

# BRITISH MERCHANT NAVY SEA SCHOOLS – A CHRONOLOGICAL SUMMARY

## INTRODUCTION

This chronicle of British Merchant Navy sea schools begins with the establishment of the Royal Mathematical School at Christ's Hospital in 1673, and it then steps down through history to the latter part of the twentieth century – by which time the British Merchant Navy had gone into terminal decline. From this historical journey it is possible to see that British sea schools fell into one of four broad categories.

The first category comprised those schools that prepared ab initio students for a career at sea as ships' officers. *HMS Conway*, *HMS Worcester* and the Nautical College, Pangbourne, were pre-eminent in this category.

Schools of the second category prepared ab initio students for a life at sea as an Ordinary Seaman. Nevertheless, many went on to become ships' officers. The static training ships of the Marine Society were prime examples of schools in this category.

Into the third category go those schools that used static training ships as a means to help often destitute and criminally inclined boys to find a way out of an otherwise hopeless existence. Whilst their primary purpose was not to encourage boys to go to sea, a significant number chose to do so, and some made it into the officer class. These were the school ships set up as a result of the Reformatory and Industrial Schools Acts.

The fourth and last category comprised those schools that helped candidates pass the examinations prerequisite to their appointment as Mates or Masters. Some of these schools, such as the King Edward VII Nautical School, were large establishments with many tutors, but a considerable number of private navigation schools once existed, particularly in the eighteenth and nineteenth centuries, that were run by one individual, often a retired ship's officer, and they were what is popularly termed "crammers". A comprehensive list of such schools is beyond the scope of this chronicle. Suffice it to say that they fulfilled the needs of candidates who simply wished to pass the examinations and who were not particularly interested in having a detailed knowledge and understanding of the subjects involved.

Appendix 1 contains a bibliography, and Appendix 2 contains a list of relevant web sites.

## **CHRONOLOGY**

### **1673**

#### Christ's Hospital

Christ's Hospital was bestowed with its second Royal Charter by Charles II in 1673. This Charter specifically created the Royal Mathematical School whose original purpose was to train mathematicians and navigators who would progress into careers as Naval officers or merchant seafarers. Samuel Pepys, Secretary to His Majesty's Navy and later Vice President of Christ's Hospital, featured strongly in his considerable contribution to Christ's Hospital. The Royal Mathematical School "represents the first attempt to provide a centre of organized instruction in navigation". However, instruction in navigation at the School ceased to be given after 1890.

### **1674**

#### The Stepney Society

The Stepney Society was formed in 1674, and its aim was to apprentice poor boys of London, and especially from the parish of Stepney, to shipwrights, sailmakers, watermen and others who were engaged in marine trades. It also clothed some boys for service on the King's ships.

## **1701**

### The Sir Joseph Williamson's Mathematical School

In October 1701 Sir Joseph Williamson, President of the Royal Society, bequeathed £5,000 to establish and run a Free School at Rochester for the sons of Freemen. One of the aims of the School was to encourage boys to enter the sea service by teaching them mathematics and other relevant subjects, such as navigation, which was taught until the late nineteenth century.

## **1712**

### The Royal Hospital School

Under the terms of the Royal Warrant to found "The Royal Hospital for Seamen at Greenwich" of 1694, provision was made not only for the care of elderly seamen, but also for their children. Sixpence a month was paid by all seamen, merchant or otherwise, to provide these benefits. In 1712 ten sons of Greenwich pensioners were accommodated and taught in King Charles's Block at Greenwich, probably by Thomas Weston, assistant to the Astronomer Royal. During this time the Hospital allowed a proper school building to be constructed on their land, and in 1715 this opened with an intake of 12 sons of seamen, and also intake from the local community. In 1747, with the number of Greenwich boys now risen to 100, the entire building was taken over by Greenwich Hospital, and Weston moved his Academy further west. The school continued to expand, and was a great success in teaching navigation and nautical astronomy, and its best students received the opportunity to enter the Royal Navy directly as Masters' Assistants. Many, however, opted for the higher pay and responsibilities of the merchant service. In 1821, Edward Riddle, a teacher at Trinity House School in Newcastle was recruited to the school, and he, and his son John, accelerated the school into the highest league of navigation schools, producing also teachers of navigation for the then newly established Board of Trade navigation schools under the auspices of the Department of Science and Art. For example, the much revered Zebedee Scaping of the Hull Trinity House Marine School was a pupil of John Riddle at Greenwich. The school was famous for its block-ship replica of a Blackwall frigate "Fame" aboard which seamanship was taught. She predated the arrival of "Cutty Sark" in Greenwich by about one hundred years, and stood to the north of the Queen's House. Her bow, bow-sprit, and figurehead are now on the southern end of the rifle range at Holbrook, whilst her stern gallery is in the Mystic Seaport Museum, Connecticut, USA.

In 1933 the school moved from its premises in Greenwich (now the home of the National Maritime Museum) to Holbrook in Suffolk, on 850 acres of land given by ship-owner and merchant, Gifford Sherman Reade, who also gave most of his fortune of over £1 million in 1929 to the school in order to provide the buildings. It continues to flourish and adapt, and is now a regular headmasters' conference school with a strong naval tradition.

### Trinity House School, Newcastle-upon-Tyne

On 9<sup>th</sup> May 1712 the Master and Brethren of Trinity House, Newcastle-upon-Tyne, opened a school, whose curriculum was later extended to include classes in navigation. Examinations were introduced "to ensure that students were fit and proper persons to become officers and take command at sea". Many of the students became apprenticed to "free mariners" and in time became themselves members of Trinity House. The school closed in 1870.

## **1756**

### The Marine Society

The Marine Society was founded by Jonas Hanway in 1756 with the initial aim of recruiting, clothing and fitting out boys for wartime service in His Majesty's ships and for peacetime service in ships of the Merchant Marine. In June 1786, just three months before Jonas Hanway died, the Marine Society purchased the merchant ship *Beatty* for one thousand guineas. Converted into a training ship, renamed *Marine Society* and moored on the River Thames between Deptford and Greenwich, she was the first pre-sea training ship in the world to pioneer nautical training for boys. She had a capacity for one hundred boys, and the first of them joined her on 13<sup>th</sup> September 1786. *Marine Society* was followed by a succession of training ships, which were all loaned by the Admiralty: *Thorn*, *Solebay*, *Iphigenia*, *Venus* and, in May 1862, HMS *Warspite* (re-named TS *Warspite*) – by which time the Marine Society's mooring had been moved to a position off Charlton Pier, near Woolwich. In 1877 HMS *Conqueror* became the next TS *Warspite*, and in 1901 she was moved to a new mooring off Greenhithe. Finally, in 1923 the cruiser HMS *Hermione* became the third and last TS *Warspite*, and she had a capacity for more than three hundred boys. In 1929 she was moved to a new mooring off Grays.

To qualify for a place on TS *Warspite* a boy had to be the son of poor parents, medically fit and of good, honest character. He would then be apprenticed to the Marine Society for two years, and his training would be "free of all expense to parents or

guardians”. After a minimum of six months training, boys could be selected and sent for service with the Navy, and the Society would then cancel their indentures. Boys destined for service in the Mercantile Marine would complete the twelve to fifteen month course on TS *Warspite* and then be “discharged to the Society’s Shipping Agent for draft to sea” on the understanding that they had to complete the remainder of their indentured apprenticeship at sea. It is important to note that the aim of this Marine Society apprenticeship was to instruct the boys in the “elementary duties of a seaman” and not to produce a candidate for the Second Mates Certificate of Competency. Nevertheless there is no doubt that this training provided a route to a career as a ship’s officer.

As a matter of interest, the published aims of the Marine Society in 1935 were to relieve distress by training and fitting out poor boys of good character for service at sea and to benefit the country at large by sending a steady stream of well-trained lads of good character and physique to serve in the Royal Navy and the Mercantile Marine.

At the outbreak of the Second World War, TS *Warspite* was closed down and subsequently broken up for scrap in response to the National appeal for “Steel for Victory”.

From the founding of the Marine Society in 1756 to the closing down of TS *Warspite* in 1939, over one hundred and ten thousand men and boys were equipped and trained for a life at sea in both the Royal Navy and the Merchant Service.

After the Second World War, the committee of the Marine Society decided against funding and running another static pre-sea training ship; instead it was determined that the Society would provide financial assistance on an individual basis to those wishing to pursue a career at sea.

The Marine Society merged with the Seafarers’ Education Service in 1976.

## **1772**

### John Hamilton Moore’s School of Navigation

John Hamilton Moore had a School of Navigation on Tower Hill, London, and in 1772 he published a “New Practical Navigator”, which covered the work needed for “that examination which every candidate for a Commission in the Royal Navy and officer in the Honourable East India Company’s Service must pass through previous to their being appointed”.

**1787**

The Hull Trinity House Marine School

The Hull Trinity House Marine School opened on the 2<sup>nd</sup> February 1787 with a first intake of pupils numbering thirty-six. The principal subjects taught were arithmetic and navigation.

**1795**

John William Norie's Naval Academy

William Heather and John William Norie (the famous publisher and map maker) ran the "Naval Academy and Navigation Warehouse" in Leadenhall Street, London, from 1795. Norie taught navigation in the "Naval Academy" – whilst the "Navigation Warehouse", formerly called the "Sign of the Little Midshipman" and run by Heather, provided nautical instruments, charts and instructional texts on navigation. Norie's navigation courses were approved by the Honourable East India Company.

**1851**

Mrs Janet Taylor's Nautical Academy

Mrs Janet Taylor ran a Nautical Academy at 103, Minories, London, which "was much patronized by officers of the Royal Navy and the East India Company". She was an accomplished astronomer; she published her own stellar and lunar tables; and in 1851 she exhibited a sextant at the Great Exhibition.

**1853**

The Department of Science and Art

The Department of Science and Art was created in 1853, and it was placed under the control of the Board of Trade. This Department was given the responsibility for providing encouragement and support for schools teaching navigation. It did this by

granting funds towards the training of teachers, their salaries and their training aids and by inspecting the schools and assessing the quality of instruction.

#### The Liverpool Navigation School

The Liverpool Navigation School was established in 1853.

### **1854**

#### The Hull Trinity House Marine School

The Hull Trinity House Marine School was reorganised by the Department of Science and Art in 1854.

#### The Stepney Navigation School

The Stepney Navigation School was established in 1854.

#### Reformatory and Industrial School Ships

In 1854, the first Reformatory Schools Act and the first Industrial Schools Act were passed. One of the effects of these Acts, and the later Industrial Schools Act and Reformatory Schools Act of 1866, was to bring about the establishment of both Reformatory and Industrial School Ships, whose purpose was not primarily to produce recruits for the Navy or the Mercantile Marine but to provide the sort of disciplined environment in which boys from troubled backgrounds could receive the corrective treatment necessary to give them a more positive start in life. Whilst the following list of Reformatory and Industrial Training Ships is not complete, it does provide an indication of the scale of the operation:

<b>School Ship's Name</b>	<b>Type</b>	<b>Location</b>	<b>Capacity (Boys)</b>	<b>Established</b>	<b>Closed</b>
<i>Akbar</i>	Reformatory	Liverpool	200	1855	1908
<i>Cornwall</i>	Reformatory	Thames (Purfleet)	250	1859	
<i>Havannah</i>	Industrial	Cardiff	100	1861	
<i>Clarence</i>	Reformatory	Liverpool	250	1864	1899
<i>Wellesley</i>	Industrial	Tyne	300	1868	
<i>Southampton</i>	Industrial	Hull	250	1868	1912
<i>Cumberland</i> replaced by: <i>Empress</i>	Industrial	Clyde	360	1869	1923
<i>Mars</i>	Industrial	Dundee	300	1869	
<i>Formidable</i>	Industrial	Bristol	325	1869	
<i>Goliath</i> replaced by: <i>Exmouth</i> replaced by a replica of: <i>Victory</i>	Industrial	Thames	500  700	1870	
<i>Gibraltar</i>	Industrial	Belfast	350	1872	
<i>Clio</i>	Industrial	Bangor	260	1877	1919
<i>Mount Edgcumbe</i>	Industrial	Plymouth	250	1877	1920
<i>Shaftesbury</i>	Industrial	Thames (Grays)	400	1877	1905

## 1855

### The Leith Navigation School

The Leith Navigation School was established in 1855 in accordance with the terms and conditions laid down by the Department of Science and Art.

## **1856**

### The Department of Science and Art

In 1856 the Department of Science and Art was transferred from the Board of Trade to the newly created Education Department, but responsibility for supervising the standards of the shore-based navigation schools remained with the Board of Trade.

### The Poplar Navigation School

The Poplar Navigation School was established in 1856.

## **1857**

### The Aberdeen Navigation School

The Aberdeen Navigation School was established in 1857 to provide day and evening classes for all grades of officers and men.

### The Glasgow Navigation School

The Glasgow Navigation School was opened in 1857.

### Trinity House School, Newcastle-upon-Tyne

In 1857 the Trinity House School, Newcastle-upon-Tyne, was re-organised, in accordance with the terms and conditions laid down by the Department of Science and Art, to become a “pure navigation school”.

### The Shadwell Navigation School

The Shadwell Navigation School opened in 1857.

## HMS Conway

In 1857 a group of Liverpool shipowners and master mariners formed the Mercantile Marine Service Association (MMSA), and one of its aims was to establish a pre-sea training school for those wishing to become officers in the Mercantile Marine. The MMSA managed to persuade the Admiralty to loan HMS *Conway* for this purpose; she was originally a sixth-rate man-of-war, and, after having been refitted and moved to a mooring off Rock Ferry Slip, Liverpool, she started her new life as a training ship for up to one hundred and twenty boys on 1<sup>st</sup> August 1859. The extensive training syllabus – covering navigation, mathematics, the use of nautical instruments, English, general science and practical seamanship – meant that cadets, who satisfactorily completed the two year course on *HMS Conway*, were entitled to a one year reduction in the four year period of qualifying sea service required before an apprentice could take the examination for the Second Mate Certificate of Competency.

The first *HMS Conway* proved to be too small and was replaced in 1861 by HMS *Winchester*, and she in turn was replaced, between 1875 and 1876, by HMS *Nile*, which, like her predecessors, was loaned by the Admiralty and renamed *HMS Conway*. Originally an auxiliary screw battleship of 92 guns, this last *HMS Conway* was a fully rigged “wooden wall” ship with four decks – equipped to provide accommodation and training facilities for some two hundred cadets.

In 1941 the threat of air attack led to *HMS Conway* being moved from Merseyside to a mooring at Glynn Garth in the Menai Straits, Anglesey. By 1949 the demand for places on *HMS Conway* led to an arrangement whereby parts of the 7<sup>th</sup> Marquis of Anglesey’s estate, at Plas Newydd, were used to provide a shore-based extension of the *HMS Conway* training establishment, and *HMS Conway* herself was moved to a new mooring off Plas Newydd. The addition of shore-side accommodation and training facilities meant that the school could cope with some three hundred cadets at a time. It also enabled the management to introduce a three-year course alongside the established two-year course – with cadets spending the first part of their training ashore before moving on board *HMS Conway* to complete it.

The prospectus for the Cadet School Ship *HMS Conway*, dated 1950, states:

“The School Fees are £66 13s. 4d. per Term, there being Three Terms to the year, making Two Hundred Pounds per annum. This charge includes the uniform, ordinary Medical attendance and use of tools. A further charge of £1 10s. 0d. per Term for Recreational purposes, 10/- per Term for Stationery and Books and £2 per Term for laundry. Also certain books for use in School must be purchased.”

The same prospectus also listed a number of Scholarships that were available.

On 14<sup>th</sup> April 1953 *HMS Conway* was under tow to Birkenhead for a refit, when she went aground just short of the Menai Suspension Bridge. Unfortunately, it proved to be impossible to recover her, and she soon broke her back. The wreck remained in that position for over three years until it was destroyed by fire shortly after contractors had started to dismantle and remove it.

Tents were used to accommodate cadets on the Plas Newydd site until wooden huts became available in October 1953. Eleven years later purpose built accommodation was officially opened by Prince Philip at Plas Newydd on 6<sup>th</sup> May 1964 – although cadets had occupied it during the Winter Term of the previous year.

Faced with a dramatic decline in the demand for Merchant Navy Officers, the management of *HMS Conway* decided in 1972 that the school had to close, and at the end of the Summer Term in 1974 the *HMS Conway* Merchant Navy Cadet School passed into history.

## **1859**

### The Great Yarmouth Navigation School

The Great Yarmouth Navigation School was established in 1859.

## **1861**

### *HMS Worcester*

The driving force behind the establishment of *HMS Worcester* was William Bullivant. At a meeting in his office in London on 26<sup>th</sup> September 1861, which was chaired by Richard Green the Blackwall shipbuilder and attended by many other notable figures involved in shipping, it was resolved “to establish a school ship on the Thames for the education of boys destined to become officers in the Merchant Service”. The Admiralty lent a 50-gun frigate – *HMS Worcester* – for this purpose, and she was moored in Blackwall Reach, halfway between Blackwall Docks and Greenwich Hospital, on 29<sup>th</sup> May 1862. The first prospectus of the “Thames Marine Officers’ Training Frigate *Worcester*” stated that:

“the difficulty which is experienced in providing proper qualified officers for merchant vessels has induced several gentlemen interested in shipping and our increasing foreign commerce to form an association for the purpose of remedying in some degree this acknowledged deficiency; and it is hoped that the valuable results, which, from a national point of view, may be expected to flow from this undertaking, will secure for it general support”.

The first “pupils”, fourteen in total, joined the ship on 4<sup>th</sup> August 1862, and according to the first Annual Report dated 13<sup>th</sup> December 1863 they had by then risen in number to eighty-five.

Boys who satisfactorily completed the two year course on *HMS Worcester* were entitled to a one year reduction in the four year period of qualifying sea service required before an apprentice could take the examination for the Second Mate Certificate of Competency.

*HMS Worcester* was moved several times during her first ten years as a school ship until, finally, she was moored at Greenhithe in December 1871. Then on 24<sup>th</sup> February 1877 she was replaced by a larger vessel, the Admiralty “wooden-wall” battleship *Frederick William*, which was renamed *HMS Worcester*, and the formal name of the school became “The Thames Nautical Training College, *HMS Worcester*”. The new *HMS Worcester* had a capacity for one hundred and eighty cadets.

In March 1920 the College took possession of Ingress Abbey, Greenhithe, together with its thirty-nine acre estate.

In 1938 *Cutty Sark* was donated to the College, and, after an extensive refit, she was berthed alongside *HMS Worcester*.

Between 1939 and 1946 “The Thames Nautical Training College, *HMS Worcester*” was evacuated to Foots Cray Place, near Sidcup in Kent, which comprised a large mansion set in one hundred acres of ground. During that period *HMS Worcester* was used as a parent ship to the Auxiliary Patrol, but when the Admiralty handed her back to the college on 11<sup>th</sup> May 1945 she was in such poor condition that it was decided to seek a replacement. Negotiations with the Admiralty resulted in *HMS Exmouth* – a purpose built, steel and iron training ship – becoming the third and final *HMS Worcester*, and after an extensive post-war refit undertaken by Green and Silley Weir she arrived at Greenhithe on 15<sup>th</sup> January 1946.

Throughout the Second World War the College had used *Cutty Sark* for instruction in seamanship and boat drill, but with the arrival of the third and final *HMS Worcester* there was no longer a need for an auxiliary training ship, and, in any event, there was

insufficient capital available for her repair and maintenance. With the cooperation of the National Maritime Museum and the London County Council, the College was able to ensure that *Cutty Sark* became a national treasure, and she was officially presented to the Cutty Sark Preservation Society on 28<sup>th</sup> May 1953.

In 1968 the Incorporated Thames Nautical Training College, HMS *Worcester* and part of the King Edward VII Nautical College were amalgamated to form the Merchant Navy College.

When the Incorporated Thames Nautical Training College, HMS *Worcester* was liquidated in 1972, the freehold of the Ingress Abbey estate passed to the Seafarers' Education Service. By 1975 the Merchant Navy College had moved into shore-side accommodation within the Ingress Abbey estate, and in 1978 *HMS Worcester* was sold to be broken up.

#### The Marine School of South Shields

On 26<sup>th</sup> March 1861 the Marine School of South Shields opened as a school of navigation in hired rooms in the Mechanics Institute. The school moved into its own buildings in 1869, and a department of marine engineering was added in 1903. In 1951 the Marine School was taken over by the Local Education Authority and became the South Shields Marine and Technical College. A move to larger premises in 1957 was followed in 1971 by the addition of a training vessel on the River Tyne.

#### **1862**

#### The Plymouth Navigation School

The Plymouth Navigation School was established in 1862 in accordance with the terms and conditions laid down by the Department of Science and Art.

## 1864

### TS *Indefatigable*

In 1864 John Clint, a Liverpool seaman and ship-owner, founded a charitable institution to train “the children and orphans of seafaring persons and other poor and destitute boys” to become merchant seamen, and the original intention was to give preference “to those whose fathers had been connected with the Port of Liverpool”. The Admiralty loaned HMS *Indefatigable* for this purpose, and, when moored off New Ferry in the River Mersey and renamed TS *Indefatigable*, she started her life in this new role in July 1865. The training course normally lasted for two and a half years, and then boys entered the Merchant Service as seamen. In 1913, after fifty years service, the first TS *Indefatigable* was replaced by another Admiralty vessel, HMS *Phaeton*, which was renamed TS *Indefatigable*, and she lasted until 1941 when the establishment became land-based due to the war. In 1945 TS *Indefatigable*, then based in Anglesey, merged with the Lancashire and National Sea Training Homes, and the new organisation was renamed “The Indefatigable and National Sea Training School for Boys”.

## 1866

### *Arethusia*

In 1866 the Admiralty, in response to a request by Lord Shaftesbury, loaned HMS *Chichester* for use as a training ship for homeless and destitute boys. Having been refitted by Money Wigram and Son, of Blackwall, and moored on the River Thames, off Greenhithe, *Chichester* began her new role as a training ship on 18<sup>th</sup> December 1866. A second training ship, *Arethusia*, also on loan from the Admiralty, joined *Chichester* at Greenhithe in 1874; then in 1889 *Chichester* became surplus to requirements due to a fall in demand for trained boys. In 1933 *Arethusia* was replaced by a steel vessel purchased the previous year, which was renamed *Arethusia II* and moored near Rochester. It is interesting to note that by 1911 a total of eight thousand five hundred boys had been trained on these ships: six thousand had entered the Merchant Service, one thousand five hundred had joined the Royal Navy and the remainder had been distributed between the Army, the Royal Marines and other services.

## 1885

### TS Mercury

Captain Charles Hoare founded a pre-sea training school – the Training Ship *Mercury* – in 1885. The TS *Mercury*, formerly the barque *Illova*, was moored at Binstead, on the Isle of Wight, and it was Captain Hoare’s aim to train those boys “of good character” whose backgrounds generally fell between the two extremes of wealth and poverty. Initially the emphasis was on training boys for the Navy, but later on an increasing number of boys were accepted who wished to pursue an apprenticeship in the Merchant Service. In 1892 TS *Mercury* was moved to a mooring in the River Hamble, near Southampton, and adjacent land was acquired to provide extensive training facilities ashore. In 1914 the Admiralty loaned HMS *Gannet* to replace the original TS *Mercury* and to act as a dormitory ship for the school. She fulfilled that role at her mooring in the River Hamble until the closure of the school in July 1968. By then over five thousand boys had passed through the TS *Mercury* training scheme.

## 1890

### The Brassey Scheme

The “Brassey Scheme” did not provide pre-sea nautical education, and so it should not really be a part of this chronicle. Nevertheless, it and its successor – Devitt and Moore’s Ocean Training Ships Limited – led directly to the formation of the Nautical College Pangbourne – and for this, if for no other reason, it is well worth reviewing their development.

In 1890 Lord Brassey, in cooperation with the shipping firm of Devitt and Moore, established a training scheme, the Brassey Scheme, to provide a “professional education” for the “sons of gentlemen”, which would enable them to become “Officers in the Mercantile Marine”. Two of Devitt and Moore’s “Australian Line” sailing ships – *Harbinger* and *Hesperus* – were specially adapted for this purpose so that up to thirty trainee officers – initially called “Midshipmen”, but later called “Cadets” – could be accommodated with “well-fitted cabins and a large mess room”. *Macquarie* took over from *Harbinger* in 1897, and in 1899 *Illawarra* took over from *Hesperus*. *Macquarie* continued in her role as a midshipmen training ship until she was sold in 1904. Then in 1907 *Illawarra* was sold, but her role as a midshipmen training ship was taken over by *Port Jackson* – a beautiful four-masted barque capable of carrying up to forty midshipmen.

In addition to the normal complement of officers, Devitt and Moore's training ships carried a "Naval Instructor", and, although the midshipmen worked a watch system of four hours on duty and four hours off, they were expected to attend "school" during the morning and the afternoon. Arithmetic, algebra, trigonometry, navigation and nautical astronomy were taught in school, whilst instruction in seamanship was given during the midshipmen's watches on deck. Examinations were held on every voyage.

As the nineteenth century came to a close, operating sailing ships in competition with steam ships on the Australia run was an extremely tough business, and the Devitt and Moore midshipmen were expected to play their full part in ensuring that voyage times were kept to a minimum. In particular they were expected to be adept at sail handling aloft in all weathers – something that could only be achieved if they were physically fit, mentally alert and committed to working together as a properly trained team.

Unlike apprentices, the Brassey Scheme midshipmen did not sign indentures. Instead they signed ship's articles for one voyage only, but the total premium for the up to five voyages needed to obtain the necessary sea time to apply for a Certificate of Competency as Second Mate could amount to as much as £305 – as compared to the total premium for a four year apprenticeship of circa £30. Some of this cost differential could be explained by the fact that the Brassey Scheme midshipmen were provided with stewards, whilst apprentices looked after themselves!

The Brassey Scheme was a laudable attempt to overcome the almost universal abuse of Mercantile Marine apprentices, who, far from receiving any formal instruction, were treated, in the vast majority of cases, as nothing more than a cheap alternative to either Ordinary or Able Seamen.

Interestingly though, Devitt and Moore also carried apprentices on their ships, which seems somewhat at odds with the concepts espoused by the Brassey Scheme.

In 1909 the Brassey Scheme was replaced by the newly formed Devitt and Moore's Ocean Training Ships Limited.

## **1892**

### The Liverpool Nautical College

In 1892 the Liverpool Education Authority established the Liverpool Nautical College, and it was opened by Lord Brassey.

## **1902**

### The King Edward VII Nautical School

The King Edward VII Nautical School was founded in 1902 by the British Sailors' Society. The Directors of the Society acted as the first governing body of the School, which was based over a seamen's hostel at 680, Commercial Road, Stepney, London. In 1926 the School became a recognised school of technical instruction aided by the London County Council (LCC). In 1949 the LCC implemented a further education development plan for nautical education. Under this scheme, senior courses would be established at Sir John Cass College, while junior courses would be run at the King Edward VII School (and later at a new college at Greenhithe). Further rationalisation occurred when the Department of Navigation at Sir John Cass College merged with the King Edward VII Nautical College in 1969 and moved to a new building at Tower Hill, London.

## **1904**

### The King Edward VII Nautical School

The King Edward VII Nautical School took over the pre-sea training course first set up by the Poplar School of Engineering and Navigation.

## **1909**

### Devitt and Moore's Ocean Training Ships Limited

The training scheme started by Earl Brassey and Devitt and Moore in 1890 was replaced in 1909 by the newly formed Devitt and Moore's Ocean Training Ships Limited. By then, the term "Midshipman" had been replaced by "Cadet", but, in all other respects, the training differed little from that undertaken by the Brassey Scheme.

Sir Thomas Lane Devitt and his son, Philip, managed this new company in which many well-known shipping companies of the day were shareholders. To start with, *Port Jackson* was the only training ship, but she was joined in 1910 by another four-masted barque, *Medway*, which had been designed to be used as a training ship. It is important to note that, although both *Port Jackson*

and *Medway* were capable of carrying forty cadets, they, like all the previous Devitt and Moore training ships, were expected to operate as merchant ships.

Devitt and Moore sold *Port Jackson* in 1916, and the net proceeds of her sale, £8,600, were put towards the cost of establishing the Devitt and Moore Nautical College at Pangbourne, which was founded in 1917.

In 1918 Devitt and Moore sold *Medway* in support of the War effort, and she was converted to a bulk oil carrier.

## **1910**

### The School of Navigation, Glasgow

The School of Navigation at the Royal Technical College, George Street, Glasgow, was opened in 1910. It was the first to introduce guided study courses by correspondence for apprentices at sea. Guided study courses were soon adopted by other schools of navigation such as the King Edward VII Nautical School.

## **1917**

### The Nautical College, Pangbourne

With the approval of the shareholders of Devitt and Moore's Ocean Training Ships Limited, Sir Thomas Lane Devitt and his son, Philip, founded the Devitt and Moore Nautical College at Pangbourne in 1917. Their reason for doing so was to ensure that "only suitable boys went to sea for training", and, in this context, "suitable" meant boys who were not only properly educated but who were also considered to be good Merchant Navy Officer material.

The "Clayesmore" estate, comprising a large country house, which had been converted into a school, and about one hundred acres of ground, was purchased by Sir Thomas Lane Devitt in February 1917. Situated to the south west of the village of Pangbourne, in Berkshire, Clayesmore lacked one important ingredient for a nautical college, as, although it was only one mile from the River Thames, it had no private access to it. Fortunately, Sir Thomas Lane Devitt was able to rectify this shortcoming by purchasing a suitable property with river frontage. He and his son, Philip, then wasted no time in securing Government support for their venture,

and a refurbished Clayesmore opened its doors, as the Devitt and Moore Nautical College, to thirty-six cadets on 1<sup>st</sup> September 1917. The fee set for attendance at the College was £80 per year, and, by the beginning of the second year, cadet numbers had risen to one hundred and fifty-five.

The Devitt and Moore Nautical College was intended to be a part, albeit a major one, of the comprehensive training scheme developed by Sir Thomas Lane Devitt and his son, Philip – a scheme that had the following principal elements:

- (i) On entering the College, cadets would be enrolled in the Royal Naval Reserve and gazetted as “Cadets RNR”, and, as such, they would wear Admiralty approved uniform throughout their training;
- (ii) Cadets would then spend two years undergoing training at the College, during which time those considered to be lacking in the necessary officer qualities would be “weeded out”, whilst, at the other end of the scale, a limited number of cadets considered to be of a sufficiently high standard would be nominated by the College for entry to the Royal Naval College at Dartmouth;
- (iii) The training at the College would be to public school standard; it would provide a good education in both nautical and general subjects, and special emphasis would be placed on developing officer qualities;
- (iv) The Board of Trade would grant cadets, who passed the two year training course at the College, a one year reduction in the four year qualifying period of sea service required for the Certificate of Competency as Second Mate;
- (v) Following the two year College course, cadets would be sent to sea for training in sailing vessels for a period of twelve months. It is important to note that in 1917 *Medway* (Devitt and Moore’s Ocean Training Ships Limited) was still operating as a midshipman training ship, and that there was every intention then to acquire more sail training ships for this purpose;
- (vi) After sail training, cadets would serve twelve months in “battleships” as Midshipmen or Cadets RNR, and this time would count in full as qualifying sea service;

- (vii) Following service with the Royal Navy, cadets would return to the College for one term to undertake a further course of Navigation; and
- (viii) Finally, cadets would go to sea in “cargo steamers” to complete the sea service requirement for the Certificate of Competency as Second Mate.

Of all the elements listed above, (v) proved, in the long term, to be unachievable. When *Medway* was sold in 1918, Devitt and Moore were left without a training vessel. In 1919 this problem was initially overcome by the purchase of *St. George*, an auxiliary barquentine of six hundred and ninety-four gross tons. Despite the removal of her propeller to save the cost of fuel, *St. George* proved to be far too expensive to operate – especially at a time when the College was suffering from a serious financial crisis. Nevertheless, by the time that she was sold in 1922, she had taken well over one hundred cadets on several testing voyages to Las Palmas.

The loss of the sail training year, together with the financial crisis that brought it about, produced a change of tack with regard to the way in which the College was run. Fees were doubled to £160 per year, and the College’s “Consultative Committee” chaired by Philip Devitt (Sir Thomas died in 1923) accepted that the College syllabus should be extended so as to offer boys, who ultimately decided not to go to sea, an education that would fit them for careers ashore. In 1924 the College started to make a profit.

In 1931 the decision was made to liquidate Devitt and Moore’s Ocean Training Ships Limited and to replace it with the Devitt and Moore Nautical College Limited, to which the original shipping company shareholders transferred their holdings. As a consequence, the College Consultative Committee was replaced by a Board of Governors, which was chaired by the recently knighted Sir Philip Devitt. By that time, the College had expanded considerably with the acquisition of adjoining land and buildings; cadet numbers had risen to a little over two hundred; a reputation for high sporting achievement had been established; the river frontage had been extended; and a respectable fleet of rowing, motor and sailing boats had been acquired.

By 1938 one thousand one hundred and ten cadets had been trained by the College. Five hundred and twenty-four of these had joined the Merchant Navy, one hundred and seventy-three the Royal Navy, and the remaining four hundred and thirteen had chosen to join either the Army or the Royal Air Force or to opt for a civilian career. Compared to *HMS Conway* and *HMS Worcester*, the Devitt and Moore Nautical College Limited was more attuned to the need to appeal to boys who did not necessarily wish to make a career at sea – a far-sighted policy that was to guarantee its survival as an educational establishment.

Cadet numbers had risen to nearly two hundred and fifty by 1951, and the Board of Governors found it necessary to make a public appeal for funds to upgrade the accommodation and training facilities at the College, and by 1956 the much needed improvements had been made.

During the early 1960s College facilities were further improved; cadet numbers increased; academic standards rose; and there were some notable successes in sports such as rugby and rowing. By contrast, the number of cadets choosing to join the Merchant Navy declined – a career in the Royal Navy being seen by many as more preferable. Nevertheless, storm clouds were gathering over the College, and a decline in the number of cadets to an uneconomic level in the latter half of the 1960s led to a radical change in policy.

In 1969 the College name was changed to “Pangbourne College”. The dropping of the word “Nautical” was in no way a cosmetic exercise as it marked a fundamental shift away from a syllabus that was focused on nautical training and towards one that prepared students for university and civilian careers.

Within five years a failing nautical college run as a public school was transformed into a successful public school with a nautical tradition.

Navigation, as a subject, was finally “abandoned” in 1983.

## **1918**

### The Gravesend Sea School and The National Sea Training Schools

The Gravesend Sea School was established in 1918 to train deck and catering boys for the Merchant Navy, and initially it was funded by the Government. The Committee of Management included representatives of the Board of Trade, the Ministry of Shipping, the Shipping Federation and the National Sailors’ and Firemen’s Union. In 1919 the Shipping Federation assumed financial responsibility for the School and in return received a grant from the Government for each successful trainee.

The success of the School can be judged by the fact that it soon became the principal establishment of its type in the country, and it was responsible for about two-thirds of the total national output.

The Shipping Federation subsequently established other schools: for example, Training Schools for Firemen and “Seamanship” Schools. All these schools were eventually grouped together as “The National Sea Training Schools” for which the Shipping Federation received direct grants from the Government of approximately fifty percent.

In 1939 the Gravesend Sea School was transferred to the Training Ship *Vindicatrix* at Sharpness, in Gloucestershire, and the premises at Gravesend were loaned to the Admiralty for training adults who had opted to serve in the Merchant Navy. Although the premises were returned to the Shipping Federation in 1944, they continued to be used for training adults until 1945 when they reverted to their original purpose of training deck and catering boys. Training for these boys also continued on TS *Vindicatrix* at Sharpness.

In 1963 the National Sea Training Schools became the National Sea Training Trust, and three years later a purpose built college was opened at Gravesend – designed to replace both the old Gravesend Sea School and TS *Vindicatrix* at Sharpness. This new establishment was called the National Sea Training College. In December 1966 TS *Vindicatrix* closed.

## **1919**

### The Seafarers’ Education Service

The Seafarers’ Education Service was set up in 1919 by Albert Mansbridge with the help of Lawrence Holt. It supplied circulating libraries to ships, and from 1934 it produced a quarterly magazine called “The Seafarer”.

## **1921**

### TS *Vindicatrix*

*Vindicatrix* started life as *Arranmore* – a three-masted fully-rigged sailing ship built in 1893 – and she sailed under the British flag for seventeen eventful years before becoming the German owned and registered ship *Waltraute*. As a “towing hulk”, which had been requisitioned by the British Government, she became the property of the Shipping Federation in 1921, and in August 1922 she was renamed *Vindicatrix*. Initially the Shipping Federation used her as an accommodation vessel in the Port of London for those prepared to work during strikes intended to disrupt the operation and loading of merchant ships. Whilst in that role she was

referred to as a “strike breaking ship”. Then in 1927 *Vindicatrix* became the first of six “Seamanship” Schools operated by the Shipping Federation. She was based in London, and the other Seamanship Schools were based at Cardiff, Glasgow, Liverpool, South Shields and Southampton.

As the Second World War approached, it was thought prudent to move the Gravesend Sea School to an area of relative safety and to use *Vindicatrix* as its new base. The site chosen was Sharpness, in Gloucestershire, and *Vindicatrix* arrived there under tow in June 1939. On 2<sup>nd</sup> September 1939, the day before war was declared, the Gravesend Sea School’s trainees joined the TS *Vindicatrix*.

After a shore-side camp was completed in 1945 to provide additional accommodation, TS *Vindicatrix* coped with up to five hundred boys at a time.

Training on TS *Vindicatrix* was free, and the length of the deck boy training course varied between ten and fourteen weeks. The course was recognised by the Board of Trade, and each boy who successfully completed it was awarded a one month reduction in the twelve months of sea service required to qualify as an Ordinary Seaman. In addition the Shipping Federation guaranteed to find employment on board a ship for each boy who successfully completed the course.

In 1966 the brand new National Sea Training College opened at Gravesend as a replacement for both the old Gravesend Sea School and TS *Vindicatrix* at Sharpness. TS *Vindicatrix* was closed down in December of that year, and in the following month she was towed away to the breakers yard.

Many thousands of boys who trained on TS *Vindicatrix* served out their time in the Merchant Navy as Ordinary or Able Seamen, but some became Mates and Masters.

## **1927**

### Sir John Cass Technical Institute

In 1927 a Department of Navigation was established at the Sir John Cass Technical Institute (originally founded in 1899) to provide full-time courses in navigation.

## **1932**

### School of Navigation, Southampton

A public School of Navigation was established in 1932 as part of Southampton University College (later the University of Southampton).

## **1946**

### School of Navigation, Southampton

The School of Navigation at Southampton University College moved to Warsash, on the River Hamble, in 1946.

## **1949**

### Sir John Cass Technical Institute and King Edward VII Nautical College

In 1949 the Department of Navigation's more junior courses were transferred from the Sir John Cass Technical Institute to the King Edward VII Nautical College under the London County Council development plan. The Navigation Department of Poplar Technical College was closed, and its courses for First Mates, Masters and Extra Masters were transferred to the Sir John Cass Technical Institute.

## **1950**

### Sir John Cass College

Sir John Cass Technical Institute changed its name to Sir John Cass College in 1950.

## **1954**

### Sir John Cass College

In 1954 the training vessel *Sir John Cass*, a one hundred and twelve foot motor launch, was converted into a floating school to enable students to study the operation of radar equipment and other modern navigational aids. It was a regular sight on the River Thames.

## **1968**

### TS Mercury

The nautical training school TS *Mercury* closed in July 1968. By then over five thousand boys had passed through the TS *Mercury* training scheme.

### The Merchant Navy College

In 1968 the Merchant Navy College was formed from the amalgamation of the Incorporated Thames Nautical Training College, HMS *Worcester* and part of the King Edward VII Nautical College.

Purpose built accommodation within the Ingress Abbey Estate was provided by the Inner London Education Authority in 1975, and HMS *Worcester* was sold to be broken up in 1978.

At its height, the College ran courses for Deck, Engineering and Radio Officers, but a dispute over funding brought about its closure in 1989.

## **1969**

### Pangbourne College

In 1969 the Nautical College, Pangbourne, was renamed “Pangbourne College”. The dropping of the word “Nautical” was in no way a cosmetic exercise as it marked a fundamental shift away from a syllabus that was dominated by nautical subjects and towards one that prepared students for university and civilian careers.

### Sir John Cass College and King Edward VII Nautical College

The Department of Navigation at Sir John Cass College merged with the King Edward VII Nautical College in 1969 and moved to a new building at Tower Hill, London.

## **1971**

### The School of Navigation, Warsash

The School of Navigation at Warsash transferred to the local Education Authority in 1971.

## **1974**

### HMS Conway Merchant Navy Cadet School

Faced with a dramatic decline in the demand for Merchant Navy Officers, the *HMS Conway* Merchant Navy Cadet School closed down at the end of the Summer Term in 1974.

**1983**

Pangbourne College

Pangbourne College finally “abandoned” navigation, as a subject, in 1983.

**1984**

The School of Navigation, Warsash

In 1984 the School of Navigation at Warsash became part of the College of Higher Education, and together they were renamed the Southampton Institute of Higher Education.

**CONCLUSION**

The foregoing chronicle illustrates, all too poignantly, that the growth and subsequent decline of British sea schools mirrors the fate of the British Merchant Navy. In his preface to the history of “Pangbourne College”, by Lionel Stephens, Richard Devitt writes: “There isn’t much Merchant Navy left”. That comment was written in 1991, and now, in 2007, it appears to be a rather mild and over generous assessment.

In my research into this web site, I have been encouraged to find that so many share my sentiments of frustration, bewilderment and even anger at the way that successive British Governments have allowed a once great national asset – our British Merchant Navy – to wither away.

This chronicle is far from complete, and I would greatly appreciate any suggestions with regard to corrections and additions.

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## BIBLIOGRAPHY

TITLE	AUTHOR	PUBLISHER	PUBLISHED	ISBN
An Act for regulating the Number of Apprentices to be taken on board <i>British</i> Merchant Vessels; and for preventing the Desertion of Seamen therefrom.	Act of Parliament	George Eyre and Andrew Strahan, Printers to the King's most Excellent Majesty.	1823	None
The British Merchant Service	R J Cornwall-Jones	Sampson Low, Marston & Company	1898	None
SEAMEN IN THE MAKING A SHORT HISTORY OF NAUTICAL TRAINING	E C Millington	J D Potter	1935	None
<b><u>Apprentices' Handbook</u></b> TRAINING of OFFICERS <b>Syllabus of Instruction</b> with <b>Notes for use of Apprentices</b>	Merchant Navy Officers' Training Board	Merchant Navy Officers' Training Board	Post 1942	None

REGULATIONS FOR THE EXAMINATION OF MASTERS AND MATES Exn. 1 Revised (1958) Edition	Ministry of Transport and Civil Aviation	HMSO	1958	None
THE SHIPPING FEDERATION A History of the First Sixty years 1890–1950	L H Powell	The Shipping Federation	1950	None
THE BRITISH SEAMAN 1200-1860 A SOCIAL SURVEY	Christopher Lloyd	Collins	1968	None
PANGBOURNE COLLEGE The Nautical College and its History	L C Stephens	Pangbourne College	1991	None
Records of Merchant Shipping And Seamen	Kelvin Smith Christopher T Watts Michael J Watts	PRO Publications	1998	1873162499

<p>THE RIGHT KIND OF BOY A portrait of the British sea apprentice, 1830-1980</p>	David Thomas	Phaiacia	2004	0954198115
<p>The story of the WORCESTER</p>	Commander Gordon Steel V.C., R.N.	George G Harrap & Co. Ltd	1962	None
<p>JONAS HANWAY Founder of the Marine Society Charity and Policy in Eighteenth-Century Britain</p>	James Stephen Taylor	Scolar Press	1985	0859677001
<p>...of daring temper A HISTORY OF THE MARINE SOCIETY</p>	Richard Woodman	The Marine Society and Sea Cadets	2006	095252922X
<p>PAINTED PORTS The story of the ships of Messrs Devitt and Moore</p>	Captain A G Course	Hollis & Carter	1961	None

THE BIRTH AND HISTORY OF TRINITY HOUSE, NEWCASTLE UPON TYNE	David R Moir	McKenzie Vincent & Co. Ltd., Glasgow	1958	None
VINDICATRIX The story of a ship and a training school	Roy Derham	Baron Birch	1996	0860235181
The Blackwall Frigates	Basil Lubbock	Brown, Son & Ferguson	1973	None
A MASTER MARINER. BEING THE LIFE AND ADVENTURES OF CAPTAIN ROBERT WILLIAM EASTWICK	Edited by Herbert Compton	T Fisher Unwin	1908	None

## RELEVANT WEB SITES

DESCRIPTION	WEB SITE ADDRESS
Christ's Hospital.	<a href="http://www.christs-hospital.org.uk/24.html">http://www.christs-hospital.org.uk/24.html</a>
Sir Joseph Williamson's Mathematical School.	<a href="http://www.sirjosephwilliamson.medway.sch.uk/information/historypt1.htm">http://www.sirjosephwilliamson.medway.sch.uk/information/historypt1.htm</a>
Hull Trinity House School.	<a href="http://www.hulltrinity.net/homedir/history.htm">http://www.hulltrinity.net/homedir/history.htm</a>
<i>Arethusa</i> .	<a href="http://www.workhouses.org.uk/index.html?trainingships/trainingships.shtml">http://www.workhouses.org.uk/index.html?trainingships/trainingships.shtml</a>
TS <i>Vindictrix</i> Association.	<a href="http://www.vindictrix-hq.fsnet.co.uk/">http://www.vindictrix-hq.fsnet.co.uk/</a>
<i>HMS Conway</i> .	<a href="http://www.hmsconway.org/">http://www.hmsconway.org/</a>
<i>HMS Worcester</i> .	<a href="http://www.tallshipsfeatures.co.uk/worcester.html">http://www.tallshipsfeatures.co.uk/worcester.html</a>
The Association of Old Worcesters.	<a href="http://www.hms-worcester.co.uk/">http://www.hms-worcester.co.uk/</a>
The Old Pangbournian Society	<a href="http://www.oldpangbournian.co.uk/">http://www.oldpangbournian.co.uk/</a>
TS Mercury Old Boys' Association	<a href="http://www.tsmercury.com/">http://www.tsmercury.com/</a>