



MT MITCHELL S222

A Message From The Captain

On behalf of the officers and crew of the NOAA Ship MT MITCHELL I would like to take this opportunity to welcome you aboard.

The officers and crew of the MT MITCHELL are at your disposal and will gladly answer any questions concerning the ship and her activities.

The MT MITCHELL is one of the most advanced hydrographic survey vessels in the world today. I hope you will leave our ship with a greater appreciation for, and knowledge of, this science of the seas.

Sincerely,

Commanding Officer
NOAA Ship
MT MITCHELL



**Welcome
Aboard
MT MITCHELL
S222**

The NOAA Ship MT MITCHELL is one of the fleet of 24 ships used by the National Oceanic and Atmospheric Administration (NOAA) to improve the understanding and use of the physical environment. The vessel is designated as Survey Ship (S222) and is operated by the National Ocean Survey—a major element of NOAA and part of the U.S. Department of Commerce.

The MT MITCHELL's home port



Officers and crew scan a fathogram for bottom profiling.

is NOAA's Atlantic Marine Center, Norfolk, Va. She was built by Jacksonville Shipyard Inc., Jacksonville, Fla., in 1966, and was commissioned as a United States Government vessel in 1968. The class II survey ship is 231 feet long overall, with a 42-foot beam and a displacement of 1,798 long tons at a draft of 14 feet.

The MT MITCHELL was designed and constructed primarily for hydrographic survey work for nautical chart construction. Most of her earlier years were spent surveying the waters off the southern Atlantic coast and Puerto Rico. In 1977, she

performed a major five-month survey of northern Lake Huron (Michigan) in cooperation with the Canadian Hydrographic Service. In May 1978, the MT MITCHELL began a five-year hydrographic survey in the Gulf of Mexico that will assist in the safe navigation of large tankers and other seagoing vessels.

The MT MITCHELL also was designed with limited oceanographic capability. One of her first assignments was to make an ocean bottom profile from Rhode Island to Spain to assist in the laying of a trans-Atlantic communication cable. Similar cruises have been made to France, Venezuela and Panama.

In recent years, she has participated in numerous oceanographic projects including:

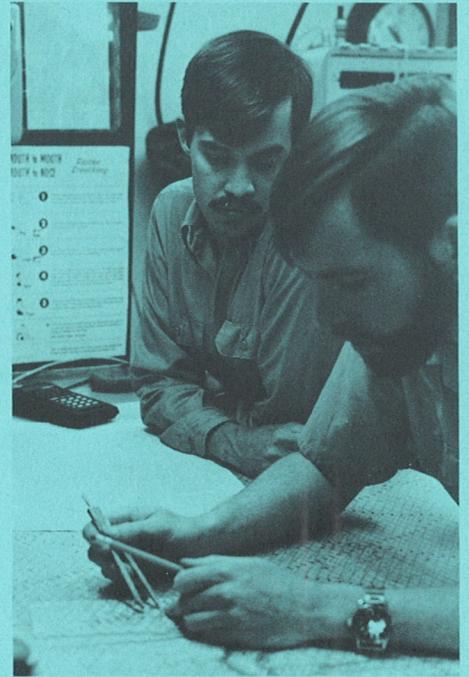
- a current study in the northeast channel (Gulf of Maine);
- a larval herring cruise on Georges Bank;
- a study of sediment transport on the Continental Shelf; and
- an investigation of underwater mud slides 50 miles off the Maryland and Virginia coasts.

To facilitate the hydrographic surveys, the MT MITCHELL is outfitted with modern electronic positioning systems, precision depth recorders, and a computerized data acquisition system. She carries four survey launches, two of which contain data acquisition systems identical to the ship's.

The ship's oceanographic capability includes bathythermographic



A commissioned officer works on a boat sheet overlay while two officers inspect a boat sheet used for initial survey work.



measurements down to 2,500 feet (750 meters), Nansen bottle water sampling, sediment grab sampling, tidal measurements, and various sample analyses. The ship also has the flexibility to accommodate additional scientific equipment such as laboratory vans, plankton nets, special winches, seismic reflection profilers, and deep ocean bottom corers.

In April 1978, the MT MITCHELL began participation in a National Ocean Survey program of monitoring deep ocean dumpsites. These investigations will study the possible

environmental impact of dumping industrial and municipal wastes in the deep ocean beyond the Continental Shelf.

The vessel is named for Mt. Mitchell, the highest mountain in the eastern United States. Located in the Blue Ridge chain in western North Carolina, the mountain was named for Dr. Elisha Mitchell, of the University of North Carolina, who established its elevation in 1835. Dr. Mitchell died on the mountain while conducting a resurvey in 1857.

Dedication

"The name of this vessel is symbolic of the strength, enduring and spiritual, that we associate with mountains. It is significant, I believe, that she will reach the 'highest peak' of service for the welfare of mankind. May the MT MITCHELL be dedicated to increasing knowledge of the sea and to furthering man's progress in the challenge of the seas."

—Alton Lennon, U.S. Representative,
North Carolina

General Description

Builder	Jacksonville Shipyard Inc., Jacksonville, Fla.
Commissioned	March 23, 1968
Call letters	WTEG
Home port	Norfolk, Va.
Length	231 feet (70.3 meters)
Beam	42 feet (12.8 meters)
Draft	14 feet (4.27 meters)
Displacement	18 tons
Horsepower	2400 BHP
Propulsion	Diesel twin screw controllable pitch propellers with a 200 HP bow thruster
Cruising speed	13 knots
Range	8,000 nautical miles
Endurance	24 days
Complement	12 commissioned officers 61 crew

Pollution Control

A closed-cycle, aerobic bacteria sewage treatment system was installed in 1977 that exceeds the stringent anti-pollution requirements for the Great Lakes.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and
Atmospheric Administration
National Ocean Survey