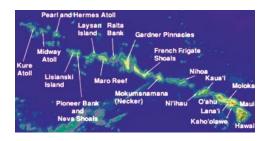
# NOAA Ship HI'IALAKAI





Tow-team divers collect video documentation of benthic habitat.



The Hawaiian Island archipelago is the Hi'ialakai's primary area of operations

HI'IALAKAI, Hawaiian for "embracing pathways to the sea" and "guiding leaders of the seas" is one of the most recent additions to the NOAA fleet. The ship supports coral reef ecosystem mapping and habitat activities under NOAA's National Ocean Service (NOS). Primary users of the ship include the National Marine Sanctuaries Program and the NOAA Coral Reef Conservation Program. HI'IALAKAI also shares a close partnership with NOAA's Office of Oceanic and Atmospheric Research, NOAA's National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the University of Honolulu.

HI'IALAKAI operates year-round along the Hawaiian Islands, the Northwest Hawaiian Island chain, and the Pacific Insular area, which includes the U.S. Territories of American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), and Guam. The ship conducts coral reef health, fish stock, and bio-analysis assessments. It also generates shallow-water coral reef maps using a multibeam and backscatter echosounder. Scuba diving operations play a major role in the ship's mission, and HI'IALAKAI is well suited to support both shallowand deep-water dive projects. The ship is equipped to carry two to five small workboats that transfer divers to the working grounds, a 15-person dive locker to store scientific gear and equipment, and an air compressor to fill tanks. As HI'IALAKAI frequently operates in remote areas, the ship also carries a three-person, double-lock decompression chamber; in the event of a diving accident, the diver can be treated on site.

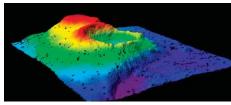
HI'IALAKAI's multibeam equipment is being used to continue the coral reef mapping activities that were initiated in 2002 by the U.S. Coral Reef Task Force. One of the primary goals is to develop a suitable baseline map of the working areas so that periodic monitoring will enable scientists to determine whether or not the reef systems are growing or shrinking over time. The coral reef ecosystems are especially important because they support several endemic, threatened, and endangered marine mammals, fish, sea turtles, and birds.



Coral reef ecosystem found off the island of Saipan, Commonwealth of the Northern Marianas Islands (CNMI).

#### **Ship Specifications**

Length (LOA): 224 ft. Breadth: 43 ft. Draft: 15 ft. lin. Displacement: 2285 long tons Cruising Speed: 11 knots Range: 8000 nm Endurance: 30 days Hull Number: R 334 Call Letters: WTEY Commissioned Officers: 6 Licensed Engineers: 3 Crew: 15 Scientists: 23 (max.) Launched: 1984 Transferred to USCG: 1998 Transferred to NOAA: 2002 Builder: Tacoma Boat, Tacoma, Washington



Uncharted submarine crater 60 km SE of Maro Reef in the Northwestern Hawaiian Islands chain



NOAA's multi-beam survey launch, R/V AHI, getting underway to conduct benthic habitat mapping. Photo courtesy of Bruce Applegate-Hawaii Mapping Research Group.

#### NOAA 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 Marine and Aviation Operations (NMAO), an office made up of civilians and officers of the NOAA Commissioned 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. Most recently, NOAA aircraft provided support to the World Trade Center and Pentagon recovery and cleanup efforts by mapping the wreckage using remote-sensing technology. 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 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 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* 

Visit the ship's web site at <www.moc.noaa.gov/hi/> For more information, contact NMAO at 301-713-1045 or visit our web site at <www.nmao.noaa.gov>

