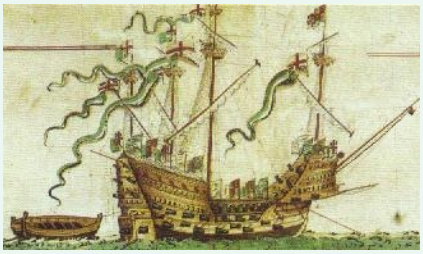
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TUDOR GALLEON H259

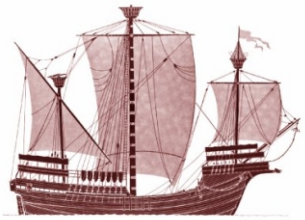


The image below left shows a contemporary drawing of the famous sixteenth century English ship the *Mary Rose*. This vessel, of the carrack-type, was built in 1509.

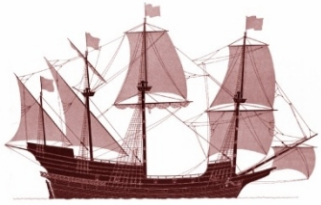


Carracks were one of the first proper ocean-going ships in Europe, being large enough to be stable in heavy seas and roomy enough to carry provisions for long voyages. They had a high stern (rear) with an aftcastle and a forecastle (platforms to shoot at other ships from or which could be used as a fortress if the ship was boarded). In 1492 Columbus set sail for America in a carrack, the *Santa María*.

By the middle of the sixteenth century, however, this design of vessel gave way to the galleon. Carracks were sturdy, but they were also rather wide and top-heavy. The *Mary Rose* illustrates one of these drawbacks as, in 1545, she toppled over while heading out to sea from Portsmouth harbour to fight the French navy. The galleon, on the other hand, was a longer, slimmer ship and this improved the flow of water around the hull, reducing resistance and giving the ship more manoeuvrability. The forecastle was also reduced, which lessened wind-resistance at the front. The two drawings below give some idea of this transformation.



Carrack



Galleon

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Galleons were built using oak for the keel and pine for the masts and various hardwoods for the hull and decking. The expenses involved in galleon construction were enormous. Hundreds of expert craftsmen worked day and night for months before a galleon was seaworthy.

Galleons could be used for trade or warfare - and the two were often combined. In the sixteenth century groups of wealthy businessmen often pooled resources to pay for a new ship. The vessel was usually intended for trade with the New World (America) or with the Far East, but it was also often assumed that weaker vessels from foreign nations would be taken if the opportunity offered itself. In times of peace the state was required to punish pirates who attacked foreign vessels, but the high seas were lawless places and a blind eye was often turned, particularly if the victim was Spanish.



Perhaps the most famous Tudor galleon was the *Golden Hind*, the ship which Francis Drake used to sailed around the world between 1577 and 1580. A modern version of this ship can be on the right.

At the start of the voyage Drake's ship was named the *Pelican*. He set sail on 15 November 1577 along with four other ships and 164 men. Drake crossed from the Atlantic to the Pacific through the Magellan Strait. By this time only the *Pelican* was left, although it had been renamed the *Golden Hind*.

The *Golden Hind* sailed north alone along the Pacific coast of South America, attacking Spanish ports and rifling towns as it went. One captured ship yielded 80lb of gold and a golden crucifix, countless jewels, 13 chests full of coins and 26 ton of silver.

Drake then headed westward across the Pacific and rounded the Cape of Good Hope. On 26 September the *Golden Hind* sailed into Plymouth with Drake and 59 remaining crew aboard, along with a rich cargo of spices and captured Spanish treasures. The Queen's half-share of the cargo surpassed the rest of the crown's income for that entire year.

Though Drake is considered a hero in England, Spanish history perceives him as a vicious pirate. *Draco* (drago') or *El Draqui*, to use Spanish names for him, was used as a bogeyman for centuries after his raids.

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The principal warships of the opposing English and Spanish fleets in the 1588 confrontation with the Spanish Armada were galleons. The English were victorious in this encounter through a mixture of tactics and good luck.

The Spanish strategy was to bombard enemy vessels and then try to board them. Their gunners fired once and then jumped to the rigging to attend to their main task as marines ready to board enemy ships. The English tactic, on the other hand, was to keep out of the reach of their opponents and to fire their cannons repeatedly.

In the main encounter - off Gravelines on the Belgian coast - eleven Spanish ships were lost or damaged (though the most seaworthy Atlantic-class vessels escaped largely unscathed) and the Spanish suffered nearly 2,000 battle casualties before the English fleet ran out of ammunition. English casualties in the battle were far fewer, in the low hundreds.

The Spanish ships were then driven north, round Scotland and back along the coast of Ireland. There they were hit by a storm and many were wrecked. It is reckoned that 5,000 men died, whether by drowning and starvation or by execution at the hands of English forces in Ireland. In the end 67 ships (out of 130) and around 10,000 men (out of 26,000) got back to Spain.

The finest ship in the English navy in this encounter was a galleon captained by Drake called the *Revenge*. This ship was built at a cost of £4,000 at the Royal Dockyard of Deptford in 1577. She weighed 500 ton and carried 46 guns ranged along both sides of a single gun deck.



In 1590 *Revenge* was commanded by Sir Martin Frobisher in an expedition along the coast of Spain to intercept the Spanish treasure fleet. She was sunk in 1591 when Sir Richard Grenville took on 53 Spanish ships with a depleted crew. For 12 hours his crew fought off the Spanish, causing heavy damage to 15 galleons. Attempts by the Spaniards to board were driven off. The *San Philip*, a vessel three times her size, tried to come along side for the Spaniards to board her, but was beaten off. When morning broke the *Revenge* lay with her masts shot away and only 16 men left out of a crew of 250. Ultimately, Grenville wished to blow up the ship, but the crew surrendered, and he died several days later of his wounds. *Revenge* along with 16 Spanish ships sank during a cyclone soon after.