NOAA Ship ALBATROSS IV

Albatross IV continues the long scientific tradition of the *Albatross I*, *Albatross II*, and *Albatross III*. Albatross vessels have been operating out of Woods Hole since the Nation's first biological station was established here in 1871, when the Albatross I was built as the first fishery research vessel.

Crew members retrieve oceanographic instrument

NOAA ship *Albatross IV* conducts fisheries and oceanographic research in coastal and deep ocean waters from Nova Scotia, Canada, to Cape Hatteras, North Carolina. The ship was specifically designed as a fishing trawler and multifunction research platform to serve the operational requirements of NOAA's National Marine Fisheries Service Northeast Fisheries Science Center in Woods Hole, Massachusetts.

Albatross IV is equipped to collect information on the distribution and abundance of groundfish (e.g. cod, haddock, and flounder) and sea scallops as well as the environmental factors that affect seasonal and long-term changes in fish stocks. The world's longest time series of standardized fishery population data is based primarily on the information collected by the *Albatross IV* and its crew for more than 35 years.

Special Projects

Although most of the ship's projects involve fish stock assessments, the ship also conducts a wide variety of physical, chemical and biological studies. Some of the other key projects are as follows:

The U.S. GLOBEC Georges Bank Program - A five-year multidisciplinary physical, chemical and biological oceanographic effort whose ultimate goal is twofold: to predict changes in the distribution and abundance of cod, haddock, and two species of plankton (Calanus finmarchicus and seudocalanus) as a result of changes in their physical and biological environment; and to anticipate how their populations might respond to climate change.

Estuarine Habitat Project - A joint project with NOAA Aircraft, NOAA Coastal Services Center and NASA Wallops Flight Facility to determine the feasibility of monitoring plankton from the air to increase data collection productivity. Data collected from remote sensing instrumentation on the aircraft are "ground truthed" with that collected by *Albatross IV.*

Marine Mammal Survey - *Albatross IV* is used to collect data necessary to estimate abundance of marine mammals.

Northeast Shelf Ecosystems Monitoring Survey - The principal objective is to assess the change in biological and physical properties of the Northeast Continental Shelf. This area is a very important habitat for the cod, haddock and flounder populations.

Recently, *Albatross IV's* operations have been redirected to ascertain the before and after impact of scalloping on several areas closed to fishing. The ship is also monitoring the recovery progress of the ground fish stocks in these closed areas.

Albatross IV has responded to special operations and emergency situations. In 1996, an oil spill occurred in Naragansett Bay when the barge North Cape ran aground during a storm. *Albatross IV* was diverted to the scene to sample the marine life to provide a baseline against which to measure natural resource damages. The ship has also responded to maritime distress situations, including the recovery of Navy F-16 wreckage off the New Jersey coast.

Ship Specifications

Length (LOA): 187 ft.
Breadth: 33 ft.
Draft: 16.2 ft.
Displacement: 1,089 tons
Cruising Speed: 10 knots
Range: 3,933 nm
Endurance: 16 days
Hull Number: R 342
Call Letters: WMVF
Commissioned Officers: 4
Licensed Engineers: 3
Crew: 13
Scientists: 14 (Max)
Launched: April 1962
Delivered: November 1962
Commissioned: May 1963
Builder: Southern Shipbuilding, Slidell, Louisiana
Designer: Dwight S. Simpson Associates

Some of the methods used to collect fishery data

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 made up of civilians and officers of the NOAA Commissioned Officer Corps, the Nation's seventh service. 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 hurricanes and major oil spills such as the Exxon Valdez, Persian Gulf War and New Carissa.

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 fixed-wing aircraft and helicopters operate 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.

NOAA Commissioned Officer Corps

The NOAA Corps is one of the seven uniformed services of the United States, 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 offcers, 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 which 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.

NOAA is celebrating 200 years of science and service to the nation. From the establishment of the Survey of the Coast in 1807 by Thomas Jefferson to the formation of the Weather Bureau and the Commission of Fish and Fisheries in the 1870s, much of America's scientific heritage is rooted in NOAA.

Visit the ship's web site at http://www.moc.noaa.gov/al/

For more information about OMAO, contact us at 301-713-1045 or visit our web site at http://www.omao.noaa.gov

Visit the NOAA 200th Celebration Web Site to see how NOAA ships have contributed to this 200-year legacy. http://celebrating200years.noaa.gov/