

Fit for a King: the model collection of George III

Slide: Title

The purpose of this lecture is to show some of the ways in which the First Lord of the Admiralty, John Montagu, the 4th Earl of Sandwich, endeavoured to get King George III interested in the Royal Navy and how the collections at the National Maritime Museum demonstrates these endeavours.

I will also attempt to show how the set of six dockyard models, as products of these endeavours, which were made for, and presented to George III tell us in a very clear and graphic way much about the yards themselves, and their organisation, and about shipbuilding in the second half of the eighteenth century.

Finally I will conclude with a short résumé outlining the later provenance of these models and how they came into the collection of the National Maritime Museum.

Slide: John Montegu, 4th Earl of Sandwich by Thomas Gainsborough

On 12 January 1771, John Montagu, 4th Earl of Sandwich, returned to office as First Lord of the Admiralty for an unprecedented third time. One of the most outstanding administrators to occupy this post in the eighteenth century, Sandwich's third tenure in the office of First Lord which lasted eleven years was also one of the longest. One of his most

pressing tasks was the overseeing of the reorganisation and modernisation of the six Royal dockyards.

Conveniently for us the dockyards fall into three pairs: Deptford and Woolwich on the River Thames in London, Chatham and Sheerness in the Medway, which is downriver from London, and Portsmouth and Plymouth on the south coast.

As well as falling into three groups of two, the dockyards also subdivide into two groups of three in terms of their scale of operation. Deptford, Woolwich and Sheerness were small yards and the ships they built and serviced were becoming smaller too, due to factors such as the silting up of the Thames and that due to space restrictions, their expansion would be difficult. The yards at Chatham, Portsmouth and Plymouth were becoming the real powerhouses of the navy and, from the 1760s, they were being transformed in redevelopment programmes, hitherto unprecedented in scale and cost. The Royal Dockyards were the high-tech large-scale industries of their day and Chatham, Portsmouth and Plymouth were the largest industrial centres of their kind in the world. They employed thousands of men and huge sums of money were required for their operation.

Slide: Plymouth Dockyard by Nicholas Pocock

Like its neighbour Portsmouth on the south coast, Plymouth dockyard, which you can see in the painting here by Nicholas Pocock, was undergoing a large-scale expansion and rebuilding programme which

had begun in 1762. This programme entailed the extension of the yard boundaries, the reclamation of land, the building of new docks, and the enlargement of existing ones. Storehouses were being rebuilt and increased in both number and size. The manufacturing elements of the yards, such as the roperies, sawpits, sailmakers' lofts, foundries, and the like, were redesigned and enlarged in order to increase output and efficiency.

You can see here in the painting the new double ropery which replaced the old shorter, single one in the 1770s.

One of the first things that Sandwich did during his third tenure as First Lord of the Admiralty was to arrange a tour of all six dockyards, accompanied by several personnel from the Admiralty board together with the secretary to the Admiralty, Philip Stevens. The tour reached Plymouth dockyard on 5 June 1771 and Sandwich was particularly impressed, not so much with the yard itself, but with a model that had been made of that yard.

Slide: Dockyards visitations book

In Sandwich's Dockyards Visitations book, Stevens has recorded:

'Took a view of the new ground, the new works finished and those in hand; examined the whole by the Plan of Improvement, and by a very ingenious model of the whole carved in wood by the foreman of the yard ...'

Sandwich himself has written beside the entry in the margin:

'It would be very proper to have a plan of each of the yards taken in the same manner'.

And in a different hand, a further note has been added, presumably after the tour had returned to the Admiralty in the July of 1771:

'To be done - and to send a model of each to be deposited in the Admiralty Office'.

It was decided then, in the summer of 1771, that six topographical models showing the dockyards at the peak of their evolution were to be made for the Admiralty and displayed at their offices in Whitehall, in London. Models would have been especially useful for those members of the Admiralty who found it difficult to read or understand plans, just as ship models made perfectly clear new classifications in ship design. A set of topographical models would also be a very clear visual means of collectively consolidating six very disparate sites stretched out across the breadth of southern England.

No time was lost as, later that month, the Admiralty ordered the Navy Board to 'Cause plans and models carved in wood of each of the dockyards to be prepared and sent hither'.

The Navy Board in turn issued a warrant to the six Royal dockyards,

which said:

'Gentlemen - As we shall soon call upon you for a model of your yard, according to the intended improved plan. We direct you to look out among the artificers for proper persons to the number of 2, that are able to execute such a work'. In other words the models of the Royal dockyards were to be made in the dockyards themselves, by designated dockyard employees who had the appropriate skills.

The prototype model, which Sandwich and his team had admired so much, together with a plan of Plymouth dockyard, was sent to Whitehall and the other five yards sent their plans - Portsmouth sent theirs by 'machine', Plymouth sent theirs 'by the waggon'. Later the dockyards sent to London their chosen modelmakers - a mixture of shipwrights, carpenters and joiners to view Plymouth's example. There was only one professional modelmaker involved in the project and I will discuss him later.

On 21 January 1772, the Navy Board issued an order to the six dockyards that said:

'The two persons whom you recommended as capable to execute a Model of your Yard having attended us and have been shown the model of Plymouth Yard will begin work on them to the Scale of 40 feet to an inch'.

The scale that was chosen is an interesting one - 40 feet to the inch equals 1:480, which is exactly one-tenth the 1:48 scale of a standard

ship plan or navy board model. In a sense it's a hybrid of Imperial and metric.

Somewhere in the decision-making process, the purpose of making a set of topographical models of the six Royal dockyards changed from being for purely practical reasons for the use of the Admiralty, to their being made for presentation to King George III. What was the reason for this?

Although it was no secret that the Royal Navy was sucking in ever increasing sums of public money to build and maintain its growing fleet, even though seamen's wages hardly increased between 1653 and 1797. The larger budgets would have been brought into stark relief by the fact that, between 1665 and 1760 there was practically no inflation in Great Britain but, as the eighteenth century passed the country entered a long inflationary period that had become rampant by 1805. The capital expenditure on the dockyards themselves by the time Sandwich returned at the First Lord was colossal. A plan of Plymouth Dockyard, drawn up in the early 1760s itemises the estimated cost of each new building. The surviving Chatham dockyard papers at the National Maritime Museum include an itemised estimate of expenditure for the dockyard in 1774 that totalled £33,649. The sort of budgets that the dockyards were consuming meant that Royal support, if not necessarily Royal consent, was necessary.

Slide: George III in HMS *Southampton* reviewing the fleet off Plymouth, 18 August 1789, oil painting by Lieutenant William Elliott

It is also clear from the correspondence between the two men that Lord Sandwich was determined to get King George III more interested in the Royal navy. He coaxed and nurtured a growing interest by the King in naval matters. He took the King on visits to the fleet and organised tours of the dockyards so that he could personally see the improvements taking shape.

Despite the fact that Britain was a great maritime power, George, a Hanoverian, was essentially a military man.

Slide: King George III by William Beechey

Here he is in our painting by Sir William Beechey and typically his is in a General's full dress uniform. His interest in the military was proven on many occasions. For example as Elector of Hanover, he had personally organised the deployment of German troops to defend British garrisons at Gibraltar and Minorca.

However, this was the Age of Reason and George was a child of his time. He was an enlightened King interested in the arts and sciences.

He studied everything from horticulture to astronomy. He was an avid collector of books, assembling one of the finest libraries ever created by one man. Perhaps less well known was that he created the first large British collection of maps and charts. We know from their correspondence that George had loaned to Sandwich the bound plans and elevations of the dockyard buildings and features that now comprise

Kings 43 in the British Library. He was an important art collector, establishing the Royal Academy in 1768.

His scientific instrument collection, part of which on display at the Science Museum, is one of the most comprehensive collections of scientific apparatus assembled during the eighteenth century. George III had personally commissioned much of it from the instrument maker, George Adams, in 1761, and the items were expensive and elaborate. It is well known from his correspondence that George enjoyed tinkering with gadgets and all things mechanical. One of the itinerant public lecturers of the day, Stephen Demainbray, himself had a large scientific instrument collection, which was brought into the Royal household when he was appointed Superintendent of the observatory at Kew.

Sandwich was nothing if not a pragmatist and would have known that models would appeal to George in his campaign to enthuse the King about the Royal navy.

Slide: Model of the mainmast and yards of a first-rate ship (1)

For instance he sent the King George this superb model depicting the mainmast and yards of a first-rate ship together with a note, which said

'Lord Sandwich also sends a model of the Mast of a ship, which has been made by the Master Mastmaker in consequence of orders given him when your Majesty was at Portsmouth: the mainmast takes to pieces,

Slide: Model of the mainmast and yards of a first-rate ship (2)

and is composed exactly in the manner of the masts that are made for the service'. Similarly the ship model in frame in the National Maritime Museum's collection, traditionally known as the *Intrepid*,

Slide: *Intrepid* [overall]

which was a 64-gun ship launched in 1770, was commissioned especially for George III's personal use. Its maker, Joseph Williams, was instructed to take this model to the King personally so that he could answer any questions His Majesty might have. Prior to the delivery, Sandwich wrote to the King:

'Your Majesty will to morrow morning receive a model of a third rate in the same state of building as the Lion and Berwick which your Majesty went into in Portsmouth Yard; the timbers have been marked with their proper appellations, & Lord Sandwich flatters himself that nothing can be more likely to give your Majesty a thorough idea of a ships construction than this model'.

Slide: *Intrepid* [detail]

The model has indeed been marked with its 'proper appellations' as all the main timbers have been annotated with paper labels. And King George was not the only recipient of ship models of the highest quality.

Slide: *Royal George* (1)

The model of the *Royal George*, on display in The Ship of War gallery, was made for his son the His Royal Highness George the Prince of Wales. It was commissioned by Sandwich on 29 July 1772, together with a model of a 32-gun ship. From the Navy Board minutes we learn that the *Royal George* model was made at Deptford dockyard and the 32-gun ship at Woolwich. This one took five years to make and wasn't delivered until July 1777. One can see here in the figurehead, less than three inches in height the standard of workmanship that was deemed fit only for a King.

Slide: *Royal George* (2)

The ship has been depicted in frame on the port side with only the full frames in position, the filling frames removed, and fully planked on the starboard side. It is somewhat curious that the model was made at Deptford Dockyard when the actual ship was built just downriver at Woolwich Dockyard.

Slide: *Royal George* (3)

The friezes along the side were painted by the artist Joseph Marshall, for which he was paid eight guineas.

Slide: *Winchelsea* (1)

The other model commissioned for the Prince of Wales at the same time as the model of the *Royal George* depicts a 32-gun ship traditionally known as the *Winchelsea*. The model was made at Woolwich Dockyard but bears a striking stylistic similarity to the *Royal George* model that had been made at neighbouring Deptford Dockyard.

Slide: *Winchelsea* (2)

One can imagine that, as both dockyards were close to one another on the River Thames in London that there would have been close collaboration between the two yards regarding the models being built.

Slide: *Winchelsea* (3)

As with the *Royal George* Model the friezes here were painted by Joseph Marshall.

Slide: painting of a model of the *Royal George* by Joseph Marshall

This somewhat curious painting of a model is an example of eighteenth century joined-up thinking. Joseph Marshall, who had painted the *Royal George*'s friezes, was also commissioned by Sandwich to paint a pair of pictures of each class of ship in the Royal navy for the King's reference. There are twenty-eight in total. The profiles for these paintings were drafted out by Joseph Williams, the modelmaker who had made the *Intrepid* frame model we saw earlier. Two of these paintings are in our

collection, the other twenty-six are in the Science Museum. The example here is the stern quarter view of the *Royal George*, which was chosen as the example of a first rate, 100-gun ship-of-the-line.

Slide: Painting of a model of the *Enterprise* by Joseph Marshall

Here is the same view of the token 28-gun sixth-rate ship *Enterprise*.

The six dockyard models each took two years to make, during an all-to-brief period of peace. Before the first shots were fired in Lexington in April 1775, the dockyard employees had the rare opportunity to turn their hands to creating objects of beauty, craftsmanship and historical importance, rather than ships of war. The models were all completed and delivered to the Admiralty between March and May 1774, prior to presentation to George III. The fact that these models had each taken two years to make meant that they had fully occupied for that period of time twelve highly skilled artisans in addition to the cabinetmakers, draughtsmen and others involved in the project.

What did the Admiralty get for their investment? Perhaps more importantly, what was George presented with to inform and amuse him? Well taken both individually and as a set the dockyard models tell us much about ship construction, the shipbuilding process, dockyard organisation, and the dockyards themselves at a critical point in their evolution.

Slide: overall view of Sheerness dockyard

Sheerness was the first to be finished and was delivered to the Admiralty on 23 March 1774. It was made by the father and son team of John Baker, house carpenter at Sheerness yard and John Baker Junior, a joiner. A feature standard to all six models is an ivory compass rose and scale, with the acreage of each yard inscribed around the scale and here, on the Sheerness example, it is proudly signed by the modelmakers.

Situated at the mouth of the Medway, there was virtually no room for expansion at Sheerness dockyard and the model shows why. It was the only dockyard with built up fortifications. The site is depicted here as a rather gloomy, bleak and melancholy place right at the extreme end of the Admiralty's empire. It is as atmospheric as it is informative - grey sea, dirty streets, a general air of untidiness. Forlorn hulks are depicted, which served as both breakwaters and accommodation for the workforce.

Slide: *Bristol* and *Squirrel*

George Stockwell, a professional modelmaker, made the ship models, *Bristol*, *Squirrel*, and *Nottingham*. The frame model here on the left of the 50-gun ship *Bristol*, which we know was on the stocks in 1774 (she was launched the following year on the 25 October 1775), has been superbly made with each frame carved separately just like the 1:48 scale model of the *Intrepid* that we saw earlier. And at exactly one-tenth the scale of the

Intrepid it is, in a sense, a model of a model.

The model of Sheerness dockyard is the only one of the set to contain two groups of figures - bullock carts with their drivers. The figures, about two millimetres in height are wearing cocked hats and carrying whips.

Slide: Hulks

To the right of the dockyard we can see a group of accommodation hulks and one of these included the old 60-gun ship *Nottingham*, which had captured a French vessel, the *Mars*, in 1746. The model of the *Nottingham*, which is finer than the other depicted hulks, was also made by the professional modelmaker George Stockwell.

Slide: Graveyard

This model has been further personalised in the graveyard: one headstone is inscribed TN - a friend of one of the modelmakers perhaps? We can only guess.

Sandwich had sent George the plans of this yard in advance to help him interpret better the model, and in a letter dated 21 March 1774, four o'clock, he promised

'The model of Sheerness Yard will be ready to morrow or next day; your Majesty will probably chuse to keep the explanation and drawings till you have had an opportunity of comparing them with the Model'.

Slide: overall view of Chatham dockyard

This is the model of Chatham dockyard, located further up river on the Medway. It was made by shipwright William Phillips, and joiner John Monk. It was also used as a PR exercise on the part of the dockyard because it was exhibited to the public before being sent up to London. The Kentish Gazette reported on the 2 May that

‘A curious model of this dock-yard is just finished ... it is looked upon as a great piece of workmanship as ever was performed. They have been about two years and a half executing it. The number of people who come daily to see it, from all parts of the country, is incredible’.

Slide: officers' terrace

The model of Chatham dockyard, in particular, has been a tremendous historical resource. Chatham Historic Dockyard Trust and English Heritage have both used it as a primary source of information for the restoration of various parts of the dockyard such as the officer's terrace shown here. The Museum of Garden History in Lambeth has also studied this model for the information it reveals on the design of Georgian gardens, which we can see to the rear of the terrace.

Slide: Barfleur

And this is what it was all about, the *raison d'être* of the whole operation.

The second-rate 98-gun ship *Barfleur* is depicted ready for launching, complete with its commissioning flags. The modelmakers have in fact used artistic licence as this particular vessel had already been launched six years earlier, in 1768. As the one brightly coloured object in the model, it stands out from the gloom of the rest of the yard and is given pride of place right in the centre of the model. This is of course close to where the *Victory* was built in the old single dock and launched in 1765.

Just beyond the *Barfleur* is the Commissioner's house and garden. A mulberry tree, mentioned several times in the diaries of John Pepys, and which still exists today is depicted on the model.

Slide: Ropery

The ropery that is shown on the model isn't the one that visitors to Chatham Historic Dockyard can see today. Ropemaking has taken place on this site since 1618. The current double ropehouse replaced the one depicted in the model when it was built between 1786 and 1791.

Slide: Mast ponds

At the opposite end of the site from the ropery we can see the two large mast ponds built to season masts, yards and spars prior to them being fitted in ships.

The fruits of the modelmakers' labours were recognised by the Admiralty. It was an indication of the importance of the whole project that on 25 May

1774, the Navy Board wrote to the commissioners at Chatham to

‘...direct and require you to enter a Servant each to William Phillips Shipwright and John Monks a Joiner for their Ingenuity and Pains in making the said Model; and the Clerk of the Cheque is to pay them a guinea each for their Travelling Charges in Addition to their day Pay. For which this shall be your Warrant’.

Slide: overall view of Deptford yard

Though made by different teams, the Deptford and Woolwich dockyard models are stylistically very similar and they could possibly have been made by the men who made the models of the *Royal George* and the *Winchelsea* that we saw earlier. Both yards on the River Thames in London had been established by King Henry VIII in the early 1500s, and still consisted mainly of vernacular buildings in 1774. ‘Deptford’ was made by Thomas Roberts, shipwright, and William Reid, joiner, at Deptford dockyard.

Slide: The great storehouse

The great storehouse is depicted here, was the only substantial building on the site. which was only demolished in 1981. The clock tower was saved however

Slide: Clock tower

and is now a feature in Thamesmead shopping centre. The clock tower on the model is just a quarter of an inch high.

Slide: Ships under construction

All the models show how timber was delivered, graded and stored but this one shows how ships were built - from keel laying to the finished product. The supply of timber, especially of English oak, was always a problem as a medium sized vessel, which was a 74-gun ship, required wood from around 3000 loads, comprising 2000 mature trees which would have covered at least fifty acres. As Great Britain is a very small island one can appreciate how rapidly large areas of land were deforested in the eighteenth century.

Slide: master shipwright's house

The master shipwright's house, built in 1703, can be seen with its original Amsterdam gables. It is virtually the only surviving building, now part of the site of News International in Wapping. The outer half of the double dry dock can be seen here as well.

Slide: Woolwich yard

Woolwich is the smallest of the yards and the model is quaint compared with the others. Despite every effort to make them as uniform as possible, inevitably, the individuality of the makers shines through.

The model of Woolwich dockyard was made by John Haley and Richard

Pickthorne, who were both joiners, the latter having very thoughtfully signed his name underneath.

Slide: Officers' terrace

Here in the smallest of the dockyards we can see the most modestly sized officers' terrace. Other features include timber drying sheds, dockyard bells for regulating the work shifts and climbing plants growing up the walls in the officers' gardens.

Slide: Ships under construction

The miniature ships were made by Joseph Murgatroid, a Woolwich dockyard shipwright, for which he was paid five guineas.

Slide: The *Surprize* being launched

And here we see the sixth rate 28-gun ship *Surprize* that was launched - conveniently for the modelmakers - on 13 April 1774.

Slide: Plymouth yard

The prototype model of Plymouth dockyard, that began the whole process, no longer exists, though it may just possibly have been used as the carcass and upgraded into the version we see today. We know that the prototype was substantially refined before being sent to Whitehall for study by the other yards.

If the version we have today is not the one made by the foreman of Plymouth dockyard, as recorded in Sandwich's Dockyards visitations book, then we do not know who made it, and it is the only one for which we cannot with any certainty attribute a maker.

The presented model shows Plymouth dockyard at a pivotal point of its development with much building work either in progress, or about to start. Using an early form of colour-coding, the original key that accompanied the model, which you can see here, states:

Slide: Key to Plymouth dockyard

'The model so far in its proper colours represents the yard in its present state; those parts painted yellow are propositions agreeable to the general plan of improvement'.

In other words the model, when completed and presented to the King, was ahead of its time as some features shown had not actually been completed. The numbered list on the key corresponds to numbers painted on the model itself. These numbers list features on the model from the horse pond, marked number five on the model, to the sheds used for storing 'thick stuff & knees'.

Slide: Removable parts

In addition two existing areas on the model can be removed and

identically shaped parts showing the planned improvements can be inserted in their place.

Slide: Removable parts

Slide: Removable parts

Slide: Ships under construction

The miniature ship models have their names on their quarterdecks, and they all have illustrious names: *Glory*, *Queen*, *Hero* and the pride of the fleet, *Royal George*, back in for repair here at Plymouth dockyard for the umpteenth time.

Slide: Portsmouth yard

The Portsmouth model was the last to be completed and the Navy Board dispatched a number of urgent missives to the dockyard hurrying them up. The model was eventually sailed round to London on the *Lion* transport and the master of the vessel was told to secure it securely in his cabin. The model was made by John Doughty and Nicholas Vass, house carpenters at Portsmouth dockyard.

Slide: close up of site

Stylistically it is the plainest of the set and it is the only one of the six not to include ship models. All the dry docks are empty.

The six ship models made for this model are in the possession of the current Lord Montagu, Sandwich's descendent. They were reputedly removed by Sandwich though it is more likely that the model was late in being delivered and the ship models themselves were still unfinished.

Late in delivery or not its makers, Vass and Doughty, like all the other modelmakers, were duly rewarded. The two Portsmouth carpenters were given their own house servants and Vass was later that year promoted to master house carpenter of Portsmouth dockyard.

Navy Board standing orders to the dockyards from 1772-74 which ordered structural changes or improvements to the yards are invariably marked 'Model of the yards' in the corners to ensure that the six models, on presentation, would be as accurate and up-to-date as possible.

Uniformity of presentation was very important. Navy Board standing order No.641 ordered the newly-completed models to be 'placed in a neat Mahogany Case, the top to be of glass; to open in the middle, and turn back on hinges' indicating that they would need to be examined with the doors open. The template case was designed and manufactured at Deptford dockyard and plans were sent to the other yards to copy. Materials which Portsmouth dockyard ordered for their case included a 13ft 7in piece of mirrored glass, a skein of silk, two books of gold leaf and a pint of wood stain.

Slide: Visit of George III to Howe's Flagship, the *Queen Charlotte*, on 26

June 1794, oil painting by Henry Perronet Briggs

Sadly it is not known what the Royal reaction to the dockyard models was but they resided in the Royal collection for the remainder of George III's long reign. The King did however show a marked increase in his interest in all things maritime. Here for example we can see the visit of George III to Howe's Flagship, the *Queen Charlotte*, on 26 June 1794, after the Battle of the Glorious First of June.

Shortly after the death of King George III, the artistic but unmilitary George IV gave his father's ship model collection to the newly established Museum of Artillery at the Rotunda in 1822.

The Rotunda, administered by the War Office, acquired a motley collection of objects over the years. The dockyard models resided there as a set until 1914.

Then, in a bid to gain some space, keeper of the Museum of Artillery, a Colonel Bethell, contacted the Bethnal Green Museum of Childhood, offering them a whole range of topographical models, including the Royal dockyard collection.

Understandably the Museum of Childhood was not interested but forwarded Bethell's letter to the Science Museum. Their director, F G Ogilvie replied stating that they were just as short of space as the Rotunda, but were potentially interested in the dockyard models. They dispatched a curator to see them and on the basis of his report, the

Science Museum acquired the models of Deptford, Woolwich and Portsmouth.

The remaining three - Chatham, Sheerness and Plymouth - languished at the Rotunda, unwanted and unappreciated. It was not until the plans for a new national museum of maritime history were well under way that these and much of the rest of George III's collection at the Rotunda, were transferred to this museum.

The Science Museum's three dockyard models have been on loan to the National Maritime Museum periodically for a number of years. In 1991 we began negotiations to formally acquire them. I got the ball rolling as part of this Museum's loans in review. Two years later, the boards of trustees from both Museums agreed to an exchange of objects. In January 1996 all six dockyard models, now all in the National Maritime Museum's collection, were displayed together for the first time in over eighty years.

Sandwich's efforts to enthuse George III's interest in all things Royal naval seem to have been met with measured success though of course it is impossible to quantify. George came to the throne in 1760 and for most of his sixty-year reign, Britain was at war. During the first twenty years of his reign George endorsed an enormous increase in the size of the fleet and the expansion of the Royal dockyards' capacity for building and maintaining that fleet. There was also a virtual exponential increase in the Royal Navy's overall budget. The King's support for expensive capital projects was important. The coppering of the hulls of the royal

navy's fleet, for example, was a hugely costly project carried out between 1770 and 1782. Once again, a model might well have been used to demonstrate the whole point of the exercise.

Slide: *Bellona* model

While there is no documented proof that the National Maritime Museum's model of the *Bellona*, on display in the Ship of War gallery, was used to illustrate coppering to the King, Lord Barham, who at the time was Comptroller of the Navy, later wrote "I was convinced in my own mind that we might with safety copper the bottoms of every ship in the fleet ... I proposed it privately to Lord Sandwich ... I afterwards accompanied his lordship to Buckingham House and explained the whole process in so satisfactory a manner that he conceived it at once and ordered it to be carried into execution". The *Bellona* model was acquired in 1977, via the Parker Gallery, from the Earl of Gainsborough, who is a direct descendent of Lord Barham. So it is highly likely that Barham used this model to help convince the King that the fleet should be coppered. Certainly fit for a King, the model is of the very highest quality, its slipway base has been fitted with carrying handles, to give it portability, and the slipway can be extended and the model 'launched' in the manner of a real ship. It would certainly have appealed to the gadget-minded George. The fact that the entire fleet was coppered in so short a time, and at great expense, is a testament to Barham's argument and powers of persuasion.

We do know that George was personally enthused, at least with one of

his models and one would like to think that this enthusiasm extended to the subjects they depicted. In a letter from Kew, dated 19 September 1773, the King had written to Sandwich (SAN/45c f21) on various official matters. In the final paragraph however his attention turns to the forthcoming delivery of the model of the *Intrepid*, which was discussed earlier.

Slide: *Intrepid* [overall]

George concluded, in the glorious language of the eighteenth century,

'I shall be very curious to receive the model you mean to send tomorrow, and doubt not from the ingenuity of Mr Williams that it will thoroughly explain the construction of a ship, which the more I reflect the more it shows the perfection to which mechanick has arrived'.

Slide: Title