

NOAA Ship *Fairweather*



Fairweather is designed to carry four hydrographic survey launches, two small work boats and a fast rescue boat. These boats provide the capability to survey in shallow water, support shore stations, tend scuba divers and meet all SOLAS and USCG regulations.

The concurrent use of several multibeam systems provides the ability to cover larger survey areas quickly and efficiently. High-speed, large capacity computers aboard *Fairweather* process the massive amounts of data collected by the launches and the ship. On-board production of high-resolution three dimensional terrain models of the ocean floor allow hydrographers to quickly analyze the bottom and determine hazards to navigation or other areas of interest.

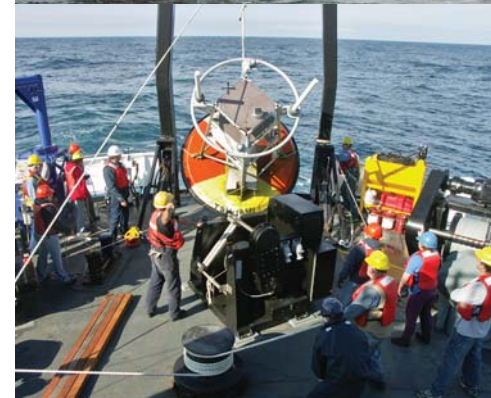
The NOAA Ship *Fairweather* is named after Mt. Fairweather, the tallest peak in the Fairweather Range at 15,300 feet above sea level, located in Alaska's Glacier Bay National Park and Preserve along the US-Canada border. Mt Fairweather was named by Captain Cook in 1778 presumably due to the good weather encountered at the time of his visit.

NOAA Ship *Fairweather* is one of the most modern survey vessels in the world, having undergone a complete refitting in 2004. The ship is designed and outfitted for conducting coastal hydrographic surveys in support of NOAA's nautical charting program. In addition, the ship can support high precision on-shore surveys and fisheries and oceanographic research. *Fairweather* primarily operates in Alaskan coastal waters and is homeported in Ketchikan, Alaska.

Fairweather is equipped with precision echo sounders, data acquisition and processing computers, Differential Global Positioning System (DGPS) receivers, high speed and high resolution side scan sonars, bottom samplers, tide gauges and saltwater sound velocity profilers. *Fairweather* uses multibeam echo sounders and side scan sonars to map the ocean bottom, determine bottom characteristics and identify areas of interest to navigators, biologists and geologists. These units allow for 100% bottom search in project areas.



Scientists take water samples that were collected at different depths



At the request of the National Data Buoy Center, *Fairweather* recovers a tsunami buoy that was adrift in the north Pacific Ocean

Ship Specifications

Length (LOA): 231 ft.
Breadth: 42 ft.
Draft: 15.5 ft.
Hull: Welded steel/Ice strengthened
Displacement: 1,800 tons
Gross tonnage: 1,591 tons
Cruising Speed: 12 knots
Range: 6,000 nm
Endurance: 22 days
Hull Number: S 220
Call Letters: WTEB
Commissioned Officers: 8
Licensed Engineers: 4
Crew: 23
Scientists: 23
Launched: March 1967
Delivered: January 1968
Commissioned: October 1968
Builder: Aerojet-General Shipyards, Jacksonville, Florida
Designer: Maritime Administration



Dive operations are conducted from the launch



Field party checks a tide station

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/fa/
For more information, contact OMAO at 301-713-1045
or visit our Web site at www.oma.noaa.gov