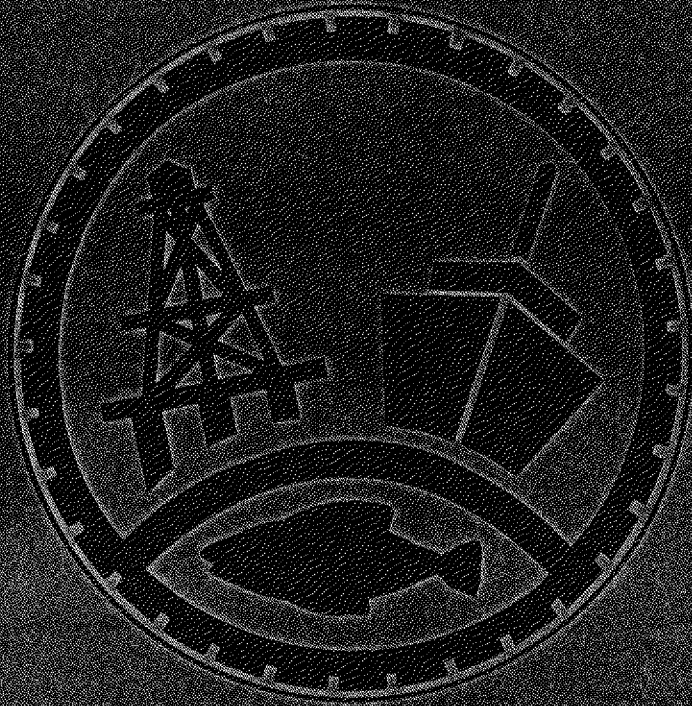


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The Future of the Port of Wilmington



Part I: A History of the Port

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Foreword

THIS is the first of three studies of the future of the Port of Wilmington organized and published by the Center for the Study of Marine Policy at the University of Delaware. The purpose is not only to present a concise history of the development of the port and its current operations, but also to raise questions and stimulate discussion about the future of the port under its present legal and financial structure.

The study was mainly prepared by Merein (Kim) Slentz, a graduate of the University of New Hampshire, summa cum laude, and a candidate for the Master of Marine Policy in the College of Marine Studies at the University of Delaware. Ms. Slentz also was selected by the Center for an internship at the Port of Wilmington during the 1985 academic year, when she had the benefit of valuable guidance and counsel by a number of past and present port staff.

Among the several persons who have assisted in the compilation of data and aided in the interpretation of events, J. Paul Senghaas, Jr. of Ship Dispatch Agency, Wilmington Marine Terminal, provided much of the historical research from archives, John H. Doherty, the Deputy Port Director, gave his time in offering background facts and figures; while Robert F. Senseny, Harbor Master, generously shared a clipped news articles collection of 40 years, now fastidiously kept current by Mrs. Senseny. Partial funding for this study came from the Sea Grant Program of the University of Delaware and the Port of Wilmington Maritime Society.

To all those who have made this study possible, the Center extends its sincere appreciation in the hope of improving the port for the benefit of the City of Wilmington, the State of Delaware, and the United States.

Gerard J. Mangone
Director
1 December 1985

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In The Beginning

IN 1638, the Kalmar Nyckel sailed up the Delaware River and landed Swedish colonists at "the Rocks" in the Christina River, named after the young queen of Sweden. Some 23 Swedish soldiers and a black slave built Fort Christina, the first permanent settlement in the Delaware Valley. But the Dutch had already settled the North (Hudson) River and claimed the banks of the South (Delaware) River for their maritime empire. In 1655 Peter Stuyvesant, Governor of New Amsterdam, sailed to Christianaham and without a battle ended Swedish control of the settlement.

Holland's dominion, however, lasted only nine years as the English fought against the Dutch in Europe and as victors took possession of the Dutch American colonies in 1664. The English took no interest in the settlement on the Christina River thereafter and it almost ceased to exist. In 1731, however, Thomas Willing surveyed the area adjacent to the river, laid out streets, and sold lots for a development. When the town was incorporated, it was named Wilmington, after Spencer Compton, England's Earl of Wilmington.

In 1735 the Wilmington community consisted of only 35 houses, but the water power of the Brandywine and other streams led to flour and grist mills for the grains of the countryside. Wilmington enjoyed an early heyday as a port for the export of flour and after the War of Independence the invention of automatic flour milling machinery made it possible for the mills along the Brandywine to ship about 300,000 bushels per year.

In the 19th century, Wilmington evolved from its colonial origins as a milling and shipping town into an industrial center. The construction of the Philadelphia-Columbia railroad diverted much of Wilmington's grain supply from southeastern Pennsylvania to Philadelphia. But this loss was more than matched by new opportunities as shipbuilding, railroad car construction, carriage making, and iron industries sprung up. These enterprises were for the most part owned and managed by local men and demanded a large number of skilled workers. The Civil War, with government orders and the demands of a wartime economy, further benefitted all of Wilmington's industries.

Between 1820 and 1860 Wilmington's population grew from 5,000 to 21,000, and it continued to grow at a rate of between 40 and 50% in each decade until the end of the nineteenth century.

At the turn of the century, most of the traditional industries began to decline, due to shifts in market demands and technological advances in the United States, while vast capital resources were concentrated in a few New York-based commercial banks. To make matters worse, Wilmington's industries were dependent on Philadelphia for the importation of their raw materials. Recognizing their need, the people in Wilmington in 1913 voted seven to one in favor of the construction of harbor facilities in their city, and their interest was increased further by the national crisis of World War I, which revealed the need of the United States for ocean shipping accommodations.

A New Marine Terminal

IN 1917 John Meigs, a consulting engineer and former director of the Department of Wharves, Docks and Ferries of the City of Philadelphia, submitted a report entitled *The Port of Wilmington, Delaware—A Brief Study for the Chamber of Commerce and City Council on the Potential Advantages of Wilmington as a Seaport and How to Realize Upon Them*. He declared the purpose of the report was to educate the business public of Wilmington on the possibilities and opportunities for port development. He defined Wilmington as "a comfortably prosperous inland city of second class" with a strong potential to become "a larger place on the map of the world." In view of World War I, Meigs argued that the splendid isolation and independence of the United States from the rest of the world for the last century and a half and American success in avoiding international entangling alliances, both political and commercial, were over. The United States, he said, must "become the greatest world trader of history," and everywhere in the eastern United States there was a popular call for port development.

An article in a leading engineering journal of the day, the *Engineering News-Record*, conveyed the sense of national urgency at the time. It warned that within a few months the amount of shipping

from the Atlantic seaboard would far exceed the utmost capacity of existing ports and it called for millions of dollars to be expended to erect warehouses, wharves and terminal facilities. Since existing American facilities were expected to be taxed to capacity and every terminal would have to take on more than it could conveniently handle, the result could be an increased use of smaller ports and therefore a return to the free competition between ports that had previously been choked by New York's overwhelming control of the marketplace. The article concluded:

No one or two ports can handle the business of the 14,000,000 tons of ships we should have by 1919. It behooves the citizens of every coast city, then, to forget that in the past the dreams of port enthusiasts too often proved to have but the airy fabric of dreams when put in to actual practice, and to recognize that port development of the minor cities of the United States is at last a manifest necessity.

Meigs believed that Wilmington possessed all the basic qualifications for a seaport: a central location with respect to an extensive tributary region, a large producing and consuming population, deep and ample water connections, excellent railroad connections, and an administrative organization empowered to organize and finance port activities.

Of three possible sites considered for development of the new port, he believed the 400-acre tract between the Lobdell Canal and the Pigeon Point Pier was "capable of development into one of the most perfect and most efficient port terminals in the world." He envisioned the port to ultimately consist of twelve finger piers extending into the Christiana and along the Delaware, multiple storage warehouses and a fully developed industrial complex, as shown in Figure 1.

Meigs wrote, "It may reasonably be assumed that Wilmington is not at present prepared to undertake the prosecution of a general comprehensive scheme such as that outlined. It is not necessary, however, for its eventual success that it should be completed all at once, or in a decade, or even in a generation. Its consummation in ultimate form might be deferred safely for many years, until the growing maritime importance of the city demands it, but that some kind of a broad, logical plan should be adopted promptly, before the commencement of

any actual work in this line—something to look forward to and aspire to—is beyond controversy."

The suggested initial steps for the port included widening and extending Christiana Avenue past the Lobdell plant, constructing one open pier, one shedded pier with necessary docks, a modest sized storage warehouse, a rail car storage yard large enough to keep ships which are engaged in loading and discharging cargo at the piers constantly supplied with rail cars, and efficient cargo handling machinery at the piers. Given this much of a start, a small but efficient terminal at a moderate cost could put Wilmington on the map as a genuine seaport.

The Board of Harbor Commissioners, 1917

THE Delaware Senate and House of Representatives then acted in 1917 to create the Board of Harbor Commissioners for the preparation of a plan to improve Wilmington's waterfront and to increase the harbor and shipping facilities of the City of Wilmington. The City Council was made responsible for choosing the place deemed most suitable for the purposes of the Act. The city was charged with building wharves, piers, docks, bulkheads, and terminals together with tracks and rails with which to connect the port facilities to the railroad lines.

The Board of Harbor Commissioners was instructed to do dredging and to designate the places where dredged material was to be deposited, and to maintain, operate, and exercise full power over the terminal operations, including rules for its use and management, setting and collecting rates, making agreements with common carriers, and leasing terminal property.

The Mayor and Council of the city were authorized to borrow sufficient sums to carry out the provisions of the Act. Any yearly deficits from the terminal were to be covered from city funds and yearly surpluses were to revert back to the city. The City Council retained power to vote on capital improvements at the port. Bond issues for such investments were to be issued by and bear the full faith and credit of the city. Three Board members were appointed by the Mayor and confirmed by the

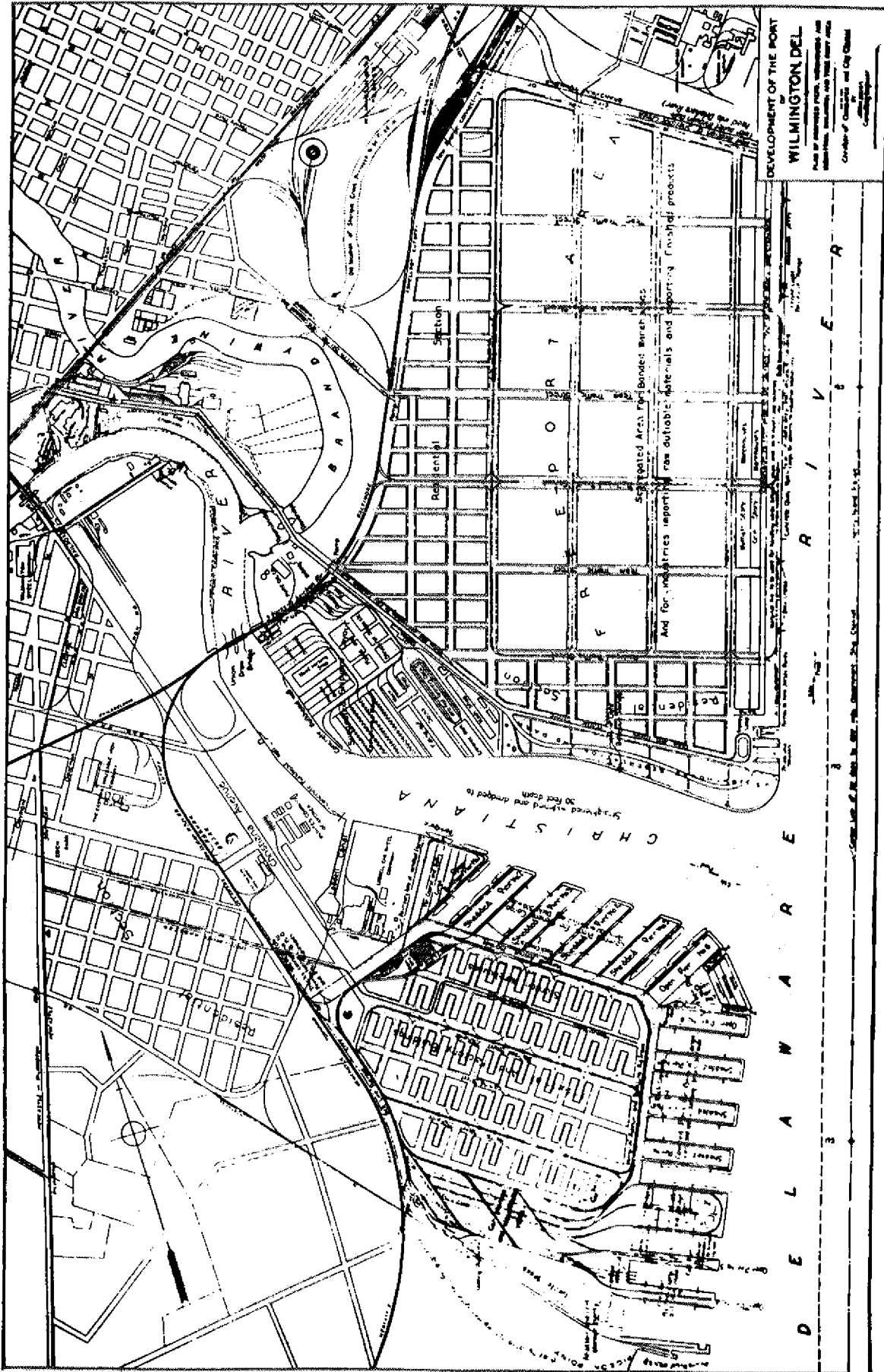


Figure 1. Meigs vision of the Port of Wilmington.

Council, to serve without salary and have offices in the Municipal Building. The first commissioners were Willard A. Speakman, President, Charles Warner, and Joseph Bancroft, all outstanding businessmen of the city. These men continued to serve the city as commissioners for many years.

H. H. Richardson, Special Investigator of the Board of Harbor Commissioners, submitted a report to the Board in December 1917 that assessed the business potential for the proposed dock and terminal. He had conducted a survey of all manufacturers and merchants doing business in New Castle County, requesting their cooperation in giving data on their average annual tonnage of inbound and outbound materials and products, their origin and destination, and an analysis of tonnage being shipped by rail versus by water. The statistics convinced him of "the absolute and immediate necessity of modern docks and terminals" since there was business waiting that would fully justify the city's investment. The 1914 U.S. Census reported that Wilmington had 319 manufacturing establishments, and employed 15,048 wage earners, with a capital of \$46 million. Richardson noted the large increase in Wilmington's manufacturing activity and estimated that business in the city had increased by at least 40% since the 1914 figures. The average annual movement of commodities based on the previous three years was 5.5 million tons. Of that tonnage, 74% was inbound, 26% outbound; 75% was domestic, 25% foreign; 83% went by rail and 17% by water. Richardson surmised that approximately 50% of the total tonnage could be handled by water.

Richardson wrote in a vein similar to that of Meigs, encouraging Wilmington to take action: "I have received letters [from government maritime officials] commending this Board for giving consideration at this time to the development of harbor facilities, which they deem a most patriotic and essential duty as an aid to the government in winning the war, and as a splendid business opportunity for Wilmington to undertake immediately."

One year later, the Board of Harbor Commissioners published its own report outlining the possibilities for port development, with a plan of procedure and recommendations for initial steps to be taken. The Board first attended to the city's need

for a produce wharf for handling perishable foods at the intersection of Front and Church streets. They requested \$130,000 to construct wharves, sheds, and streets and to acquire additional property with the expectation that the economic gain from receiving inland waterboats would so reduce produce costs that the total investment in the facilities would be saved annually. A report published in 1920 referred to the wharf as having been built, but no further mention was made of its activities.

The second project recommended by the Board for immediate attention was a passenger steamer wharf for passenger traffic located immediately north of the produce wharf and adjacent to city park property for the enjoyment of the public.

Finally, the Board recommended prompt acquisition of the necessary land for seaport piers and terminals. It cited the property recommended by Meigs which was located on the south side of the Christiana River near its mouth, then owned by Lobdell Car Wheel Company, comprising 101.8 acres of high land and nearly as much acreage of marsh lands, with the necessary rights of way to the railroad lines. Purchase price of the lands was \$230,600.

In the Board's summary report they reiterated reasons for Wilmington to establish itself promptly with the recommended facilities: the new commercial relations the United States would bear to other countries of the world, beginning with the new peace era, the enlarged number of steamships in the new merchant marine of the United States the admirable natural and geographic opportunities possessed by Wilmington for such development, the rapid development of the Delaware River district into one of the largest maritime districts in the world. The Board looked forward to the realization of its plans so that Wilmington might "fully assume her proper commercial relationship to the world." The City Council approved a bond issue of \$2,500,000 soon after for the creation of the port.

The New Port of Wilmington

By the fall of 1920, the land had been purchased and the city was seeking government coopera-

tion for its project, specifically from the U.S. Army Corps of Engineers for channel and jetty improvements on the Christiana. The shipping business on the Christiana was then mainly local. All export and import business from the Delaware was done at the Pigeon Point Pier of the Philadelphia and Reading Railway or by transfer from ships to lighters. Delaware was the only state along the Atlantic seaboard without a port through which its coastal and overseas commerce could directly pass, and the 21-foot depth of the Christiana was entirely inadequate to accommodate modern merchant vessels.

The Board soon received assurances that the city's three railroads (the Pennsylvania, the Baltimore and Ohio, and the Philadelphia and Reading) would welcome the improvements proposed. The State Highway Department began construction of a roadway connecting the proposed new terminal with the center of Wilmington and with the system of roads across the state. The political parties included promises in their platforms on their commitment to port development.

The City of Wilmington in 1920 had a population of 110,168 and another 50,000 people in its suburbs. Its principal local industries included the manufacture of steel and wooden ships (despite the absence of a port), railroad cars, and car wheels; iron, steel and brass castings; plate and sheet steel; machine tools; boilers, engines and machinery; paper, wood pulp and cotton goods; rubber and cotton hose; vulcanized fiber, and explosives.

Operations of the Port, 1923-1938

CONSTRUCTION of the first unit of the Wilmington Marine Terminal was begun in 1921 and completed in 1923. The marine terminal was directly connected to all railroads entering the city. Two million cubic yards of riverbed were removed by the end of 1923 to obtain a 25-foot channel depth from Lobdell's Canal to the Delaware River. During the first year of the terminal's operation it handled 17,000 tons of cargo. Statistics on the port for 1923 are shown in Table 1.

By the 1927-28 fiscal year the port was handling 200,000 tons, with an average of 300 tons per day

being received or discharged by each ship. The city approved another bond issue of \$800,000 in 1928 and an additional area of dock was constructed. Altogether the terminal facilities then consisted of a quay wharf 2,060 feet long; a transit shed measuring 400 by 120 feet; two storage sheds each 500 by 120 feet; a coastwise cargo shed, 220 by 30 feet; an open storage area of 25 acres; seven miles of railroad tracks and yards; and a complete sewer and fire protection system. Mechanical equipment included five cranes ranging in capacity from 5 to 35 tons, tractors and trailers, electric winches, chisel trucks, and other devices. The depth of the channel had been increased from 25 to 30 feet at mean low water, and the total 105 acres of terminal property had been increased by 35 acres due to reclamation.

Table 1

Port of Wilmington—Statistics, 1923

Berthing area	1,210 ft.
Land area	105 acres
Open storage	10 acres
Transit storage	48,000 sq. ft.
Warehouse storage	120,000 sq. ft.
Water depth	23 ft.
Annual tonnage	17,000 tons

By 1929 when the Chamber of Commerce made an industrial survey, seven new businesses had located around the terminal facilities since 1925: National Creosoting and Lumber Company, Eastern Terminal Lumber Company, Tannin Corporation, Crane Hook Oil Storage Company, J. Frank Darling Company, Eternit, Inc., and Triangle Agricultural Corporation. The other three already located at the terminal were the Lobdell Car Wheel Company, Pyrites Company, Ltd., and Eastern Malleable Iron Company. The Eastern Terminal Lumber Company had chosen Wilmington as its Atlantic Coast distribution point for economy of operation, nearness to consumers, and favorable rail rates. The Tannin Corporation's one million dollar plant made the Port of Wilmington the world center for the manufacture of glazed kid and morocco leathers, with a yearly capacity for extracting 50,000 tons of vegetable tannins

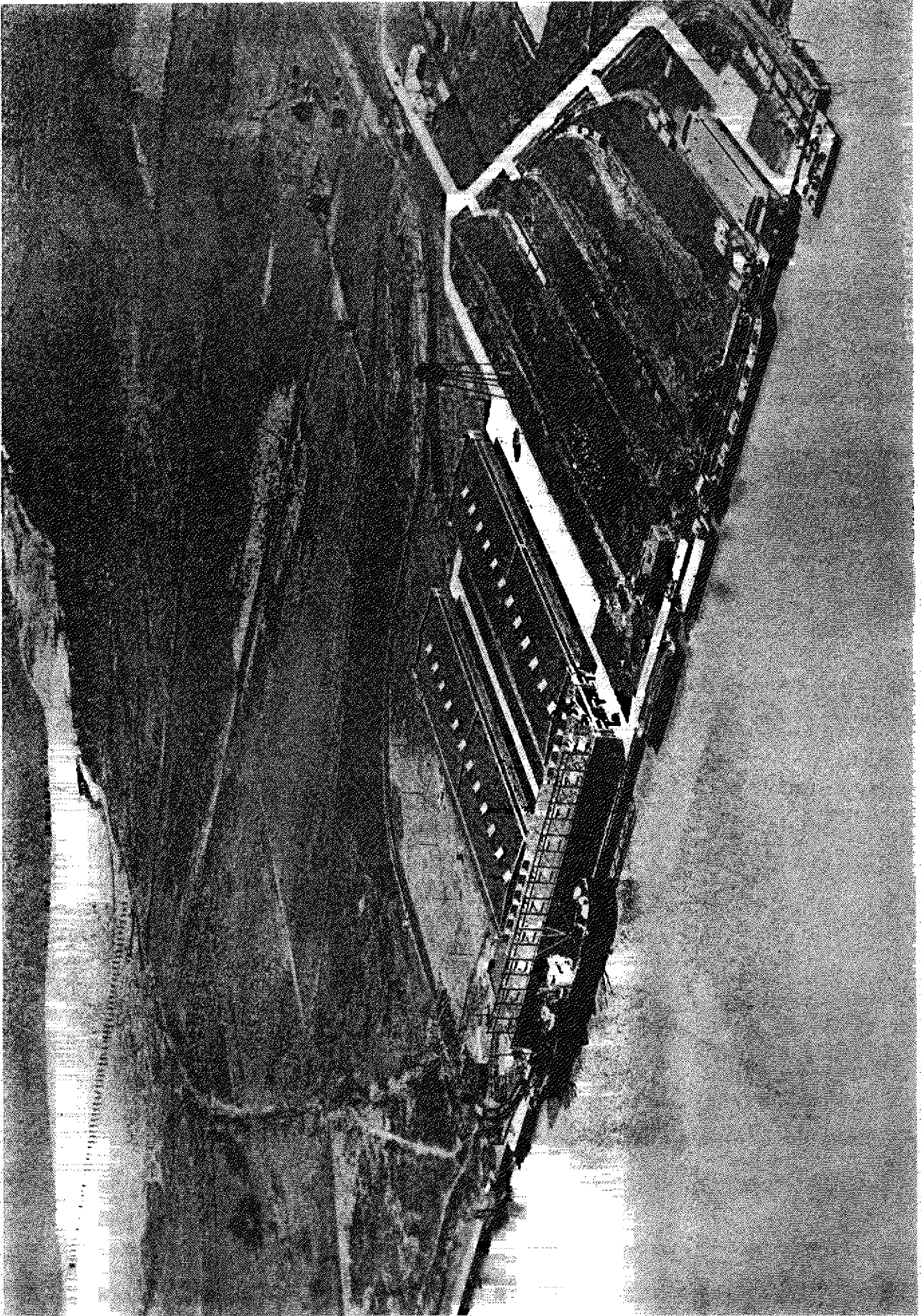


Figure 2. The Port of Wilmington in 1926.

from South American quebracho logs, South African wattle bark, and Indian myrobolams.

In 1935 a national periodical, *The Nautical Gazette*, featured the Port of Wilmington as a growing port. The bulk of inbound tonnage was then South American quebracho, cork from the Mediterranean, ilmenite ore from India, wood pulp and barytes ore from Northern Europe, lumber from the Pacific Coast, and petroleum products from the Gulf of Mexico. The article emphasized the port's slogan, "The Port of Personal Service," as being accurate both for the shipper and the ship operators, and enthusiastically reported the Port as looking forward to the future with confidence despite the national depression. While unemployment was still a problem, some plants that had shut down were resuming operations, others were increasing production schedules, and there was the promise of new industrial establishments opening up. By fiscal 1934-35, the port was handling 360,336 tons of cargo per year.

Two consultants, M. Garsaud and J. S. Smith, were hired in 1938 to conduct a study of the possibility of port expansion. After reviewing terminal operations during the previous ten years, with a focus on the last three years, they found an "imperative demand for additional storage space of a minimum of 50,000 square feet, and justification for an additional 500 feet of wharf to avoid a periodical congestion of ships." They projected that the addition of the recommended facilities would save the city annually \$24,000 in operations costs. The wharf extension would accommodate peak loading times and the extra storage space would reduce the high cost of piling and the extra handling of wood pulp. The total annual cargo handled by the port was 540,000 tons by then, of which 386,000 was inbound.

Despite the consultant's urging improved facilities, nearly two decades elapsed before the port facilities were upgraded and expanded.

From World War II to 1965

CH. Gant, who had acted as secretary for the Board of Harbor Commissioners and managed the marine terminal for 23 years, left his post in April 1942 to manage a war production plant in

Virginia. That same month, Charles Warner, a founding member on the Board, also resigned due to World War II responsibilities. E. W. Richardson, who had been the traffic manager at the terminal assumed the role of port manager in Gant's stead, and the terminal's engineer, T. J. McDonnell, became secretary for the Board.

Little is available in the way of historical records during the next twenty years except for news articles clipped and saved by Richardson and passed on to Robert Senseny, the current Harbor Master. A May 1943 item stated that the marine terminal vessel shipping business had dwindled due to war conditions, but that rail transshipment and warehousing business had been near peak since the war's beginning. The terminal was contributing to the war effort by use of its facilities. At one point, the port manager found it necessary to enlist the help of 35 boys, who received excused absences from school, for a few weeks to cope with the labor shortage. During the war, the terminal won federal recognition as one of the nation's best warehousing operations because of its modern equipment and handling methods.

Port operations were extremely busy again in 1948. The port was able to send a check to the city for \$100,057.19 in net revenue, but the pinch for more dock and storage space continued to be felt. A six-month survey was undertaken by a group called the special "Committee on Terminal Development." Their report stated that both "shippers and receivers have advised that they would use the terminal to greater extent if the necessary facilities were available to handle shipments."

The volume of traffic handled by the port was taxing its facilities beyond capacity, specifically in its ability to assemble cargoes for shippers, to provide space for cargo, and to accommodate vessels on specific dates. The terminal development committee reiterated the recommendation of a decade earlier: increase the length of the dock and construct additional transit shed and storage facilities. In September 1949, the city applied to the U.S. Army Corps of Engineers for the widening of the turning basin for vessels in the Christiana River from 400 to 600 feet and the maintenance of the river channel at a depth of 35 feet rather than 30 feet, but ten years

later the turning basin was still only 450 feet and the river channel, when dredged, only 32 feet in depth.

In 1952 the Board again proposed that a two-million dollar covered warehouse be constructed at the terminal along with other improvements. According to the Wilmington News-Journal in May 1953, the marine terminal was enjoying a booming business and the terminal grounds were piled high with goods, with the warehouses stocked full. The issue of a warehouse had become a political issue and one candidate for office declared, "It is a well known fact that the Wilmington area during the past several years has been losing thousands of dollars in business to ports in New Jersey because of inadequate facilities at the Marine Terminal, yet nothing has been done to improve the situation." By the fall of 1953, the terminal was *still* awaiting a city bond issue permitting enlargement of the overcrowded terminal.

Annual tonnage at the port had risen to 855,425 tons in fiscal year 1952-53. The city had received \$189,063 in net revenue from the terminal, not including \$51,600 of the terminal's earnings that had been spent on the survey and planning blueprints for facility expansion. Finally in March 1954, a contract was awarded for a new covered warehouse to be built, with dimensions of 420 by 400 feet that would provide 168,000 square feet in new storage space. The warehouse was completed in May 1955. It had been a long wait.

Four years later, in recognition of the difficulty of issuing bonds for financing the port, the law for port investments was changed so that it was permissible for bonds to be issued without the "support of the full faith and credit of the city."

After 34 years with the Board of Harbor Commissioners and fourteen years as the manager of the Wilmington Marine Terminal, Richardson retired in March 1956. In his place, Joseph Cathcart was appointed manager. Cathcart had been with the terminal since 1936 and had risen through the ranks as lift truck operator, checker, supervisor, foreman and superintendent.

The American Association of Port Authorities published a description of U.S. ports in 1961. The Port of Wilmington was described as having a 144,000 square foot single story warehouse, completed in 1960, along with a 300,000 cubic foot cold storage

warehouse just 120 feet from dockside. The cold storage capability made the Port of Wilmington the only Atlantic port offering refrigerated facilities directly adjacent to dockside. The dock itself had also been extended to 3,060 feet so that it could berth seven ocean carriers. Further, the U.S. Army Corps of Engineers was planning to deepen the channel from 32 to 37 feet and widen the turning basin from 450 to 650 feet. The primary cargoes handled by the port were jute, cork, fluorspar, frozen meat, and automobiles.

Another record year for the terminal was 1963 when the port handled 901,422 tons of cargo. The port staff then totalled 100 city employees, 200 longshoremen, and 1,200 employees of the seventeen companies located at the terminal. During the previous eight years, the Board of Harbor Commissioners had spent nine million dollars on improvements and expansion of the port facilities on warehouses, docks, reclamation of land, mechanical equipment, roadways, and lighting, not without considerable political struggle.

Evaluation and Reforms of the Port, 1967-1973

A new Department of Commerce had been established by the City of Wilmington in July 1967. The director of the port, Joseph Cathcart, in addition to his role as President of the Board of Harbor Commissioners, also became the first director of the Commerce Department. The new department's aims were to promote and develop the city's commerce and industry and encourage the increased use of the port. Although investment decisions remained under the authority of the City Council, the decisions to spend for operations and to set rates rested with the Commerce Department, while the role of the Board of Harbor Commissioners became advisory.

The Board of Harbor Commissioners recommended \$11 million in the Capital Improvements Program for fiscal years 1968-1973 for land acquisition, dock extension, storage space, and expansion of the freezer warehouse.

This prompted the city to engage outside consultants to suggest long-range policy for the port. A

University of Delaware report, provided by Dr. Francis X. Tannian, assessed the total investment in the port over its 44 years to be \$11.2 million, and its replacement value at \$26 million. The Tannian report also observed, "Since one man is the director of the port, director of the Commerce Department, and a member of the Board of Harbor Commissioners—large amounts of port policy power and responsibility now reside in a single person." The Board of Harbor Commissioners, in practice, had been a part-time group that acted to review and approve port action steps, but not to initiate policy programs. Program initiation had come from the port director. There was no middle management, no port planning staff outside the director, and no port marketing staff outside the director. Tannian felt that it was needlessly risky to rest the entire operation on the health and judgment of one man without support of middle-management aides who might replace him temporarily or permanently if required. The report advised the city to hire a port market development manager to help promote port commerce and assure sufficient volumes of business to warrant the proposed \$11 million capital expenditures.

A second study, done by private management consultants in 1968, advised the port administrators to undertake specific short and long term goals. They suggested that the internal administration of port operations be improved; that surplus funds from port operations be retained in a fund and not transferred to the city; that the port administration be freed up for business flexibility purposes; and that the deficient storage needs be immediately remedied. Long term suggestions included a promotional program for industrial development, a city and county effort to broaden the port's economic base beyond the city, and the development of a relationship with state planning and development agencies.

The city's attention or reaction to the advice of its consultants was not apparent, but the warnings of the Tannian report had been prophetic. In July 1970, Cathcart died suddenly. The city appointed Cathcart's chief assistant, Doris Dawson, as director, to administer a port, then handling over 600,000 tons of cargo per year, with the primary cargoes being ore, lumber, bananas, and steel, and providing a net revenue in 1970 of \$257,635.

Dawson served the port until January 1974 when she resigned suddenly with the intention of calling attention to the need for major changes in the port's organization. It was then alleged that she had sold surplus meat from the port without getting City Council approval or requesting bids, but she was eventually cleared of any wrongdoing. During her stint as director, she had tried, with the concurrence of the Board of Harbor Commissioners, to stimulate the political action required to create an independent port authority, for port facilities had been deteriorating and five million dollars was required for repairs to restore it to full operation. One editorial by three former Harbor Commissioners stated that the port simply could not be operated as a vigorous business while subject to the control of the city budget process and that the funds required for development were not available from the city treasury.

The Tribbitt Study

IN response to these issues, Delaware's governor, Sherman W. Tribbitt, issued an executive order establishing a study committee for the port to investigate the port's method of operation and its business potential. Those serving on the committee included the President of the Du Pont Company, a New Castle County representative, a representative from the Mayor's office, a state senator, the President of Delaware Trust and a member of the board of the Delaware River and Bay Authority, a local businessman, the head of the Associated Contractors of Delaware, a county councilman, and a representative from the International Longshoreman's Association. Numerous technical advisors were also engaged. Meanwhile, Donal J. Alfieri, a New York City native with a background of experience in port operations in Philadelphia, was appointed port director in February 1974. By then the port consisted of 180 acres of land, plus 60 subaqueous acres. A total of 124 acres of port property was under lease, generating total rental revenues of nearly \$250,000. The total investment in rental revenues of nearly \$250,000. The total investment in the port plant and equipment was \$13.9 million, and the total cargo handled in 1974 was 1,241,023 tons.

The Tribbitt study was completed within the year and it became the basis for numerous changes in the structure and operations of the port over the next few years. In response to its recommendations, the city administration and port officials searched and obtained grants from the federal government's Economic Development Administration and Coastal Energy Impact Program as well as from the State of Delaware. It was then possible to initiate a vigorous long term capital improvement program, including rail replacement and maintenance, crane overhauls and purchase, and roadway, warehouse and utility lines improvement. The berth area was restored by replacing the 850 foot dock, restoring the additional 1,200 feet of dock, and constructing a new floating berth dedicated to automobile exports and imports.

Other recommendations that were implemented included seeking and securing long term commitments from shippers; hiring an experienced marketing director to initiate a concerted marketing effort; assessing the port's profitable and losing commodities and engaging a full time accounting manager for the port; and achieving a full cost breakdown on port operations while making a comparative study with neighboring ports. The chain of command to improve efficiency in cargo handling was also improved and appraisals on port properties were made in order to alter rental rates to reflect current market trends.

Table 2

Port of Wilmington—Yearly Tonnages

1923	17,000
1927-28	200,000
1934-35	360,336
1938	540,000
1952-53	855,425
1963	901,422
1970	600,000
1974	1,241,023
1980	2,928,153
1984	2,766,123

The final recommendation of the study was to modify the port's institutional structure to assure the long range commercial interests of the state, city, and region by allowing a broader financial base in the form of a public port corporation. That recommendation, however has never been implemented.

Since 1975, the Port of Wilmington has been steadily improved by the addition of modern equipment and facilities that have enabled the port to continue its growth and serve not only the city, but the state and region. However, port visionaries continue to be frustrated over the inability of the port to achieve its potential.

In Part II of this series, the current operations of the Port of Wilmington will be reviewed.