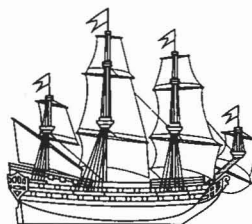


THE ROYAL DANISH NAVAL MUSEUM

An introduction to the History of the Royal Danish Navy

Ole Lisberg Jensen

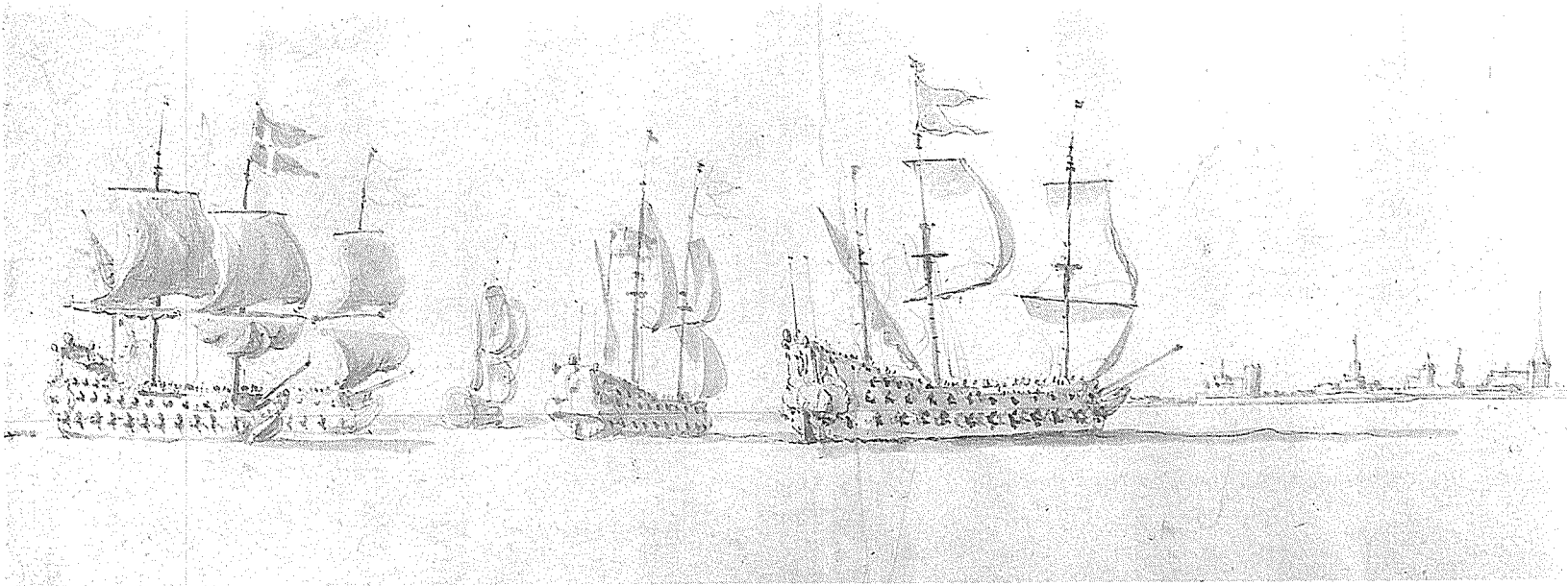




**Royal Danish Naval Museum
Copenhagen 1994**

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Ole Lisberg Jensen

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Frontispiece:

C. Neumann 1859

Danish naval vessel at anchor off the British coast. One of the first naval artists, Neumann sailed with the fleet on a summer expedition.

Title:

The famous Dutch battle artist, Willem van der Velde (the elder), sailed with the Dutch relief fleet to Copenhagen in October 1658. Here we see one of his sketches, showing 5 Danish naval vessels led by TREFOLDIGHED. Copenhagen is in the background.

Photo: archives of the Royal Danish Naval Museum.

Back cover:

The building housing the Royal Danish Naval Museum at Christianshavns Kanal was originally a hospital wing of the Søkvæsthuset. In 1988-89, the building was converted for the use of the Royal Danish Naval Museum with the aid of a magnificent donation from »The A.P. Møller and Mrs. Chastine Mærsk McKinney Møller's Foundation for General Purposes«. The building was constructed in 1780 by master builder Schotmann. When it was handed over to the Royal Danish Naval Museum, the building passed from the responsibility of the Ministry of Defence to that of the Ministry of Culture.

PREFACE

This catalogue is meant as a contribution to an understanding of the chronology of the exhibits in the Royal Danish Naval Museum. It contains illustrations of selected objects from the various collections of the museum, and a review of the history of the Danish fleet through the ages.

The collections of the Royal Danish Naval Museum contain models of ships, ship's equipment, weapons and uniforms relating to war at sea, naval artillery, nautical instruments, maritime art, and much more.

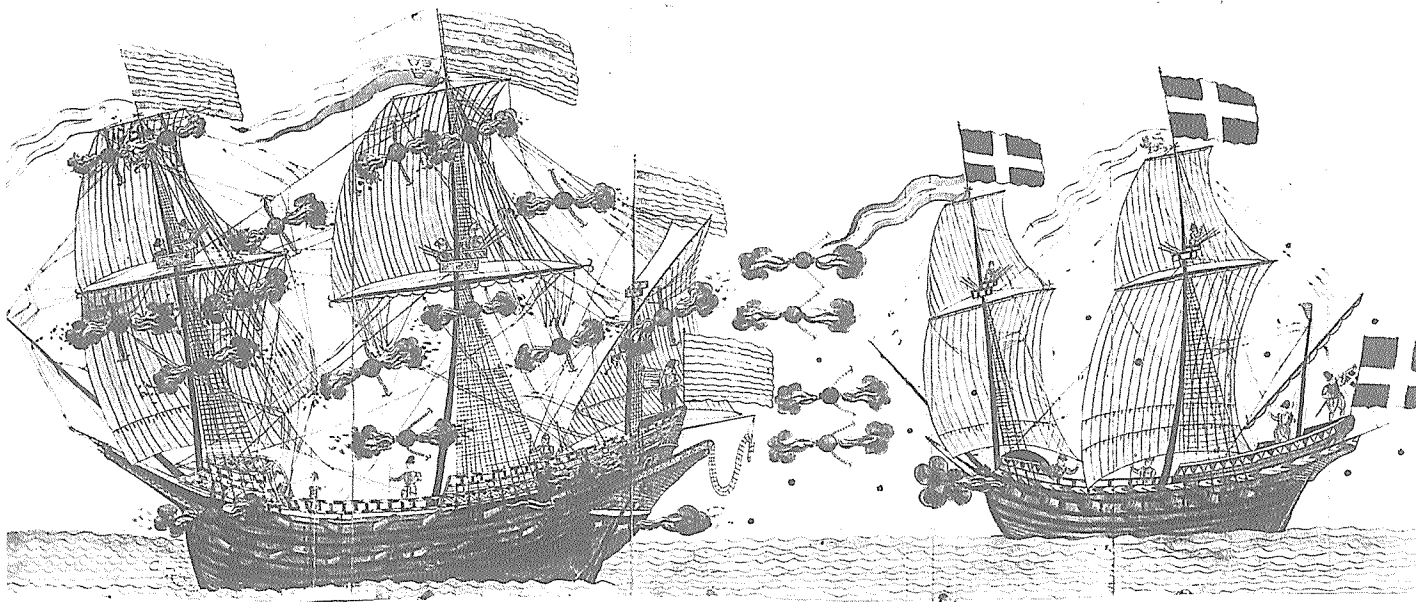
The origin of the model collection, which in its present form contains some 300 models, goes back to the time of King Christian III. In the 18th century it was preserved in the pavilion housing the arsenal at Gammelholm, and was used in the training of shipbuilders. The majority of the models were rescued from the great fire of 1795, which destroyed central parts of the capital, and after this the model collection, which remained in the Copenhagen area, suffered the vagaries of fate, finally coming to rest in a building specially built for the purpose at Holmen, though the collection was only open to the public on festive occasions. During the Second World

War the models were evacuated to Frederiksborg Slot, and it was not until 1957 that the Royal Danish Naval Museum was able to stage an exhibition of them in the Nikolai Kirke (Church of St. Nicholas) in central Copenhagen. From 1978 to 1989 the models were again stored at Holmen, though in the years 1972-1984 a smaller exhibition was on view in the old country seat of Niels Juel, Valdemar Slot on the island of Tåsinge.

In October 1989, after eleven years of storage, the Royal Danish Naval Museum was able to open a permanent exhibition at Søkvæsthuset in Copenhagen, thanks to a magnificent donation from »The A.P. Møller and Mrs. Chastine Mærsk McKinney Møller's Foundation for General Purposes«. This donation covered the costs both of the restoration of the 200-year-old hospital wing, and of setting up the museum.

This catalogue has also been funded by the Foundation, and The Royal Danish Naval Museum would like to take this opportunity of offering its heartfelt thanks to the Foundation, not least for this important contribution to the work of the museum.

P. Wessel-Tolvig, Captain, RDN
Chairman of the Board of Directors of the Royal Danish Naval Museum.



Sea battle between Danish and Swedish warships in the 16th century. Although the ships are only sketched in outline, a number of interesting details can be seen. The Swedish flag has not yet been given the blue-yellow cruciform shape it has to-day. Bombs and other shot are flying between the ships, and the tops are manned by soldiers armed with hand weapons. The ships' captains are standing on the poop, and on the Danish ship the bugler is sounding a call. It looks as if the Danish fire-balls are doing their work on the rigging of the Swedish ship.

*Water-colour drawing by Rudolf van Deventer, 1585.
The Royal Library, Copenhagen.*

THE EARLY STRUCTURE AND ORGANISATION OF THE FLEET

The origins of a national Danish naval fleet are to be found at the end of the 14th century, when Queen Margrethe commanded the nobility and the burghers of the Royal Boroughs to equip ships at their own expense for the defence of the realm. From the time of King Erik VII in the 1420's we hear that a large fleet had been gathered, which also included ships owned by the king. In the course of the 15th century merchant shipping increased in connection with the development of towns, and the need gradually arose for a permanent fleet to protect trade and assert the interests of the king, and therefore of Denmark as a whole.

The Sound, the gateway to the Baltic, was of vital importance for Danish sea-power. The Sound Duty was introduced in 1429 by Erik VII, and brought considerable incomes to the country throughout the years. This customs duty, which was levied on foreign merchant vessels passing Kronborg, was also on occasion the cause of international conflicts, and the reduction of this duty, or its temporary removal, was a clause in most peace treaties throughout the 17th century.

The role of the Danish nation as »watchman of the Baltic« was further emphasised by the strategic choice of Copenhagen as both the capital and the home of the fleet, situated, as it was at that time, in the middle of the Kingdom of Denmark.

The name »Holmen« is mentioned for the first time in 1461 as the place where Danish naval ships were fitted out. This must probably be understood to mean Slotsholmen, more precisely the beach in front of Copenhagen Castle facing the channel between Copenhagen and the island of Amager. Here ships could be laid up, and maintenance and repair work could be carried out within sight of the castle.

The first names we have of ships forming part of the Danish

fleet are DEN STORE ARK (1414) and ROSENKRANTSEN (1436). In 1471, King Christian I gathered an enormous fleet of 70 ships and 5,000 soldiers and sailed to Stockholm, where his army was later defeated at Brunkeberg. From here the king wrote letters dated »Our own ship, VALLENTIN«, which must therefore have been the first ship we can prove was a royal naval vessel.

Under King Hans, who came to the throne in 1481, the fleet was given a more organised structure, and from the period of his reign we hear of large ships being built by royal order. The ENGELN was built in Sønderborg, where there was a good supply of oak for shipbuilding. The MARIA, which was just as big, seems to have been built in Copenhagen, which had gradually become the home port of the fleet. Bremerholm is mentioned for the first time about this period.

In the course of the 15th century, the number of royal ships grew in relation to ships requisitioned from the Royal Boroughs and from the nobility.

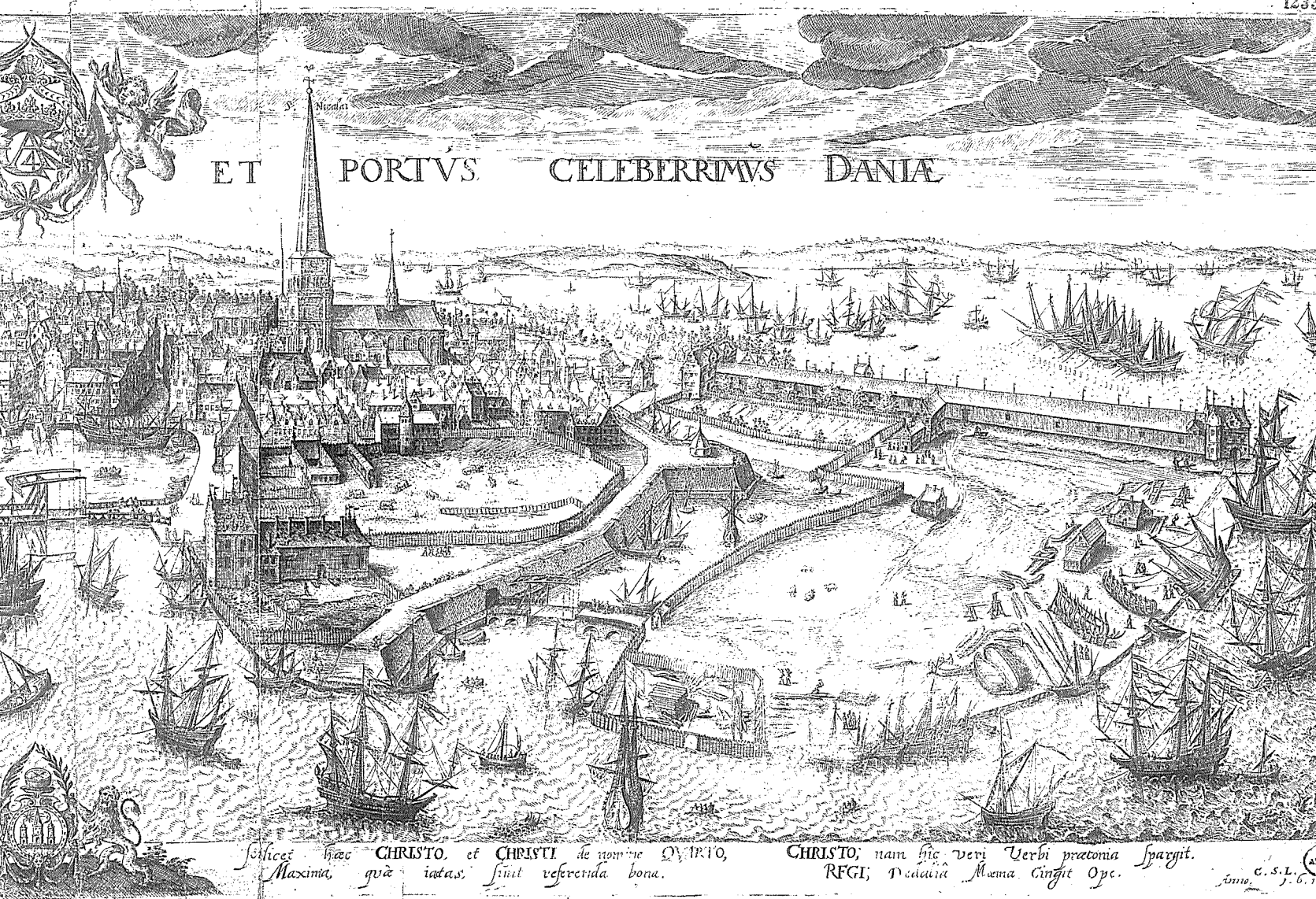
Under the Union Kings, Hans and Christian II, the task of the fleet was to nip Swedish aspirations towards independence in the bud. Things came to a head in 1520, when Christian II took Stockholm with a strong fleet and gave orders for the execution of a large part of the Swedish nobility, an event known as »The Stockholm Bloodbath«. Three years later, Christian II was forced to go into exile in Holland, taking with him the greater part of the fleet, which he regarded as his personal property. He sailed away leaving a political vacuum in the Baltic, and this elbowroom was made good use of, not only by his successor, Frederik I, but also by the newly-crowned King Gustav Vasa in Sweden, the Hanseatic League, the buccaneer Søren Nordby on Gotland, and various minor Baltic princes, who all attempted to gain advantages at the expense of the others.



6

Copenhagen was the base of the Danish-Norwegian fleet, and naval arsenals, dockyards and other workshops were established in the course of the 16th century. On the left can be seen the Arsenal-harbour, built during the reign of Christian IV, where ships were fitted out and

mounted with artillery. In the middle of the picture can be seen the anchor forge, later converted into Holmens Church, and on the right Bremerholm with its shipbuilding yard and ropewalk. Engraving by Johan Diderichsen, 1611, based on a painting by Jan van Wijk. The Royal Library, Copenhagen.



ET

PORTVS

CELEBERRIMVS

DANIAE

felices haec CHRISTO, et CHRISTI de nomine OPTATO,
Maxima, quae iactas, sunt referenda bona.

CHRISTO; nam hic veri Verbi praecordia spargit.
REGI; Delectata Maerua cingit Ope.

C. S. L. delin.
J. B. G. sculp.

At this period the Danish fleet was on the decline, but after Christian II had been finally subdued in 1523, the task of building up the fleet was begun.

FREDERIK II BUILDS UP THE FLEET

During the later years of the 16th century, a permanent Danish naval force was gradually established based on Copenhagen, where there were dockyard facilities, as well as storage for weapons, equipment and provisions. Large ships were still built in those parts of the country where there were plentiful supplies of oak.

Frederik II came to power in 1559, and he devoted a lot of attention to the fleet. The dockyard at Bremerholm was improved; for example, a building was erected for the ship's carpenters, so that they could »chop« in the winter, and had a place to keep their tools. A new ship, the HINDEN, was »shot into the water«, that is, launched from Bremerholm. Records also mention for the first time that a shipbuilder was ordered to make a model, about two feet long, of the warship, FOR-TUNA. At Bremerholm the royal ships were loaded with such delicacies as rusks, barley groats, dried fish and salted meat. In 1561, 800 shields were painted to decorate the ships. These few, isolated bits of information give us an impression of the activities which went on at the naval base in the early days.

In the middle of the 16th century, the organisation of the fleet was changed, in that the Royal Boroughs were no longer required to provide the navy with ships, but only with ammunition, men and provisions.

Thus, with the help of the fleet, the Danish king was able to assert his sovereignty over the Baltic. In exchange for the duty paid by foreign ships in Helsingør (Elsinore), the Danish king was expected not only to keep the Baltic free of pirates, but also to maintain lights on Skagen, Anholt and Kullen, as well

as to put out buoys at Dragør and Falsterbro reef in the period from March 1 to November 11, for the benefit of traffic in and out of the Baltic. Winter sailing was regarded as risky, and the fleet was normally laid up from November to April.

After the middle of the 16th century, Sweden had gradually built up a sizeable fleet, and there began a long period of rivalry between the two kingdoms for control of the Baltic. This tense situation led to the first serious confrontation in the Scandinavian Seven Years War from 1563 to 1570.

In Denmark the first year of the war began with the arming of 700 Norwegian boatswains, who had to make the journey down to Copenhagen in the spring. The Sound was then closed to Swedish ships, and boatswains and musketeers from foreign ships at Helsingør were pressed into war service in the fleet. On May 4, the first Danish warships were able to set sail from Copenhagen. In this first year of the war the two fleets met off Bornholm at the end of May, and the Swedes won a clear victory, while a later engagement at the end of the summer off Gotland was inconclusive. The Danish fleet was led by Admiral Peter Skram.

The following year, 1564, fighting broke out again. There were two major sea battles off Øland between the Swedish fleet and a combined fleet from Denmark and Lübeck, led by Herluf Trolle, who was victorious on both occasions. These battles were fought between very considerable fleets, with something like 50 ships on both sides.

The energy and the will to mobilise naval resources on this scale continued the following year, when naval battles were fought in the waters between Nydyb and Bornholm, and off Øland. Although the Danes and their allies from Lübeck won this last battle very convincingly, the fleet was hit by a major disaster near Gotland in the days that followed, as a massive storm blew up and 12 of the ships stranded off Visby on July 28, 1566.



*Despicio Fatum, forhtnam sperno sinistram,
Spe patiens humidas frango utriusq; minas.
Fors fera miscefecit miscefecit fletibile fatum:
Excipiens curas gaudia longa meas.*

Ejusdem Regis Majestati humilime sculpsens dicat, consecrat Lucas Kilianus Augustanus.

Christian IV, 1621. Engraving by Lucas Kilianus Augustanus.
The Royal Danish Naval Museum.

THE REIGN OF CHRISTIAN IV

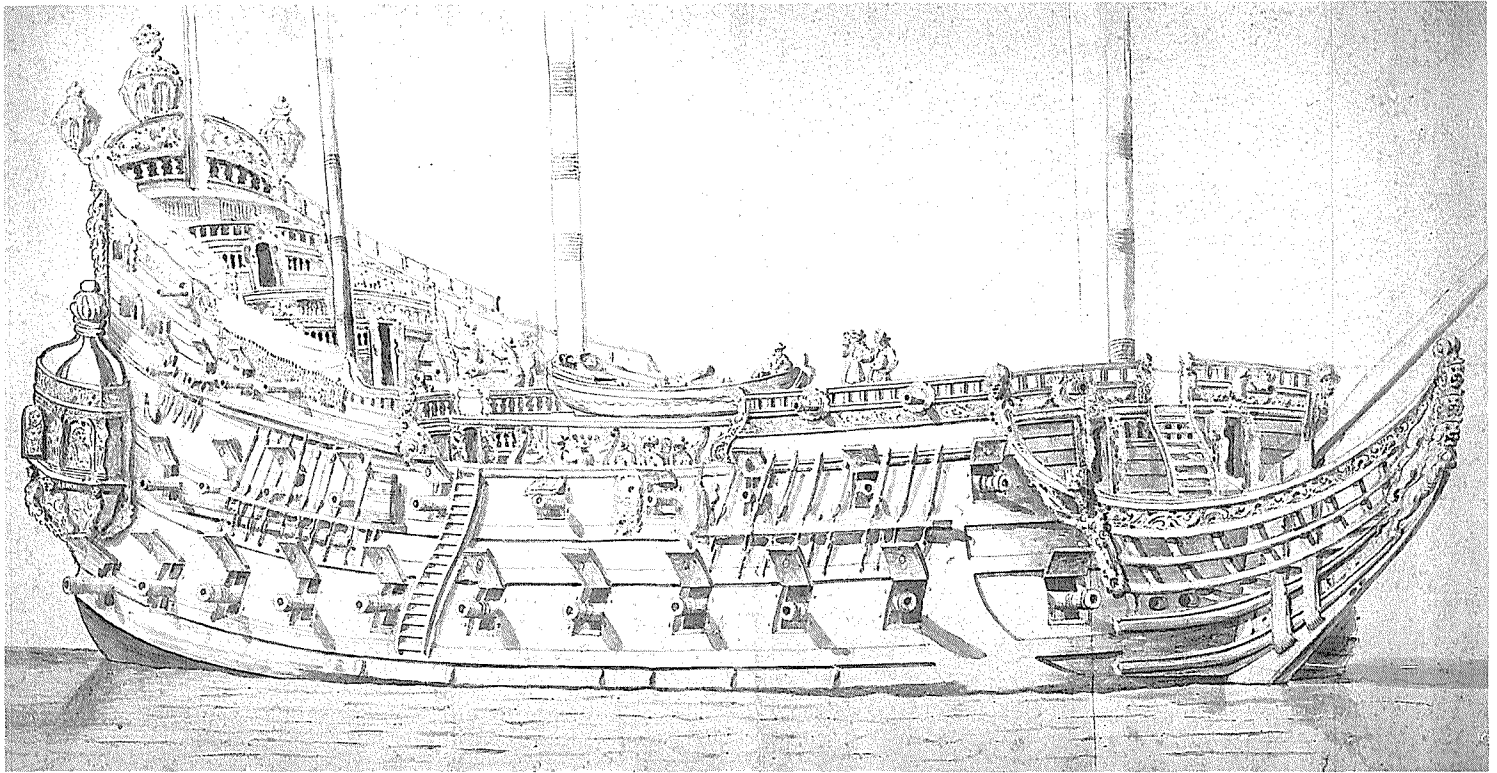
The reign of Frederik II saw a marked increase in Danish sea power, and the king took a deep personal interest in building up of the fleet. This interest was continued and further developed by his legendary son, Christian IV, who sailed with the fleet every year during his reign. Christian IV's intense interest in the fleet was manifest at all levels, from the naval base at Bremerholm to the duties of his admirals and the equipment of the ships.

The energetic and ambitious young king took up the struggle with Sweden, and was successful in the Kalmar War, 1611-13. The fortress of Elfsborg on the river Götaälven, commanding Sweden's narrow access corridor to the Kattegat, was taken in 1612. The Danish fleet now had mastery of the seas, and attacked the east coast of Sweden, showing the flag as far north as the Stockholm archipelago.

Peace was made at Knæred in 1613, but the conditions attached were a heavy burden for Sweden, which had to pay one million rix-dollars for Elfsborg, the so-called «Elfsborg ransom». This was an humiliatingly large figure for the time, and took six years to pay off. After this war, the mood of suspicion between the two countries became ingrained, and an historical line can be drawn from here to the later peace treaties of Brömsebro and Roskilde, when the Swedes had gained the upper hand and were in a position to make their own conditions.

The archives from the time of Christian IV offer a wealth of information on matters relating to the fleet, for example, regarding activities at the naval shipbuilding yard at Bremerholm, where the Admiral of Holmen supervised the building of ships and the annual fitting-out of the fleet. The fleet at sea was commanded by the Admiral of the Fleet, and other admirals appointed from time to time.

Christian IV was an active monarch. He often sailed to Norway, and frequently visited the Elbe, where the Danes levied



The warship TREFOLDIGHED, built in 1642 and taken out of service in 1676, drawn here by Willem van der Velde (the elder) during his stay in Copenhagen. The almost extravagant richness of detail makes this picture one of the best representations of a Danish warship of the period.

Photo: archives of the Royal Danish Naval Museum.

customs duties at Glückstadt on traffic headed for Hamburg. The interest he showed in Glückstadt led to the establishment of a small naval base there.

The rivalry with Sweden concerning control of the Baltic broke out again in the Torstenson War, 1643-45, which proved to be fateful for Denmark. In May, 1644, a Dutch relief fleet on its way to Sweden was stopped and defeated in Listerdyb at the west coast of Jutland, but in the famous naval battle of

Kolberger Heide west of Femern, in which Christian IV on board the TREFOLDIGHED engaged the Swedish fleet, fighting was hard and ended inconclusively. It was here that the king lost an eye, immortalising him in the eyes of the Danes. Later that year, the fleet suffered its worst defeat ever at the battle of Femern, when on October 13, 1644, Admiral Pros Mund was totally defeated. Twelve warships were captured or destroyed by the Swedish-Dutch fleet in this battle, which was a turning-point for Danish supremacy in Scandinavia.

Their successes in the Thirty Years War had given the Swedes control of large sections of the Baltic coast, and they now saw it as their next goal to put an end to Danish control of shipping in and out of the Baltic. They aimed to put an end to the Danish »encirclement« by attacking Jutland from the South and Scania from the North. At sea, the Dutch and the Swedes had common interests, and Denmark could not withstand the pressure. At the peace negotiations in Brømsebro in 1645, Denmark was forced to relinquish Gotland and Øsel, surrender Halland in the course of thirty years, and give up Jæmtland and Hærjedalen.

Shipbuilding had seen considerable developments under the reign of Christian IV, and warships had increased in size, built according to the newest principles by shipbuilders from Holland and Britain. The fleet now consisted of forty warships, large and small, plus the royal merchant ships and other smaller vessels.

The facilities provided for the fleet in Copenhagen – the complex of buildings connected with the Tøjhuset (arsenal) and Proviantgården (provisions stores) with their sheltered harbour – and the complete renewal of the various functions of Bremerholm, date from the first half of the 17th century. Holmens Church was established, and »the long house« was built, which contained a smithy, sail stores, the Admiralty, and many other functions.

Even though the actions taken by Christian IV in pursuit of

his foreign policy helped to diminish Denmark's power in northern Europe, his reign is nevertheless remembered as an epoch of vital importance in the history of the fleet.

On the death of Christian IV in 1648, the country's finances were in a bad state, and there was therefore little sympathy for the constant renewals and replacements necessary to maintain so many ships at sea, and in consequence the fleet was left to decline until the introduction of the absolute monarchy in 1660.

THE KARL GUSTAV WARS 1657-1660

One of the natural tasks of the Danish fleet in time of war was to prevent the enemy landing troops on the Danish islands. In the war with Sweden in 1657, a detachment of the fleet was sent to Danzig to foil an expected Swedish attempt to sail troops to Denmark. Instead, the Swedish king, Karl X Gustav, had his army march west to invade Jutland, while the fleets of the two countries kept each other in check in the southern part of the Baltic. In the harsh winter of 1658, the Little and Great Belts froze over, enabling the daring Swedish king to march his army over the frozen waters and reach Zealand in record time with a force of 7,000 men. In such a situation the fleet was completely out of the running. The Danish government, hard pressed, was forced to conclude peace with the Swedes, unconditionally. Denmark lost Scania, Halland and Blekinge the three Danish provinces east of the Sound, as well as Bornholm, and Norway was forced to cede the provinces of Bohus and Trondheim. In addition, Sweden secured full freedom from duty in the Sound, and Denmark undertook to forbid the passage of foreign fleets, which in reality was quite unrealistic.

One ray of sunshine in the icy winter of 1658 was provided by Captain Peter Jensen Bredal, who had been ordered to patrol the Great Belt with four warships to prevent the Swedes

sailing their troops to Zealand. He was icebound at Nyborg, but he succeeded in holding out against Swedish cannon fire from the shore until there was open water again, and he was able to sail home to Copenhagen.

In view of the unusually harsh conditions laid down at the Peace of Roskilde, the great powers of Britain, France and Holland began to worry about Swedish military ambitions, and fearing that Karl X Gustav should become the new master on both sides of the Sound they changed sides to support Denmark instead. First and foremost they wished to secure the important Baltic trade, a necessary condition of which was free passage through the Sound.

1658 was a dramatic year for Denmark. A large Swedish fleet had mastery over the Baltic, while the Danish fleet, for lack of money, had not been fitted out at all. After the conclusion of peace, the Swedish army had withdrawn from Zealand, but still occupied Jutland and Funen. In the course of the summer months, Karl X Gustav gathered a new army in Kiel, ostensibly with the intention of invading Prussia. This strategem of war succeeded, and on August 8 the Swedish fleet again sprung a surprise, landing an army of 10,000 men at Korsør. At the same time, twelve Swedish warships blockaded Copenhagen from the sea, and after a few days Copenhagen was a town under siege. Kronborg also came under siege, and surrendered after a time. The country found itself in a profound state of crisis; the king, the government and the fleet were trapped in Copenhagen, threatened with total annihilation.

The news of this unexpected Swedish invasion soon reached Holland, where the possible suppression of Denmark was seen as a serious threat to the country's trading interests in the Baltic area. Orders were given as quickly as possible to equip a relief fleet which could sail to the relief of Denmark. It consisted of 38 warships and 6 merchant ships carrying troops, provisions and ammunition.

On October 29, 1658, a fresh northerly wind was blowing,

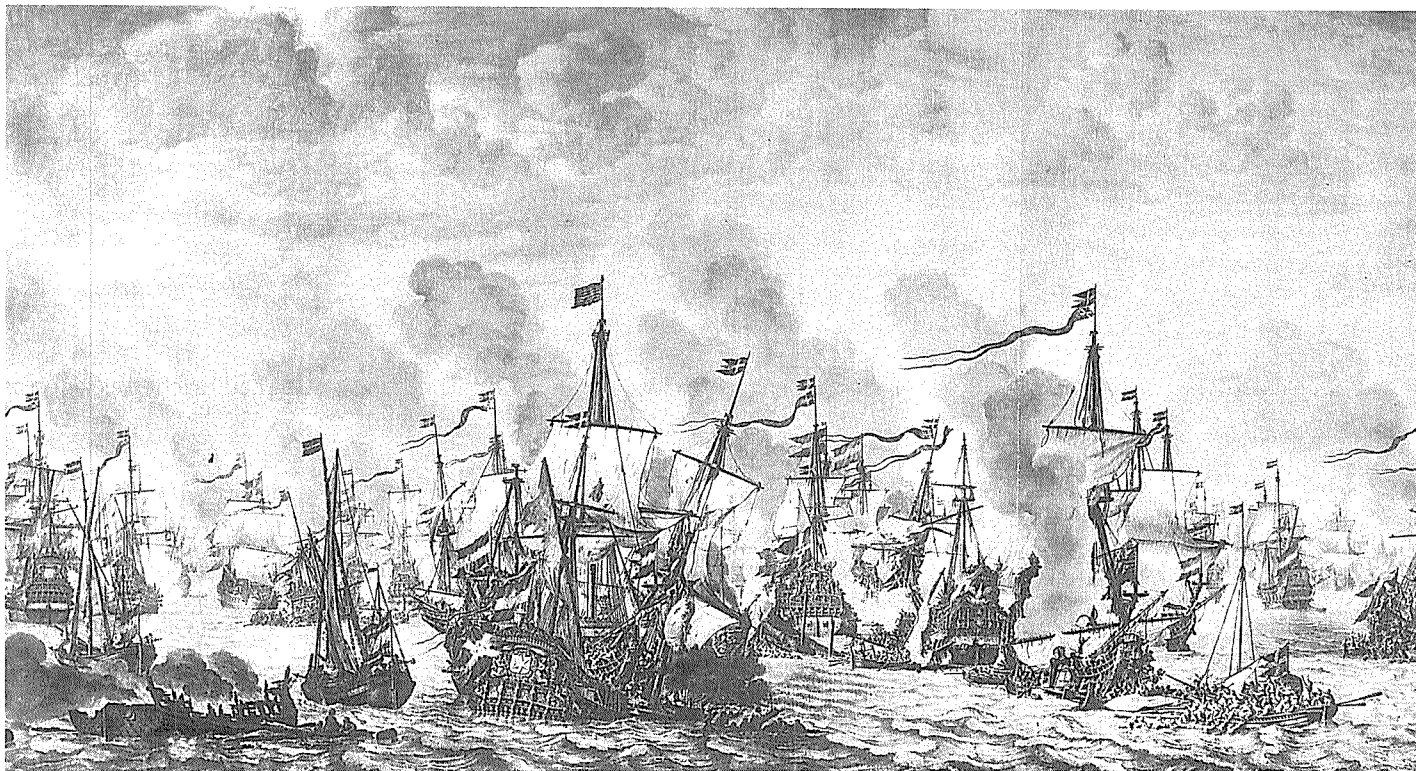
and the Dutch, under the leadership of Admiral Jacob Wassenaer Obdam, were able to enter the Sound and sail past Kronborg, which was occupied by the Swedes, by sailing down the middle of the channel out of range of the guns on both sides. South of Helsingør they ran into the main Swedish fleet of 44 warships under the command of Admiral K.G. Wrangel.

After five or six hours of hard fighting, during which the Dutch lost one ship and the Swedes four, Admiral Obdam succeeded in fighting his way through to Copenhagen. It must be regarded as an irony of fate that the six Danish ships which had been ordered to support the Dutch were held back by the same brisk northerly wind which had helped the Dutch down through the Sound. The Danish ships had reached as far up as Hven, from where they were able to accompany the Dutch to Copenhagen.

The Battle of the Sound on October 29, 1658, between the Dutch and Swedish fleets was just as much a battle for Denmark. The Dutch brought up supplies and troops to the beleaguered town of Copenhagen, opening up the approach to the town from the sea. In this way they gave the population renewed hope and strengthened their will to resistance.

Despite this setback, the Swedes continued their siege of Copenhagen. On February 11, 1659, the town's defences withstood a frontal attack by the Swedes, an action which proved to be a turning point for Karl X Gustav's campaign in Denmark. Though the country was still occupied by the Swedes, peace negotiations were begun, under heavy pressure from Britain, France and Holland. In order to put extra weight behind these negotiations, a new Dutch fleet arrived at the Great Belt on June 1, led by the famous admiral, Michael Adrian de Ruyter, followed later by an British fleet. The Swedish troops on Zealand and Lolland-Falster were thus cut off from Funen and Jutland, and in November Danish and allied troops were landed on Funen to lay siege to the occupying Swedes.

Karl X Gustav was forced to remain on Zealand, unable to



The Battle of the Sound, October 29, 1658. In October, 1658, a Dutch fleet came to the aid of hard-pressed Denmark, and relieved Copenhagen. First, however, the Dutch had to fight a violent sea battle against the Swedish fleet south of Helsingør. Here, the battle is seen through the eyes of Willem van der Velde (the elder), who sailed with the Dutch fleet under the command of Admiral Jacob Wassenaer van Obdam. This hard-fought battle cost the Dutch one ship, and the Swedes four. The ship seen sinking in the middle of the picture is the MORGONSTJÄRNAN. Palazzo Pitti, Florence. From: Svenska Flottans Historie, 1942.

support his troops on Funen. He who ruled the sea held the upper hand, and even though the Danish fleet had only played a marginal role in this conflict, it had to be admitted that the defence of Denmark depended on a strong fleet. On February 12, 1660, Karl X Gustav died suddenly. Peace negotiations were however first concluded in Copenhagen on May 29, 1660. The result was a ratification of the Peace of Roskilde, though Bornholm and the province of Trondheim were returned.



Niels Juel was the victor in the Battle of Køge Bugt, July 1, 1677. He was appointed Chief of the Naval Staff under the Dutchman, Cornelis Tromp, who was Lord High Admiral, and the highest officer in the navy. Tromp never got to the Battle of Køge Bugt and after it Niels Juel's prestige rose considerably. He was subsequently appointed Lord High Admiral. Portrait by A. Wuchters in Frederiksborg Museum.

THE RECONSTRUCTION OF THE FLEET AND THE SCANIA WAR 1676-79

During the period from the introduction of the absolute monarchy in 1660 to the beginning of the Scania War a gradual reconstruction of the naval fleet was begun.

The Norwegian, Cort Sivertsen Adelaer, came home in 1663 and took over the leadership of the fleet. He had made his name as a naval officer, and had gained international recognition while in Venetian and Dutch service. Cort Adelaer was inspired by Dutch sea power, and wanted to introduce changes based on the Dutch example.

With Dutch help he fitted out the fleet, which was given the task of protecting trade, especially Dutch trade, against British privateers in Danish waters. This latter activity was part of the wider conflict between the British and the Dutch, and as a result Denmark became involved in a war with Britain in the years 1666-67, which led to the confiscation of Danish ships in Britain.

Christian V came to the throne in 1670, and after this date the fleet became the object of greater interest on the part of the government of the country. The Admirals Cort Adelaer and Niels Juel carried out an effective modernisation of the naval fleet with a view to its use in the major conflict which was brewing with Sweden. This began in 1676, and was known as the Scania War. In effect, it was a corollary of the wider European conflict, in which France and Sweden were opposed to Holland, Spain, the German Emperor and Brandenburg.

Naturally enough, Denmark wanted to recover its lost provinces east of the Sound, and in this connection the fleet was a necessary means to pacify the large Swedish fleet and, if possible, to support an invasion of Scania.

Cort Adelaer was appointed Lord High Admiral, but unfortunately he died at the end of 1675, and the command of the fleet passed to Niels Juel.

The Dutch continued to exercise a considerable influence on Danish naval policy, and the following year Christian V appointed the well-known Dutch admiral, Cornelis Tromp, Lord High Admiral.

The attention to detail and singleness of purpose with which the fleet had been reconstructed now paid dividends. In 1676 Niels Juel was able to get the fleet ready to sail as early as the end of March, and a month later he took and occupied Gotland, which remained in Danish hands as long as the war lasted. The Swedes had likewise made great efforts to get their fleet ready as early as possible. On May 25, the two fleets sighted each other in the southern Baltic, and Niels Juel was able to hold off the superior Swedish fleet until he was joined by Admiral Tromp, who sailed down from the Sound with a Dutch fleet. The combined Danish-Dutch fleet was now equal to the Swedes in strength.

The Battle of Øland, June 1, 1676

The major confrontation took place on June 1 at the Battle of Øland. The three-decker warship, STORA KRONAN, with the commander of the Swedish fleet on board, capsized and exploded, and this sparked off a violent sea battle which was resolved to the advantage of the allied Danish-Dutch fleet. The Swedish fleet suffered heavy losses, and control of the Baltic passed into Danish-Dutch hands for the rest of the year. The victory at Øland paved the way for a Danish landing and invasion of Scania, in which the fleet played its part by transferring the army to Raa, south of Helsingborg.

The army did not have the same success in the war on land, and after having taken Scania in the summer of 1676 it was defeated in the decisive battle for Lund in December of the same year, and was forced to retreat to Landskrona.

The following year, the fleet was again fitted out early in the season, and put to sea in May, once more under the command of Niels Juel. In 1677, the Swedish strategy was to unite

the Gothenburg squadron with the main fleet. The Gothenburg squadron of nine ships made an attempt to sail down through the Great Belt at the end of May, but ran right into the clutches of Niels Juel's squadron and was totally defeated at the Battle of Møen on June 1, 1677.

Great efforts had again been made in Sweden to fit out the fleet, now commanded by Henrik Horn, previously a field marshal. In June he sailed with 36 ships into the southern Baltic, with orders to attack and destroy the Danish fleet.

The Battle of Køge Bugt, July 1, 1677

Niels Juel drew up his 24 warships in a line between Stevns and Falsterbo. This deployment gave him the greatest freedom to manoeuvre and enabled him to make use of his knowledge of this narrow stretch of water. He had been informed that the Lord High Admiral, Admiral Cornelis Tromp, was approaching Danish waters from the North with a Dutch fleet. During the whole of June the fleet held this position and made ready its equipment, while cruisers were sent out to follow the movements of the Swedish fleet. On June 24, the Swedes lay at anchor off Møen, and the Danes off Stevns. On June 30, the fleets made contact, and the following day battle was joined in Køge Bugt. On the one side, the Swedes had 18 ships of the line, 12 frigates, 6 fireships and 11 smaller ships, while the Danes, on the other side, had 16 ships of the line, 9 frigates, 2 fireships and 7 smaller ships. Altogether, the Swedes could muster 1,624 guns and 9,200 men against the 1,422 guns and 6,700 men of the Danes. The battle of Køge Bugt was the culmination at sea of the Scania War.

From 5.30 in the morning of July 1 and for the next ten hours the two fleets fought a running battle. The outcome was a resounding Danish victory, the Swedes being forced to retreat into the Baltic in the afternoon after the loss of eight warships.

With this victory Niels Juel gained international recognition. The Dutch never arrived at the battle area, and this fact

also meant the end of Danish dependence on the Dutch. The fleet had regained its selfconfidence, which had been dealt a serious blow by the overwhelming Swedish victory at the Battle of Femern in October 1644.

In the last years of the Scania War the Danish fleet had complete control of the Baltic, but its successes could not outweigh the losses suffered on land by the army in Scania. The terms of the peace concluded at Lund, and later at Fontainbleu, were dictated by France, and the borders remained unchanged. In Sweden, this war led to a change in the area on which its fleet was based. They realised that it was strategically necessary to move closer to Denmark, and therefore established a new harbour for the fleet at Karlskrona, in the islands off the eastern coast of Blekinge. In Denmark, under the competent leadership of Niels Juel, improvements were made within the fleet as regards administration and training. One of his aims, for example, was that the officer corps should consist of Danish nationals only.

The naval dockyards in Copenhagen were also renewed, as the site at Bremerholm was now too small. The port of Copenhagen was extended northwards, and Nyholm was established on Refshalen, east of the fleet anchorage. The first ship built at Nyholm was the ship of the line, DANNEBROGE, in 1692. Naval shipbuilding was now headed by such highly qualified men as Henrik Span and Ole Judichaer, the latter bearing the title of master shipbuilder.

In this period the fleet also possessed bases in Glückstadt in Holstein and Christiansand in Norway, and in 1684 Ert-holmene, northeast of Bornholm, was opened as a supply base for the fleet, and given the name Christiansø.

After the death of Niels Juel in 1697, leadership of the fleet passed to Ulrik Christian Gyldenløve, an illegitimate son of Christian V, who was only nineteen years old. The fleet was in good shape, and in 1700 it was fitted out in full strength, ready to be sent against Sweden in the war which had now begun

a new. The new king, Frederik IV, was ready with the army in Holstein, and there was widespread confidence that the fleet had mastery of the seas. No one, however, had expected that the fleets of Sweden's allies, Holland and Britain, would appear in the Sound, and join, moreover, with the Swedish fleet, which passed unhindered through Flinterenden and attached itself to the allied forces south of Hven the well known island in the Sound.

In the course of the summer months, the young and energetic Swedish king, Karl XII, had gathered an army in Scania, and under cover of the allied fleet he sailed them over to Zealand, whilst Gyldenløve lay idle with the Danish fleet in Copenhagen, unable to intervene against this superior force. Suddenly, Denmark was once again faced with a very dangerous situation, reminiscent of the siege of Copenhagen in 1658. At the end of July the town was subjected to a bombardment from the sea by the British, Dutch and Swedish fleets, though the attack was in the main ineffective.

When the Swedish army invaded Zealand the great powers once more lost their nerve. As in the similar situation in 1659, they did not want the same state to hold power on both sides of the Sound. Peace was almost forced upon the warring parties, and was concluded on August 18. Denmark was compelled to relinquish its alliances with Russia and Poland, and to recognise the rights of Gottorp, the Duke of Holstein. Under allied protection, the Swedish army was escorted back to Scania again.

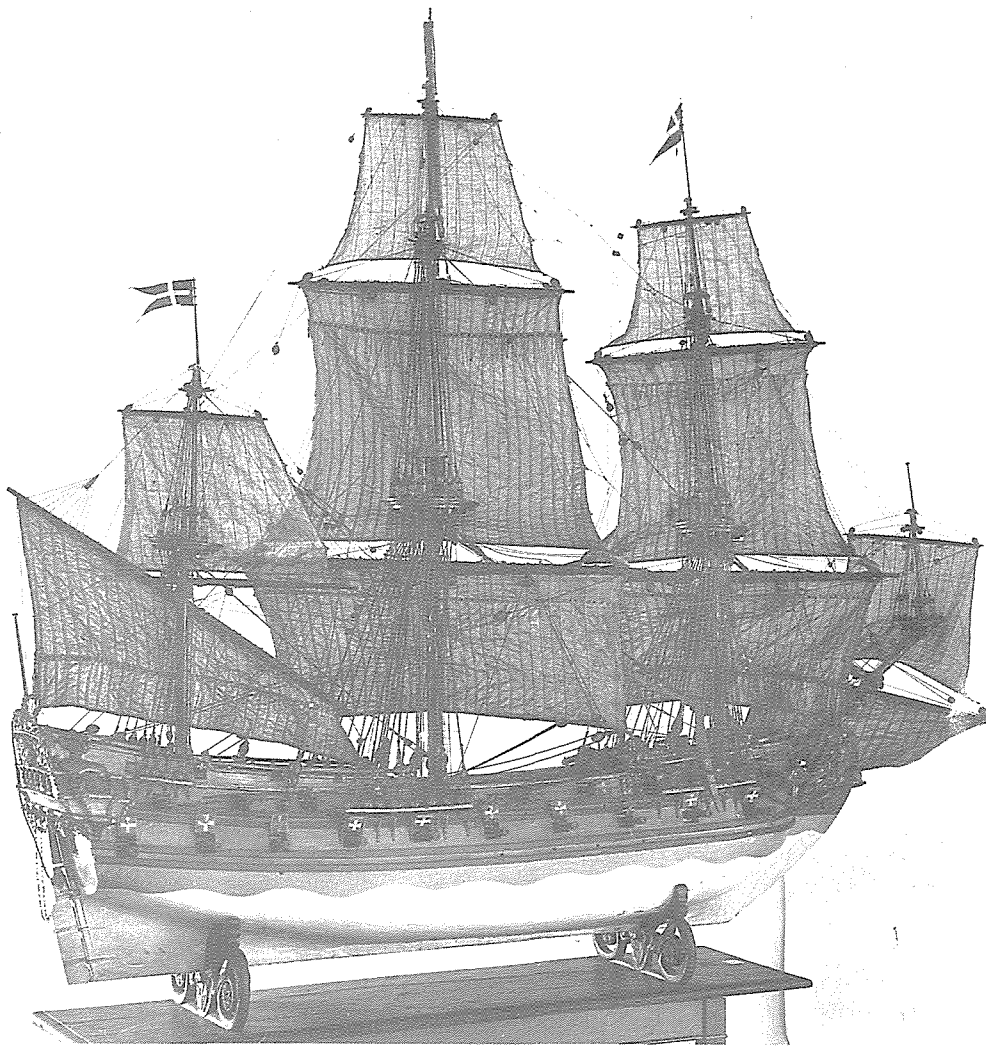
A more offensive strategy on the part of the fleet in this war could have prevented this precarious situation, but the leadership of the fleet acted as it did under orders from the top.

A number of years passed before the Danes again felt that the time was ripe to go to war with Sweden, still with the hope of winning back the provinces of Scania. In alliance with Russia and Poland war was declared on Sweden in 1707. At the beginning of this war the fleet consisted of 41 ships of the line,



The Battle of Køge Bugt, July 1, 1677. Painting by Viggo Faurholt (1832-1883). The fleet won a number of important victories in the Scania War, thereby enabling the army to reach Scania, while at the same time keeping the Swedish naval forces bottled up in the Baltic. This painting by Viggo Faurholt depicts a dramatic scene from the Battle of Køge Bugt.

13 frigates and 11 smaller vessels, in all somewhat smaller than the Swedish fleet. No other powers possessed naval fleets in the Baltic at this time.



One of the oldest models at the Royal Danish Naval Museum is this warship from the time of Niels Juel. It seems likely that the model was made as a votive ship for church use, as the proportions of the hull are not realistic. The rigging is original 17th century, with sails of hemp and great attention to the smallest details. The design of the Royal Danish Naval Museum's logo is taken from this model.

THE GREAT SCANDINAVIAN WARS

In 1709, with the aid of the fleet, a Danish army of 16,000 men was sailed over the Sound to Raa, south of Helsingborg, an invasion harbour preferred by the Danes, and which had also been used in 1676.

The task of the navy in this war was to hold the Swedish Gothenburg squadron in check, to carry supplies to Norway, to use the main fleet in the Baltic to keep an eye on the main Swedish fleet, and to cut the Swedes off from their possessions on the other side of the Baltic.

On October 10, 1710, a sea battle was fought with the Swedes in Køge Bugt, but little was achieved. The rigging of the ship of the line, DANNEBROGE, caught fire, and the ship's captain, Iver Huitfelt, showed great courage by holding his ship in position, despite the fact that it was burning, and engaging the Swedish fleet, diverting attention from the rest of the fleet, which was able to run for cover in Copenhagen. After an hour's fighting, the DANNEBROGE exploded, and almost 600 men were lost.

Health conditions aboard the ships at this time were abominable. In 1711, the crews serving in the fleet were hit by the plague, as were the population of Copenhagen and the Swedes at Karlskrona. This led to a reduction in military activity on both sides.

It was in connection with the Great Scandinavian War that one of the most outstanding personalities in Danish naval history made his lightning and glorious rise to fame. Peter Wessel came to Copenhagen at the age of fifteen from Trondheim in Norway, and at the age of seventeen sought the king's permission to start as a cadet. He was not accepted, and instead he took hire as an apprentice on a long-distance voyage to Guinea and the East Indies. On his return in 1709 he was taken on as a cadet, and once more sent off on a long voyage to the East Indies. When he came home again in 1710, the war had

once more broken out, and he was given his first command on the ORMEN, a snow with four guns attached to that section of the fleet operating in the Kattegat and the Skagerrak. In 1711, he was also operating in this area, on board the famous LØVENDAHL'S GALEJ, a small frigate paid for by Norway's commander-in-chief. Peter Wessel was very active, and his fearless energy seemed to know no bounds when it was a question of seizing enemy privateers or getting wind of the latest news regarding enemy plans.

At the same time there was a lot of activity on the north coast of Germany, where Rygen, with Stralsund and Pommern, were especially the scene of military activities.

Late in the autumn of 1712 the north Squadron, that part of the fleet which was operating in the Kattegat and the Skagerrak, was summoned to Copenhagen to supplement the Baltic fleet. The Lord High Admiral, Ulrik Christian Gyldenløve, had gathered the fleet in Køge Bugt. He had transported guns to the siege of Stralsund, and was now looking for the Swedish fleet, as it was known that a large Swedish transport fleet was to be escorted to Rygen. The Swedes succeeded, however, in doing this, but were caught by surprise when unloading on September 29; Gyldenløve launched a bold attack and set 80 transport ships on fire, thus making it impossible for the Swedes to relieve Stralsund.

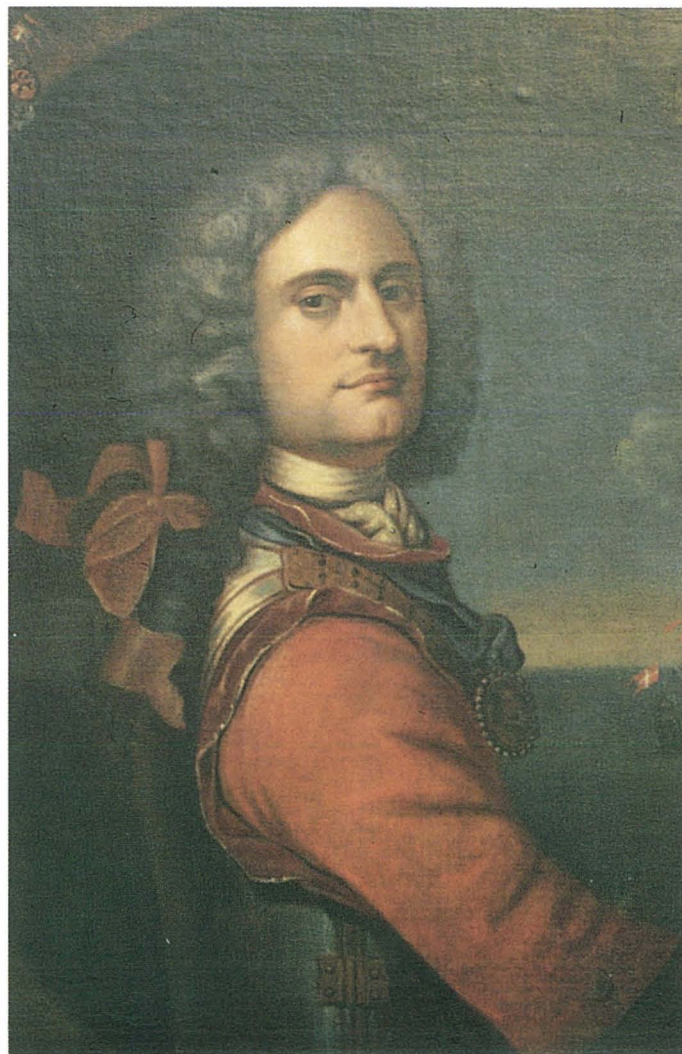
During the next couple of years (1713 and 1714), the main fleet was restricted to operations in the Sound and that part of the Baltic closest to Denmark. In the Kattegat and the Skagerrak Peter Wessel was more active than ever before, and many of the episodes on which his reputation was based took place here. It is related that he once had a skirmish with a Swedish frigate, a privateer with an British captain. After a violent exchange, he hailed the British captain and asked for the loan of some gunpowder, as his own supplies had run out. After this the two captains drank a toast to each other and then sailed off in opposite directions. The episode aroused critical

attention, and Wessel was brought before a court-martial, but he was protected by the king, and appointed captain at the age of only twenty-three.

In 1715, Wessel, as captain of the LØVENDAHLS GALEJ, was part of a squadron which was dispatched to the Baltic early in April to observe the movements of the Swedish fleet. A Swedish squadron was sighted off Femern, and the two squadrons joined battle on April 24. In the course of this hard-fought struggle, which resulted in the destruction and surrender of the Swedish squadron, Wessel succeeded in taking captive the Swedish admiral, Karl Hans Wachtmeister. As a reward for this achievement, Peter Wessel was allowed to hoist his commissioning pendant on the VITA ØRN, a swift and very seaworthy Swedish frigate which had been captured in the battle.

Later in the year, the centre of conflict moved to the shallow stretch of water off Rygen, and for this purpose lighter, flat-bottomed ships had been commandeered, better suited to an area of small islands and shallow waters. Vice Admiral Sehested, a commander of high reputation, having gained mastery over the Swedes in the area, was able to land Frederik IV and the King of Prussia with 18,000 men at Stresow near Rygen. Here the Swedes suffered a defeat and were forced to withdraw to Stralsund. On December 1715, despite the odds,

Vice Admiral Peter Tordenskiold was absolutely the most colourful naval officer in the Danish-Norwegian fleet. Peter Wessel was born in Trondheim, Norway, in 1690. He had wanted to be a naval officer from an early age, and after gaining experience in the merchant fleet he was admitted to the navy as a cadet in 1709. His energy, drive and decisiveness in action were legendary, both in service in the Baltic and in the Kattegat-Skagerrak during the Great Scandinavian War. In the course of a few years his lightning career brought him to the top, and in 1716 he was raised to the nobility under the name of Tordenskiold. His victories at Dynekilden, Gothenburg and Marstrand were the high points of his career. He was killed in a duel at Hildesheim in Germany in 1720. Contemporary portrait of Peter Tordenskiold.



Karl XII succeeded in sailing to Trelleborg in a small, insignificant vessel, and was thus able to take the initiative again on Swedish soil.

Peter Wessel took aggressive action wherever he was in service, and was soon the object of great respect. Whilst the fleets at this time were often deployed to suit tactical purposes, and admirals usually found it to their advantage to avoid a confrontation, Wessel took the initiative, and proved himself superior to the enemy in terms of seamanship. With this attitude, he often engaged superior enemy forces, overcoming them with his resourcefulness and courage. His achievements were noted in higher quarters, and in 1715 he was raised to the nobility under the name of Tordenskiold.

In 1716, when Karl XII's plan to attack Copenhagen by marching his troops over the ice had failed, he marched his troops north instead to attack Norway. In consequence, the Danes concentrated all their efforts on improving the scope of fleet operations in the northern waters.

Peter Tordenskiold was given command of a squadron which was deployed in the Bohuslen in order to disrupt Swedish supplies being sailed to the army from Gothenburg.

Tordenskiold gained one of his greatest victories at Dynekilen, where he surprised and destroyed a Swedish transport fleet and captured 19 ships. As a result, Karl XII was forced to raise the siege of the Norwegian border fortress, Frederiksten, and withdraw his forces.

In the years 1717-19, an allied fleet composed of Russian, British, Dutch and Danish ships controlled the Baltic, and for the most part the Swedes remained in port. Mutual distrust between the allies, however, prevented a common attack being launched on the Swedes.

In 1715, Peter Tordenskiold captured the Swedish frigate, VITA ØRN, at Femern. This frigate later became Tordenskiold's flagship, and was renowned for its sailing abilities. Model by Peter Maack. (Photo: Jan Iversen)



At the end of 1716, Tordenskiold was appointed commander of the north Squadron. His task was to block the operations of the Gothenburg squadron, a force far greater than his own, and at the same time to fight the large number of Swedish privateers. In addition, he was to prevent the transport of supplies to Swedish troops in the northern Bohuslen as well as ensuring safe conditions for Danish-Norwegian sea traffic in the area.

Tordenskiold's main tactics consisted in carrying out surprise raids against the enemy when they were at anchor. In fact, this element of surprise was the main element behind the success of his ventures. However, his night attack on Gothenburg on May 14, 1717, nearly ended in disaster, as the Swedes discovered his activities at an early stage. The same is true of his attack on Strømstad on July 19, 1717, where he himself was wounded.

In September, 1718, the Swedes once more marched into Norway, and laid siege to the fortress of Frederikssten. It was here, on December 11, that Karl XII was shot dead.

The news of Karl XII's death was brought to Frederik IV by Peter Tordenskiold himself on December 28, and in recognition of his efforts he was appointed »Schoutbynacht« equivalent to our days counteradmiral.

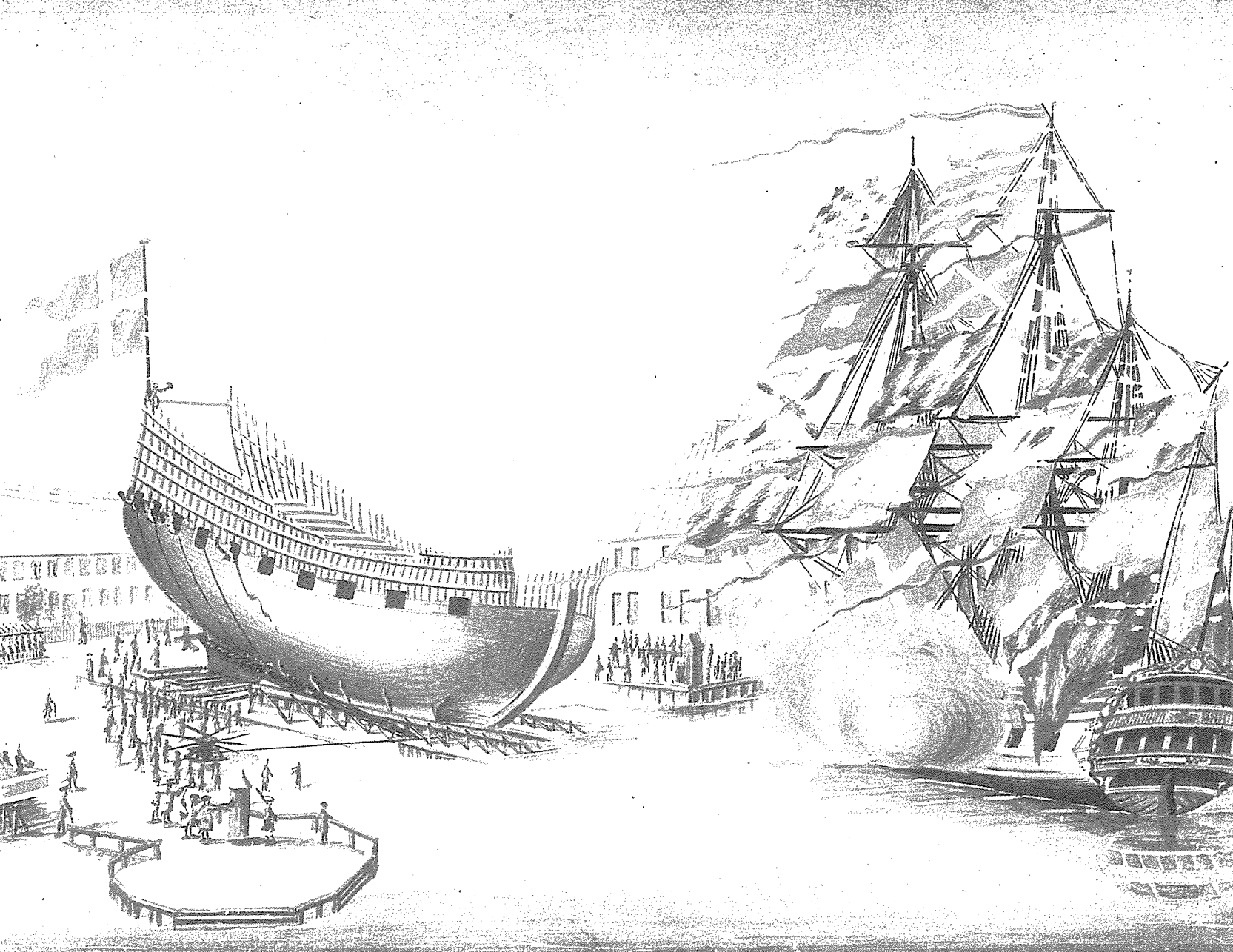
Britain and Holland now withdrew from the war, but Denmark continued in the hope of forcing territorial concessions. The battle for Bohus province continued, therefore, in 1719, and Tordenskiold's reputation now ran like fire before him. On July 16, 1719, after a heavy bombardment, he captured the town Marstrand with the fortress of Carlssten. The commander and his troops were allowed to go free. Four ships were captured on this occasion and after this, his most imposing victory, he was appointed vice admiral at the age of only 29.

On August 2-4, 1719, a second attempt was made to take Nya Elfsborg, the fortress at the mouth of the river Gøtaelven, but

despite two days of heavy artillery fire the attack failed. The third attempt, however, on October 8, was successful. Under cover of darkness Tordenskiold was able to sail three galleys, 3 wherries and 7 shallops unnoticed past Nya Elfsborg and overpower the Swedish ships that lay at anchor in the harbour. He blew them all up, except for the Danish galley, PRINS CARL, which had been captured by the Swedes. Tordenskiold managed to bring this ship with him out of the mouth of the river and past Nya Elfsborg. Despite heavy gunfire, Tordenskiold reached safety without suffering any losses.

This, the last engagement of the war, demonstrated Tordenskiold's strength under the right conditions: a quick, surprise raid followed by a just as rapid withdrawal.

In earlier times, just as today, the launching was an event in the history of a ship which called for a celebration. Here, the frigate, BORNHOLM, is being launched from Gammelholm in 1748. Another ship is at anchor out in the harbour, firing a salute, and all the ships are dressed overall. On the left can be seen the marquee which has been erected for the occasion, so that the notabilities can see the show protected from wind and weather. It would surprise the modern visitor to Copenhagen to know that this launching took place from the site where the National Bank is situated today, seen from Christianshavn. Watercolour by Clement Mogensen Clementsen Rønneby.





THE LONG PERIOD OF PEACE

The Great Scandinavian War had told heavily on the fleet and the coffers of the state alike, and a long period of reconstruction lay ahead. Certain improvements had already been made in the last years of the war, including a reorganisation of the navy high command. Naval finances, for example, were separated from those of the army. At this time, the navy's regular personnel consisted of 200 officers and 4,700 petty officers and other ranks. In its later years, the war had become an internal conflict between Denmark-Norway and Sweden,

and there were no longer as many Dutch officers as during the Scania War. The aim was that navy personnel should consist of Danish nationals only, and in 1732 orders were given that no foreign citizens should be recruited to the fleet.

During the ensuing eighty years of peace, the fleet was seldom fitted out in its entirety, though treaty obligations promising mutual help were honoured. For example, in 1726-27, a Danish squadron operated alongside the British fleet to keep in check the large Russian fleet.

Three figureheads, modelled in wax. Until about 1800, warships were richly decorated with gilded wooden carvings, with special emphasis on figureheads, and the decoration of the stern. The best carvers were brought to Holmen to carry out this work. The Royal Danish naval Museum has a collection of 49 wax models, used by the carvers as sketch for the final figureheads.

The ship of the line, *FYEN*, launched in 1736. The motif here is a lion with outstretched paws, of a type common on warships in the 17th and 18th centuries.

The ship of the line, *JYLLAND*, launched in 1739. This model depicts an ox with the tail of a fish, and symbolises the cattle-raising area of Jutland, bordered by the sea. We may surmise that the horns of this beast must have been accursed nuisance to the seamen who worked on the stays and shrouds of the bowsprit.

The ship of the line, *ELEFANTEN*, launched 1741. The *ELEFANTEN* was called after the Order of the Elephant, one of the highest orders, instituted by Christian I in 1458, and renewed in 1693 by Christian V.

Model of the stern of the ship of the line, *ELEFANTEN*, launched in 1741. The ship's figurehead bears the head of an elephant, and the stern depicts the Order of the Elephant with its chain.



King Frederik V was succeeded by Christian VI in 1730, and five years later Frederik Count Danneskjold-Samsøe, who was thirty years old at the time, was appointed head of naval administration. He was educated in physics, mechanics and construction design, and was not really a naval officer at all. However, his energy and far-sightedness provided an impulse to the renewal of the fleet, and in 1735 Danneskjold was appointed »Intendant de Marine«, the highest officer in the navy.

His indefatigable energy led to many innovations of lasting importance. Among the most important of these were the building of a dry dock at Christianshavn in 1739, the establishment of the Naval Artillery, which was at this point separated

from the army, and the building of a headquarters for the Naval Artillery. Among lesser projects can be mentioned the deepening of the harbour, improvements to the fleet's anchorage, the filling in of Nyholm, the chartering of Danish waters, as well as new arrangements for naval enrolment and the qualifications of naval officers.

Danneskjold took an active part in the eternal debate about the development of new types of ships. The type of ship developed by Judichaer, who stressed the role of naval artillery, had been altered by Knud Nielsen Benstrup, who sharpened the shape of the hull to produce faster and more manoeuvrable ships. Danneskjold managed to out-manoeuvre the brilliant Benstrup, and appointed shipbuilders like Rasmus

Krag and the Frenchman, Laurent Barbé, to find a compromise between these two extremes.

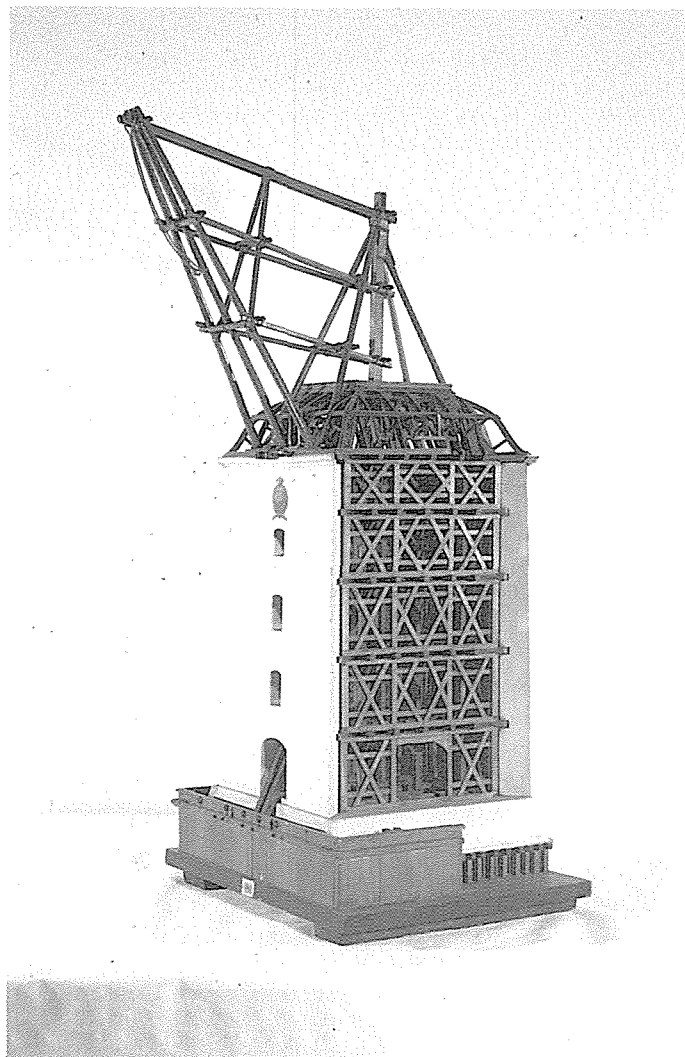
The years of peace meant that the activity of the fleet was restricted to keeping watch in the Sound and in the Great Belt, as well as sailing on exercises with cadets and making maiden voyages with new ships. Expeditions to Iceland, Greenland and the overseas colonies were also part of the navy's work.

The Danish West Indian islands of St. Jan and St. Thomas had been acquired in the latter part of the 17th century, and the fertile island of St. Croix had been bought from France in 1733. There was thus plenty of opportunity for naval officers to gain experience at sea on the ships of the (Danish) West India Company and the Asiatic Company. Finally, some of the officers were able to see service in the French and Dutch fleets.

1746 marks a turning-point in the development of the fleet. Frederik V came to the throne, and as an absolute monarch he could replace officials he did not like. In the case of the fleet, this meant that Danneskjold-Samsøe was dismissed. Due to a wellplanned programme of work and considerable energy, the fleet in 1746 had reached a total of 29 ships of the line, 13 frigates and 34 smaller ships. Altogether, these ships carried 2,580 guns, and on paper the total personnel consisted of 19,103 men.

By the middle of the 18th century, the leadership of the fleet was discussing improvements to the type of ship known as a galley. This light vessel could be rowed in narrow straits and between coastal islands, and had certain advantages, especially when it was a case of landing troops, in a coastal raid, for example. The Russians had waged a successful naval campaign against Sweden, and the result was that the Swedes,

The collection of the Royal Danish Naval Museum contains a number of models of machines and technical devices from the naval dockyards. Here we see a model of the Rigging-sheers at Nyholm, built in 1749 in the reign of Frederik V.



too, had begun to build galleys. The Danes could see the considerable advantages possessed by the galley among the small islands typical of Scandinavian coasts, and a dockyard for galleys was opened at Frederiksværn, near the town of Stavern in Norway. A galley harbour was also opened at Nivå north of Copenhagen, but later abandoned. Galleys required a large crew, and therefore entailed additions to the officer corps. This type of ship never achieved great importance in Denmark, and died out as a type of ship at the end of the 18th century. However, rowing as an important means of propulsion lived on in the oared gunboats which had their heyday in the period after 1807.

The escorting of convoys had gradually become an important task for the fleet. As sea trading increased, and the danger of attack in the Mediterranean and off the coast of Africa became more frequent, the fleet was obliged to provide convoy escorts to protect the merchant fleet against pirates. The North African Barbary states especially had organised piracy on a large scale, adopting it as official policy. Tributes had to be paid to princes in Algiers, Tunis and Morocco to ensure safe passage of ships bearing the Danish flag. When the demands became too extortionate, the armed forces were sent in, as for example in 1770, when Schoutbynacht Frederik Christian Kaas with 4 ships of the line, 2 frigates and 4 smaller ships sailed into Algiers and bombarded the town, though to no great effect. The most successful mission was carried out in 1797 by Captain Steen Bille, who sailed to Tripoli with the frigate, NAJADEN, and two smaller vessels. After a dramatic battle with the corsairs' ships, Bille was able to force an agreement and achieve the ransom of Danish captives.

In 1762, Czar Peter III ascended the throne of Russia. His ancestors came from Gottorp in Schleswig, the German border-duchy south of Jutland, and he was a sworn enemy of Denmark. He therefore moved a Russian army against Holstein, forcing Frederik V to mobilise. As far as the fleet was concerned, this meant that 14 ships of the line and 8 frigates were



Throughout the whole of the 18th century the fleet had possessed a few really large ships of the line, with three gundecks and a crew of about 900 men. These were used as the admiral's flagship when the fleet was fitted out in full battle strength. The expenses connected with the building, maintenance and equipment of these prestige ships were considerable. The last three-decker in the fleet was the ship of the line, CHRISTIAN DEN SYVENDE, built in 1767. It had 90 guns and a crew of 849. This ship took part in the Battle of Copenhagen in 1801 under the name PRØVESTENEN. (Photo: Jan Iversen).



In the latter part of the 18th century there were often problems with the North African pirate republics, who continued to raise the tributes Denmark was required to pay in order to prevent Danish merchant ships being taken by corsairs in the Mediterranean. In 1797,

Captain Steen Bille was dispatched to Tripoli with the frigate NAJADEN and the brig SARPEN. After destroying several Tripolite ships he was able to negotiate better terms.

fitted out and dispatched to the Baltic. Luckily enough, the war fizzled out, as Czar Peter III was deposed the same year.

In 1766, Christian VII came to the throne. Danneskjold-Samsøe once more came into favour, and was reappointed to the leadership of the fleet. He was given the position of Superintendent, but only managed to reorganise the administration before he was dismissed again in 1767.

The events of the following years were much affected by the unstable government under the mad king, Christian VII; this can also be seen in the case of the fleet, which possessed a weak leadership under a series of different commanding officers.

In the years 1758-72, shipbuilding in the fleet was in the competent hands of master shipbuilder Michael Krabbe. He was succeeded by Henrik Gerner, who is regarded as the most brilliant shipbuilder ever produced by the fleet.

Henrik Gerner's untiring work with the building of ships gave the fleet many a seaworthy ship, and his drawings were used also after his untimely death in 1787. His successors as master shipbuilders were Ernst Wilhelm Stibolt and F.C.H. Hohlenberg. The latter gained international recognition for his successful, and to a certain extent innovatory, designs for ships.

The major international conflicts with Britain and France made it necessary for Denmark to establish links with other, non-involved nations in order to protect their common trade. The fleet was therefore given the task of maintaining the armed neutrality agreement with Holland, Russia and Sweden. In the years 1779-82, ten ships of the line and half as many frigates were fitted out for convoy duty every year.

Stability of government was achieved in 1784, when Crown Prince Frederik took over the government of the state in practice, ably assisted by A.P. Bernstorff, and in the period that followed the internal organisation of the fleet was revised and developed. Training was improved, the Hydrographic Ar-



The navy's great shipbuilder, Henrik Gerner (1742-1787), worked with untiring energy to improve the fleet. After study trips to Britain and France, he was appointed master shipbuilder at Holmen in 1772. In this capacity he was responsible for the construction of 18 ships of the line, 11 frigates and many smaller ships and machines. He was a member of a number of learned societies and commissions.

Painting by Jens Juel. Property of the Royal Museum for Art.



chives were established under the competent leadership of Poul Løvenørn, and the Naval Lieutenants' Club was founded as a forum for junior officers for the discussion of naval military matters.

At the end of the 1780's, treaty obligations once more required the fleet to be fitted out to support Russia in the war against Sweden. Even though the situation might well have developed into a major conflict, Bernstorff was able to keep Denmark out of direct involvement in military operations.

In 1794, a neutrality treaty was signed with Sweden, and the increased trade brought a good deal of prosperity to the country. For a long time the Royal Navy had been involved in a trial of strength with France, but after the famous sea battles at Cape St. Vincent and Aboukir (the Battle of the Nile) in 1797 and 1798 respectively, in which the Spanish and French fleets were soundly defeated, the British began to search neutral shipping. In addition, interest in Britain became directed at neutral countries, which under convoy escort were able to deliver important cargoes that later might be transported by land to the enemies of Britain.

The British began to adopt a stronger line towards Denmark. In July, 1800, the frigate, FREYA, commanded by Captain Peter Krabbe and escorting a convoy of six merchant vessels, was forced to strike its colours at Dover after a clash with a superior British force of three frigates. This event caused diplomatic complications, and Denmark was obliged to stop the convoy service. In 1801, the relationship to Britain became clear; all Danish-Norwegian ships in British ports were impounded and the British occupied the Danish West Indian Islands.

Shortly afterwards, Denmark entered into an armed neutrality coalition with Sweden and Prussia.

This white shallop was rowed by twelve rowers in festive uniforms on ceremonial occasions in the Port of Copenhagen. The shallop is the oldest of the navy's historical vessels, and is dated at around 1780.



April 2, 1801 was a fateful day for Denmark. In the Battle of Copenhagen, tough resistance was offered in the protection of the town by the Danish blockships lying at anchor along the western side

of Kongedybet. The welltrained ships under Admiral Nelson's command forced a victory after a hardfought, bloody battle lasting nearly four hours. Engraving after a painting by C.A. Lorentzen.

THE BATTLE OF COPENHAGEN, APRIL 2, 1801

There was every indication that Britain would attack Copenhagen and force Denmark out of the armed neutrality coalition. Sure enough, towards the end of March an British fleet entered Danish waters under the command of Admiral Sir Hyde Parker, with Vice Admiral Horatio Nelson as his next in command. Copenhagen prepared itself for the attack by putting out a defensive chain of blockships, that is, unrigged warships and floating batteries, which were towed out and anchored as a defensive line on the western side of Kongedybet.

Horatio Nelson led the attack on the Danish defensive chain. The day before he had sailed down south of Middelgrunden, and anchored there with 12 ships of the line and a number of smaller vessels. On the morning of April 2, a southeasterly wind brought the British squadron northwards through Kongedybet, where it took up battle stations opposite the Danish ships. The first Danish ship to be involved was the PRØVESTENEN. It lay furthest south, and was soon engaged in a violent battle as all the British ships passed by. A colossal artillery duel raged for almost four hours along the whole of the line, about two kilometres, and both sides fought bravely.

The Danish flagship DANNEBROG, with commanding officer of the fleet, Olfert Fischer, on board, was attacked by Nelson's flagship ELEPHANT, and the GLATTON. These ships lay only 400 metres off, and their heavy guns could be used to devastating effect. The DANNEBROG suffered heavy damage, and fire broke out on board, so Olfert Fischer moved his command to the adjacent HOLSTEN, which had not yet been engaged. Special mention must be made of FLOATING BATTERY NO. 1, anchored north of DANNEBROG, and which was involved in hard fighting along with the latter. This floating battery lay low in the water, and was a sort of raft measuring 13 x 47 metres. It came under heavy fire, and the unprotected crew lost 46 killed and wounded, the heaviest percentage losses of

the whole line. Its commander, the brave 17-year-old second lieutenant, Peter Willemoes, withdrew from the battle about one o'clock. He achieved considerable fame for his contribution to the battle.

The British also suffered heavy losses: the 74-gun MONARCH, fighting against the Danish ship of the line, SJÆLLAND, sustained 56 men killed and 164 wounded.

The battle at the centre, involving the DANNEBROG, FLOATING BATTERY NO. 1 and the SJÆLLAND, ended after about three hours, but the battle on the north flank continued for a while, as it had begun about an hour later. The ship of the line HOLSTEN, which lay further north, and to which Olfert Fischer had moved his command, came under heavy fire. At one-thirty, Olfert Fischer was again forced to move, this time to the fortress TREKRONER, as the INFØDSRETTE, which lay furthest north, had struck its colours. At this point the Danish defensive line was breaking up. The Trekroner fortress had put up a stiff resistance and had inflicted heavy damage on the British ships of the line DEFIANCE and MONARCH. On the south flank, resistance was proving stiffer. The blockship JYLLAND under the command of Captain Erich Branth had to strike its colours after almost four hours of battle which had cost many dead and wounded.

The British commander-in-chief Sir Hyde Parker, was positioned further north in the Sound and was able to follow the course of the battle. When the battle had raged for three hours he began to grow nervous, and gave orders by signal flags and gunshots that the action be broken off. Nelson disregarded the order and the battle continued. It was on this occasion that Nelson put his telescope to his blind eye, and maintained that he really could not see the signal. At the same time he continued to fly the signal, »Engage enemy at close quarters«.

It was at this point that Lord Nelson wrote his famous letter to the Danish government in which he promised to spare the brave Danish seamen if hostilities ceased. Otherwise he would be forced to burn all the captured ships, and would not be able to save the brave Danes who had defended them!

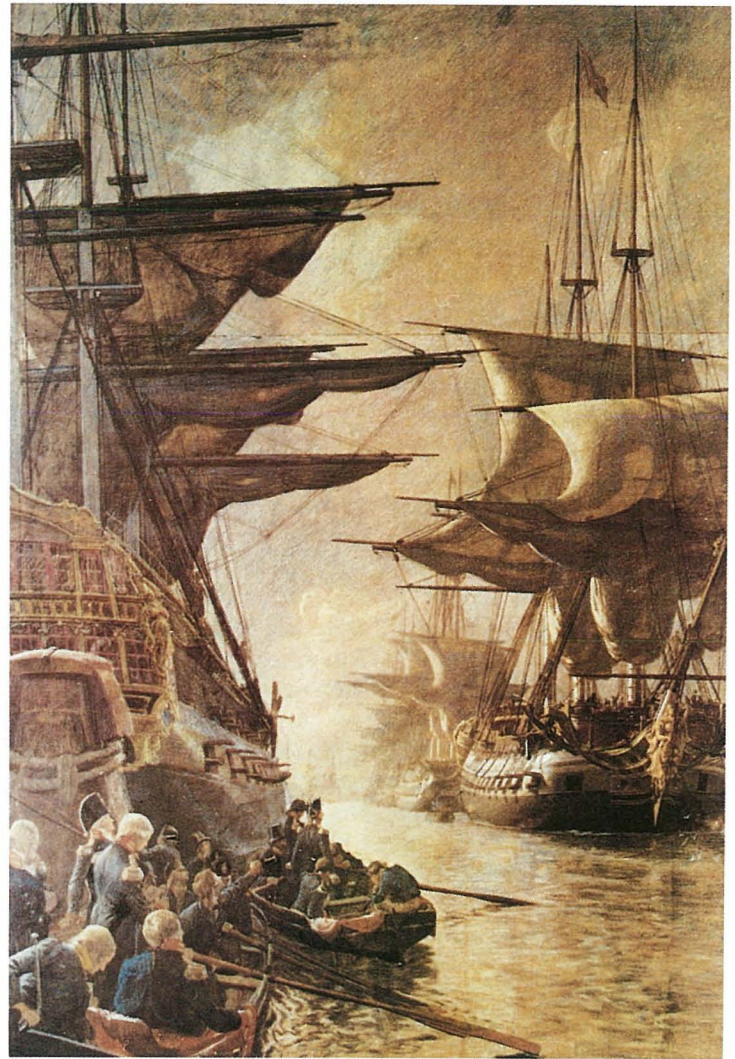
Nelson's own comment was that the aim of the letter was to show mercy, but it has later been interpreted as a strategem of war, since at the time it was written Nelson had not taken a single Danish ship, and had reached a point where he could see that an end to the engagement would be to his own advantage. The Crown Prince received the letter about three o'clock, and decided at this point that further resistance was useless. Shooing was stopped immediately, and a cease-fire was arranged.

The British losses were put at 254 killed and 689 wounded. On the Danish side there were 367 killed and 635 wounded, 100 of whom died in the days that followed. 1,779 men were taken on board the British ships as prisoners of war.

In the afternoon of April 2, 177 dead and 371 wounded were brought to the Søkvæsthuset, where the Royal Danish Naval Museum is now situated. On April 7, the funeral procession went from here to Holmen's cemetery.

The Battle of Copenhagen meant that shipping was suspended for a time, but was able to be resumed some three months later. The British had taken many Danish-Norwegian merchant ships, and these could now be put into service again at sea, but the flourishing period of Danish shipping was drawing to a close, and finally ended in 1807.

The surrender of the Royal Danish Navy. On August 1, 1807, the British returned and besieged Copenhagen. Troops were landed, and British ships blocked the approaches from the sea. After three nights of bombardment, Copenhagen capitulated on September 7. The aim of the British was to neutralise the Danish-Norwegian fleet. The whole fleet was captured intact and sailed as booty to Britain. On Chr. Mølsted's painting from 1902 depicts the moving scene when the ships left harbour for the last time.



THE BOMBARDMENT OF COPENHAGEN, 1807

At the end of 1806, Napoleon issued a decree ordering a continental blockade, requiring that all trade with Britain be forbidden for France and its allies. Britain replied by prohibiting neutral trade between enemy ports, which created difficulties for the remaining neutral countries, including Denmark. Napoleon came to an agreement with Czar Alexander I at the Peace of Tilsit in July, 1807, so that Denmark had become the only neutral country on the European continent.

In July 1807 Britain sent a large invasion fleet to the Baltic with the aim of demanding custody of the Danish fleet, fearing that it might fall into Napoleon's hands. No plans had been made to fit out the fleet to any great extent that year, and it lay unrigged at the fleet anchorage.

The British fleet consisted of 24 ships of the line, 22 smaller ships, and troop carriers with a total of 30,000 men. Backed by this force, Francis Jackson entered into negotiations on the part of the British, but could not obtain the desired treaty.

It was clear to all that the British aimed to appropriate the fleet by force, and Copenhagen prepared for the coming siege. The commandant of Copenhagen, General Ernst Peymann, became commander-in-chief of the land forces, and Captain Steen Bille head of the navy.

On August 16 the British landed at Vedbæk without Danish opposition, and the British troops were then deployed in a semicircle around Copenhagen.

On September 1 and 2, the British sent messages to General Peymann requiring that he surrender and hand over the fleet, but without result. The British bombardment began on September 2 at seven-thirty in the evening and was carried out without consideration for civilians and public buildings. Amongst other things, fire-rockets of the newly-invented Congreve type were used, examples of which can be seen in the collection of the Royal Danish Naval Museum. The bom-

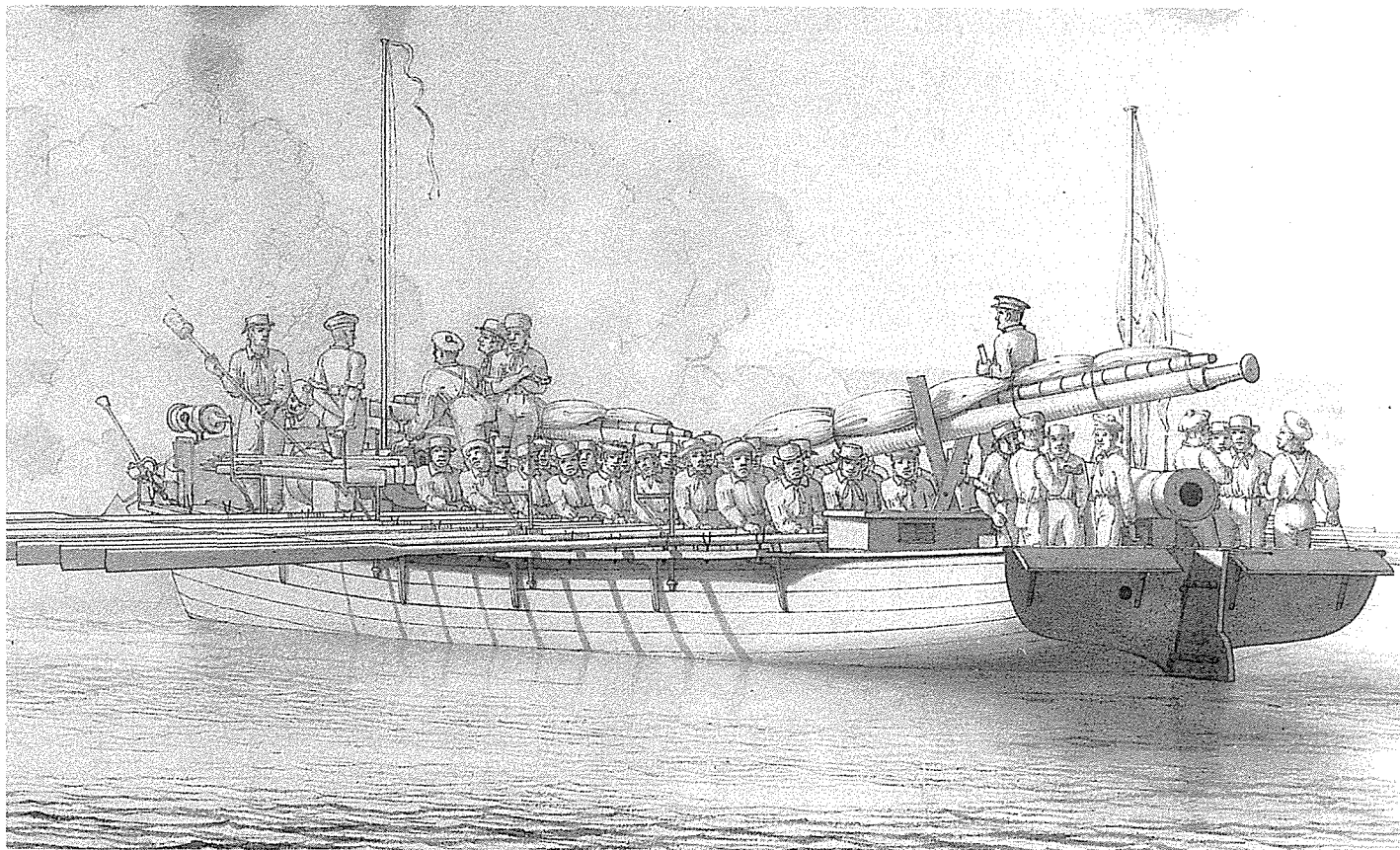
bardment continued for twelve hours, causing extensive damage. It started again at six in the evening the following day, and once more continued until eight the next morning. The inhabitants had by this time deserted their houses, which also made it impossible to maintain the local fire services. On September 4 the bombardment began again at seven in the evening, and it seemed that the population was beginning to lose the will to resistance. A raging fire was now spreading in the area around the University, and because of the size of the conflagration the work of fighting the fire had almost come to a halt. The Round Tower and the Church of the Trinity, which housed the university library on an upper floor, were saved thanks to a superhuman effort on the part of many, including troops and sailors from Holmen. The bombardment continued on September 5, and the general mood now favoured a capitulation. A negotiator was sent to the British general, who answered unequivocally that the bombardment would continue unless the Danes agreed to hand over the fleet.

On September 6, the terms of the capitulation were specified: the fleet was to be handed over, and the fort (Kastellet) as well as all fleet facilities were to be occupied by the British until the fleet had been fitted out and was ready to sail.

The British thus invaded Copenhagen, and remained within the agreed areas while the fleet was being got ready to avoid conflict with the population. At the end of October, the British sailed away with the entire Danish fleet; 80 warships and 243 transport ships sailed off northwards through the Sound.

The British booty comprised 17 ships of the line, 17 frigates, 16 smaller vessels and 26 gunboats. In addition, the British removed nearly all the equipment from the various facilities connected with the fleet and destroyed all the ships being built on the slipways.

In this way Denmark lost the ability to protect its trade and



During the war with Britain in the years 1807-14 there was much activity at sea. Throughout Denmark and Norway gunboats were built for the defence of the country. In calm weather, these boats were quite effective against the large British convoys which sailed regularly through the Sound and the Great Belt. This drawing by C.W. Eckersberg shows a shallow gunboat with a crew of 76.

to assert its sovereignty in territorial waters, and the glorious period that had made Copenhagen one of the most important towns in the Baltic area came definitively to a close. Moreover, the country had been forced out of its neutrality, and had chosen to side with France.

THE GUNBOAT WAR 1807-14

In the ensuing seven years of war with Britain, great efforts were made to compensate for the loss of the fleet, and large numbers of oared gunboats were built. The tactical advantages of these boats could especially be utilised in calm weather, as under these conditions they were superior to sailing ships in terms of manoeuvrability. In the first three years of the war these boats were on several occasions able to capture cargo-ships from the convoys and to defeat British naval brigs, though they were not strong enough to overcome larger frigates and ships of the line. The British had control of Danish waters during the whole of the 1807-14 war, and when the season was suited to navigation they were regularly able to escort large merchant convoys out through the Sound and the Great Belt. As early as 1801 the British had reconnoitred and surveyed the difficult waters of the Great Belt, so that there was no obstacle to them also using this way in and out of the Baltic.

One ship of the line, the PRINS CHRISTIAN FREDERIK, had been in Norway in 1807, and had therefore avoided the British capture of the Danish fleet. In the spring of 1808, the PRINS CHRISTIAN FREDERIK, commanded by Captain C.W. Jessen, and with Peter Willemoes as one of the junior officers, was ordered to transport a force of French and Spanish auxiliaries across the Great Belt. The ship was soon spotted and chased by British warships. On March 22, Captain Jessen ran into two British ships of the line. As there seemed to be no other choice, Jessen engaged the British ships and fought bravely in the darkness of the evening, until the PRINS CHRISTIAN FREDERIK ran aground on Sjællands Odde and he was obliged to strike his colours. The young Lieutenant Willemoes, who was a hero from the battle of Copenhagen, was among the fallen.

In 1809 an abortive attempt was made to recapture the island of Anholt from the enemy with the help of ten gunboats

and a force of almost 1,000 men. However, the British managed to summon reinforcements, and the invasion force never succeeded in capturing the Anholt light, but had to withdraw to Jutland with heavy losses.

Over the years more than 200 gunboats were built, using a design more or less identical with the constructions built by the Swede, Frederik Henrik Chapman. The larger type, the shallop gunboat, was rowed by 70 men, and including the gun crew and the commander carried a total crew of 76. These shallop gunboats were heavily armed, with a 24- or 18-pound gun at each end. In an attack, the boat was rowed towards the enemy and the front gun was fired. The smaller type was a barge gunboat with a crew of 24 and a 24-pound gun. The advantages of the gunboats lay in their manoeuvrability in calm seas, and the fact that they presented a small target for enemy gunfire. On the negative side must be mentioned their limited range, and the lack of protection afforded the crew.

In the war with Britain, however, the Danes made use of every means at their disposal. The government issued letters of marque to anyone who had a private ship or boat and was ready to go to sea and engage enemy shipping and the merchant ships which the British were escorting. Many prizes were taken, which could be sold by auction when they had been »condemned« by the Admiralty court. Privateer captains and shipowners were able to gain rich rewards from this legalised piracy.

The many Danish sailors and seamen taken prisoner by the British usually ended up in »the Hulks« anchored at the home ports of the British fleet and used as floating prison camps. A number of reminders of these prison ships have been preserved in the form of »prisoner's work«, various types of handicraft such as model ships and other small objects carved in ivory. Other rules were in force for officers, who were often quartered in private homes and allowed freedom of movement once they had given their word of honour.

RECONSTRUCTION AND ADAPTATION TO NEW CONDITIONS, 1814-48

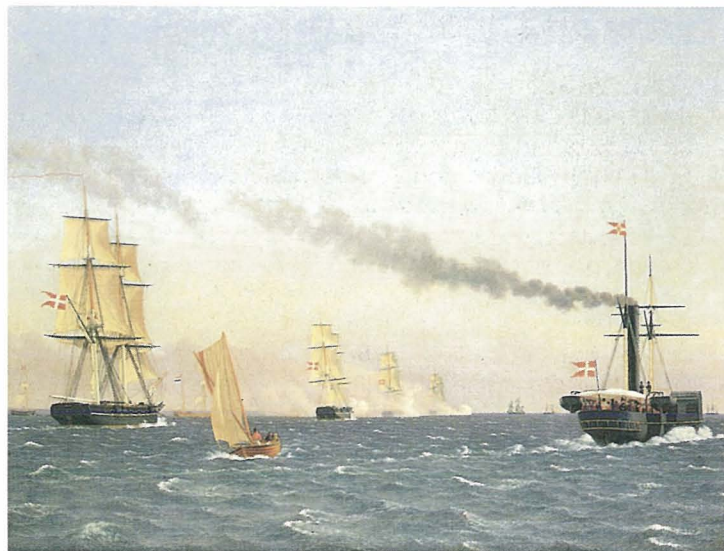
With the peace of Kiel in 1814, the saga of Danish-Norwegian sea power came to an end. Britain had crushed the fleet, and Norway was separated from Denmark. Before the war the fleet had consisted of some 25 ships of the line and 15 frigates, and the task was now to simplify the organisation of the navy and work out a new plan for the fleet to suit Denmark's new situation.

Both civilian shipping and the naval fleet had to be built up from scratch. According to the new plan the fleet was to consist of 6 ships of the line, 8 frigates and 8 smaller ships, and 86 oared shallops were to be kept on. The number of naval officers was reduced from 244 to 150.

In the course of the next eighteen years the new fleet gradually took shape. Apart from the larger ships, oared vessels were still retained, as a useful defensive weapon offering great manoeuvrability in calm weather and shallow waters. A new idea was the construction of bomb ketches carrying howitzers or mortars. The building of oared shallop gunboats continued until as late as 1847.

Artillery was considerably developed in these years. Muzzle-loading guns firing solid balls for use against massive wooden warships were replaced by long-range mortars firing explosive shells which caused great damage to wooden ships. In the short run, thick iron armour-plating offered a solution. At the same time, naval artillery, which had consisted of many different types of guns, was simplified and made more uniform. At the beginning of the 19th century a ship of the line was equipped with six different types of guns (36-, 24-, 28-, 12-, 8-, and 6-pounders), which called for complicated administration and a variety of gunnery skills. The simplification process entailed fitting larger ships with guns of the same calibre, namely, 30- and 18-pounders.

In this period, too, the propulsion of ships was improved,



The size of the fleet had to be considerably reduced after the loss of Norway in 1815. Here we see a review of the fleet in the Sound in 1841. King Christian VIII, on board the steamship ÆGIR, is inspecting four naval brigs. Painting by C.W. Eckersberg.

and steampower came into use. On land, the fleet had installed Denmark's first steam engine as early as the 1790's, employed in the anchor smithy at Gammelholm, and in 1824 the first steamship was bought from Britain, paid for by the fleet. Britain, the leading nation in terms of technology, also supplied the paddle steamers ÆGIR and HEKLA in 1841 and 1842. Not until 1844 was the first steamship, the GEJSER, built at Nyholm. This new technology was expensive, and the fleet therefore hired steamships to be used by the postal services in peacetime, on condition that they could be mobilised in time of war.

In naval military terms paddle steamers were not really suitable, as the two large wheel houses amidships were vulner-



The officers onboard the steamfrigate JUTLAND home in the Royal Dockyard in Copenhagen after the battle at Heligoland in 1864. The frigate JUTLAND, which is an example of excellent wooden ship-building is now completely restored as Museumship in Ebeltoft at Jutland.

able to direct hits by enemy gunfire. The last paddle steamer was built for the navy in 1849, and in the First Schleswig War these ships proved very useful as tugboats for the large sailing ships and shallop gunboats.

As a curiosity it may be mentioned that the interest shown by King Frederik VI and King Christian VIII in »modern paddle steamers« undoubtedly compelled the fleet to acquire such ships. In the years 1824-40, the paddle steamers KIEL, and later

the ÆGIR served as royal yachts. From 1856-80, the paddle steamer SLESVIG was bought for this purpose, and from 1880 its role was taken over by the paddle steamer DANNEBROG, which continued in service until the 1930's, when the present DANNEBROG took over.

At the same time, until the First Schleswig War, traditional sailing warships continued to be built, and these were in fact still the real ships of the line.

THE SCHLESWIG WARS, 1848-50 AND 1864

When the fleet once more went to war, the enemy was Schleswig-Holstein, which possessed no real fleet of its own. The task of the fleet was to blockade enemy ports and cooperate with the army, especially important being the transport of troops between various parts of the country. In 1849, a massive operation moved the army from Helgenæs in Djursland to regroup at Fredericia, paving the way for the army's victory at Fredericia on July 6. The efforts made by the fleet were of great importance, allowing the army freedom of movement.

When the German Alliance entered the war the fleet was ordered to blockade the Prussian Baltic ports, and a squadron was sent out to the North Sea to blockade the river Elbe and the mouths of other German rivers in the area.

The engagement at Eckernførde Fjord on April 4 1849 dealt a hard blow to the fleet. Attempting to suppress Prussian emplacements on land, the ship of the line CHRISTIAN VIII and the frigate GEFION were forced to surrender; wind conditions were against them and they were hit by accurate enemy fire. This unfortunate affair ended badly; the ship of the line was blown up and the frigate captured.

The blockade of the German ports helped to create a mood in Germany in favour of a cease-fire in July 1849. Peace with Prussia was concluded a year later. The demand that Schleswig-Holstein should forever remain united was not met, and the question of the inherited rights of the Danish king remained unresolved.

In terms of technology, the years between the two Schleswig wars were a period of transition for the fleet. Steam engines were installed in sailing ships, and older ships were converted from sail alone to the use of steam engines and propellers. One example was the ship of the line DANNEBROG, launched in 1850, the last ship to be built for the fleet purely as a warship with two gun decks. In 1862-64, it was refitted as

an armoured frigate. Originally a sailing ship, the rigging was reduced, one deck was removed and iron armour plating, 10 cm thick, was fitted from stem to stern. A steam engine and propeller were also installed. In 1863 the ROLF KRAKE was bought in Glasgow. This was a type of ship referred to as an armoured floating battery, and heralded a new era for the Danish fleet. The ROLF KRAKE was a low freeboard, iron ship, propelled by steam and fitted with four powerful guns on two revolving armoured turrets. The rigging and sails had a purely auxiliary function, to be used if the steam power failed.

Steam power led to the introduction of a special engineer corps in the fleet. The new technology came from Britain, and the first engineers were Englishmen. The first Master Engineer at the Naval Shipyard was the Englishman, William Wain, later a partner in the Burmeister and Wain shipyard. In the years 1854-58, British engineers also built the dry dock on Dockøen, an important technical innovation for the fleet. The nature of shipbuilding gradually changed, and from 1856 technical activities in the fleet were centred on what was called the Naval Shipyard (Orlogsværftet).

The crisis revolving round the future of Schleswig-Holstein made a continuation of the First Schleswig War inevitable, and war with the German Alliance, headed by Prussia, broke out again in 1864.

This time the fleet was well prepared for the task, which, as on the previous occasion, consisted of blockading enemy ports, supporting army operations, and fighting what few naval forces the enemy possessed. The steamships were again able to act as troop transporters, and to keep watch on the army's flanks.

The greatest challenge to the fleet was to oppose a possible Austrian naval initiative, as Austria, a member of the German Alliance, took part in the war on the German side. The rela-

tively large Austrian fleet, based on the Adriatic, did indeed send a squadron to the North Sea to break the Danish blockade.

On May 9, 1864, the steam-powered frigates SCHWARZENBERG and RADETZKY, under the command of Rear Admiral Wilhelm von Tegetthoff, encountered in the Heligoland Bight the Danish North Sea squadron, consisting of the steam-powered frigates NIELS JUEL and JYLLAND, as well as the steam-powered corvette HEIMDAL, under the command of Captain Edouard Suenson.

As far as the Danes were concerned, it was a question of destroying the Austrian detachment before further Austrian reinforcements arrived.

The Battle of Heligoland lasted one hour, and was the last naval engagement fought with large wooden ships deployed in a line. The two fleets sailed past each other first at a distance of 1,800 metres with heavy fire on both sides, and then sailed parallel to each other at a distance of between 900 and 400 metres. After an hour the rigging of the frigate SCHWARZENBERG caught fire, and the Austrians decided to withdraw to neutral British waters close to Heligoland.

For the Danes, the Battle of Heligoland was both a tactical and a moral victory, but in the meantime the army had been defeated in Schleswig, and a cease-fire was negotiated a few days later.

When the war was resumed, the fleet was unable to prevent the Prussians passing over to Als. On the positive side can be mentioned the fact that the North Sea islands at the west coast of Jutland remained in Danish hands for a long time, thanks to the brave defence put up by Lieutenant Otto Christian Hammer with a force of smaller steamships and barge gunboats. The peace negotiated after 1864 meant that Denmark was forced to cede Schleswig-Holstein and Lauenborg to the German Alliance.

FROM SAIL TO STEAM FROM WOOD TO ARMOUR

Technical developments continued after the war. The navy finally got round to abandoning the old dockyard Gammelholm in 1866. Only Holmens Church remains to remind us of the shipyard which had existed since the 16th century in the triangle between Holmens Church, Kongens Nytorv and Havnegade.

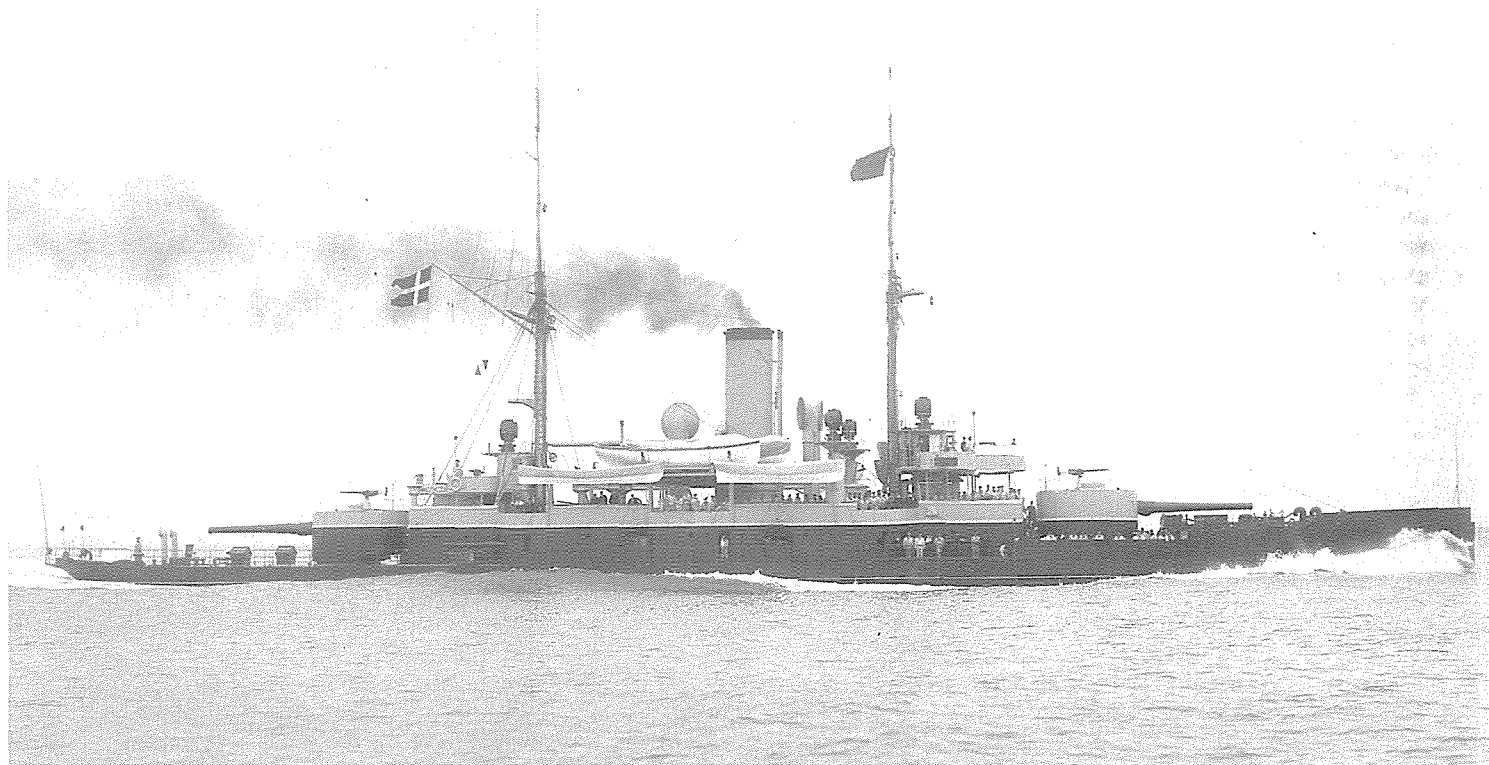
The development of technology also continued remorselessly, and the era of the wooden ships had come to an end. New naval weapons, such as mines and torpedoes, were introduced and further developed. In 1875 the Scandinavian countries bought 50 Whitehead locomotive torpedoes, and purchased at the same time the right to construct torpedoes using the Whitehead patent. In the beginning the torpedo was seen as the weapon of the future for smaller fleets, suitable for operations in narrow waters and protected coves from which the small, fast torpedoboats could launch surprise attacks. The torpedo has since been further developed, and now, one hundred years after its introduction, has reached a high level of technical perfection.

In the period of transition, low freeboard armoured ships of the monitor type, carrying a few powerful guns, offered one solution, connected to a certain extent with the extension of the fortifications around Copenhagen at the end of the 19th century. With the introduction of rifled, breech-loading guns, the artillery determined the pattern of other developments. These types of ships also changed, however, and the modern coast defence ships began to take shape. At the turn of the century, 1900, three powerful of these were launched, with impressive engine power and heavy armaments. These were HERLUF TROLLE 1899, OLFERT FISCHER 1903, and PEDER SKRAM from 1908. They were of 3,650 tons, and their engines produced 4,400 hp. These ships were regarded as

excellent artillery-ships, with a construction suited to Danish conditions.

The 1903 plan for the fleet stated the following aims: 4 coast defence ships of the HERLUF TROLLE class, 24 torpedo-boats and submarines, 2 minelayers and various other smaller-ships.

A new type of vessel, the submarine, had been acquired by the navy as early as 1909 with the purchase of the DYKKEREN from Italy, and new submarines were bought at regular intervals. The construction of submarines began at the Naval Shipyard, and in the course of time considerable experience was gained in the construction of these boats.



OLFERT FISCHER was second to last in a range of coast defence ships which were of great value in the First World War, when they were used to protect Danish minefields in the Great Belt. The *OLFERT FISCHER* was built in 1903 and phased out in 1936.

THE FIRST WORLD WAR 1914-18

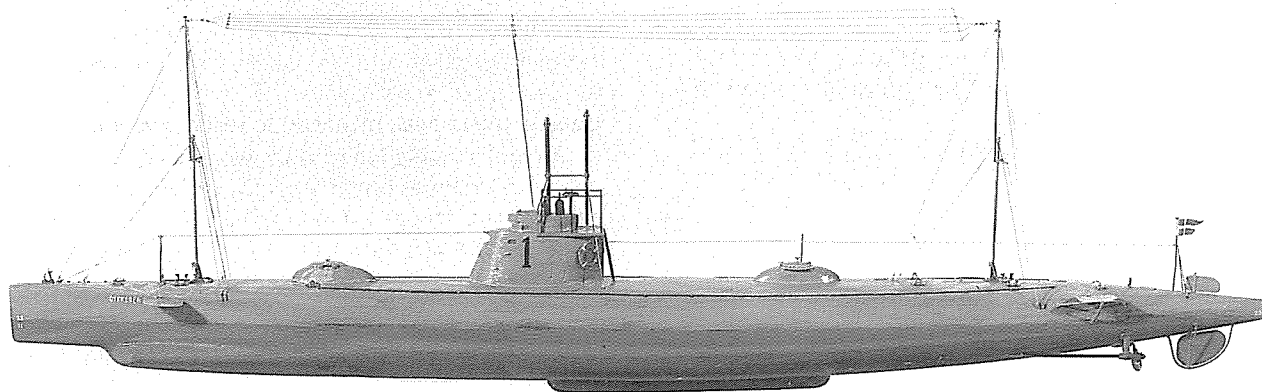
At the outbreak of the First World War Denmark possessed a strong, modern fleet, well-suited to the tasks connected with maintaining neutrality.

The artillery-ships were used to guard and service the minefields laid in the Great Belt, and the torpedoboats with their greater mobility could prevent violations of neutrality in Danish waters. As an example can be mentioned the British submarine E 13, which went aground at Saltholm in the Sound in 1915 and was attacked by German submarines. Heavily damaged, the E 13 was taken to Holmen and the Royal Danish Naval Museum has several exhibits connected with it. During the First World War, the Danes had laid mines in the Great Belt and the Sound at the request of Germany, but in many respects they also had the effect of preventing German fleet move-

ments out of the Baltic area, whereas at the same time the British made raids into the Baltic, as in the case of the submarine E 13, which was cruising south on a mission to the Baltic.

A more peaceful violation of neutrality occurred when the German submarine U 20 stranded at the west coast of Jutland in 1916 after suffering damage to its engines. The submarine was put out of action by its crew, as it did not seem to be worth salvaging. Only later did it become known that the U 20 had been responsible for the sinking of the British passenger liner LUSITANIA, an act which was the formal occasion of the USA entering the war on the side of the allies.

A model of Denmark's first submarine, the DYKKEREN. Submarines were introduced into most navies at the beginning of the 20th century. Denmark's first submarine was the DYKKEREN, bought in Italy in 1909. After this the Naval Shipyard continued to build submarines until the beginning of the 1960's.



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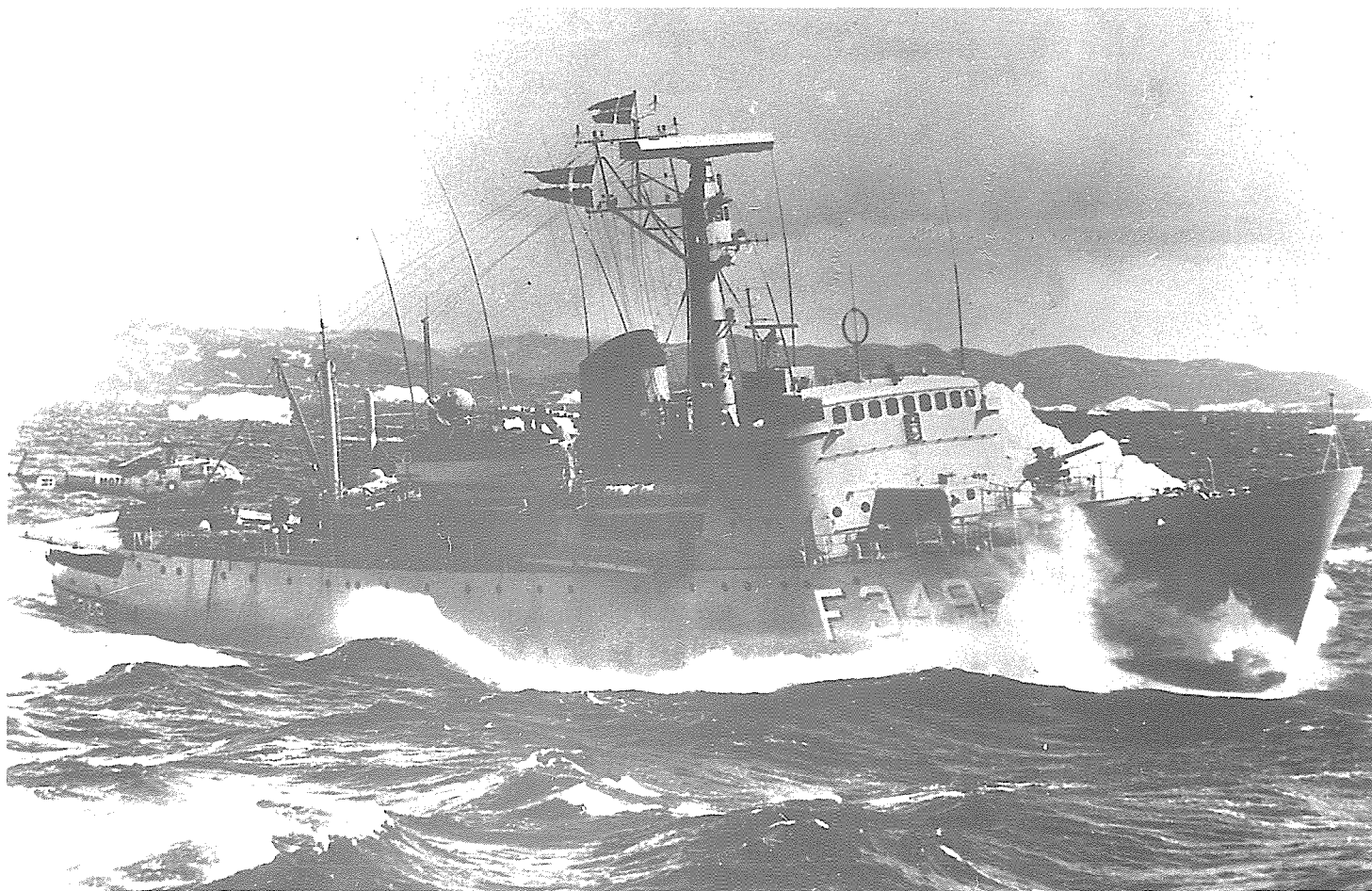
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King Frederik IX (1899-1972) was trained in the navy and often took part in fleet activities. Here the King is seen in conversation with Vice Admiral A.H. Vedel on the quarterdeck of the supply ship ÆGIR, 1955.





The last Danish-constructed submarines were the DELFINEN-class boats (1958-61). Part of the interior of the submarine SPÆKHUGGEREN has been recreated at the Royal Danish Naval Museum, so that visitors can enter the command centre, the radio/radar room and the officers mess.



Fisheries inspection has always been one of the navy's important tasks. This picture shows the inspection ship VÆDDEREN, making heavy weather in the waters off Greenland in 1966.



The frigates PEDER SKRAM and HERLUF TROLLE were additions to the fleet partially financed by Marshall Aid, and were the backbone of the fleet for 25 years. Their main armaments were originally four 127 mm. guns, but from 1979 they were equipped with Sea-Sparrow and Harpoon missiles. Here we see the HERLUF TROLLE in the autumn of 1983.

THE POST-WAR PERIOD – NATO

After the Second World War the fleet had again to be built up from scratch. There were many tasks to be tackled, including clearing mines from Danish waters. In the years after the war some 20,500 mines were disarmed.

The British sent a detachment of minesweepers manned by Danish crews to sweep Danish waters, and they were soon hard at work alongside twenty German minesweepers which had been taken over by the navy.

In the autumn of 1945, the fleet bought two frigates and one corvette from Britain, and the following year there were trai-

ning voyages for cadets and inspection tours off Greenland.

In the years following the war, as the situation dictated, much of the material acquired by the fleet came from a variety of different countries, so that in the short term any form of standardisation was impossible.

After Denmark became a member of NATO in 1949 ships and equipment worth large sums of money were delivered from the USA, and in the 1950's the reconstruction of the fleet proceeded rapidly. In the 1960's, Denmark took part in what was called the »costsharing« programme, according to which the receiving country paid half the costs and the USA the other half. The frigates PEDER SKRAM and HERLUF TROLLE were built under this scheme in 1966-67, as well as minelayers of the FALSTER class and DELFINEN-class submarines in the years 1957-62. The DELFINEN-class submarine SPÆKHUGGEREN, presumably the Danish-built submarine, was phased out in 1989, and its command centre can be seen at the Royal Danish Naval Museum.

THE YEARS BETWEEN THE WORLD WARS

In the years between the wars the navy was subjected to massive cuts, though the submarine arm was more or less kept going, because for technical reasons these units had to be kept manned even in the winter. No combat ships as such were built, with the exception of DRAGEN-class torpedoboats, launched from 1929 onwards. The coast defence ship NIELS JUEL, launched in 1918, was kept on and in the main did service as a training ship.

With the creation of the Danish Fleet Air Arm during the First World War a new type of activity was added to the navy. The first flying boats were bought abroad, but both engines and planes were developed at home, and the Naval Shipyard produced planes under licence in the inter-war years. The tasks of the Fleet Air Arm were reconnaissance and artillery guidance. Flying boats were also used in connection with hydrographic surveys, in Greenland for example.

In the 1930's, flying boats were attached to the fleet's inspection vessels.

At the outbreak of the Second World War in 1939 the fleet could therefore only muster a modest force, and in realistic terms its fighting strength faced with a great power like Germany was clearly restricted.

THE SECOND WORLD WAR 1940-45

During the Second World War the navy remained loyal to the government, and following the orders of the King and the government no resistance was offered to the German occupation on April 9, 1940. During the first years of the occupation the Danish armed forces played a limited role. The activities of the navy were thus restricted to exercises around the South Funen islands, in Isefjorden and in the case of the submarines in Mariager Fjord. Danish minesweepers were given the task of sweeping the main channels between the Danish islands in an east-west direction, whilst the occupying forces swept the north-south routes.

As time went on, and the population grew increasingly opposed to the German occupation, the situation became untenable and at last the government was forced to resign. On August 29, 1943, the Germans stormed all military installations in Denmark. Holmen was attacked in the early morning. Secret orders were issued by the commander-in-chief of the navy, Vice Admiral A.H. Vedel, either to scuttle the ships or to sail them to Sweden. At Holmen in Copenhagen, most of the ships were scuttled by their own crews before the Germans could do anything to prevent it. A few smaller ships, setting off from various places outside the capital, managed to reach Sweden in safety.

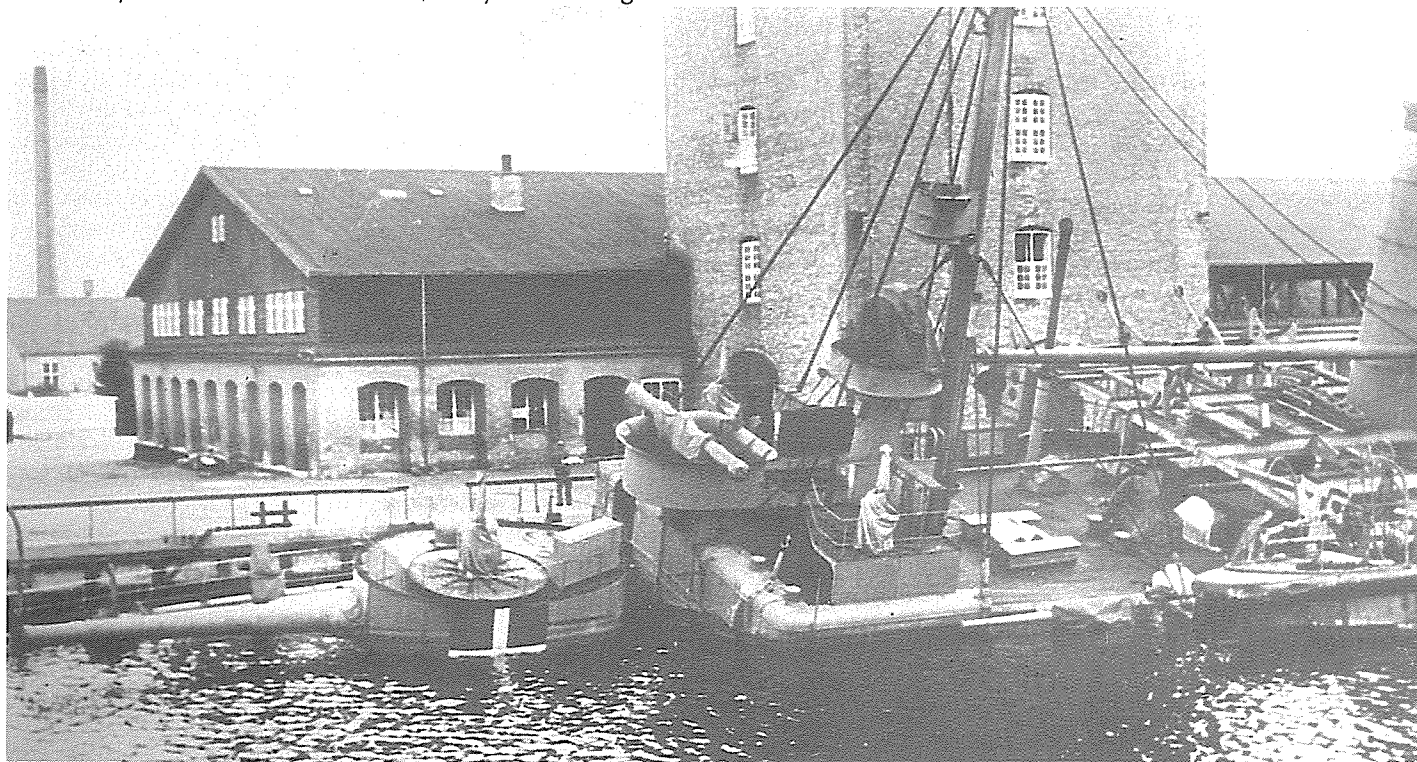
The artillery-ship NIELS JUEL was in harbour at Holbæk, and attempted to break out through Isefjorden in order to sail to Sweden, but was stopped by a bomb attack by German planes and was forced aground near the town of Nykøbing on Zealand.

The training unit, consisting of the inspection ships INGOLF and HVIDBJØRNEN plus a number of smaller vessels, was gathered at Svendborg, and attempted to sail north through the Great Belt, but was stopped by the Germans. The crew of the HVIDBJØRNEN managed to scuttle the ship, but the INGOLF was forced in to Korsør.

The scuttling of the fleet at Holmen was an event which clear-

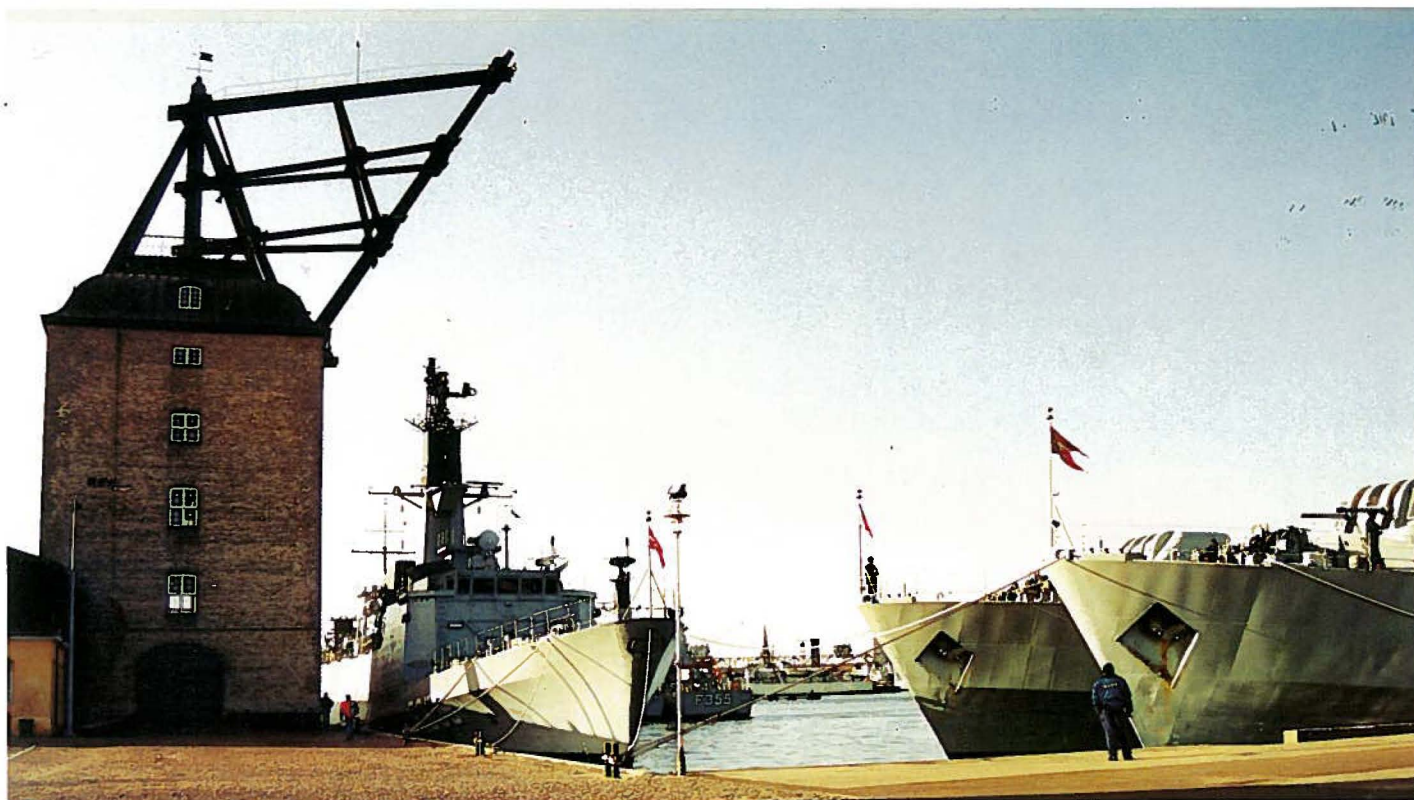
ly signalled that Denmark was on the side of the allies against Nazi Germany. Along with all other military personnel, the crews of the fleet were interned for about two months, after which they were sent home. After this, many of them began to

work for the resistance, and a number of officers escaped to Sweden, from where they went on to Britain. Others joined the Danish Brigade in Sweden and later came home with the Danish flotilla after the liberation.



The PEDER SKRAM, sunk at the Rigging-sheers on August 29, 1943. The Danish fleet was placed in a strange situation after the German invasion on April 9, 1940. Denmark was not officially at war with Germany, but subject to restrictions approved by the government. The ships of the fleet were allowed to hold exercises in the waters of South Funen, in Isefjord and in Mariager Fjord, and Danish minesweepers

swept the east-west routes in the Great Belt. As time went on the situation in the country grew tense, and the population revolted in the summer of 1943. On August 29 the Germans attacked Danish military installations, including Holmen. Vice Admiral A.H. Vedel, commander-in-chief of the fleet, ordered the ships to be scuttled or sailed to Sweden. The personnel at Holmen managed to sink or destroy 26 vessels.



In the early 1990's the Royal Dockyard of Copenhagen was closed and the maintenance of the navy ships was moved to Frederikshavn in Jutland and Korsør at the Great Belt.

The Royal Danish Navy did not abandon Copenhagen totally. The oldest part of Holmen with the old Rigging-sheers got a status of

Marinstation and housed still some of the education institutions for the navy.

The photo shows corvettes of NIELS JUEL-class (launched 1978-81) at the Rigging-sheers, which has been a symbol of the navy activities in Copenhagen the last 250 years.

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