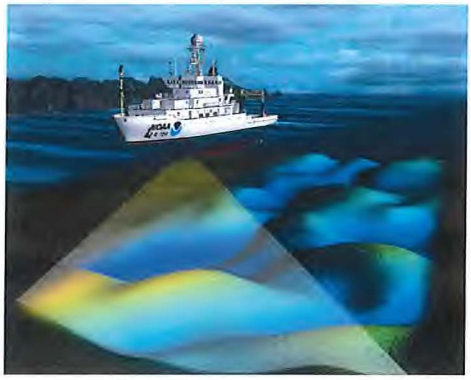
2018 NOAA COAST SURVEY INTERNSHIP

Since President Thomas Jefferson asked for a survey of the coast in 1807, Coast Survey has been the nation's nautical chartmaker. Using the water depths and other data acquired by NOAA hydrographic surveys, Coast Survey creates and updates over a thousand charts covering 95,000 miles of U.S. coastline, publishes the United States Coast Pilot, and responds to navigational emergencies in U.S. waters and at our nation's ports.



The student volunteer will work with the Chief, Resource Management Staff, in the Office of Coast Survey at the National Oceanic and Atmospheric Administration, a federal environmental agency dedicated to understanding, managing, conserving, and predicting changes to the nation's coastal and marine ecosystems.

The volunteer will assist the office on several tasks related to a recent office reconfiguration, including scanning and sorting of records according to the records management schedule set forth by the National Archives. The volunteer will also assist the office with the placement and organization of historical heritage items, such as original copper plates that were used to produce Coast Survey's maps of the ocean, or nautical charts.

For further information or questions, please contact oc.internships@noaa.gov

Office of Coast Survey *The nation's nautical chartmaker*

Who we are

U.S. Department of Commerce

National Oceanic and Atmospheric Administration

National Ocean Service

Office of Coast Survey

What we do

Coast Survey maintains the nation's nautical charts and publications for U.S. coasts and the Great Lakes. We create and maintain over a thousand charts covering 95,000 miles of shoreline and 3.4 million square nautical miles of water. We support the 1.3 billion metric tons of cargo valued at $1.8 trillion that comes in and out of U.S. ports every year.

Our products

Data collection - Conduct hydrographic surveys to collect depth measurements for nautical charts.

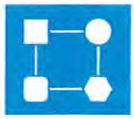
Product development - Create nautical charts and other products for safe and efficient navigation.

Product distribution - Distribute nautical charts in multiple formats, capitalizing on digital formats.

Our services

Navigation response - Conduct routine and emergency hydrographic surveys.

Regional support - Navigation managers strategically located in U.S. coastal areas to assist with navigational challenges.



Model development - Develop models for storm surge and hurricane prediction with real-time data feeds.

Technology research - Develop and test new technologies to improve mapping efficiencies.

Our customers and stakeholders

- Professional mariners representing regulated deep draft vessels.
- Department of Defense including U.S. Navy, U.S. Coast Guard, and other government agencies
- Port authorities and pilots
- Recreational boaters
- Manufacturers of navigational systems for commercial vessels and recreational boaters
- Software and application developers
- State and local government agencies
- Coastal planners who use nautical data and geographic information Systems (GIS)

Our public/private partnerships

- **Chart production, printing, and distribution**
  Coast Survey establishes certification requirements for private industry companies who want to distribute paper charts.
- **Contract surveys**
  Coast Survey uses hydrographic contract companies to collect bathymetric data used in nautical charting products.
- **Multiple data formats for ease of use**
  Coast Survey provides data freely to be ingested into navigation systems and mobile applications.

A bit of history... President Thomas Jefferson created the U.S. Coast Survey in 1807 to provide nautical charts to help the Nation with safe shipping, national defense, and maritime boundaries. Over two centuries later, Coast Survey–now an office within NOAA in the DOC–continues to provide the navigation products and services that ensure safe and efficient maritime commerce.

nauticalcharts.noaa.gov

Office of Coast Survey
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
(/)

History of Coast Survey

The Nation's First Scientific Agency

On February 10, 1807, President Thomas Jefferson signed "An Act to provide for surveying the coasts of the United States."

The effort experienced some growing pains in the early years. Ferdinand Hassler, who was eventually to become the agency's first superintendent, went to England to collect scientific instruments and was unable to return through the duration of the War of 1812. After Hassler returned, he started work on a survey of New York Harbor in 1817, but Congress stepped in to suspend the work because of tensions between civilian and military control of the agency. After several years under the control of the Department of the Navy, the civilian U.S. Coast Survey was established in 1832, with Hassler as superintendent. Coast Survey has been the nation's chartmaker ever since.

In the ensuing years, the young agency tackled additional responsibilities. In addition to conducting hydrographic surveys and producing nautical charts, U.S. Coast Survey conducted the first systematic study of the Gulf Stream, designed tidal predication machines, and established the geodetic connection between the Atlantic and Pacific coasts.

U.S. Coast Survey (known as Coast and Geodetic Survey beginning in 1878) attracted the best and brightest scientists and naturalists. Coast Survey commissioned famed naturalist Louis Agassiz to conduct the first scientific study of the Florida reef system. James McNeill Whistler, who went on to paint the iconic "Whistler's Mother," was a Coast Survey engraver. The great naturalist John Muir was a guide and artist on "Survey of the 39th Parallel" across the Great Basin of Nevada and Utah. Alexander Dallas Bache, great-grandson of Benjamin Franklin, was the second Coast Survey Superintendent. Bache was a physicist, scientist, and surveyor who established the first magnetic observatory and served as the first president of the National Academy of Sciences.

The agency's men and women (Coast Survey hired women professionals as early as 1845) led scientific and engineering activities through the decades. In 1926, they started production of aeronautical charts to meet the requirements of the new air transportation age. During height of the Great Depression, Coast and Geodetic Survey (C&GS) organized surveying parties and field offices that employed over 10,000 people, including many out-of-work engineers.

In World War II, C&GS sent over 1000 civilian members and more than half of its commissioned officers to the military services. They served as hydrographers, artillery surveyors, cartographers, army engineers, intelligence officers, and geophysicists in all theaters of the war. Civilians on the home front produced over 100 million maps and charts for the Allied Forces. Eleven members of the C&GS gave their lives during the war.

President Richard Nixon formed NOAA in 1970, bringing C&GS into the new scientific agency. Today, the Office of Coast Survey continues its traditional commitment to employing the highest levels of science and technology to improve marine safety and to tackle the new challenges of the 21st century.

According to the Dictionary of American History (https://nauticalcharts.noaa.gov/goodbye.html?url=http%3A%2F%2Fwww.encyclopedia.com%2Fearth-and-environment%2Fgeology-and-oceanography%2Fgeology-and-oceanography%2Fcoast%233401800882), "the Survey is considered to have been one of the major birthplaces of modern American science, including many disciplines not generally associated with geodesy and hydrology. Its creation is a cornerstone of the rapid growth of science and technology and of the development of natural resources for commercial use in the United States."