame and two winches, *Nancy Foster* can adapt to many different types of oceanographic research, including trawling, water and bottom sampling, geologic, bathymetric, and hydrographic surveying. The ship is equipped with wet and dry laboratories, computers for data acquisition and analysis, and instruments for obtaining oceanographic and atmospheric data. The ship carries four different launches, ranging from 17-foot rigid hull inflatable boats to a 23-foot aluminum boat for diving and oceanographic operations in shallow waters. Crew members are trained and certified NOAA working divers. They are also trained in Nitrox diving, which is useful when deeper or longer dives are necessary for a particular project.



Deck crew attaches a buoy that had flipped over during hurricane Katrina. The buoy was towed to the Data Buoy Center for repairs

The ship supports two primary areas: NOAA's Office of Ocean and Coastal Resources Management and National Sea Grant College Program. Operations may include the characterization of various habitats in NOAA's National Marine Sanctuaries, pollution assessment, and studies to improve our understanding of the connections between marine habitats and estuaries. The ship also participates in the College of Charleston's At Sea! program, where high school students are introduced to hands-on marine science through day-long cruises to conduct oceanographic sampling.

Nancy Foster conducts field operations for the National Status and Trends program, a pollution-monitoring program that documents the effects of human activities on coastal and estuarine environments by systematic observations in selected locations along the U.S. shoreline. The status of the present environmental conditions of these sites is measured by taking sediment quality surveys and conducting benthic macro-invertebrate studies, then resampling the same areas at regular intervals to define trends of varying contaminant levels.

Nancy Foster may be found trawling for bottomfish, sampling surface sediments, and conducting side-scan and multibeam sonar surveys. It tows ROVs, and sub-bottom profilers, deploys bottom corers, services oceanographic/atmospheric surface and subsurface buoys, and deploys divers for various underwater tasks.

The ship was deployed to the Gulf following hurricane Katrina to conduct hydrographic surveys and environmental assessment studies.



Scientists observe whales feeding during whale tagging cruise

Ship Specifications

Length: 187 ft.
Breadth: 40 ft.
Draft: 11 ft.
Displacement: 894 tons
Cruising Speed: 10.5 knots
Range: 3,500 nmi
Endurance: 15 days
Officers: 5
Licensed Engineers: 3
Electronic Technician: 1
Survey Technician: 1
Crew: 10
Scientists: 15 (max.)
Hull Number: R352
Call Letters: WTER
Designer: McDermott, Inc.
Builder: McDermott, Inc., Amelia, Louisiana
Delivered to: U.S. Navy, 1991
Transferred to NOAA: 2001
Commissioned: 2003



Wire trap is used to obtain fish samples



A Remotely Operated Vehicle is deployed

Office of Marine and Aviation Operations

Since NOAA's beginning, NOAA ships and aircraft have played a critical role in the collection of its oceanographic, atmospheric, hydrographic, fisheries and coastal data. This fleet of platforms is managed and operated by NOAA's Office of Marine and Aviation Operations (OMAO), an office composed of civilians and officers of the NOAA Commissioned Officer Corps, one of the Nation's seven uniformed services.

NOAA's fleet of research and survey ships is the largest fleet of federal research ships in the Nation. The fleet ranges from large oceanographic research vessels capable of exploring the world's deepest ocean, to smaller ships responsible for charting the shallow bays and inlets of the United States. The fleet supports a wide range of marine activities, including fisheries research, nautical charting and mapping, and ocean and climate studies. Many of NOAA's research vessels are unique in their ability to conduct scientific research.

NOAA's fleet of aircraft operates throughout the world providing a wide range of capabilities including hurricane prediction research, marine mammal and fisheries assessment, and coastal mapping. NOAA aircraft are modified to carry scientists and specialized instrument packages to conduct research for NOAA's missions.

In addition to research and monitoring activities critical to NOAA's mission, NOAA ships and aircraft provide immediate response capabilities for unpredictable events. NOAA survey ships found the wreckage of EgyptAir Flight 990, TWA Flight 800 and John F. Kennedy Jr.'s aircraft. Our ships, aircraft and personnel have also conducted damage assessments after major oil spills, such as the Exxon Valdez and Persian Gulf War, and after land-falling hurricanes. Following Hurricanes Katrina and Rita, NOAA ships conducted emergency surveys for navigation hazards that helped Gulf ports reopen quickly, and tested the waters for contamination to ensure seafood safety. Aerial images of disaster-torn areas taken by a NOAA aircraft were posted on the Web with a Google interface, enabling residents and emergency workers to see if houses, bridges and roads were still standing.

NOAA Commissioned Officer Corps

The NOAA Corps is one of the seven uniformed services of the United States. It is composed of commissioned officers who provide NOAA with an important blend of operational, management, and technical skills that support the agency's science and surveying programs at sea, in the air, and ashore. NOAA Corps officers, in addition to managing and operating ships and aircraft, are also scientists and engineers. Corps officers serve in NOAA's research laboratories and program offices throughout the Nation and in remote locations around the world. For example, an officer serves as station chief at the South Pole, Antarctica.

About NOAA

NOAA conducts research and gathers data about the global oceans, atmosphere, space, and sun, and applies this knowledge to science and service that touch the lives of all Americans.

NOAA warns of dangerous weather, charts our seas and skies, guides our use and protection of ocean and coastal resources, and conducts research to improve our understanding and stewardship of the environment that sustains us all.

A Commerce Department agency, NOAA provides these services through five major divisions: the National Weather Service, the National Ocean Service, the National Marine Fisheries Service, the National Environmental Satellite, Data and Information Service, and Office of Oceanic and Atmospheric Research; and numerous special program offices. More information about NOAA can be found at <http://www.noaa.gov>.

Visit the ship's Web site at www.moc.noaa.gov/nf/
For more information, contact OMAO at 301-713-1045
or visit our Web site at www.oma.noaa.gov