

# PORTS *and* HARBORS

SEPTEMBER 1962

Vol. 7 No. 3



THE PORT OF NEW YORK

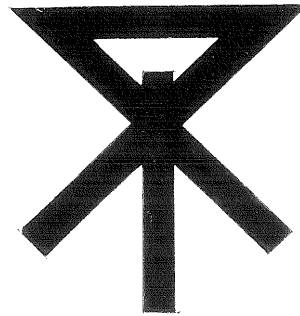
THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

# *Introducing The Crests of Co-Member Ports*

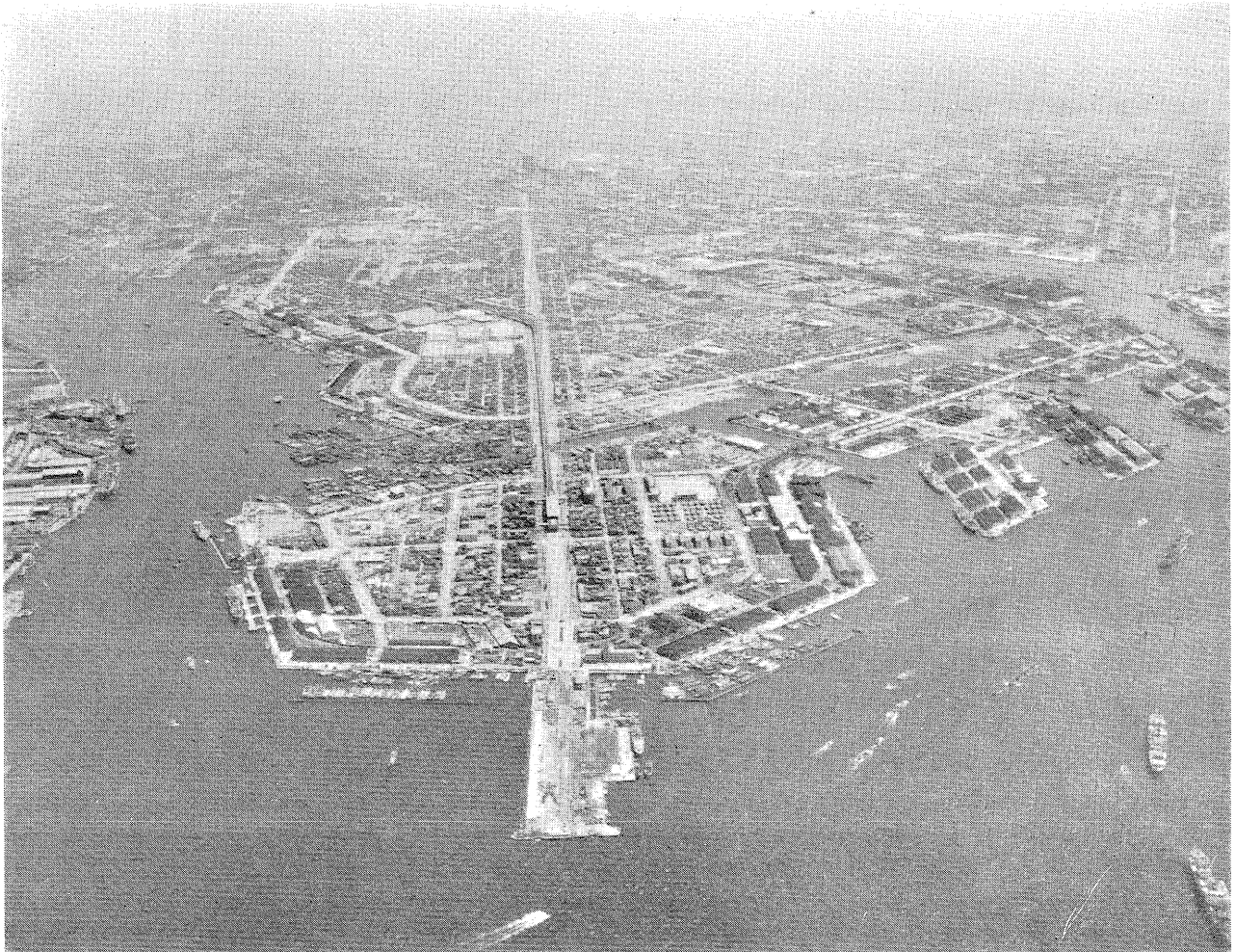
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(Each Issue One Port)

## **THE PORT OF OSAKA**



Since olden times Osaka has been known as the most flourishing commercial town of Japan, developed at the mouth of the River Yodo. The navigation aid, familiarly known to the medieval mariners and citizens as *Miotsukushi*, was adopted in 1894 as the emblem of the city and port of Osaka.



**General View of Port of Osaka.**

# THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

## OBJECTS AND PURPOSES

(Per Article 3 of Constitution)

The objects and purposes of this Association shall be:

(a) To associate its members from all countries together in the common cause of mutual international friendship and understanding;

(b) To exchange information relative to port and harbor organization, administration, management, development, operation and promotion;

(c) To encourage, develop and promote waterborne commerce to and from all world ports and harbors; and

(d) To encourage the standardization and simplification of procedure governing imports and exports and the clearance of vessels in international trade:—  
thereby promoting the peace in the world and the welfare of mankind.

## UNDERTAKINGS

(Per Article 3 of Constitution)

This Association shall carry out the following undertakings in order to accomplish the objects and purposes specified in the foregoing Article:

(a) The holding of conferences of the International Association of Ports and Harbors as provided in the By-Laws;

(b) The publication of the minutes of Conferences, an official Association journal or other publication and other special publications concerning ports and harbors, as may be authorized by this Association;

(c) The establishment of relations with other international organizations, associations and agencies on matters of mutual international interest concerning ports and harbors;

(d) The establishment of a center or centers for the collection, tabulation and distribution of information concerning ports and harbors from throughout the world for the benefit of members of this Association and other interested persons:

(e) The dissemination to ports and harbors, and governmental agencies and private operators thereof, of the accomplishments of this Association as expressed in resolutions, bills, reports of committees, and the published proceedings thereof;

(f) The establishment of committees from among the membership of this Association for reference purposes of members engaging in the organization, administration, development, operation, utilization, management or promotion of ports, harbors and other waterfront facilities;

(g) The assumption of other undertakings necessary to effectuate and realize the objects and purposes of this Association.

# PORTS and HARBORS

PORTS AND HARBORS is quarterly published by the Central Secretariat of the International Association of Ports and Harbors as an official journal of the Association, to provide its members with information concerning port and harbor development in the world.

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## THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

### President

Lt. Gen. Huang Jen-ling

Chairman, Board of Directors,  
China Merchants Steam Navigation Co., Ltd.  
Taipei, Taiwan, China

### Chief of the Central Secretariat

Gaku Matsumoto

Editor: Akira Ikeda

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# Officers and Members of The Board of Directors of The International Association of Ports and Harbors

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Chairman, Board of Directors  
China Merchants Steam Navigation Co., Ltd.  
Taipei, Taiwan, China

### Chief of the Central Secretariat

Mr. Gaku Matsumoto  
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<b>Viet-Nam</b>	Mr. Nguyen Van Chieu Director, Saigon Port	Mr. Nguyen Ngoc Du Director Port of Da-Nang

# From The Central Secretariat

By **Gaku Matsumoto**  
Chief of the Central Secretariat  
I.A.P.H.

## Triennial Conference Preparation in Progress

The Third Triennial Conference to be held in New Orleans, La., U.S.A., May 1 through 4, 1963, is fairly in progress. In the Royal Orleans Hotel as the site of the Conference meeting rooms and spaces have already been reserved by the Port of New Orleans, Conference hosts. During the past three months, according to the decisions made at the last Executive Committee meeting in Taipei, Taiwan, China, March 7 through 10, 1962 and later approved by the Board of Directors, the Central Secretariat has been engaged in the preparation for the forthcoming Conference, including the selection of guest lectures, the mailing of invitations, etc. The Central Secretariat prepared a tentative

list of port officials and representatives of related organization throughout the world, besides Association members, to whom invitations to attend the Conference should be extended, and the Port of New Orleans had the trouble to mailing out, in the middle of August, the first announcement note, requesting the recipients to save the Conference dates so that they might attend, in accordance with this list. Further announcements in connection with the Conference will be mailed out from the Port of New Orleans in the name of Conference Chairman.

\* \* \*

## Second Port Seminar

As reported in the last issue of this magazine, the Second Seminar

on Ports and Harbors executed under the Colombo Plan in South-East Asia, the Technical Cooperation Plan for other Asian Areas, the Technical Cooperation Plan for Near and Middle East and Africa and the Technical Cooperation Plan for Latin America, with the Japanese Ministry of Transportation and the Overseas Technical Cooperation Agency as organizers and the Central Secretariat of the IAPH as coordinating organization, will take place, as scheduled, October 2 through November 2, 1962, at the Asia Center, Tokyo.

It is scheduled that the opening ceremony will take place on October 5 in the Shipping Club and after attending lectures and discussions with occasional field studies until October 20, the partici-



1962 Port and Harbor Fair was officially opened on August 31 for a two week session, in Harumi, Port of Tokyo. Photo shows Princess Takamatsu cutting ribbons to open the fair, Prince Takamatsu standing second from left in front row.

pants will leave for Kyushu on a study tour to Moji, Kobe, Osaka, Kyoto and Nagoya, returning to Tokyo on October 28. In these cities they will visit the ports and important industrial plants in the vicinity. After the evaluation of the seminar at its end and the closing ceremony, they are scheduled to leave Japan November 2.

In the IAPH Hours on October 20, specially set aside for the IAPH, Mr. Philip S. Bogart, First Secretary, United States Embassy in Tokyo, and Mr. H. D. Leonhardt, General Traffic Manager, C. F. Sharp & Co., Tokyo, who is a member of the Permanent Council of this Association, have been requested to lecture respectively on "World Economy and Port Operation" and "Shipping Industry and Port Management."

As of September 15 there are 34 port officials from 21 countries in the areas concerned, who have applied for participation. Their names and titles are given elsewhere in these pages.

### **Progressive Report on Standing Committees**

Both No. 1 Committee (on Port Administration and Utilization and No. 3 Committee on Cooperation with Other International Organizations) have been active in the execution of the works referred to them. Thanks to the cooperation of all member ports, active responses have been received during the past three months to the questionnaires mailed out to them from the respective committee chairmen on the following work subjects:

#### *No. 1 Standing Committee*

- Subject No. 1.** "Investigation of charges for handling containers and containerized cargo, and regulations for containership operation of each member port."
- Subject No. 2.** "To investigate labor conditions—such as, Port transportation industry, Port employers, Port workers, Labor-management relations, Organization of port works, Coordination of port works—of each member port."
- Subject No. 3.** (1) "To investigate, standardize and define the terminologies of selected port charges in various languages."  
(2) "To investigate and standardize the methods of computing rates of such selected port charges."

#### *No. 3 Standing Committee*

"Investigation of the shipping Documents which your port office and other public agencies require for the entry and clearance of the vessel engaging in international trade."

### **Port and Harbor Fair**

The 1962 Port and Harbor Fair was held for two weeks from August 31 to September 13, 1962 in Harumi Harbor area, Port of Tokyo, under the joint sponsorship of the Japan Port and Harbor Association, the Cago Handling Mechanization Association, the Japan Operation Vessel Association, the Japan Reclamation Association and the Nihon Keizai Press. It was one of the commemoration programs of the 40th anniversary of the Japan Port and Harbor Asso-

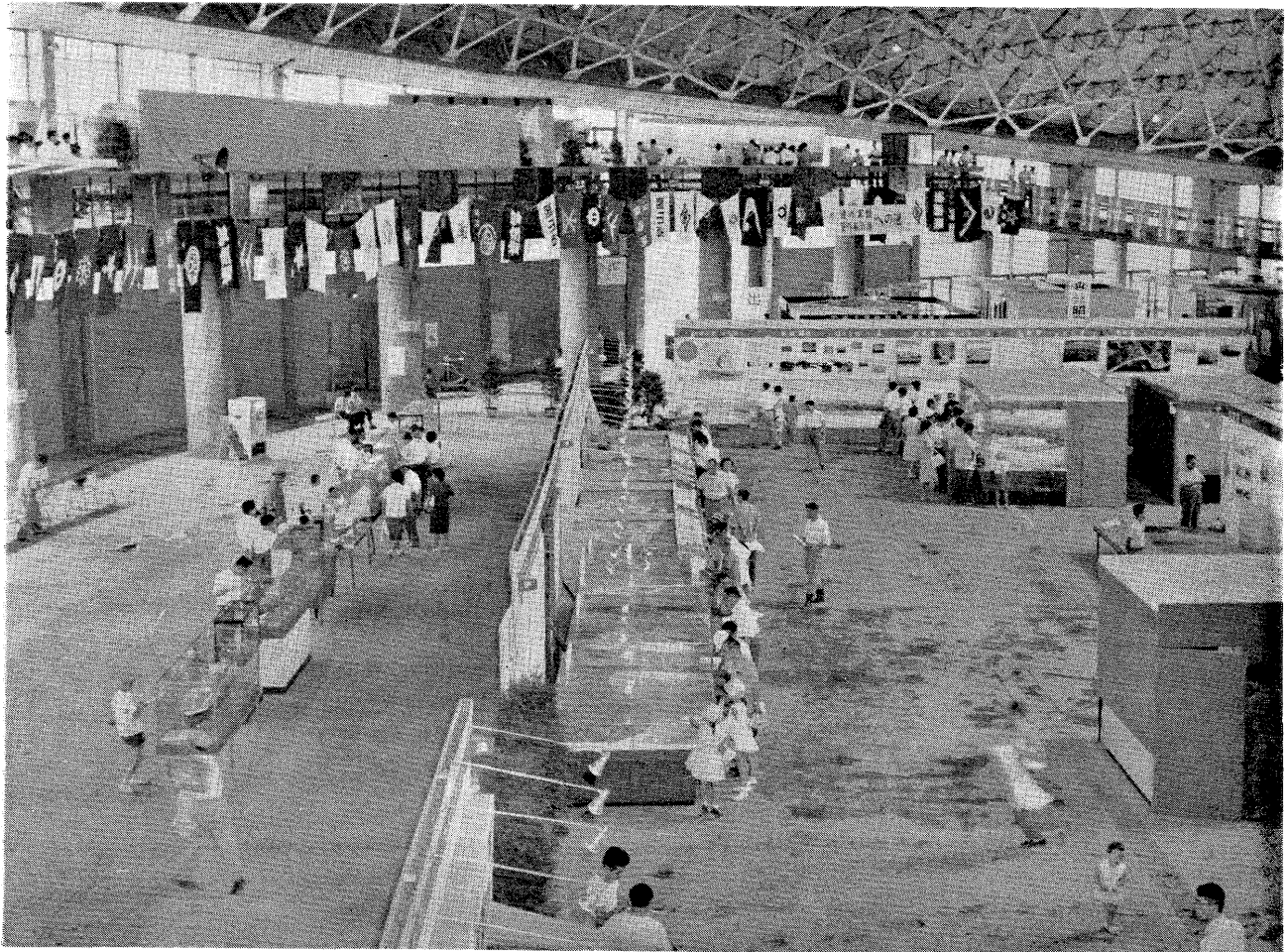


Photo shows part of the exhibition hall of the 1962 Port and Harbor Fair held in Harumi Harbor Area, Port of Tokyo, August 31 through September 13, 1962.

ciation, and as such it was the largest in scale of all the similar events to have ever been held in Japan, with the participation of almost all the ports and harbors of the nation as well as related industries.

The Central Secretariat extended its cooperation to help successfully realize the organization of this grand port fair, of which Gaku Matsumoto, Chief of the Central Secretariat and President of the Japan Port and Harbor Association, was one of the Chairmen.

\* \* \*

### Board Meeting Called

For the purpose of reporting the current Association affairs and asking for the election of new Association members, a meeting by correspondence of the Board of Directors was called on September 12, 1962, with October 12, 1962 set as the date of voting.

\* \* \*

### New Members

During the past three months the Association has welcomed the following ports and organizations and one individual as its new members:

		Members Unit (e)
Empresa Puertos de Columbia	Regular .....	1
Suez Canal Authority	Regular .....	1
*The Port of New York Authority	Regular .....	3
The Singapore Harbour Board	Regular .....	1
The Alabama State Docks Department (The Port of Mobile)	Regular .....	1
The Port of Lake Charles	Regular .....	1
Captain John G. Roenigk	Individual Supporting .....	1
U.S. Naval Attache,		
U.S. Embassy in Tokyo		

\* The Port of New York has newly subscribed for 3 Regular Membership Unit, at the request of the Central Secretariat.

### Oakland's New Executive Director

Ben E. Nutter has been appointed executive director of the Port of Oakland by the Board of Port Commissioners, according to Peter M. Tripp, president. The appointment was effective September 1.

Nutter has been acting executive director since July 1, when Dudley W. Frost retired.

Nutter has had top administrative and engineering responsibil-



Dr. George R. Wall, President  
Los Angeles Board of Harbor  
Commissioners

### New President for L.A. Commission

Dr. George R. Wall, 49, native of San Pedro, California, and prominent physician and surgeon, was elected president of the Los Angeles Board of Harbor Commissioners in July. Albert Perrish, 47, president of the steel importing firm of Winter, Wolff and Company, Los Angeles, was elected vice president of the five-man Board. Following a policy of rotation of officers, Dr. Joseph D. Carrabino, professor and manage-

ment expert at the University of California in Los Angeles, retires from the presidency of the Board, which was appointed a year ago by Mayor Samuel Yorty.

\* \* \*



Mr. Ben E. Nutter  
Executive Director, Port of Oakland

Nutter has been in charge of all engineering and shared administrative responsibilities under Frost for the varied Port development program.

From 1952 to 1953 he was assistant manager and assistant chief engineer of the Board of Harbor Commissioners in Hawaii and was appointed to the governor's cabinet as Superintendent of Public Works in 1953.

Nutter has served as a member of the board of directors of the American Association of Port Authorities and the Pacific Coast Association of Port Authorities.

He is chairman of the national defense committee of the AAPA, chairman of the Ports and Harbors Committee of the Rivers and Harbors Division of the American Society of Civil Engineers and chairman of the committee on terminal area facilities of the Aerospace Transport Division of the American Society of Civil Engineers.

Nutter is a member of the Oakland Rotary Club, East Bay Engineers Club, and East Bay Structural Engineers Society.

ities during the past six years, a period in which the Port has undertaken major expansion and improvement programs in diversified fields.

Nutter came to the Port in January, 1957, as chief engineer after serving as superintendent of Public Works for the Territory of Hawaii. Since 1959, when the late J. G. Bastow retired, Nutter has been both assistant executive director and chief engineer.

## Stockton's New Commissioner

Mr. Leonard W. Pores has recently been elected Commissioner for the Port of Stockton. He is a partner in three Stockton drive-in dairy stores and has led the fight in California for the lower-priced cash and carry milk depots.

Pores was appointed last month by the San Joaquin County Board of Supervisors to fill the vacancy created by the retirement of John D. Turner, who completed 20 years of outstanding community service as a commission member.

An Air Force veteran, Pores enlisted in 1940. After basic training, he was assigned to intelligence and was attached to the American Embassy in London for five years during World War II. Before entering the dairy products field in 1950, Pores was sales representative for Texas and New York sports wear houses in seven western states.

\* \* \*

## Melbourne Commissioners Reappointed

The Victorian Executive Council has extended the terms of office of two Melbourne Harbor Trust Commissioners for a further three-year period until 30th June.

The Commissioners are Mr. J. P. Webb, O.B.E., who has been on the Board of Commissioners since 1941, and Mr. C. H. McKay, C.B.E., who was first appointed in 1956.

\* \* \*

## New President for Long Beach Commission

A new slate of officers was elected July 2 by the Long Beach Board of Harbor Commissioners. H. E. Ridings, Jr. was made President succeeding W. A. Harrington. Ridings, a native of Kansas City, Missouri, has resided in Long Beach for twenty-five years. In addition to owning the Cadillac agency in Long Beach, he is currently active in the Long Beach and Los Angeles Chambers of Commerce.

The new president was appointed to the Board in 1955 and served as president in 1959. Other new officers include M. W. Daubney, Vice President, and R. A. Reid, Secretary. They will serve until July, 1963.

# Participants in Second Port Seminar

— October 2 — November 2, 1962 —

Port officials who have applied for participation in the Second Seminar on Ports and Harbors, to take place October 2 through November 2, 1962, in Tokyo, number 34 from 21 countries in South-

East Asia, Near and Middle East and Africa, and Latin America as of September 15, 1962. Their names and titles given by nationality are:

### CAMBODIA

Khim-Chhuon

Deputy Chief Engineer,  
Port of Phnom-Penh

### INDIA

S.K. Bhattacharya

Deputy Chief Hydraulic Engineer,  
Calcutta Port Commissioners

T.K.P. Nambiar

Secretary,  
Madras Port Trust,  
Administration and Secretarial

### INDONESIA

Koesnoroto

Director of General Harbor Management Board,  
Department of Sea Communications  
Harbor Director,  
Port of Semarang

Sardjoe

Director of 3rd State Port District,  
Ministry of Sea Communications

Tie King Tiat

### MALAYA

Mohd Yusoff bin Mat Esa

Outdoor Assistant Official,  
Malaya Railway Administration

### PAKISTAN

2 Attendants Expected

### PHILIPPINES

Carlos Lat Castillo

Asst. Staff Civil Engineer,  
Asst. Chief, Div. of Ports and Harbors,  
Bureau of Public Works  
Collector of Customs,  
Batangas Collection District

Romeo L. Gonzales

### SINGAPORE

H. V. Hogon

### THAILAND

Tapanavongs Bunnag

Deputy Chief, Engineering Dept.,  
Port Authority of Thailand

Yom Chitrakul

Chief, Transit Sheds Div.,  
Port Authority of Thailand

### VIET-NAM

Nguyen Kiem Quyen

Chief, Operation Subdivision,  
Saigon Port

### ARGENTINE

Carlos Romani

Director, Adjunto de Construcciones de la Direccion Nacional de Construcciones Portuarias y Vias Navegables

### BRAZIL

Sergio Humberto  
Mesquita Miranda

Arther Miranda Ramos

Fauzi Adas



## CHILE

Francisco Brzovic Marusic

Oswaldo Gormaz Balieiro

## MEXICO

Jose Guillermo  
Macdonal Martinez

Julio Pindter Vega

Luis Hernandez Aguilar

## PERU

Javier Velarde Aspillaga

## VENEZUELA

Julio Cesar  
Martinez Gonzalez

## IRAN

M. Hadi Ghavamian

## IRAQ

Edmond Philip Hannawi

## EGYPT

Gamal El Din El Shafey

## SYRIA

Naaman Zein

## TURKEY

M. Ihsan Tezcan

## REP. OF CHINA

Tseng Yung-Shang

Tseng Shoei-Chuang

Wang Wen-Tsu

Ingeniero Zonal Jefe de Obras  
Portuarias de la Zona Sur Con Asi-  
ento de Puerto Montt  
Ingeniero Jefe del Depto. de Estudios  
de la Direccion de Obras Portuarias

Ingeniero Civil,  
Proyectista de las mencionadas obras  
de Toma de Agua Marina en Ro-  
sarito, B. C.  
Jefe del Departamento de Control  
de Obras, Direccion General  
de Obras Maritimas

City Planning Department,  
Alexandria, Va., U.S.A.

Ministerio de Obras Publicas

Technical Deputy Assistant to  
Director General, Port and Naviga-  
tion Organization

Civil Engineer,  
Iraq Ports Administration

Director of Works, Port-Said Harbour

Director of Technical Affairs,  
Latakia Port Company

Port Manager of Samsun

## South American Offices Of New Orleans Port

The Port of New Orleans will establish its newly authorized office for the development of trade with South American countries in Lima, Peru, Richard G. Jones, President of the Board of Commissioners of the Port of New Orleans announced July 13.

H. Gilbert Smith, Latin American Trade Director for the Port, will open the new office early in October, Jones said. Prior to this he will visit Venezuela, Ecuador and Colombia.

Smith formerly was prominently identified with trade and commerce between the United States and Cuba. He was president of W. Harry Smith Agencies, Inc. which, with its predecessor companies, at one time or another represented nearly all of the American steamship companies operating to Cuba and many of the foreign-owned lines. He was a director of the Havana Harbor Association and the Cuban Chamber of Commerce of Cuba as well as vice-president of the American Chamber of Commerce and president of the American Club.

Selection of Lima as a base office for South America was influenced to a large extent by its central location and its importance as an aerial gateway to other important centers as well as to the relative ease of entry and exit.

Smith recently returned from a five-month survey of Latin American countries in the interest of the Port of New Orleans. In 1960 South America accounted for approximately \$353 million dollars or 20 per cent of the port's total trade of about \$1,783 million dollars. It is interesting to note that the 1961 trade with Peru represented 13 per cent of the total 1960 trade with South America.

Regular steamship services between New Orleans and Peruvian ports are maintained by the Chilean Line, Grancolombiana, Gulf & South American Steamship Co., Peruvian State and West Coast Line.

The ports of Mollendo and Mataradi in Peru serve as important points for trans-shipment to Bolivia.

## Oakland Int'l Airport Has New Tower

Traffic control at Metropolitan Oakland International Airport switched to the new 11-story control tower at 4 p.m. Monday, July 16.

The tower thus became the first unit in the \$17.5 million expansion program to open officially.

It is part of a \$5,200,000 terminal complex scheduled for an open house and dedication program on September 15 and 16.

Peter M. Tripp, president of the Board of Port Commissioners, turned a microphone over to T. J. Holmes, Federal Aviation Agency chief controller, to symbolize the tower's opening.

The new control tower cab is 127 feet high and will be used by the FAA controllers for traffic on all existing runways and the new 10,000 foot jet runway when it is opened in September.

The FAA occupies eight floors for equipment and offices.

Equipment includes four surveillance radar sets, which have a range of 60 miles in distance and 25,000 feet in altitude. Precision approach radar will be transferred from the existing tower.

The newest interphone equipment, which permits instant connections within the tower and with military and other commercial airports, as well as the traffic control center at Fremont, has been installed by Pacific Telephone and Telegraph Company.

The FAA controllers in the new tower control traffic to Alameda Naval Air Station and Hayward Airport, as well as east and north-bound departures from San Francisco International, in addition to the Oakland International Airport traffic.

The cost of equipping the new tower is estimated at \$750,000.

## **New Joint Terminal in Los Angeles Harbor**

Three major American flag steamship lines have announced plans for joint utilization of new terminal facilities in Los Angeles Harbor.

American Mail Line, American President Lines, and Pacific Far East Line have petitioned the Federal Maritime Commission for approval of the plan which envisions the formation, by the three lines, of a fourth corporation to operate the terminal.

To be known as Global Marine, Inc., this company would be wholly owned by the three lines and staffed by personnel from them, as well as by sources outside the lines.

The \$16 million terminal is being built by the Los Angeles Harbor Department. Located in San Pedro, it is expected to be the most modern and efficient facility of its kind in the world and will offer to Los Angeles shippers a receiving terminal for nearly all world-wide destinations.

The decision to operate a joint terminal on behalf of AML, APL, and PFEL resulted from an extensive survey conducted by an interline coordinating committee constituted under Federal Maritime Commission approval for the purpose of determining methods of eliminating duplication in non-competitive activities. Under this program, the lines have already effectuated a joint purchasing plan.

Occupancy of the new terminal is scheduled for January 1963.

Pending approval of the petition by the Federal Maritime Commission, executives of the three lines plan meetings with port officials to discuss details of the move. The lines stressed the cooperative nature of the plan, wherein each would be independently serviced by Global Marine and each would maintain its separate competitive identity. The lines indicate an expectation that the program will create considerable financial savings through better utilization of terminal services, reduced duplication, and greater efficiency.

## **Foreign Trade Cargo via Port of New York**

A continuing decline in foreign trade cargo handled in the Port of New York in 1961 poses a challenge to all government and business interests in the New Jersey-New York Port area, according to a statement made May 25 by S. Sloan Colt, Chairman of The Port of New York Authority.

"The increased volume of semi-manufactured and raw cargo materials shipped through competitive ports, and the inland rail freight structure that discriminates against the Port of New York in favor of commerce through competitive ports, makes it imperative for a vigorous and concerted effort on the part of all concerned in order to maintain the Port of New York's preeminent position in world trade," Mr. Colt said.

He noted that according to the Port Authority's Annual Report on Foreign Trade in the Port of New York, the New Jersey-New York Harbor handled 12,994,112 long tons of foreign trade general cargo in 1961. This was 5.4 per cent below the 13,736,545 tons handled in the New York Customs District in 1960, and 0.7 per cent below the 13,091,702 tons handled in 1959. General cargo provides more employment of labor and use of port facilities than does bulk cargo, which is generally handled through mechanically operated and industrially owned terminal facilities.

Comparable volumes for total United States oceanborne export-import general cargo showed an increase of 2.7 per cent to 60,793,809 tons in 1961 from 59,170,441 tons in 1960. New York's share of the national volume of general cargo trade, therefore, declined 1.8 percentage point from 23.2 per cent in 1960 to 21.4 per cent in 1961, continuing the downward trend which began in 1952.

The Port's share of 21.4 per cent in 1961 compares with 23.2 per cent in 1960, 24.7 per cent in 1959, 27.0 per cent in 1958, 24.9 per cent in 1957, 25.9 per cent in 1956, 27.6 per cent in 1955, 28.5 per cent in 1954, 33.0 per cent in 1953 and 33.8 per cent in 1952.

The total tonnage of foreign trade through the New York Customs District, general and bulk

cargo, was 38,733,257 tons in 1961, a decrease of 6 per cent from the 41,214,687 tons in 1960, and a decrease 8.8 per cent from the 42,472,924 tons in 1959. This compares with a decrease of 1.6 per cent for total United States foreign trade tonnage from 273,136,044 tons to 268,637,149 tons. Thus, the Port of New York handled 14.4 per cent of the total national foreign trade tonnage in 1961, as compared with 15.1 per cent in 1960.

"The Port Authority's marine development program at Port Newark, Elizabeth, Hoboken, and Brooklyn are important factors in assuring the modern shipping facilities in this premier port," he continued. "Such development is required to meet the competition of other ports and the additional competition from the St. Lawrence Seaway.

"Important projects such as the proposed World Trade Center, aggressive and continuing promotion of the port's trade and commerce, and new waterfront facilities are all part of the effort to keep New York's commerce at a peak level.

The decrease at New York in bulk cargo movements was accounted for primarily by reduced inbound movements of crude oil and metallic ores. Additional losses occurred through reduced outbound shipments of wheat, petroleum products and foreign aid.

Nationally, decreases occurred in outbound movements of sorghum, soybeans, bituminous and lignite coal, fuel oil, sulphur and foreign aid, and inbound shipments of crude oil, gypsum, iron ore, and inedible molasses. These losses more than offset gains in outbound corn, wheat, anthracite coal, coke, and iron ore, and inbound fuel oil, jet fuel, miscellaneous petroleum products, bauxite and nitrogenous fertilizers.

The value of total oceanborne foreign trade tonnage via the New York-New Jersey Port in 1961 was \$9.4 billion, a decrease of 3.1 per cent compared to 1960. New York's valuation in 1961 represented a 38.1 per cent share of total United States value, a decrease of 1.0 percentage point below the previous year.

# PORT OF NEW YORK AND WORLD TRADE

Four hundred and thirty-eight years ago, in 1524, the bearded Florentine explorer, Giovanni Da Verrazano, piloted his squat-hulled ship into what is now known as the Narrows—the entrance to upper New York Bay from the Atlantic Ocean. This was the only visiting vessel from foreign shores that the Port of New York was to receive until 85 years later when Henry Hudson—captain of the famous “Half Moon”—sailed some distance up the mightily deep-mouthed river which met the sea at the Narrows and which was later named in his honor.

In 1961, vessel activity in the

New York-New Jersey Port was quite a different story. Twenty-six thousand vessels arrived at and departed from this great natural harbor during the year.

Nature has bestowed upon the Port of New York one of the most splendid of her harbors. Provided with many miles of shoreline where ships could berth sheltered from, yet adjacent to, the sea; ice-free waterways throughout the year; and a good climate, all that was left to man was the responsibility and challenge of molding these natural geographic assets into a great port. Men responded to the challenge with enthusiasm

throughout the centuries and today the shipping facilities and services of the great, far-reaching Port of New York, combined with the advantages of a spacious natural harbor, make it foremost among the great ports of the world. Its 650 miles of navigable waterways measured along bulkheads make it by far the largest port in the world.

The harbor and its adjacent region, known as the New York-New Jersey Port District, extends approximately 25 miles in all directions from the Statue of Liberty. This area of 1,500 square miles is the home of 13 million



General view of New York-New Jersey Harbor



The Port of New York showing most of its harbors, bays, inland waterways and rivers.

people, of which more than 3 million—one out of every four—gain their livelihoods directly or indirectly from the Port itself. This vast District was established in 1921 by a treaty between the States of New York and New Jersey, which also created the Port of New York Authority, a bi-state agency designated to develop and operate terminal and transportation facilities in the Port District and to promote and protect its commerce.

#### **Piers and Transportation Facilities**

Today, over 200 piers line the shores of the Port of New York and provide simultaneous berthing for more than 400 ships. Railroad cars from all over North America converge at the Port providing direct service to all of these piers.

Barges, carfloats and other waterborne equipment of the railroads make the transfer of cargo from rail to shipside easy, efficient and economical. Continuously on the move, these small vessels move freight to and from ocean-going carriers no matter where they are docked in the harbor. This lighterage system also makes possible the simultaneous loading and discharging of cargo from both sides of a ship, materially reducing turnaround time.

#### **Warehousing and Other Special Facilities**

The Port of New York's 162 general merchandise warehouses with a capacity of 18,400,000 square feet, 20 cold storage warehouses with a total of 32,893,000 cubic feet, 160 transit sheds with 20,000,000 square feet, 6 public liquid storage terminals with a

capacity of 1,300,000 barrels, one deep water grain elevator with a capacity of 1,800,000 bushels, plus its 310 general cargo vessel berths, 41 specialized and 83 industrial vessel berths represent by far the greatest concentration of such facilities in the United States.

#### **Railroads, Motor Trucks, Highways, Etc.**

Transportation facilities leading to and from a port are an essential adjunct to over-all efficiency of operation. Ten railroads connect the Port of New York with all parts of the United States, Canada and Mexico. Ten thousand registered common carrier motor trucks serve the Port District daily. Four major airports served by 40 airlines connect this aerial gateway with all major cities of the nation and the world, while 170 steamship lines provide unmatched

ed frequency of sailings to just about every port throughout the world. In addition, the Port of New York possesses a complex of superbly developed highways and turnpikes, all of which form vital links in the port's comprehensive transportation system, the finest and most highly developed of its kind in the world. Of equal importance, the port's strategic location in the world's richest metropolitan market has attracted and continues to serve as a stimulus to business and industry.

**Banking, Insurance and Foreign Trade Specialists**

Banking, insurance, export packing and freight forwarding and the myriad of associated services and industries must be plentiful and organized in a port. Since the founding days of the nation, the bi-state Port of New York has

traditionally occupied an undisputed position as the nation's financial center. A vast physical plant, equipped with the most modern machinery that present-day technology has been able to devise, the Port of New York is staffed and operated by persons whose skill and talents are at least the qual of those found at any other port. Year in and year out for the past 150 years, the Port of New York has handled more general cargo than any other American port. During that time, it has developed a superb team of transportation and foreign trade specialists—foreign forwarders, marine insurance experts, longshoremen, export packers—the entire gamut of skilled technicians needed in the intricate business of foreign trade. It is not strange, therefore, that America's greatest port should be recognized as America's most efficient port.

**Some Specifics About The Movement Of Foreign Cargo Through The Port of New York**

The Port of New York, being the Number One port in the nation and perhaps in the world, naturally is the leader in many types of commodities in addition to being the premier passenger port.

Some of the highlights of the movement of foreign cargo through this great port follow. To facilitate analysis of the material, the information has been put in question and answer form.

1. What is the dollar value of New York's oceanborne foreign trade and what is New York's share of the national total?

Value of New York's foreign trade	\$ 9,354,584,200
Value of United States foreign trade	\$24,526,418,500
New York's Per Cent of United States	38.1%



Three Piers recently completed by the Port of New York Authority along the Brooklyn Waterfront have extensive upland areas and wide aprons.

2. What is the value per ton of New York's trade and how does it compare with the national average?

### Redevelopment and New Construction of Marine Facilities In The Port

The greatness of a port is not

	New York	United States
General Cargo Exports—Value	\$4,916,326,200	\$11,160,243,900
—Tonnage	5,731,273	33,461,748
Value Per ton	\$858	\$334

3. What is New York's general cargo tonnage compared to its closest rivals?

Total General Cargo Tonnage	
New York	12,994,112
New Orleans	5,896,494
Galveston	5,748,546
Los Angeles	4,170,181

4. What are New York's leading export and import commodities, measured by the Port's partici-

only measured by its present capabilities, but by the plans and provisions that are made for its future progress. The bi-state port has continued to play a dominant role among the ports of the world not only because its present services and facilities are unparalleled, but because of the constant efforts being made to improve them and to anticipate any demands that might be made in the future.

Principal New York Exports	New York	Per Cent of U.S.
Cotton Manufactures	64,381	56.0
Synthetic Fibers and Manufactures	58,919	55.5
Glass and products	52,759	64.2
Finished Steel Products	374,773	33.3
Electrical Machinery	142,825	78.3
Mine Construction Machinery	148,469	45.9
Machine Tools	124,301	70.9
Office and Printing Machinery	176,314	62.9
Vehicles Except Military	289,153	75.2
Railroad Locomotives, Cars, Parts	59,172	87.0
Medical & Pharmaceutical Preparations	34,392	67.7
Chemical Specialties	297,850	34.0

Principal New York Imports		
Fresh or Frozen Meat	142,109	56.8
Cheese	25,329	64.2
Fresh or Frozen Fruit	32,329	60.8
Nuts and preparations	96,634	73.9
Edible Vegetable Oils & Fats	51,891	61.9
Coffee	663,614	49.5
Spices	49,446	78.8
Inedible Vegetable Oils & Fats	148,374	78.9
Wood Manufactures	56,841	50.9
Crude Zinc Semi-fabricated	41,630	84.9
Electrical Machinery	48,040	57.5

5. What is the status of New York's trade with Japan?

(See Table A in page 13)

6. How important is Japan's trade with New York, measured in dollars and why is it so critical for Japan's balance of payments and Japanese businessmen?

(See Table B in page 13)

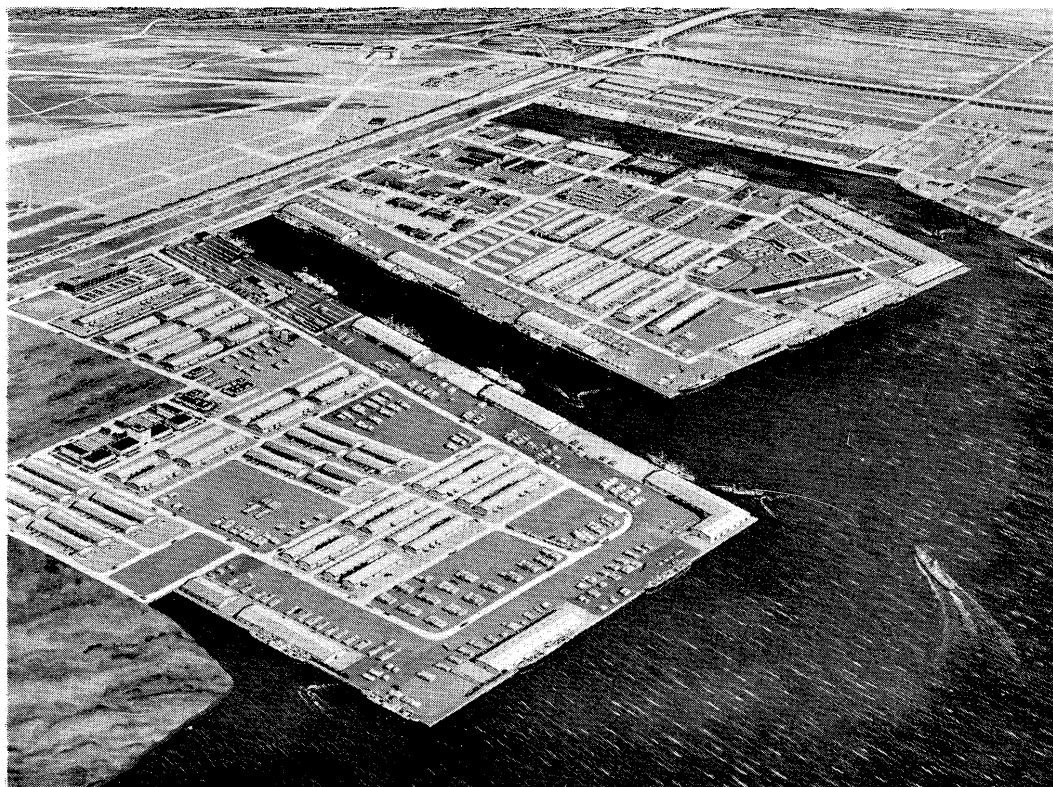
Probably no port area in the United States has already undergone such striking changes in physical appearance as the New York-New Jersey Port, where a gigantic waterfront redevelopment program has resulted in replacing scores of old and inefficient terminals with the world's most modern piers. In spearheading this tremendous waterfront modernization program, the Port of New York Authority

has been joined by the City of New York as well as numerous private interests.

These vast construction projects are illustrative of the tempo which has marked the progress of the Port since the end of World War II. In the 16-year span beginning in 1946, the Port of New York has spent almost five times more on port construction than any other U.S. port. In this period, a total of 62 new general cargo berths have been built—exceeding by far the total number of berths provided by all of New York's principal competitor ports combined.

The largest share of the \$300 million which has been spent so far on the modernization and rehabilitation of the port's marine terminal facilities has been invested by the Port Authority. Since it first assumed operation of its Grain Terminal in the Brooklyn sector of the New York-New Jersey Port in 1944, the bi-state Port agency has expended about \$195 million to date in a massive marine construction program which will ultimately reach \$400 million. This amount excludes a \$270 million World Trade Center, a project which is keyed directly further to improving the Port's ability to handle foreign trade economically and efficiently.

One of the greatest marine terminal projects ever undertaken in the Port of New York is the development by the Port Authority of an entirely new seaport, the Elizabeth-Port Authority Piers adjacent to Port Newark in New Jersey, at a cost of \$150,000,000. Beginning with the dredging of a new 9,000-foot-long channel in 1959 at a cost of \$4,500,000 rapid progress has been made in transforming this former wasteland into one of the world's most modern seaports. On August 15, 1962 the completion of the first of five construction stages at this 703-acre new seaport was marked by the arrival of the first ship at the new piers. Almost the entire first stage has been leased to



A rendering of Port Newark and the Elizabeth Port Authority Piers as they will appear when fully developed in about fifteen (15) years.

(Table A)

	New York	United States	Per Cent U.S.
Exports to Japan—Bulk . . . .	10,156	14,052,929	.1
General Cargo . . . .	1,059,143	10,370,361	10.2
Imports from Japan—Bulk . . . .	1,891	281,016	.7
General Cargo . . . .	412,808	1,774,482	23.3
Total Trade with Japan . . . . .	1,483,998	26,478,788	5.6
Major Imports—Japan to New York			
	Tons		Percentage
Clay Products . . . . .	32,544		44.4%
Tools and Hardware . . . . .	29,711		22.3%
Rubber Manufactures . . . . .	26,351		57.1%
Wood Containers . . . . .	23,350		13.5%
Cotton Manufactures . . . . .	22,068		65.2%
Value of Trade with Japan			
	New York	United States	%
	\$786,027,900	\$2,724,913,600	28.8%
Major Exports—New York to Japan			
	Tons		Percentage
Iron & Steel Scrap . . . . .	860,094		15.6%
Machine Tools . . . . .	34,988		82.0%
Copper Alloys . . . . .	22,748		22.9%
Chemical Specialties . . . . .	19,183		16.4%
Inedible Animal Products . . . . .	17,350		9.2%

(Table B)

	New York	United States	
Value of total exports to Japan . . . .	\$311,805,600	\$1,698,539,900	(18.4%)
Value of total imports from Japan . . . .	474,222,300	1,026,373,700	(46.2%)
Value of General Cargo Exports to Japan . . . .	309,567,800	1,338,934,700	(23.1%)
Value of General Cargo Imports from Japan . . . .	471,209,400	1,008,196,800	(46.7%)

Sea-Land, Inc., a containership operator. The \$27,000,000 first phase of this new marine facility includes five vessel berths, many acres of paved upland, and seven buildings. An 85-acre second phase of development—to be completed in 1965 at a cost of almost \$20,000,000—will provide five additional berths, with associated transit buildings, paved upland and cargo distribution buildings.

When completed, this new marine facility will provide 24 new vessel berths, including 12 conventional shedded berths and 12 open berths supported by 400 acres of transit and open storage area. An important feature at the Elizabeth-Port Authority Piers will be its abundant upland area which will furnish about 5,000,000 square feet of distribution and cargo handling space. This area will be indispensable to the handling of general cargo via containership operations, which are expected to account for at least half of the 5,000,000 tons of cargo estimated to be handled by the new facility annually.

While the Elizabeth project is under way, the Port Authority is also continuing its development program at Port Newark. This 612-acre integrated marine terminal was leased to the Port Authority by the City of Newark in 1948 and presently contains 31 deep-water berths, 18 new or rehabilitated cargo terminal buildings, 6 warehouse buildings and numerous other facilities for the handling of all types of cargo. Seven new vessel berths will be constructed at Port Newark in the future thus enlarging the port's annual cargo capacity from 4,500,000 to 6,000,000 tons. Completion of the Port Newark development program will entail a total investment of \$125 million by the Port Authority. When the entire Newark-Elizabeth project is complete, it will represent an investment of \$275 million, and will cover a land area of 1,300 acres on Newark Bay with a capacity to handle 40 per cent of the

total cargo of the entire Port of New York. Because of the availability of ample upland area, Port Newark has become a leader in the handling of containerized cargo, lumber, automobiles and similar items which require large open areas for processing and storage.

On the New York side of the bi-state port, the Port Authority is approaching the final stages of construction in its huge waterfront development at the Brooklyn-Port Authority Piers. Here eight great new piers have already been built and are in operation. Four additional piers are now under construction, and a thirteenth pier has been authorized. Almost \$70 million has been expended on this facility under a \$95 million program to rehabilitate the two-mile section of waterfront property in the Brooklyn region of the Port.

This seven-year program for the redevelopment of the Brooklyn-Port Authority Piers will create 13 new single-story, wide, steel and concrete structures, fully fire resistant and fire protected to replace the 25 narrow and obsolete piers existing at the time the bi-state agency purchased the two-mile-long property in 1956. Altogether, there will be 27 modern, efficient vessel berths, each with about 90,000 square feet of shedded space, to replace 44 antiquated berths, and each will be extensively supported by well-lighted, enclosed and paved upland cargo areas.

Experience with these modern new shipping berths and supporting facilities at Brooklyn and Port Newark has overwhelmingly confirmed their value from the standpoint of both shipper and carrier.



New York's skyline serves as a background for an evening shot of Brooklyn-Port Authority Pier 7 leased to N.Y.K. Line.





The Elizabeth Port Authority Piers (foreground) and Port Newark (background) as they appeared in early summer, 1962.

The new piers are especially qualified for the speedy handling of large cargo containers, some as long as 35 feet, carried by trucks and rail flat cars to shipside for loading. With cargo containerization rapidly becoming one of the most important developments in the handling of oceanborne shipments in the United States, the Port of New York, as "Container Capital of the United States", offers a greater variety of container services than any other American seaport. The twin seaports, Port Newark and the Elizabeth-Port Authority Piers on the Jersey side of the New York-New Jersey port, are in the forefront as the nation's leading seaports in the handling of containerized cargo.

#### **A Word or Two About Planning and The Engineering Aspect of Building Marine Facilities at The Port of New York**

When Lyle King, Director of Marine Terminals for the Port of New York Authority, joined that bi-state agency some fifteen years ago, one of his first observations of the operation of an "old-type" pier sparked off an innovation in the type of pier to be built in the future.

What Mr. King learned was that when just one ship was berthed at one of those "old piers", which were about 800 feet long and often less than 150 feet wide, there was fairly good productivity in tons of cargo handled per hour by each gang of longshoremen.

"But when two ships were berthed there, it fell 30 or 40 per cent, and with three ships it dropped 70 to 75 per cent." The reason was that on the old piers, density of activity meant that longshoremen, drivers of fork-lift trucks, checkers, cargo-sorters and trucks began getting in each other's way. Everything slowed down.

To end this kind of congestion, so costly in time and money, Mr. King arrived at what is today his magic number in pier design—90,000 square feet. Every pier, he believes, should be planned and built so that at least this much space will be available inside the transit shed for every vessel berth.

This is most readily done in quay-type wharfs, such as those at Port Newark or the new Elizabeth-Port Authority Piers.

But if the finger-pier design is followed, the pier should be quite wide, 300 to 350 feet or even more, so that one new or rebuilt pier has space equal to three of the old. Some of the piers the Port Authority is building today have a U-shaped roadway within the pier shed to accommodate a continuous stream of trucks that move directly to the point where cargo is to be deposited or picked up.

In addition, the new piers that the Port Authority has been building have wide aprons, replacing the incredibly narrow string-pieces on the old piers, which made it necessary to dangle cargo in front on a door and then pull it in with hooks. Other features are good paving and foundation that increase the cargo load capacity; plastic skylights which give the inside of the shed the appearance of broad daylight without a bulb being turned on; and paved upland "farm" areas for parking of trucks.

All of these characteristics have been proven to be economically advantageous. The shipper effects savings in truck overtime, longshoremen's labor costs are reduced, operations in the pier shed and upland areas are much more efficient, turnaround time of ships is greatly reduced, etc.



Artist's concept of World Trade Center-Hudson and Manhattan terminal to be constructed by The Port of New York Authority on a 15 acre site in the heart of lower Manhattan's famed business and commercial district. The Center, to be developed at a cost of approximately \$270 million, will be an integrated facility of commerce which will bring together government agencies and business services involved in international commerce. Rehabilitation of the Hudson and Manhattan Railroad, a vital passenger link between New York and New Jersey, will require an expenditure by the Port Authority of some \$150 million.

A typical pier shed in the "new-type" pier is a fireproof structure consisting of a structural steel framework covered with aluminum roofing and siding. It includes an office area, truck backup loading platforms at the inshore face of the pier and is architecturally pleasing.

Another interesting innovation by the Port Authority is the construction of Cargo Distribution Buildings at its New Jersey facilities where extremely large upland areas provide space for supporting facilities. These buildings are for the purpose of supporting the transit areas by providing space for the distribution and storage of the transit commodities.

The buildings have a standard width of 160 feet and are built in units or sections of 26,000 square feet, depending on the length of the site. As a rule, each building is four, five or six sections long. The buildings are arranged in pairs with a common rail area between them. The opposite sides of the buildings are paved to provide adequate parking and truck handling areas.

They are similar in design and construction to the transit shed buildings—which are built at the quay-type wharfs—except that the column spacing is reduced to 20 by 40-foot bays since cargo does not move through this type of building with the same turnover as transit sheds.

A number of these buildings have been constructed at Port Newark and the complex has come to be known as a "Distribution City".

These are but a few of the answers to the many requirements to be considered when planning and building an up-to-date, efficient port. Many technological advances in ship design, cargo handling, changing transportation patterns, etc. enter into provisions for the future. The Port of New York is doing whatever is necessary to provide for current and future requirements.

#### **Domestic and Overseas Trade Development Offices**

The Port Authority, in fulfilling the terms of the treaty under which it was established, has not only undertaken to provide the

New York-New Jersey Port with the world's finest terminal and transportation facilities, but through its active role in protecting and promoting the commerce of the port has engineered one of the finest service organizations to be found anywhere.

Through the medium of domestic and overseas Port of New York Trade Development Offices which are the responsibility of its World Trade Department, the Port Authority is providing a unique contribution—not only to the welfare of the port—but to foreign traders throughout the world. In the United States these offices are located in New York, Chicago, Cleveland, Pittsburgh and Washington, D.C.; those located overseas are in Rio de Janeiro, Brazil; London, England; Zurich, Switzerland; and San Juan, Puerto Rico.

These Trade Development Offices have proven of incalculable value to their users. In many cases, they have served to build up an immense amount of good will through their ability to furnish material or information which would be difficult or virtually impossible to obtain through other commercial or governmental sources. These officers have also been instrumental in providing a continuous reminder to foreign trade shipping circles of the merit of moving cargo via the Port of New York.

Activities of these field offices, both domestic and overseas, are closely coordinated by the bi-state agency's Port Commerce component to provide up-to-date information on any matter connected with the Port's trade to shippers, forwarders, exporters and importers. The managers of these offices, skilled port and transportation specialists, have had years of training and experience equipping them to act as consultants in analyzing problems of routing freight or to offer advice and information concerning over-all transportation costs, handling and storage facilities, freight forwarder practices, export packing techniques, in fact, on the entire range of activities involving the most effective and economic utilization of the bi-state port's facilities and services. The trade development services offered by America's greatest port

are not restricted to two or three foreign countries within the immediate vicinity of its overseas offices, but reach all of Western Europe and Latin America in addition to 32 states. In addition, one of these trade development specialists recently completed an extensive visit to Japan, arrangements with the First National City Bank of New York also provides service to innumerable shipping people in all parts of the world.

#### **Vessel Activity**

One of the primary advantages of the port is the fact that the Port of New York provides more direct and frequent service to any part of the world than any other port in America. Over 170 steamship companies provide unmatched frequency of sailings. In 1961, more than 26,000 deep-water vessels arrived at and departed from the New York-New Jersey Port, a total far exceeding that of any other United States port. This impressive total of vessel movements, when broken down, represents one every 20 minutes, around the clock, around the calendar. This is important to the shipper for, if cargo misses one ship, another will follow to the same port, sometimes within hours.

In addition, over 90% of the vessels leaving New York move directly to foreign ports with no intermediate stop-overs at any other United States port. A great many of the largest and swiftest passenger and cargo liners serve the Port of New York exclusively—a primary consideration to the shipper—for time is money in the shipment of goods from origin to destination.

#### **Now, A World Trade Center for The Port Of New York**

The appreciation of the part played by international commerce in the maintenance of mutual prosperity of nations and the effect of such prosperity in unifying all free nations of the world has

resulted in the formulation of many imaginative plans at the Port of New York.

Paramount among these is the construction of a gigantic World Trade Center in the heart of New York's famed financial and shipping district. To be built by the Port of New York Authority, the \$270 million World Trade Center will bring together, in the most modern and efficient facilities, the basic government and business machinery vital to the flow of international commerce through the New York-New Jersey Port.

One of the principal functions of the World Trade Center would be to bring together into efficient working relationships the government customs agencies, importers, exporters, customs brokers, freight forwarders, foreign consulates, foreign and American trade associations and chambers of commerce, international finance and insurance firms and the many other organizations involved in world trade, thus permitting their operations to be even more effective and economical. Extensive sales exhibit areas will be available for the viewing of products from all corners of the world. Of special interest to the visiting businessman will be the World Trade Information Service, which will provide ready information on trade procedures and opportunities in international commerce.

Plans call for the construction of a complex of buildings encompassing nine million square feet of floor area located on a 15-acre site.

A permanent centralized exhibit area will be housed in a towering World Trade Mart, which will be the headquarters of American and foreign manufacturers, exporters, combination export managers, government purchasing agencies and other agencies engaged in buying and selling. Organizations, promoting or developing trade, foreign consulates or their commercial sections, foreign chambers of commerce, trade associations and other similar groups will also be located in the World Trade Mart.

A World Trade Information Service in the lobby of the Mart will provide international businessmen with information on prices, products and opportunities in the field of world trade. The Information Service will include a World Trade Library of federal, state, city and Port Authority information bureaus. Information Service personnel would be trained to answer inquiries ranging from the elementary to the complex—from where a certain firm is located to the potential number of buyers for refrigerators in a lesser developed nation.

The Information Service would be all-inclusive, a clearing house for international trade information that would centralize fragmented sources improving the availability of existing services rather than competing with established informational programs.

On top floors of the World Trade Mart, preliminary plans call for a hotel of about 350 rooms, many of which will offer a superb vista of New York Harbor and beyond to the Atlantic.

A World Commerce Exchange will house customs personnel and other United States Government agencies directly concerned with the administrative processing of export-import freight through the Port of New York. This building will also accommodate the offices of freight carriers, customs brokers, forwarders and commodity brokers of the port—in total, providing an unprecedented concentration of agencies so vital to the effective followup of sales transactions.

Current plans call for a third building that will provide convenient office space for other important ancillary services—marine insurance, foreign departments of United States banks and branches of banks from other nations, management consultants, publications, advertising and public relations firms—all in the international trade field.

The west side site for the Center, adjacent to the traditional core of world trade activity in lower Manhattan, which today serves most of the international commerce handled on both the New York and New Jersey sides of the harbor, is ideally situated to

## Sr. Lawrence Seaway Bridge

When the new North Channel Bridge and related facilities are opened to traffic, the operations of The Cornwall International Bridge Company, Limited, which has been operating a highway toll bridge across the St. Lawrence River between Cornwall, Ontario, and Roosevelttown, New York, since 1934, will be carried on by the Seaway entities, it was jointly announced by Mr. R. J. Rankin, President of The St. Lawrence Seaway Authority and Mr. Joseph H. McCann, Administrator of the Saint Lawrence Seaway Development Corporation. Spokesmen for the seaway entities have stated, however, that this operational change (or change in operations) will not affect the users of the river crossing at Cornwall-Roosevelt town since the operations will be continued, with the new facilities, by The St. Lawrence Seaway Authority in coordination with the Seaway Development Corporation and in accordance with presently existing conditions. No change in the toll rate is contemplated.

Before the construction of the St. Lawrence Seaway, the Bridge Company used the railroad bridge of the New York Central Railway under a lease from the railway. In 1956, the seaway entities in Canada and in the United States purchased the railroad bridge over which the highway toll business was operated. In the following year the entities purchased the shares of the Bridge Company which continued to operate the highway crossing.

The opening of the new North Channel Bridge scheduled for July 3, will complete the replacement of the installations over which the highway crossing was previously operated since the new South Channel Bridge was opened in 1958.

achieve the stated objectives of the World Trade Center. The Center, by amalgamating the participating segments of the port's international trade community, will be both a constructive symbol of the port's leadership and of utmost practical benefit to shippers of America and the world.

## Reactor Vessel from New Orleans

The largest atomic component ever shipped from the United States, a 236-ton pressure vessel for Italy's \$64 million Enrico Fermi power project, left New Orleans recently aboard the Creole Line motor ship "Monbaldo."

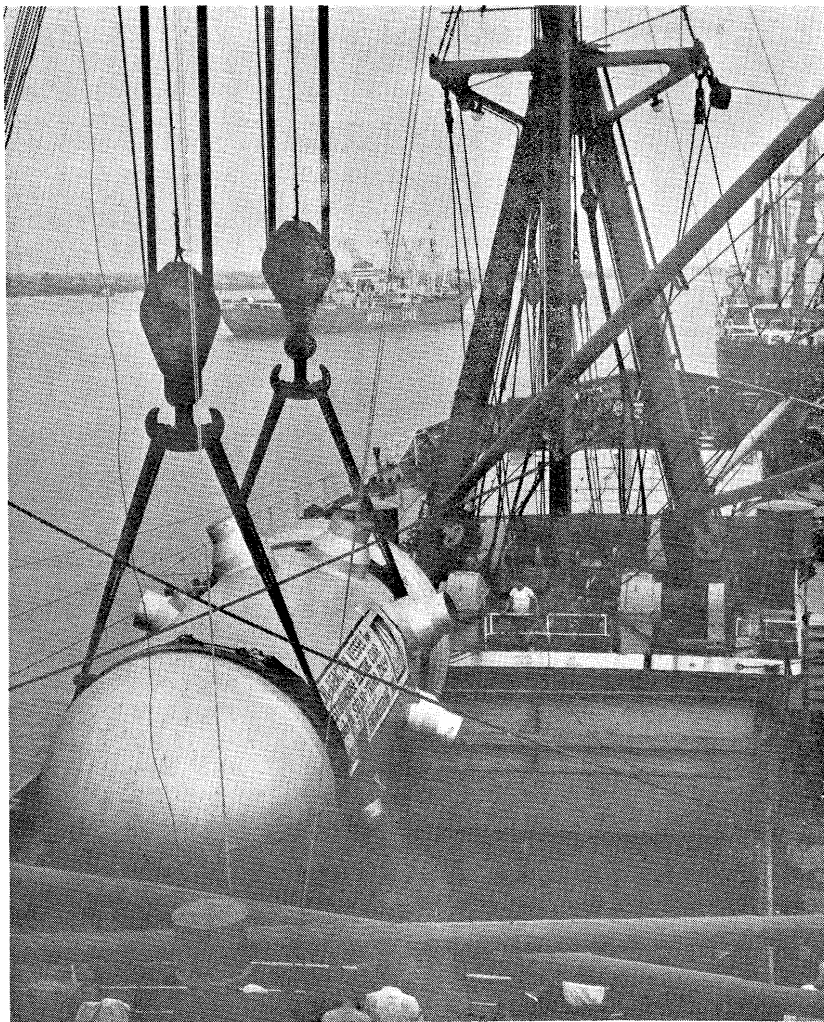
The 39-foot stainless steel-clad unit is a key element in the 225,000-kilowatt nuclear power plant being supplied by Westinghouse Electric International Company to Societa Eletttronucleare Italiana (Selni), a company formed by leading Italian utilities to provide electrical energy to Italy's northern industrial region. The pressure vessel was built by Combustion Engineering Company at its plant in Chattanooga, Tenn.

Forwarders for the whole project are Francesco Parisi (USA) Inc., of New York, represented by S. P. Fredericks. Representing the Creole Shipping Lines was Texas Transport and Terminal Company, while all movements of the heavy lifting project in port were handled by T. Smith and Son, Inc.

Too large and heavy for overland movement, the reactor vessel traveled most of the distance via barge which carried both the vessel and its multi-wheeled trailer up the Tennessee River from Chattanooga to the Ohio River and then down the Mississippi to New Orleans. Twin derricks, barge-mounted and lashed together, moved the vessel over the ship's side and into a forward hold a matter of minutes, where it was set down on a bed of heavy beams. Following loading the vessel was bolted to the ship to prevent any possibility of shifting while the ship is underway.

The apparatus is destined for Venice, where it will be floated by barge across the country on the Po River to Trino, in the vicinity of Milan and Genoa. Because of its weight it must be transported on the river during the spring flood season.

The pressure vessel is the most important single unit in \$4 million worth of apparatus being shipped via New Orleans to the Italian project, largest private-enterprise atomic project in Europe, accord-



Ever wonder what 236 tons looks like? Here it is in one piece of cargo which was exported from New Orleans recently. This is a pressure vessel, destined to contain the nuclear core which will power a 225,000 kilowatt electric power plant in northern Italy. The stainless steel-clad vessel compares in weight with diesel railroad engines, giant trucks and even yachts. It was supplied by Westinghouse Electric International to Societa Eletttronucleare Italiana (Selni), a company formed by leading Italian utilities to provide electrical energy to Italy's industrial region. It was built by Combustion Engineering Company at Chattanooga, Tenn., shipped to New Orleans by barge and loaded aboard the Creole Line Italian freighter "Monbaldo," via derricks. The forwarder was Francesco Parisi (USA) Inc., of New York and ship's agents were Texas Transport and Terminal Company. T. Smith and Son, Stevedores, did the loading.

ing to Jose de Cubas, executive vice president of Westinghouse International.

"Through New Orleans, products will be supplied by industry from Pennsylvania, Ohio and Wisconsin as well as from the South and the entire inland region," he added. "The project represents some \$34 million in apparatus, materials and services from the United States, providing employment throughout the country."

Financing for the materials and services from the United States is being provided by the Export-Import Bank of Washington. Nuclear equipment and design is being furnished by Westinghouse under a

prime contract, while other electrical and mechanical equipment is being built in Italy. Gibbs and Hill, New York, are engineering the project in cooperation with the Selni technical staff.

"The Enrico Fermi project is an outstanding example of cooperation between United States and Italian scientists and engineers," said Dr. G. Castelli, technical director of Selni. "Like northern Italy, the American South and other regions of the United States are making progress in atomic power, and technical advances made on one project contribute to atomic developments in other parts of the free world."

# Public Authority in “Port of Private Enterprises”

By Ir. F. Posthuma, Managing Director

Dr. C. G. van Leeuwen, Director of Economic Affairs  
Rotterdam Municipal Port Administration

The Port of Rotterdam is often referred to, at home and abroad, as the ‘Port of Private Enterprise’. This name has been given to Rotterdam, in the world of commerce and shipping, not only because it reflects the actual position and reputation, but as it also expresses its dynamic expansion before and since World War II.

This name does not alter the fact that government authority, at both national and municipal levels, has a comprehensive task, also in the field of development, carried out in cooperation with private enterprise.

One will readily appreciate that, although their specific tasks differ, both government and private enterprise work hand in hand towards a common goal—the welfare of the Port as a mainstay of the Dutch economy, and a centre of world trade.

The relationship between public authority and private enterprise may be most clearly expressed in this short sentence: By placing the harbor facilities at the disposal of private enterprise and taking care of future development, the public authority provides ‘the tools to do the job’!

## The Task of the State

The fact that the port is exceptionally well situated, economically and geographically, at the estuary of the most important West European rivers, the Rhine and the Meuse, with direct connections with the internal canal systems, clearly indicates the important and, indeed, imperative role played by the State. This estuary is of great importance not only for transport and commerce, but also because of its influence on internal water-levels. The sea—eternal friend and foe of the Dutch people

—penetrates into the country twice daily, damming up the water which flows down from the Swiss, German and French mountains.

The area on the north bank along the New Waterway is the most densely populated part of Holland. This area not only has to be protected from this tidal water, but, at the same time, is largely dependent on this very same river for its water for domestic use, not to mention its agriculture and horticultural requirements.

It is obvious, therefore, that the State is responsible for everything concerning the river itself and its banks. The river is owned and controlled by the State. From a traffic point of view, this means that the State ensures continuous navigability, which, firstly, includes maintenance and extension of the depth of the fairway. The Municipality of Rotterdam, however, bears one third of the costs of improvements still being carried out; mainly deepening to accommodate very large ships. Apart from this technical navigability, however, there is what one might call the actual navigability, the assurance of safe navigation at all times. This stretch of the river is controlled by a State Harbour-Master, who enforces the State regulations.

Pilotage, buoys and beacons, and police duties on the New Waterway are provided by the State. Although it is not compulsory to take on a Pilot on the New Waterway, pilots-dues have to be paid; except in the instances when no pilot is available.

## Radar

A most important task of the Pilotage Service is linked with the chain of shore-based radar posts which contribute to safe navigation during poor visibility between the Hook of Holland and the har-

bour area. The radar service is a joint undertaking by the State, the Port of Rotterdam and private concerns, and costs for this service are borne jointly by them.

Collection of import duties and clearance of in-and outgoing ships is another, extremely important aspect of the State task. For this purpose Rotterdam employs a system based on harmonious cooperation between the port authority and the private companies, which, in practice, makes Rotterdam virtually “freer than a free port” although it is not a free port in the real sense of the word.

## Freeport

It would be going too far to consider more closely the ‘free port facilities’ offered by Rotterdam within the scope of this article. We would mention, however, the Vrij-Entrepôt (Free Bonded Warehouse) maintained by the Municipality of Rotterdam. These warehouses are considered as being extraterritorial by the Customs. In addition, a large number of private warehouses and storage depots are permitted to function as ‘private’ or as ‘fictitious’ bonded warehouses, whilst dutiable goods can also be stored in many sheds on the quayside under Customs supervision and transport of such goods from one part of the port to another can be carried out quickly and smoothly. This entire system is based on the realisation that transport and traffic must experience the least possible hindrance from the State’s Customs system.

## Cooperation

Another example of good cooperation is the collection of harbour-dues. The State Collector of Import Duties and Excise, who is, officially, already concerned with all the incoming and outgoing ocean-going ships, also collects the harbour-dues levied by the Rotterdam Municipality.

The Dutch railways are not state-controlled but run by a limited liability company, the shares of which are actually in the hands of the State, and managed in accordance with normal commercial practice. Agreements have been concluded between the Rotterdam Municipality and the Netherlands Railways Ltd., regarding the construction and exploitation of rail-

ways in the port area. Under these agreements, exploitation is in the hands of the Netherlands Railways.

### **Task of the Municipality**

The Municipal task in the harbour is predominantly administrative. The Rotterdam harbour complex is, in fact, a municipal port, i.e. all the water, the sites and the quays are owned by the Municipality and controlled by same. There are a few exceptions, such as shipbuilding yards, industrial sites and railway yards. Special mention must be made of the Botlek and Europoort (Gateway to Europe) areas, which are situated on the territory of other municipalities, but are operated—for the time being—on the basis of private undertakings by the Rotterdam Municipality, such areas being its private property.

The actual administration of the port is in the hands of the Rotterdam Municipal Port Administration, headed by a Managing Director who is appointed by the City Council and who handles matters concerning everyday affairs.

With regard to other matters, he holds contact with that member of the Board of Mayor and Aldermen—at present the Mayor—concerned with port management. This member of the Board is assisted in important matters by the advisory committee elected from and appointed by members of the City Council and other citizens, of which he is chairman. These matters are then subject to the judgement of the Board of Mayor and Aldermen, and, if necessary, put before the City Council as a whole.

### **Revenues**

The revenues received by the port management are, amongst others, the harbour-dues for sea-going and river vessels, quay-dues, pilotage and bridge-dues, dock-dues, ferry rates, rents from municipal cranes, the proceeds of letting out wharves, sheds, etc. On the other hand, the principal costs are for administration and upkeep of all Municipal property in the port, the maintenance of installed equipment provided, plus interest on invested capital and depreciation. Moreover, there is the cost of upkeep of the pavement of a number

of streets in the harbour area, the cost of cleaning and lighting them, free supply of drinking-water to river vessels, etc. Any surplus or deficit made by the port management is for the account of the Municipality in its entirety.

### **Facilities**

Setting aside the Municipal task of providing pilotage, the police and safety measures in the harbour and considering especially the direct contacts between the Port Management, as exponent of the public authority, and private concerns, we must first mention the provision of harbour facilities.

The Municipal Port Administration handles the letting out of the Municipal wharves, which is usually done on long lease terms, ranging from 25 to 75 years, and also the renting of sites in the immediate vicinity of the harbour basins. The decisions in these matters can only be taken by the City Council. The equipment and buildings required on these sites are provided by private enterprises. In order to ensure permanent berthing alongside these sites, the lessees of wharves have to obtain a permit, for which quay-dues must be paid.

### **Private enterprises**

The government—in this case the Municipality of Rotterdam—does not partake, in any form, in the actual economic port traffic, such as the handling of ships and cargoes, stevedoring, transport, brokerage, insurance, commerce, etc. This field has been exclusively delegated to private enterprises. Although the Municipality owns part of the crane-equipped wharves, sheds and other cranes, including some dry docks, here again, although manned by Port personnel, it does not 'operate' them, but they are let to private concerns. Their mobile cranes actually serve as additional equipment to the lessees. The exploitation of the warehouses belonging to the above-mentioned Vrij-Entrepôt, follows the same pattern. The Municipality has nothing to do with the goods stored in them. The facilities are offered at a certain price.

### **Future development**

Today, with international atten-

tion focused on Botlek and Europoort, on industrialisation, the laying out of the Eemhaven for the transshipment of general cargo, on the construction of general cargo piers in the Waalhaven—originally only intended for bulk goods—an item high on the Municipal Port Administration agenda is the designing of extension and improvement plans and the presentation of same to the City Council. When accepted, these plans will be executed by the Municipal Works Department. This task requires a very close contact with private industry's strongly dynamic needs, but above all, a constant observation of the structural changes in world trade, transportation and industrial development. Because of the inevitable time-lag of excavating and building projects, an almost visionary anticipation of future requirements is needed. It would be unwise, even unacceptable, on the part of the government—be it Municipality or State—if it confined itself to an adaptation to current needs of a large port. This can only lead for the port, but also for the fulfilment of its function of bringing together producer and consumer. Just as earlier generations of administrators realised the consequences of large-scale industrialisation of the hinterland, so must the present generation build the port of tomorrow and place it at the disposal of international trade and transport.

### **Economical Climate**

That the 'ways and means' of government in the port have been dwelt upon so extensively—and yet are outlined only summarily—has been done purposely in order to give some idea of the 'climate' in which private industries have to work. Obviously the specific situation in Rotterdam has numerous and far-reaching consequences. The real prosperity of the port, with its record traffic figures, and record transshipment of goods, the extensive interest for harbour and industry sites, both from home and abroad, alongside the general trade movement, is only partly and not always directly the result of the Port Administration. Private industry is the decisive factor, they must find the opportunities for expansion.

## **Intermediary**

Of the far-reaching consequences, we will only mention one and that one which is connected with the typical manner in which services in the port are rendered, particularly in the commercial sense. The Rotterdam Municipality's conception of the port is not intended to reflect credit upon itself, but it can claim the right of existence from the services rendered as a result of their intermediary.

The costs incurred by every user, of any port, are in effect a reimbursement to the port for services used (i.e. quay-dues) and similarly, payment has to be made for the handling of cargo and ships (transshipment, stowage, transport, storage, repairs, etc.). In Rotterdam, only the first-mentioned costs are officially determined by the government. The actual 'local charges' whether or not decided by the government, are not fixed prices of a monopolistic nature, but are the outcome of free competition between private enterprises.

## **Complete freedom**

Rotterdam industries enjoy complete freedom from the public authority, which, neither directly or indirectly, takes part in the economic traffic. This freedom and the confidence the government gives in the fulfilment of its direct task (amongst other things, with respect to Customs regulations), accounts for the fact that Rotterdam, in spite of its extensive and responsible government task, is called the 'Port of Private Enterprise'.

When taking stock of the practical results the Port has achieved with regard to goods traffic, an undoubtedly satisfactory development can be seen.

## **National Industrialization Changed Port Pattern**

This development can only properly be judged by going back to the situation before the Second World War. The Netherlands was, at this time, poorly industrialised and had, therefore, a relatively low level of exported industrial finished products. The situation in Germany, however, was quite different.

## **'Hinterland'**

Industrialisation of the hinterland was far more advanced and as Rotterdam was—and is—the nearest situated port for the highly industrialised Ruhr area, it is small wonder that the difference in the economic structure of Germany and The Netherlands found expression in the picture of the Rotterdam Port traffic. Of the total amount of traffic via Rotterdam in the last few prewar years—approximately 40 million tons of 1000 kg per year—(accounting for the fact that Rotterdam was then Europe's second port after London) no less than 75% was transit traffic and only 25% or approximately 10 million tons, was traffic destined for or originating from the Dutch hinterland.

This situation has now radically changed. Transit traffic has, after a sharp decline in the early postwar years, gradually increased again to prewar levels of approximately 30 million tons, and, since 1960, has even exceeded this figure.

Just as transit traffic has made a good recovery, and is continually extending, national traffic has experienced a tumultuous development. It has increased from about 10 million tons in 1938 to over 50 million tons in 1960 and now comprises 60% of the total sea-going-traffic figures of Rotterdam. The doubling of the total traffic figures that has occurred in the Rotterdam Port, between 1938 and 1960 (now making Rotterdam Europe's largest port) is mainly the result of the increase in national traffic.

## **Foreign companies**

What is the reason for this radical change? The cause originates from the great changes in the economic pattern of postwar Holland. The great density of population (approx. 340 inhabitants per square kilometer) and the immense increase of the population (with a birth surplus of 13 to 14 per 1000 inhabitants; the excess of births in the Netherlands is the highest in Europe), forced the Netherlands, in order to assure the future generation of work and a good standard of living, to vigorous industrialisation exertion. These efforts have large-

ly met with success; in the course of some 20 years, the Dutch have succeeded in making an industrialised nation out of a mainly agricultural country. The stable labour situation and the relatively low standard of living have been used to good advantage. These attractive factors have induced many foreign companies, independently or in combination with Dutch enterprises, to establish themselves here.

## **Fivfold Increase**

Industrialisation not only provides employment and prosperity but also creates traffic, both of raw materials and of finished products and the fivefold increase of the national traffic in the Rotterdam Port is an illustration of the national industrialisation success. Industrialisation also took place in an important part of the Rotterdam harbour area itself, which as it were, brought part of the hinterland nearer to the Port. The considerable importance industrialisation in the harbour area means to a port, is referred to later in this article.

Whilst the increased amount of traffic and the proportion between national and transit traffic give a considerable postwar change in favour of the Rotterdam Port, the prewar picture has been conserved in another respect. At present, as well as before the war, the arrival of goods from abroad was two or three times larger than the discharge of goods overseas. This is an occurrence met in practically all West European ports (with the exception of Antwerp), caused by the fact that Western Europe is very short of raw materials and foodstuffs and, consequently, because of the ever-increasing population and prosperity, must import these items. There is, of course, compensation in the considerable export of industrial products and refined agricultural products, but measured in quantities, the import of raw materials will always remain dominant. This situation has to be taken into account in a port and it has to adapt itself to it.



In 1960, Rotterdam Port handled 83.4 million tons of goods. In 1961 this figure was 90.14 million tons. Here is a detailed survey of how this 'goods-parcel' is made up.

### **Oil**

The transport of mineral oils amounted to about 47 million tons in 1961, more than half the total amount of traffic. The presence of three refineries in the Rotterdam Port area (Shell, Caltex and Esso), and the pipeline connection Rotterdam/Europoort-Ruhr area are the principal reasons for this transport. The announcement by Gulf Oil of their intention to establish a refinery in Europoort is a welcome reinforcement of Rotterdam's position as Europe's most important oil centre.

Of these 47 million tons, about 25.8 million tons was imported crude oil from overseas, 80% of which coming from the Middle East.

Moreover, 8.5 million tons of refined oil was imported and 12.6 million tons of refined oil was shipped (including 3 million tons of bunker oil), and was almost entirely produced by the three aforementioned refineries. This relatively large amount of shipping is a characteristic of the Dutch refineries, aiming their production to a large extent to export overseas, in contrary to the German refineries, who, for the greater part, concentrate on home consumption and export, even via the German seaports, little abroad. This fact shows clearly one of the advantages of a refinery being established in the neighbourhood of a large seaport.

### **Pipelines**

The pipeline from Rotterdam/Europoort to the Ruhr area, at present transports 6 million tons of crude oil per year. The present capacity amounts to 8 million tons. This capacity, by the introduction of new pumping-stations, can be extended to 20 million tons per year.

The Rotterdam-Rhine pipeline is not the only crude oil pipeline in Europe. The pipeline-connection between Wilhelmshaven and the Ruhr area has been in use for several years now. In 1960 it

transported approximately 10 million tons. A number of pipelines are under construction, the most important of which will run from Marseilles to Strassbourg and the Southern German area. In some quarters, the question has been raised as to whether this pipeline will not result in a serious setback in transportation of oil from Rotterdam. We are of the opinion, however, that the result will not be detrimental to Rotterdam's interests, for the following reasons:

a. The port of Lavera, near Marseilles, the starting-point of this pipeline, is not equipped to receive very large tankers.

b. The arrival of crude oil for the refineries in the Ruhr area, now being served by the Rotterdam-Rhine pipeline, will most probably remain permanently cheaper via Rotterdam, provided that transport is carried out by very large units—tankers of 65,000 tons or over.

c. The greater part of the Rotterdam oil transport is destined for the refineries in its own harbour area. These refineries will continue to employ Rotterdam Port for their transports. The oil-harbours in Rotterdam, notably Europoort, will be ready to receive tankers up to 85,000 tons dwt. within a few months and within a few years the very largest ships of 100,000 tons and over will be able to berth here.

### **General Cargo**

After oil transport, the general cargo traffic is the most important traffic item regarding amounts handled in Rotterdam. This traffic amounted to 14 million tons in 1960 and to 14½ million tons in 1961. It is desired to draw attention to this fact as, often, opinion is expressed that Rotterdam is a typical bulk cargo port and that general cargo does not play an important role here. This is by no means true. Rotterdam is not only by far the most important general cargo port of the Netherlands, but is trailing only slightly behind Antwerp, which is always looked upon as the largest general cargo port.

The increase of general cargo traffic is accompanied by—and here is a question of interaction—

an increase in the number of regular liner services calling at Rotterdam. In fact, Rotterdam can rightly claim to be the foremost liner port of the West European continental ports, with about 290 regular liner services totaling 12,000 sailings per year.

### **Ores**

The transport of ore is only a little less than that of the general cargo traffic. It amounted to about 13 million tons in 1961 and to 13½ million tons in 1961. For a long time, the postwar ore traffic has been on a lower level than the prewar, because nearly the whole ore transport via Rotterdam was destined to Germany and before the war was used in large quantities by the German armaments industry. In 1938, 11 million tons of this ore was delivered via Rotterdam.

After the war, a considerable decrease was made in this transport and the prewar levels had not been attained up to and including 1959. In 1960, however, there was a striking increase and the prewar levels have now been amply surpassed, and the upward trend is continuing steadily.

### **Grains**

For some time now, Rotterdam has ranked as the major grain port in Europe. Grain traffic is a very complicated affair as the import in Europe depends on many factors, such as crop results in the various parts of the world, price differences on world markets, etc., resulting in great changes in the traffic of grain every year. 1959 was a peak year for Rotterdam, with a transport of 6 million tons. 1960 showed a lower level and a further decline was general in 1961 in all West European ports, except Amsterdam and Emden. For most of these ports, the decline was very substantial. This indicates that the total grain imported by Europe in 1961 was considerably smaller than in the preceding year.

It is not entirely clear whether the formation of the E.E.C. has influenced this development as this Organisation does show a strong leaning towards autocracy in the field of grains.

## Coal

The transport of coal in Rotterdam has shown a rather violent course. Transports amounted to about 11 million tons in 1938, mainly export overseas of German coal. In the '50's, this picture changed drastically. The export of German coal dropped considerably and was replaced by large imports of American coal, both by the Netherlands and Germany.

The total figures of coal transports via Rotterdam reached 16 million tons in the years 1956 and 1957. This increase was followed by a heavy decline, however, when the European coal crises arose, which, within a few years, nearly brought the import of American coal to a standstill. As a result, transit of coal in Rotterdam shrank to less than one-third. This setback was followed by a period of stabilization during which total coal traffic via Rotterdam amounted to about 5 million tons. Transports are mainly export of German coal, similar to before the war.

## Establishment of Industries

This outline of bulk and general cargo transit in Rotterdam does not, of course, give a complete picture of a modern port. There is another, most important aspect: the establishment of industries in the port area.

The immediate vicinity of a deep-sea harbour is becoming more and more a decisive attraction for certain types of industries seeking the best possible site for settlement. The possibility of being able to import large quantities of raw materials by large carriers is one advance; the presence of a highly developed general cargo port with liner services to every part of the world is also of great importance to those industries exporting their finished products. This illustrates why, since the end of the war, a continuous demand for industrial sites in the harbour area has been made. This demand has further increased by the formation of the E.E.C., inducing many concerns outside the common market to establish themselves somewhere in Europe, either independently or in participation with European enterprises.

In order to meet this demand

sufficiently, large areas for the establishment of industries have been reserved. The newly planned harbour area, is, therefore, not simply harbours and transit sites.

Certain types of industry are particularly considered when preparing location sites. Firstly, of course, are those industries dependent on very large ships for the supply of their raw materials. The most striking examples are the oil refineries of Shell, Caltex and Esso, who have already settled in the Rotterdam port area, and of Gulf's recent announcement of its intention to commerce business in the Rotterdam/Europoort area.

## Steel Industry

In principal, blast furnaces and a steel industry would be candidates in this category of industries. A large site has been reserved in Europoort, but it is still uncertain whether such industries will eventually be built here.

Apart from these types of industries closely connected with the harbour area, there is another important category having the same ties but in a more indirect way. These are the companies who further refine and process the many products originating from the refineries, which products are mainly delivered to them by means of short pipeline-connections. The petrochemical industry has grown enormously in the Rotterdam port area and has developed a complex network of pipeline-connections between refineries and industries, and from one industry to another, which has resulted in an ever-expanding, interwoven conglomeration of industries.

The established industries and the actual port activities are interdependent. They stimulate each other and, combined with the three factors—transit of general cargo, transit of bulk cargo and establishment of industries—make possible the most efficient use of the port area and the facilities of the port. The presence of a highly developed general cargo port with a great variety of liner services, is an important point in favour of Rotterdam for those industries with settlement plans, whilst on the other hand, the establishment of industries and their resulting finished products,

swell the quantities of general cargo traffic.

No further comment is required in realising that establishment of industries and arrival of bulk goods are closely linked.

## Integrated Port

As a result, what might be called the integrated port was developed, a port concordantly combining transit of bulk and general cargoes and the establishment of industries. This confirms the idea that each seaport should specialise, one for general cargoes, one for bulk goods, another for attracting and catering for industries, should be rejected.

No limitation of scope, but a harmonious integration of the various harbour activities, that is the criterion for a dynamic seaport and this can surely be said of Rotterdam.

*(This article has been quoted whole from "Rotterdam Europoort", No. 1, 1962.....Editor.)*

## Toledo's Foreign Trade Zone

Figures released recently by the Deputy Collector of Customs at the Port of Toledo's Foreign-Trade Zone show that goods valued at \$7,088,575 were handled at the facility during its first 11 months of operation.

The Zone received 12,146 long tons of commodities, and duties collected on entering goods totaled \$24,024.92. There were 7,937 long tons of goods delivered from the Zone.

The Customs report, covering the fiscal year ending June 30, 1962, noted there were 291 entries of 14 commodities from nine countries.

The Toledo Foreign-Trade Zone is located on 5½ acres of the Toledo-Lucas County Port Authority's general cargo site at the entrance to Toledo Harbor. The facility is operated by Toledo Foreign-Trade Zone Operators, Inc., a division of the Edward J. DeBartolo Companies, under an agreement with the Port Authority.

The Zone opened for business in August, 1961, and since that time its warehouse has been expanded from 48,000 to 83,000 square feet.

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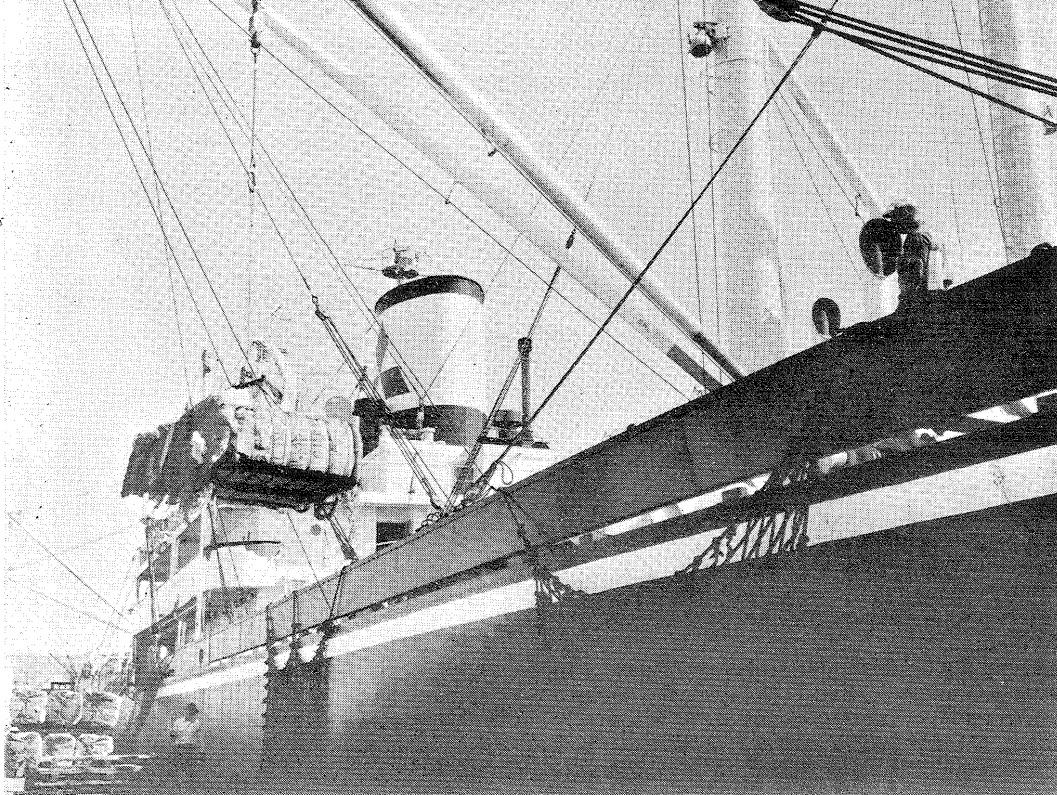
May 1—4, 1963

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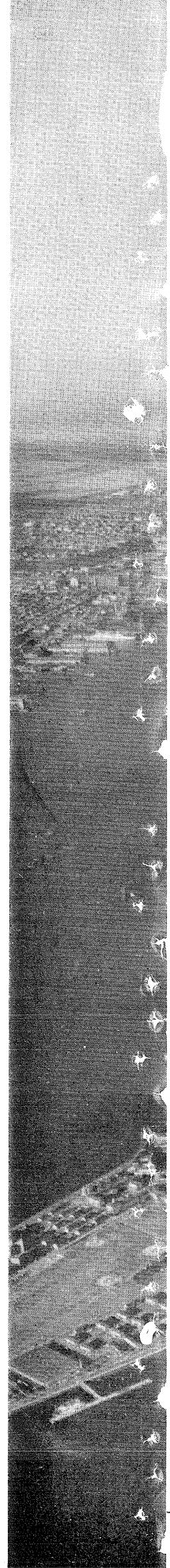
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20, Marunouchi 2, Chiyoda-ku, Tokyo, Japan



California cotton is loaded aboard a Japanese freighter, the Caledonia Maru, at the Grove Street Pier of the Port of Oakland.



The Port of New York, showing the Brooklyn-Port Authority Piers (center right).

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Chiyoda-ku, Tokyo, Japan