

A Long and Difficult Journey across the Atlantic

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Visitors to Roanoke Island Festival Park can view *Elizabeth II*, a composite replica of ships that sailed in the 1500s. The ship is named for *Elizabeth*, one of the seven vessels that made the 1585 Roanoke voyage. It is a square-rigged, sixty-nine-foot-long bark with three masts that has a carrying capacity of fifty tons. Image courtesy of Roanoke Island Festival Park.

In April 1585 an expedition of men left England. They sailed across the Atlantic Ocean to the shores of what we know as the Outer Banks of North Carolina. Seven ships sailed together in a fleet. The ships were different sizes; the middle size was about the length of a school bus. The travelers included sailors, who worked on the ships, and soldiers and tradesmen going to North America to explore and find items of value. The ships took about ninety-two days to reach Roanoke Island. They traveled at about five to ten knots, roughly six to twelve miles per hour. During the voyage, storms off the coast of North Africa separated the ships. Each had to make its way alone to the

Caribbean, where sailors traveling from Europe to North America often stopped for rest and supplies. Some of the ships reunited near Puerto Rico. The crews got fresh supplies and captured two Spanish ships, which they later sailed back to England.

The men onboard these ships lived in very cramped conditions. Soldiers and tradesmen

If your family went on vacation from North Carolina to California by car, it would take two days of constant driving to get there. In order to equal the journey of the ships in 1585, your family would have to make that trip to the West Coast and back twenty-three times, and you could only get out of the car twice!

stayed “below decks.” These areas remained locked and sealed to prevent water from getting in and sinking the ship. Since soldiers and tradesmen were not used to being at sea, if they went up on the main deck, they could get in the way of working sailors or get hurt.

Normally a cargo ship like the *Elizabeth II*—a true-to-size model based on typical sixteenth-century ships, built in the 1980s for anniversary celebrations of the Roanoke voyages—traveled England’s coastlines or to France and the

Netherlands. Such trips required about fifteen men to sail the vessel. When these ships crossed the Atlantic Ocean, they needed twice that many crew members because the vessels had to sail twenty-four hours a day. Traveling by ship to unfamiliar places such as North America also required careful and precise measurements to ensure arrival at the

intended destination. The captain and a crewman called a navigator usually did these calculations.

In the 1500s the best way to identify your location in the vast ocean and make sure you were heading in the right direction was to measure the angle between the horizon and an object in the sky, such as the North Star or sun. To do this, and determine latitude, navigators used tools such as an astrolabe or cross-staff. Then, using charts, the captain could direct his ship.

Conditions on sixteenth-century ships—which looked nothing like modern cruise ships—were rough. Hatches, or doors, were small, and men used ladders to get from one deck to another. Captains made money by the amount of cargo they could carry. So they needed the cargo hold to be as large as possible. The ship's top deck, called the weather deck, was outside and filled with masts, rigging, and sails. In between the cargo hold and weather deck could be one or more decks, depending on the size of the ship. Many ships had gun decks with cannons. Often this was where the crew slept or passengers stayed. Because the gun deck was full of cannons and not used for other jobs, it was small—around four and one half feet from floor to ceiling. A full-grown man could not stand up straight there. Men in the 1500s averaged about five feet seven inches tall.

Europeans categorized ships in the 1500s by the pattern of their sails and how much they could carry in their holds. They measured carrying capacity by a ship's ability to carry one-ton (or tunne) barrels. Each barrel held 252 gallons of wine as a standard of measure. A fifty-ton vessel like the *Elizabeth II* held fifty barrels. Some ships held six to eight hundred tons. A two-hundred-ton ship is four times bigger than a fifty-ton, but that does not mean the ship is four times as long or tall. The measurement is by volume.

The men on the ship ate food rationed by the ship's steward. It was his job to make sure everyone got what they needed and to ensure supplies did not run out during the trip. Every day, each man got a pound of meat, which could be dried beef, salted pork, or



The gun deck of ships like *Elizabeth II* is often where sailors slept or passengers stayed. Typically these decks had low ceilings. Image courtesy of Roanoke Island Festival Park.

dried or salted fish. Jellied eel was a possibility. The cook also added meat to dried vegetables and grain, boiling the mixture in a pot. The final product, called "pottage," looked like a thick stew. If the weather became too rough for using fire to cook, everyone ate the meat dry with ship's biscuits. The biscuits were incredibly hard, made only with flour and water. Since water spoils when stored in a wooden barrel, each man received one gallon of beer to drink throughout the day. The beer on ships was not very strong, but it kept algae from growing in the barrels

and was safer to drink than water.

With moldy biscuits and cramped, dark decks, life aboard ship proved difficult. Sailors worked hard to get the ship and its passengers safely from one point to another. Many ships did not make it. They turned back to Europe or were lost. It took about six months to travel to North America and back, and the sailors, soldiers, and tradesmen often left their families behind during these long trips.

Imagine again that cross-country trip in the car. If the adults were in the front seat, and they painted all the windows in the back of the car black, with a curtain between you and them, you get an idea of what life was like for passengers aboard a ship crossing the Atlantic Ocean. What if your parents refused to turn on the air-conditioning? Of course, you could play cards, dice games, or board games such as backgammon, just like the passengers may have done in 1585.

The Roanoke colonists weren't able to stay permanently in North America, but they would learn a lot and bring back information that helped later English sailors and explorers return and establish settlements.

**Roanoke Island Festival Park in Manteo is a state historic site. Access Web site www.roanokeisland.com to learn more about the park, the Elizabeth II ship that is based there, and related history.*