



Welcome  
Aboard  
Peirce S328

The NOAA Ship PEIRCE is designed to perform nearshore hydrography, the process of surveying the physical features of the sea's bottom and the depth of water. The ship performs three types of surveys:

### Basic Hydrographic Survey

The basic hydrographic survey involves charting the sea floor using a continuous depth profile obtained from an echo sounder. Data on water depths, details of the shoreline, positions of navigational aids, and dangers to navigation are compiled for inclusion in National Ocean Survey nautical charts of the area.

### Navigable Area Survey

The navigable area survey is designed to provide very accurate and timely information of heavily trafficked areas, giving the mariner a greater degree of detail required for modern navigation.

### Chart Evaluation Survey

The chart evaluation survey permits the National Ocean Survey to perform a critical examination of the accuracy and the completeness of its marine products including nautical charts, Coast Pilots, and tide tables. In conducting this type of survey, the PEIRCE performs reconnaissance hydrography to determine the adequacy of existing charts; observes tides to check tide predictions; resolves all reported or discovered discrepancies and deficiencies; and conducts a "user

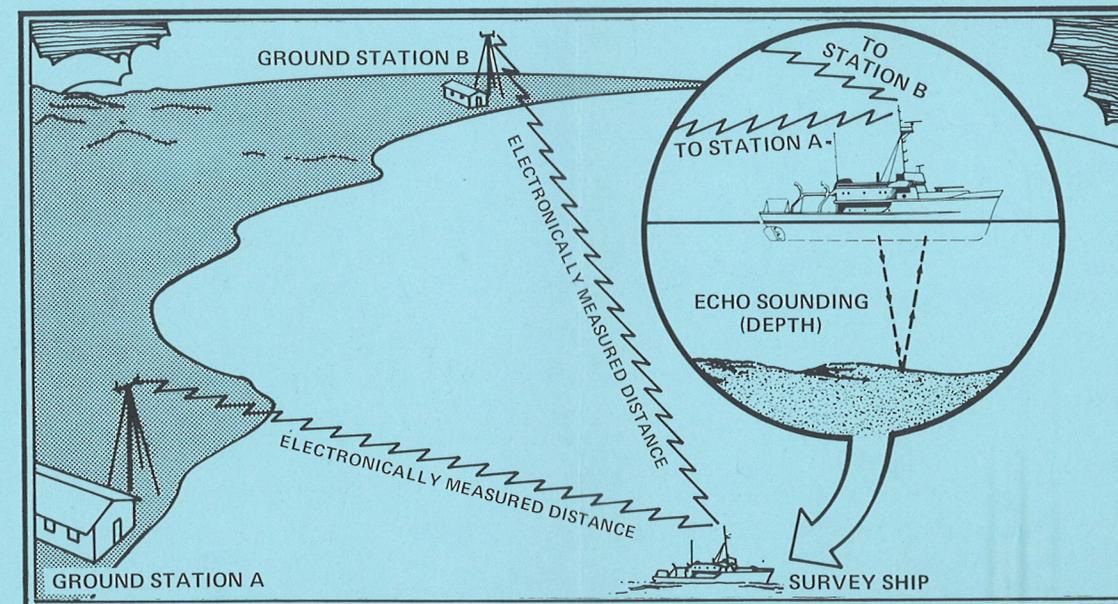
analysis" of National Ocean Survey charts and services.

To facilitate these surveys, the PEIRCE is outfitted with modern electronic positioning systems, precision depth recorders, and a computerized data acquisition system. The ship also has limited oceanographic capabilities. She carries two highly sophisticated survey launches used to gather inshore survey data. They are equipped with the same data acquisition gear the ship uses.

### Mission

Assist in the coastline charting of the Eastern Seaboard and Great Lakes, and participate in oceanographic projects as assigned.

The NOAA Ship PEIRCE (pronounced "purse") is named for the nineteenth century scientist Charles Sanders Peirce. Recognized as an eminent philosopher, logician, and epistemologist, Peirce gained fame through his service with the Coast Survey—forerunner of the modern National Ocean Survey—from 1859 to 1891. During this time, he became famous for his work as a "pendulum-swinging," revolutionizing the world's methods of determining the force of gravity for a given location, and for efforts in measurements implementing the wave length of light as a tool.



*Hydrographic Survey*

### Tour Details

#### I. Pilot House

##### Land Survey Instruments

- Theodolite — Measures precise angles
- Geodimeter — Precise distance measuring instrument
- Level — Measures difference in elevation

#### II. Plotting Room

##### *Exhibit #1—Project Area*

Illustrates the PEIRCE's assigned survey area

##### *Exhibit #2—Survey Sheet*

Visual aid to surveyor displaying the data gathered

##### *Exhibit #3—Computerized Survey System*

Automatically gives ship or launch directions in navigation plus determining the depth. It then plots the information real-time. (See Exhibit #2).

### General Description

Builder	Marietta Mfr. Co. Point Pleasant, W.Va.
Commissioned	May 6, 1963
Call letters	WTEQ
Sister ship	NOAA Ship WHITING
Home port	Norfolk, Va.
Length	163 feet (49.7 meters)
Beam	33 feet (10.1 meters)
Draft	10 feet (3.0 meters)
Displacement	760 tons
Propulsion	Diesel
Horsepower	2 - 800 SHP
Speed	11.5 knots
Range	5,700 nautical miles
Days at sea	200 days
Complement	32 crew 8 officers

### Pollution Control

Type	Aerobic bacterial
Sewage holding tank capacity	30 days
Oily waste holding tank capacity	Bilge retention



**U.S. DEPARTMENT  
OF COMMERCE**

**National Oceanic and  
Atmospheric  
Administration**

National Ocean Survey



# Peirce S328

### A Message From The Captain

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

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

I hope your visit will be both enlightening and enjoyable.

Sincerely,

Commanding Officer  
NOAA Ship PEIRCE