Hey guys, welcome to the Renaissance English History Podcast, Episode Thirty Six on Henry VIII's founding and creation of the Tudor Navy. Before I get started, I want to tell you about an amazing tour of England that I'm putting together, and invite you to come on this once in a lifetime experience with me. A good friend and I have put together a tour company called Big World, and our launch tour, next Spring, 2016, is English cathedrals and choral evensong services. We'll be visiting places like Cambridge, Ely, Bath Abbey, Salisbury, and Winchester, with a lovely day spent in the Cotswolds in Cirencester as well, and at each stop we'll have both a historical tour in the morning, free time in the afternoon, and then gather back together to attend and listen to the evensong service in the chapel or cathedral. We're capping the tour at just 12 people, and there are still some spaces available. If the idea of spending 9 days traveling through the English countryside at one of the most beautiful times of the year, wandering through the Cotswolds, lounging in a Roman Bath, and enjoying amazing music almost every day in the most stunning setting is appealing to you, then I'd invite you to check out our tour at www.bigworld.com. That's www.bigworld, all one word. com. Thanks so much, and we can't wait to travel with you.

Then start music

Hello, and welcome to the Renaissance English History Podcast. I'm your host, Heather Teysko.

As I get started, here's my Holiday gift to you: I'm going to start sending out regular monthly newsletters to keep in touch with people who listen to the podcast in a different way - we'll have book and CD giveaways, promotions, exclusive interviews and content, etc. If you sign up for the newsletter before the end of the month, I'll send you a Tudor-themed digital advent calendar that I created. Every day opens up to a different Tudor or Elizabethan holiday treat like a Renaissance playlist, or a holiday video at Hampton Court, or a recipe for wassail. So go to the website at www.englandcast.com and sign up! Of course, you can sign up any time in December and I'll still send it to you, but I'll be sending it out to everyone at the end of the day on the 30th of November, so if you want to enjoy all 24 days in order, go to the site now and sign up!

Also, a reminder that if you like this podcast, please rate it in whatever service you use to listen to it, whether it's itunes or Stitcher, or something else. It helps other people find the podcast, and decide if it's something they want to listen to. Finally, you can now call me on 801 6TEYSKO or 801 683-9756 to leave feedback, show ideas, nice thoughts, etc.

So this week I'm talking about the rise of Henry VIII's navy, and how England went from being a place where even fisherman rarely went beyond the view of land into a naval powerhouse that was able to defeat the mighty Spanish armada in just two generations. Along the way we'll be talking about famous ships like the Mary Rose and Great Harry, victories in France and Scotland, defeat in France, and ultimately the emergence of a naval power.

Let's start by talking about ships, shall we? Ships in general were going through a major transition during the Renaissance thanks to the growth in trade between Northern Europe with their heritage of Norse ships, and Southern Europe's Mediterranean tradition. The new ships were faster and could sail further, and could also sail closer to the wind, which made it easier to sail to places previously difficult to reach because of the winds. The idea of how a ship could be used in war was also changing, from being simply a means of transporting soldiers to being an actual weapon itself, with guns and cannon. This was a new idea in Europe, since gunpowder was still relatively new, and people were still figuring out the best ways to work with it.

So let's look at Henry VIII now. Before he became the womanizer that we know now, he was interested in all things military, and especially ships and guns. He particularly liked to receive pictures of ships, and he had a very rare European tidal almanac in his posession. Twice during his reign he struck gold coins bearing the image of ships. He often left London to keep up on maritime affairs in different ports so he could observe for himself what was going on, and he kept track of his shipping involvements personally. A list of shipping that had been hired on his behalf in 1512 was corrected in his own hand, for example. When ships were at sea they were required to keep the king directly informed of any events. Henry may have also participated in actually designing ships himself towards the end of his reign. Even Eustace Chapuys, the imperial ambassador who had no reason to exaggerate Henry's talents, wrote that henry had begun to "make ships with oars of which he himself is the architect."

Henry VII started the Tudor interest in ships, though he did not have the same level of enthusiasm as his son. Though the monarchy had used Portsmouth harbor since the 12th century, and it had briefly been a galley base under King John, Henry VII was the first monarch to spend much money on its defenses, wanting a fully functional naval base on the south coast. He ordered the construction of its first dry dock in 1485 on the southwest tip of Portsea Island. Henry VII left his son two big men o'war; the four masted *Regent* of 1000 tuns, and the three masted *Sovereign* that was three masted and slightly smaller. There were also three much smaller royal ships including *Mary and John, Sweepstake* and *Mary Fortune*. This was the extent of the Navy when Henry VIII came to power.

With that being said, another change that was happening in society was the idea that the monarchy needed a standing navy. Up until now, the King could simply call on merchant ships as he needed them. But perhaps the growth of the specialization with guns on board made that more improbable. Traditionally the King's Ships would be only partly owned by a monarch, generally intended to trade like any other ships, the profits sometimes going into the monarch's own pockets rather than the treasury. If hostilities broke out, it was easy to turn a merchant vessel into a war ship. Generally monarchs would rent boats, with the fee being per ton per month. In 1512 Henry was paying 1 shilling per ton per month, a rate that was not very generous to the ship owners. Sometimes monarchs would even rent out their own ships to merchants the way Henry Tudor let out his *Sovereign* towards the end of his reign to merchants going to the Mediterranean. From time to time ships could be conscripted into the King's service, and if the ship was lost they received no compensation.

Another monarch that was leaning towards building a navy, which made it more important for Henry, was James IV in Scotland. Scotland was also dependent on the sea, like England, and in 1506, four years after signing a perpetual peace treaty with England, James informed Louis XII of France that he was determined to build a fleet capable of defending Scotland against anyone. By the end of his reign he had acquired 38 ships. One of those, started in 1506, was a super-ship, the *Michael* which was 1000 tuns and needed a crew of over 300 to work her, and was one of the biggest vessels afloat when she was completed. For the first time, a ship carried real artillery, the kind that soldiers in siege warfare would recognize. The ship carried 120 gunners to work the cannons, in addition to the regular crew. Henry quickly came to the conclusion that he would have to match her in a great warship of his own.

The idea of a navy at the time was turning into a three tiered job - first, the warships were tehre to protect a country's interests from pirates or other predators. Sometimes they took soldiers to warfare. And finally, they enhanced the stature of the sovereign. For England, the primary job was to protect the merchants and commerce. English trade extended to Iceland in one direction, and the far end of the Baltic in the other, down the Atlantic coasts of France and Spain, and into the Mediterranean a bit. England imported a wide variety of items like wine, produce, spices; and exported mostly fish and coal from Newcastle. Wool was turning into the number 1 export by this point as well. So it was important to make sure these traders were protected, and they were often escorted along parts of their routes.

But glory and reputation was a prime motive for Henry in all things, as we have seen before, and he quickly began making war against France in an alliance with his Father in Law Ferdinand of Aragon, and the Holy Roman Empire. He had an early failure in 1512 when Edward Howard, the Admiral, after having a successful expedition to Brittany returned, and wound up losing a major ship, the *Regent* in what should have been an easy battle. It was because the ship's captain tried to use the traditional tactic of grappling and boarding an enemy ship for hand to hand combat - during the fight an explosion on the Breton ship caused both to catch on fire, and they were both lost, taking about 1500 men with them. This would be a turning point in naval warfare as people turned towards firing artillery to sink a ship.

Henry recovered quickly and spent much of 1513 winning battles in both France, and, with his wife Katherine of Aragon acting as Regent, the famous battle of Flodden in Northumberland where the English beat back the invading Scots, killing much of the Scottish nobility, including the King. Right around the same time, the Scots suffered another setback when the navy was affected by some violent storms while aiding the French against the English. The great ship, the *Michael* ran aground and was almost lost. It was left behind when the Scottish fleet sailed home in November, and the French eventually bought her for 40,000 francs.

So all of this is the backdrop against which Henry started his ship building project. He began with the Mary Rose and its sister ship the Peter Pomegranate in 1510. The Mary Rose is the most famous because of its history, having sunk in 1545 in the Battle of the Solent in the straits

off the isle of wight when the French were trying to invade England. Attempts were made for years with divers trying to rescue her in some way, but it wasn't until 1982 that she was salvaged, and she's now undergoing a reconstruction in Portsmouth. Almost 15,000 items were preserved and so she is a bit of a Tudor time capsule with personal items like shoes and combs mixed in with navigational tools, coins, mugs and the remains of a small dog. Both the Mary Rose and Peter Pomegranate were large warships that had specially built gun ports in the sides of the boat on special platforms. The Mary Rose served for 35 years, and the Peter Pomegranate is last mentioned in the late 1550's, which means it would have served for almost 50 years.

In response to the Scottish ship the *Michael*, there was a bit of an early Arms race with Henry building the Henry Grace a Dieu (henri grahse a dieu) or the Great Harry in response. It was built at the new naval yards in Woolwich, which Henry created specifically to build his new ship, and the ship was absolutely amazing. It had 4 decks, 43 heavy guns, 141 light guns. She was one of the first ships to be able to fire guns broadside, which meant that she could be parallel to a ship and open the newly invented watertight gunports in the side of the boat and fire all the cannon from the side simultaneously, which would, of course, be devastating. Though it took an expert captain to be able to maneuver a ship to pull off such a great shot. The Great Harry's forecastle was 4 decks high, and had a crew of between 700 and 800 men. She saw little in the way of actual action, though she was at the same Battle of the Solent where the Mary Rose sank. After Henry died, she was renamed for Edward, and then lost in the record. It's a great shame that this magnificent flagship was just lost, though it's possible that she burned in a fire in Woolwich in 1553.

So, we've got Henry building ships, and at the end of his reign he left a navy of almost 50 great ships, which was, as you'll remember, about 10 times the size he was left with when his father died. He also created new dockyards at Woolwich and Deptford to build and house his great ships.

All of this activity needed support both in terms of paying the workmen, but also in provisioning them while they were working. To build the Great Harry it took 252 men, and because there weren't very many men with shipbuilding experience in London, the men came from all over the country including Plymouth, Dartmouth, Exeter, Poole, Ipswich, York and others. They were all paid a halfpenny a mile to cover their travel while they came to Woolwich, and on site their pay varied depending on what skills they had. Shipwrights received between twopence and sixpense a day, laborers twopence to fivepence. Everyone received free lodging and meals while they were working, which was a better deal than they would have received under Henry's father, the first Tudor, who was so famous for being miserly. He expected them to pay their own way and pay for their own lodging while they were working for him. The food they would have been fed was really high quality, too - beef, cod, herring, oatmeal plus rations of bread and ale.

Doing a project like this just once or twice would have been a major feat, but doing it enough to leave your successor over 55 ships took a level of project management that needed an expert in

administration. Enter Thomas Cromwell. Henry created the Navy Board to oversee the administration of the navy, but that wasn't until 1546, by which point Cromwell had already lost his head. While his head was still attached he had earned the King's favor by being incredibly efficient in the way he handled Henry's money, and the way he obtained money for Henry through dissolving the monasteries, but that's a totally different subject. Anyway, Cromwell was a project manager who could have written a book on project management. When Henry broke with Rome to marry Anne Boleyn, there was a question of where the tax money that had previously gone to the Pope would go. Cromwell suggested that it should go to provisioning the sea defenses, and he appointed his friend Stephen Vaughan as the King's agent in the Low Countries, tasking him with procuring naval stores.

So basically, you're seeing this movement from the King not being involved in maintaining a navy at all, and simply renting merchant ships when he needed to in order to go to war, to having a king owning a fleet, and then coming up with the administrative network to be able to support it from one central office so that the responsibility was streamlined in a single line of command rather than through disparate people.

Of course, the break with Rome in order to marry Anne Boleyn also meant that Henry was facing the threat of war again, this time from the Catholic powers who saw a chance to get in good with the Pope while also making things difficult for England. Because of the new threat of war with France, Henry decided to keep 30 ships active even during peacetime to patrol the coasts. This meant that you needed to have more facilities on shore, have more administration, more people to fix the ships when things go wrong. It was a big jump to having a navy that was perpetually active.

In 1545 the French tried to invade again with 30,000 men - it was a larger armada than when the Spanish invaded with their armada 40 years later. The Mary Rose was the most famous casualty of this invasion, and the French troops were repelled by both the English weather and troops, and returned to France. When Henry created the Navy Board it was organized with seven officers each in charge of a specific area, presided over by a Vice Admiral. The Navy spent much of its time during peace chasing Pirates.

Henry also began casting cannon in England. By the time of Elizabeth, England had huge iron workers using furnaces developing cast iron cannons, which were not as durable as bronze cannon, but were much cheaper and could be produced in England with English materials. And in the next episode I'm actually going to talk about the economy of iron in the forest of the Weald and the growing economy around cast iron in Tudor England.

So that's it for this week. The book recommendation is Great Harry's Navy by Geoffrey Moorhouse. I'll put a link up on the site and facebook page, which again is facebook.com/englandcast, where you can again contact me, send me show ideas, or just say nice things. And again, you can get all the book recommendations, show notes, sign up for the

mailing list, etc at http://www.englandcast.com. And don't forget to sign up for the mailing list in time to get your digital advent calendar for December! I've also started doing regular quick segments on different aspects of Tudor history on youtube, called the Tudor Minute. There's a link on the site and facebook page. Thanks so much for your listenership and support. The next episode in 2 weeks will be on the burgeoning industrial revolution - no, not the one in the 18th and 19th centuries. I'm talking about the tiny iron industry that took off during the close of the reign of Henry VIII and what it meant for the English economy. Talk to you next time!