

# PORTS *and* HARBORS

MARCH 1964

Vol. 9 No. 1

THE PORT OF SAN FRANCISCO



THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

# *Introducing The Crests of Ports*

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(Each Issue One Port)

## **THE PORT OF BUENOS AIRES**



THE PORT OF BUENOS AIRES



# THE INTERNATIONAL ASSOCIATION OF PORT 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

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John P. Davis

Commissioner

Board of Commissioners of the  
Port of Long Beach, Calif., U.S.A.

### Chief of the Central Secretariat

Gaku Matsumoto

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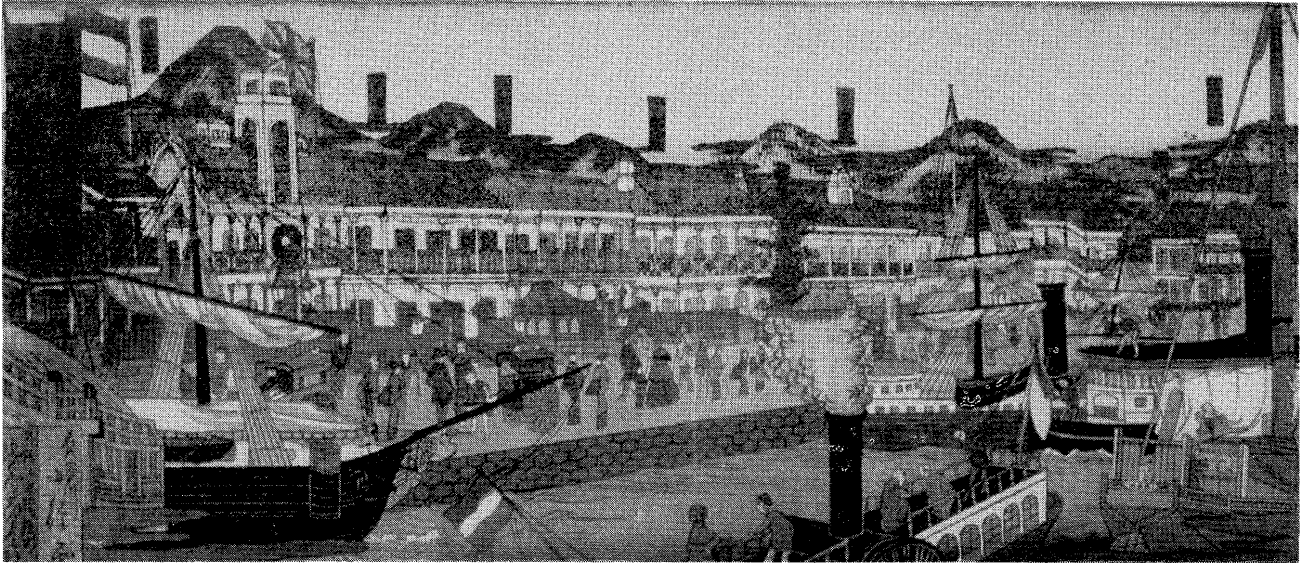
The Central Secretariat of the International  
Association of Ports and Harbors

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# THE PORT OF KOBE

## IN 1860's



The Port of Kobe was officially opened to the world on January 1, 1868, to be an international port as it is, in the modern sense of the world.

The Port is a good natural one and is close to Japan's center of industry and culture. For these reasons the Hyogo part of the present Port of Kobe began to be a busy and important gateway for trade and shipping to and from the Asiatic Continent in the third century when Chinese and Korean Culture and civilization flowed directly into Japan. Hyogo grew into a port-town of more than 20,000 population in the closing days of the Tokugawa era with which Japan's feudalism ended when Hyogo was officially opened to the world in 1868. To tell the truth, however, not Hyogo but a new area of land facing a stretch of sea a little to east, was picked out for foreign trade and shipping under the 1858 Treaty of Amity and Commerce.

The opening provided the designated area with the opportunity to grow as a gateway of Japan. In 1872 the Kobe Customs House was established and the area began to be officially called by its own name, which is Kobe.

*The Port and Harbor Bureau,  
Kobe City Office*



# From The Central Secretariat

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

## **Executive Committee will meet in San Francisco, February 26, ~ 27, 1964**

At the call of our President, Mr. John P. Davis, a meeting of the Executive Committee will be held February 25 through 28, 1964 at San Francisco, Calif., U.S.A. This is the first meeting of the Executive Committee to be called since the last meeting convened March

7-10, 1962 at Taipei, Republic of China.

Since this meeting is primary for deliberation on the preparation for the Association's Fourth Triennial Conference which is scheduled for May 10 through 14, 1965 in London, England, the Port of London Authority acting as host, Sir Leslie Ford, General Manager of Port of London Authority and

Mr. G. D. G. Perkins, Deputy General Manager of P.L.A. and Second Vice-President of I.A.P.H. are good enough to come to San Francisco so that the Executive Committee might fully discuss with them on details of the Conference preparation and programs.

All members of Executive Committee were notified on December 27, 1963 of the scheduled meeting with the following agenda:—

- I. Central Secretariat Chief's report on Association's affairs  
Personal affairs and membership campaign;  
Seminar on Ports & Harbors and Seminar Club;  
Meeting by correspondence of the Board of Directors (January 10, 1964);  
Permanent Council Meeting (Beginning of February, 1964);  
Standing Committees.
- II. Approval of financial statements  
Interim report on account and payment of bills for the Third Fiscal Period (1962-1964)  
Proposed budget of revenues and expenditures for the Fourth Fiscal Period (1965-1967)
- III. Preparations for Fourth Triennial Conference  
(May 10-14, 1965, London)  
Tentative program  
Conference agenda  
Registration fee, etc.
- IV. Others

At the present, the undermentioned are expected to attend the Executive Committee Meeting:—

Chairman	Mr. John P. Davis President	Commissioner Board of Harbor Commissioners Port of Long Beach Mayor City of Kobe
Members	Dr. Chujiro Haraguchi First Vice-President & Director for Japan Mr. G. D. G. Perkins Second Vice-President & Alternate Director for U.K. Mr. H. A. Mann Director for Canada  Mr. V. G. Swanson Director for Australia  Mr. A. L. King Director for U.S.A. Mr. W. J. Amoss Alternate Director for U.S.A. Mr. Ben E. Nutter	Deputy General Manager Port of London Authority  Chairman National Harbours Board Ottawa Chairman Melbourne Harbor Trust Commissioners Director of Marine Terminals The Port of New York Authority Director of the Port Board of Commissioners of the Port of New Orleans Executive Director Port of Oakland General Manager Port of London Authority Assistant City Attorney Port of Los Angeles Assistant City Attorney Port of Long Beach
Host Port 4th Triennial Conference Legal Counsellors	Sir Leslie Ford  Mr. A. W. Nordstrom  Mr. J. C. Spence, Jr.	
Central Secretariat Chief Senior Under-Secretary	Mr. Gaku Matsumoto Mr. Motoo Kiyooka	

## Permanent Council Meeting

The Permanent Council was called in meeting on February 11, 1964, in Tokyo, attended by its members, viz. Mr. I. H. Macdonald, Mr. H. D. Leonhardt and Mr. Gaku Matsumoto, Chief of the Central Secretariat and Council Chairman ex officio, approved the settlement of accounts for 1962 — 1964 and the proposed budget for 1965 — 1967 after due deliberation. Mr. Royal S. Wintermute was absent due to sudden illness.

The meeting deliberated on the tentative agenda worked out by the Central Secretariat for the Fourth Triennial Conference scheduled for May 10-14, 1965 at London, England.

The Chief of the Central Secretariat made report about Association affairs and works.

## Visitor

A group of approximately 20 prominent Maryland businessmen will be leaving Baltimore on April 3, 1964, to visit more important trade centers in the Pacific and the Orient with the purpose of strengthening trade relations between the Port of Baltimore and cities visited.

Prior to the departure of the party, Mr. Charles I. Hughes, Director of Trade Development for the Maryland Port Authority, on his first leg of a planning trip paid a visit to Tokyo and called on the Central Secretariat on February 14 for information and discussed the matter with the Chief and other members in its office.

He is scheduled to visit Tokyo, Yokohama, Nagoya, Kobe, Osaka, Hong Kong, Djakarta, Bangkok, Singapore and Manila.

## World Trade Center of Japan

The plan of establishing World Trade Center of Japan in Tokyo was reported in our "International News Letter" of last October issue.

The project has recently been approved by the Government to Mr. Gaku Matsumoto, President of the World Trade Center who is the Chief of Central Secretariat IAPH.

The proposed building is a 30-story one covering 6,600 square meters and when completed in 1966 it will house consulates of various countries, customhouse, banks, offices for traders, forwarders and tourist companies, hotels, etc.

## The Port of New Orleans opens office in Tokyo



Mr. Robert W. Bruce

The third foreign office of the Port of New Orleans will be opened in Tokyo, Japan, effective February 1, 1964.

Mr. W. Bruce to head the new trade office. Already operating are offices in Milan, Italy, servicing the European area, and in Lima, Peru, servicing the Latin American area.

Mr. Bruce is a native of Seattle, Washington, and has been executive general agent for the port in Chicago since 1960. He began steamship company service in 1914 with the Pacific Coast Steamship Company. Following army service in World War I, he became foreign freight traffic agent for the American Mail Lines at Seattle and Portland, Oregon.

During World War II, Mr. Bruce served as American President Lines' operating manager responsible for company operations at the ports of Philadelphia, Wilmington, Baltimore, Hampton Roads and Charleston. He served as general agent of the War Shipping Administration.

The East will not be unfamiliar to Mr. Bruce. He was at one time general agent for the American Mail Lines in Shanghai, Chi-

na, and manager of the line's offices in Kobe and Yokohama, Japan.

## Gulf Ports Group Elects Amoss

W. J. Amoss, director of the Port of New Orleans, and alternate-director of the International Association of Ports and Harbors, was elected as first vice-president of the Gulf Ports Association at their October meeting in Lake Charles, Louisiana.

Named to head the Association as president was Jack P. Fitzgerald, director of the Tampa Port Authority, and also elected as second vice-president was A. S. Johnson of the Port of Pascagoula, Mississippi. Selection of a secretary-treasurer of the organization, who is appointed by the president, will be announced at a later date.

The group represents 17 Gulf ports and handles contacts with the Federal Maritime Commission, Senate and Congressional committees, and various other regulatory and advisory agencies that effect shipping and world trade through these ports.

## New Orleans PORT RECORD

\* \* \*

Seventeen acres of paved upland area adjacent to berths 60 and 62 under construction at the Elizabeth-Port Authority Piers will be provided under a \$621,010 contract awarded by the Commissioners of The Port of New York Authority. Announcement of the award was made by Chairman S. Sloan Colt following the monthly Board meeting.

The contract calls for the removal of 300,000 cubic yards of surcharge fill from the site, installation of utilities and paving. It was awarded to the low bidder, Standard Bitulithic Company of Newark, New Jersey. The work will be completed in May 1965.

(The Port of New York Authority)

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# FORUM ON PORTS PROBLEMS

## A Key to the Efficient Operation of Ports and Harbors

By

Lt. General J. L. Huang

Ever since the dawn of civilization, man has been fascinated by the mysteries of the sea. Its abundant resources afford a livelihood to millions, who since that remote age, have devised means to traverse its surface in search of the riches of the deep blue waters. With the passing of time, man-powered fishing rafts and canoes were replaced by cargo and passenger-carrying clippers and steamers. The economic potential of sea traffic was explored by the adventurous spirit of man unsatisfied within the boundaries of his many homelands, seeking for new opportunities beyond the unknown horizon. History was written by Ferdinand Magellan, Vasco da Gama, Christopher Columbus and many others who pioneered the sea routes into hitherto strange lands opening new markets for the traders of the world. With the mounting sea traffic, came the need for water terminals to handle trading goods and passengers and to provide for the safety of the ships and their crews, thus calling into existence ports and harbours, with their many facilities, regulations and systems of import and export duties.

It would be redundant for me to reiterate the importance of ports and harbours as pertaining to international trade and commerce since it is already so well-known to us. However, I deem it fitting to bring forward a few words worthy of our deliberation. On my desk are inscribed four Chinese characters, pronounced "Hsin", "Su", "Shrh" and "Chien", mean-

ing respectively "Innovation", "Speed", "Practicability" and "Simplicity". These words represent the cardinal principles of a motto given by President Chiang Kai-Shek to the Chinese people as the key to success in every field of endeavour. The interdependence of these principles is apparent. The application of each one contributes to the attainment of the others.

As I examine the responsibilities of The International Association of Ports and Harbours in the improvement of international port and harbour operations and facilities, I am impressed by the sheer coincidence of the motto with the motives behind the IAPH efforts. We need the innovations in port and harbour procedures and facilities to cope with the problems caused by the increased capacities of modern ships and by the revolutions from coal to diesel and thence to nuclear energy. Such innovations as the availability of new cargo handling devices, larger berthing spaces and storage areas, better routes of communications to and from port areas, advanced navigational guidance systems, new harbour craft with greater power and maneuverability as well as countless items of modernizations, serve no other purpose than the reduction of the turn-around time of ships and the assurance of greater safety for personnel and properties. It is only natural that these innovations have to be practicable and simple in order to attain the speed and safety called for. Practicable innovations in



Lt. General Huang

ports and harbours will result in speedy and simplified procedures in the handling of ships which fact is in conformity with the concept of President Chiang's motto "Hsin", "Su", "Shrh" and "Chien"—in other words, EFFICIENCY.

I know that the aforementioned problems are under constant study by the Central Secretariat and the various standing committees of the IAPH. I can envision with hope that within the next decade or so, our ports and harbours will be functioning with greater safety, speed and precision.

As your past President, my memories and interests are always with you. Therefore, I hereby extend my heartfelt wishes to each and every one of you a Merry Christmas and a prosperous New Year in 1964.



# On Port Problems etc. in Mexico

*An interview with Admiral C. G. Manuel Zermeno Araico, Minister of Maritime Affairs, Mexico, by Mr. Manuel Mejido, Reporter of "The Excelsior".*

*The newspaper cutting was sent to the Central Secretariat of the International Association of Ports and Harbors by Mr. Daniel Ocampo S., Ingeniero Civil, Mexico, and Director of IAPH in Mexico. This is an English version from Spanish shown elsewhere in this bulletin.*



Admiral C. G. Manuel  
Zermeno Araico

Admiral Zermeno Araico stressed the urgent necessity of further construction of ports in Acapulco area and opening of inland canals to connect Tuxpan with the U.S.A. border.

In view of the geographical position, the port of Acapulco is a natural gateway of our main economic areas to ports all over the world.

The Ministry of Maritime Affairs has decided construction of Port of Marques as the best port free from waves and silting.

Besides advantages on which ground the Ministry has selected this port, there are many points of advantage, according to the Admiral.

The Port of Marques is situated in plain which affords easy laying railroads and construction of warehouses and other facilities.

For construction of port in Acapulco area in future, utilization of Lake Negra should be considered. This means a project of rehabilitation of Acapulco. The plan is based on a quite sound ground and not a mere casual idea.

Although the greater part of wheat product in the north-east area of the country is consumed there, the rest of wheat is forwarded by sea in economical way, viz., from Guaymas to Veracruz via Panama Canal, thence by rail to the Capital. In spite of low cost of transportation via Panama Canal, the fact that it takes long time for transportation and impossible to meet demand in an emergency should not be disregarded.

In this regard, Admiral Araico again pointed out the importance

of Acapulco. The Port of Acapulco can offer low cost of forwarding and elimination of deviation to Veracruz in transportation. These circumstances will justify the necessity of construction of railroad between Mexico City and Acapulco. The movement of wheat between the two points amounts to 400,000 tons per annum. Other kind of cargo also moves besides wheat.

However, Admiral does not disregard the importance of tourist industry. He puts much importance to this enterprise, saying that proper port facilities should be completed in Acapulco, for instance.

As regard to the construction of canal to connect Tuxpan and U.S.A. border, the Admiral came to a conclusion as follows:—

In view of the world trend of utmost utilization of inland waterways, the Ministry is conducting a close investigation towards opening of a canal between Tuxpan and Matamoros. To connect this canal with those in U.S.A., both U.S.A. and east Canada should first be connected by inland waterways. If this method of transportation is realized, its cost will be less than one-tenth of that by railroad. In order to realize this project, we must make full use of Lake Tamiahua, Lake Morales and Lake Madre. The cost of railroad construction per one kilometer is nearly the same as the cost of one goods-wagon. The operation cost of canal is rather cheap. A good example is the canal opened between Tuxpan and Tampico about 50 years ago. This canal is still rendering excellent service and its

operation cost is negligible.

Admiral Zermeno Araico is a man firm in his resolution and he has prepared various useful materials for construction of new inland canals. The canals require a good number of barges and tugboats of which construction should be provided by government subsidies.

On the other hand, operation of canals will contribute to the development of fertile land between Tampico and Matamoros on the Gulf of Mexico. The completion of the port facilities in Acapulco area and construction of inland canals is urgently required.

There are also many other important projects which may strongly drive forward the nation's economic development.

The agricultural activities in Fuerte Valley area and rail transportation between Chifuana and Pacific Coast will attach much importance to Port of Topolobampo. It is necessary to change Topolobampo into "High Port" for smooth forwarding of agricultural products raised in this area to domestic markets.

Other important problems are: Forwarding of agricultural products from Banderas Valley to consumption centre. Developing country's tourism by offering services as intermediate port to the yachts which frequently sail between the U.S.A. and Acapulco.

Port of Manzanillo-with one pier only-must handle more cargo. The bulk part of Manganese Ore is being shipped from this port.

By building dams "El lufienillo" (now under construction) and "Villita" (under planning), the construction of inland waterways become possible. Moreover, in Balas district, there is rich deposit of Iron Ore and it is necessary to open a port nearby for its shipment.

The broad basins of Campeche, Tabasco and south of Veracruz which have navigable system have not been fully utilized yet. This area would considerably be developed if connection of basins of Coatzacoalcos-Tonalá and also the connection Grijalva - Usumacinta system and other lakes is once completed.

The plans which Admiral Araico is now taking up are very important in the nature and promise for future realization. They are indispensable for the nation's economic development.

Although Mexico is one of the countries having long coastline in the world, her fishing industry is still at less developed stage. This is due to the fact that appropriate measures have not been directed to this field in the past. Thorough research should be conducted for elimination of every adverse cause to the development of fishing industry. This is very serious and important issue of the nation.

The fishing problems which require immediate solution are mainly as follows:—

- a. Lack of fishing ports and facilities of transportation of refrigerated cargo.
- b. Limited market in the country.
- c. Practically monopolized state of fishing industry.
- d. Unnecessary competition which is special feature in fishing ground.
- e. Lack of biological research and shortage of personnel concerned. Unsatisfactory catching methods. Lack of introduction of the latest catching methods.
- f. Poor financing to the fishing enterprise.

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# La Estructura de Mexico

- **Zermeno Araico y la Necesidad de un Puerto en Acapulco**
- **Un Canal Intracostero Entre Tuxpan y Estados Unidos**
- **Obras Necesarias en Topolobampo, Manzanillo y el Balsas**
- **Diagnostico de la "Enfermedad" de la Industria Pesquera**

**Por MANUEL MEJIDO, reportero de EXCELSIOR.**

Hombre de mar, acostumbrado a la claridad de la palabra y a la precisión de los conceptos, el almirante Manuel Zermeno Araico, secretario de Marina, señaló la necesidad inaplazable de disponer de un puerto en la zona de Acapulco y de un canal intracostero que comunique a Tuxpan con la frontera con los Estados Unidos.

Estas son las razones del viejo marino, que fue premiado con la medalla al Mérito Militar por haber restacado de las aguas del río Potomac los restos del inolvidable Francisco Sarabia:

"El puerto de Acapulco, por su posición geográfica, es la salida natural hacia el extranjero de la más importante zona económica del país: el Distrito Federal. Por el gran desarrollo de las actividades turísticas, el puerto se ha vis to imposibilitado para crecer".

Aunque se debe emprender cuanto antes, la tarea es difícil. Pero el almirante pone sobre el tapete de la opinión pública una solución ampliamente analizada:

"La Dirección General de Obras Marítimas ha determinado que el sitio ideal para la construcción de un puerto en la zona de Acapulco, es la bahía de Puerto Marqués, que no tiene problema de oleaje ni de azolvamiento".

El sitio elegido por los técnicos de Obras Marítimas tiene, además, otras ventajas que el secretario de Marina senala:

"En Puerto Marqués de dispone de accesos terrestres planos por donde pueda llegar el ferrocarril y hay espacio suficiente para patios, bodegas y demás servicios. Inclusive se ha pensado aprovechar la Laguna Negra para ubicar en su interior el futuro puerto de Acapulco".

Estos significa que el proyecto para rehabilitar Acapulco, no es producto de una charla de café, sino el resultado de un concienzudo estudio.

## SOLIDOS FUNDAMENTOS

El proyecto, pues, tiene sólidos fundamentos.

El almirante, condecorado siete veces por países extranjeros expone:

"El trigo que se produce en el noroeste del país y del cual el Distrito Federal consume un fuerte porcentaje, se transporta actualmente en ferrocarril, una parte, y otra—la más económica,—por vía marítima entre Guaymas y Veracruz, cruzando el canal de Panamá. Desde Veracruz llega en ferrocarril hasta la capital".

No obstante su bajo costo, el viaje—vía Canal de Panamá—es prolongado y por lo mismo, incapaz de satisfacer una urgente necesidad en el consumo.

Y es en este cuando el almirante vuelve a poner de manifiesto la importancia de Acapulco.

"A efecto de abatir los costos debe pensarse en la habilitación del puerto de Acapulco, para evitar la innecesaria vuelta hasta Veracruz. Esta situación ayudaría a justificar la conveniencia de la construcción del ferrocarril México Acapulco, porque el solo moviendo del trigo aportaría como mínimo—cuatrocientas mil toneladas anuales para fletes del ferrocarril".

Sin embargo, el almirante Zermeno Araico no deja de considerar el aspecto turístico y encara el problema:

"No puede dejarse de considerar la industria turística en los puertos que la tienen, pero al mismo

tiempo, debe disponerse de servicios adecuados en cuanto lugar sea posible”.

Y este es, exactamente, el caso de Acapulco. Una zona que precisa de servicios adecuados, es decir, de instalaciones portuarias.

En lo referente a la construcción de un canal intracostero que comunique a Tuxpan con la frontera con los Estados Unidos, el almirante llega a estas conclusiones:

“Siguiendo la tendencia mundial de aprovechar al máximo las posibilidades de navegación interior, se tiene en estudio la construcción de un canal intracostero que comunique al puerto de Tuxpan con la frontera de Matamoros. Al conectar con el sistema de canales americanos se liga por navegación interior toda la zona este de los Estados Unidos y Canadá”.

La obra permitiría la transportación a un costo diez veces menor que el de los ferrocarriles.

Pero, ¿cómo sería posible efectuar tan ambiciosa obra?

Adiestrado desde hace años en los asuntos marinos—des de que era teniente de los cañoneros “Agua Prieta” y “Nicolas Bravo”—Zermeño Araico no duda en su respuesta:

### **TAN BARATO COMO UNA CARRETERA**

“Para la realización de la obra se aprovecharían las lagunas de Tamiahua, Morales y Madre. Los costos de construcción por kilómetro en este tipo de obras, son semejantes a los que se precisan para una carretera”.

Eso no es todo. El almirante, que fuera en 1956 embajador extraordinario y plenipotenciario de México en Noruega, tiene otros conceptos que agregar:

“Los costos de operación en los canales son sumamente bajos. Tenemos como ejemplo el tramo construido, hace cincuenta años, entre Tuxpan y Tampico, que prácticamente sin gastos de conservación, aún se encuentra en servicio”.

Zermeño Araico es hombre que llega siempre hasta el fin de los problemas y aporta todos los datos ventajosos sobre la construcción del canal intracostero:

“El canal tendría la ventaja de

que, tanto los chalanes como los remolcadores necesarios serían de construcción nacional. Por otra parte, la obra permitiría el desarrollo de la rica zona del Golfo—entre Tampico y Matamoros—que en la actualidad se encuentra casi totalmente incomunicada”.

La instalación portuaria en la zona de Acapulco y la construcción del canal intracostero, son obras de necesidad inaplazable. Pero también hay otras de capital importancia para vigorizar el desarrollo económico del país. Por ejemplo:

La necesidad de que Topolobampo se convierta en un puerto de altura. ¿Razones?

La gran actividad de la zona agrícola del Valle del Fuerte y el funcionamiento del ferrocarril Chihuahua - Pacífico presionan a Topolobampo y lo empujan a convertirse en puerto de altura para que no se entorpezca la salida de los productos de esa zona hacia los mercados de la República.

¿Otra obra necesaria?

### **ACONDICIONAR PUERTO VALLARTA**

El acondicionamiento de Puerto Vallarta, por tres razones principales:

1.—para permitir la salida de productos agrícolas del Valle de Banderas hacia los centros de consumo.

2.—Para auxiliar al incremento turístico prestando servicios — como punto intermedio—, a los yates que viajan constantemente entre los puertos de California, Estados Unidos, y Acapulco.

3.—El resultado de los estudios practicados en este sentido, califican la obra como una “inversión reducida”.

El puerto de Manzanillo, que opera con un solo muelle, tiene que mover mucha carga de altura. Por esa vía marítima salen casi todas las exportaciones de manganeso y de mieles incristalizables.

Ligada a la construcción de las presas de “El Infiernillo”—en proceso—y del la “Villita”—en estudio—surge la posibilidad de construir un sistema de navegación interior que disponga en uno de sus extremos de un puerto de altura y penetre hacia el interior siguiendo por un lado la cuenca principal del río Balsas y por el otro la del Tepalcatepec, para

comunicarse con el valle de Apatzingán.

En la zona del Balsas, además, se encuentran ricos yacimientos de fierro que precisan de un puerto cercano.

### **NO APROVECHAN RIOS NAVEGABLES**

Un amplio sistema de ríos navegables en Campeche, Tabasco y el sur de Veracruz, no ha sido aprovechado todavía. Esa zona del país se beneficiaría enormemente con la interconexión de las cuencas de los ríos Coatzacoalcos-Tonalá y el sistema Grijalva — Usumacinta, además de las lagunas interiores.

El almirante Zermeño Araico es, en pocas palabras, un hombre lleno de proyectos de insospechados alcances. Sus realizaciones han sido muchas y muy variadas. Sin embargo los planes que tiene en estudio son verdaderamente importantes y seguramente en el futuro se irán realizando porque representan una necesidad inaplazable para el progreso económico del país.

México es una de las naciones del mundo que cuenta con mayor número de kilómetros de costa y, a pesar de ello, no cuenta con una gran industria pesquera. De nuestra riqueza en especies marinas, no hay quien dude, pero nunca hemos contado con los medios adecuados para explotarlos.

El almirante Zermeño Araico, hombre de mar, ataca de frente el complicado problema.

Considera que intentar un diagnóstico de todas las causas que concurren para impedir el desarrollo adecuado de una industria pesquera nacional, es un trabajo cuya magnitud requiere un estudio exhaustivo que aún está por hacerse.

### **PROBLEMAS DE PESCADORES**

Sin embargo, para el almirante existen muchos factores que concurren para limitar la expansión pesquera:

a) La carencia de obras de infraestructura, como las de puertos pesqueros especializados y de transportes refrigerados.

b) Un mercado interno reducido.

c) Una comercialización prácticamente monopólica.

d) Reducida concurrencia de la

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(Continued to Page 30)

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# PORT OF SAN FRANCISCO

## *Public Relation Department San Francisco Port Authority*

San Francisco's world-famed port this month enters its second century as a state-administered utility for ocean commerce.

It is the only state-operated port on the U.S. west coast.

It is also San Francisco's biggest public enterprise—a 200-million-dollar stake in the harbor's historic role as a hub of world trade.

But with all the port's developments and the investment they represent one basic factor hasn't changed since 1863, when a state board of harbor commissioners

was established to manage the harbor and put system into its expansion.

In more than nine decades of growth since then, all of the port's improvements have been carried out with never a cent of public tax cost.

Port Authority officials point to the fact that the port's 12½ miles of waterfront facilities have been financed entirely from the port's own revenues and through self-liquidating bonds that are paid off from operating income. No state, municipal, or other tax sources are

used.

Financially as well as physically, the Port of San Francisco today presents a picture that would be the envy of state and city officials who struggled with the harbor's problems a century ago, in the wake of San Francisco's gold-spurred growth.

History identifies the company led by the Spanish captain, Don Gaspar de Portola, as the first Europeans to view San Francisco's harbor, in 1769.

It names Lieutenant Juan Manuel de Ayala, of the Spanish schooner SAN SARLOS, as the first white man to sail in San Francisco Bay, when his ship entered the Golden Gate and anchored off Yerba Buena Cove in 1775.

But there was little change in the harbor's unhurried life until 1849. Then gold transformed San Francisco's sleepy waterfront overnight.



This view looking northwest shows most of the Port and a good part of the City of San Francisco. The Port's 21-acre Mission Rock Terminal is the pyramidal-shaped facility in the foreground. At distant right is the now abandoned Alcatraz Federal Prison and in the middle distance is the Golden Gate and the hills of Marin.



**Mr. Cyril Magnin,**  
**President San Francisco**  
**Port Authority**



**Mr. Rae F. Watts,**  
**Port Director San Francisco**  
**Port Authority**

Gold seekers started pouring through the Golden Gate from over the world. Supplies and merchandise poured through after them. Railroad lines weren't to reach San Francisco for 20 years. Ships were the common carriers then. Vessels jammed the harbor's anchorages and vied for its scanty docking facilities.

In 1851 the States Legislature authorized the City of San Francisco to "construct wharves at the ends of all streets, commencing with the Bay of San Francisco." To help stimulate the harbor's development, the state transferred its domain over beach and water lot property to the City of San Francisco.

But the city was in no position to undertake a major program of waterfront construction. It was already laboring under a heavy municipal funded debt.

In a move to keep port facilities a-building without further mortgaging, the city's funded debt commission was authorized by the state to lease wharf areas to private groups for 10 year periods.

These firms hastily threw wharves together to accommodate the harbor's accelerating traffic. Most of them were flimsily built. Their untreated wooden pilings deteriorated under the attacks of sea water and the voracious teredo worms. Sections often collapsed,

spilling dock workers and cargo into the Bay.

Somehow the harbor got along with this patchwork port through more than a decade of the area's hectic growth.

In 1860, with their 10-year leases from the city approaching maturity, the private wharf operators got together in a plan to perpetuate their holdings.

They offered to build a seawall and develop better wharf facilities, in return for legislative action that would give them control of the waterfront and empower them to collect the port's revenues.

A bill which would have granted these exclusive privileges for a 50-year term was passed by the legislature in 1860, but it was vetoed by Governor John Downey.

Wide reaction to the idea of turning over San Francisco's waterfront resources to private interests brought forth proposals at the 1863 session to place the port under state administration.

An act to carry this out was passed by the legislature and signed by Governor Leland Stanford on April 25 1863. The legislation set up a board of state harbor commissioners with administrative control of San Francisco's harbor, "with the improvements, rights, privileges, franchises, easements, and appurtenances connected therewith."

The new board also was charged with the upkeep and new construction of wharves, piers and seawalls; dredging; and with collecting rents, tolls, and wharfage and dockage fees.

Commissioners on the original board—forerunner of the present five-member Port Authority—were made appointive by the Governor of the State.

In recognition of the close economic and physical relationships between city and harbor, the Port Authority's commissioners are consistently named from the ranks of San Franciscans prominent in the city's business, labor, and industrial life.

The old harbor board's first commissioners held their initial meeting in November, 1863, amid circumstances that seemed to typify the problems they faced. The day before they met, a Steuart Street wharf caved in and dumped 150,000 feet of lumber into the water.

That was just the beginning.

Only five of the nine major public wharves then operating were turned over to the state commission. It took more than 10 years of litigation to establish jurisdiction over the other wharves and waterfront areas that were assigned to the harbor board under the 1863 legislation.

One of the state's basic accomplishments—one that made possible today's great waterfront and added much valuable land to San Francisco's downtown areas—was the construction of a seawall to stabilize the line of the waterfront.

San Francisco's first seawall sections, built in 1869, proved traps for mud and sediment. In 1871 the harbor board's engineering staff recommended that the basic remedy lay in changing the line of the sawtoothed waterfront.

The engineers laid out a seawall line that would parallel the general sweep of the strong bay currents and shoulder off at least part of the silt which filled up berthing spaces almost as fast as they were dredged out.

The legislature approved the plan. The new seawall begun in 1878 corresponds in general to San Francisco's waterfront perimeter today.

Some 12,000 feet of seawall had been completed by 1908. Piers still in full use today—36, 40, 42 and 44 are examples—were built out from the new wall during this period. More than 800 acres of land in what is now the heart of San Francisco's financial district were filled in behind the massive wall as it progressed.

That was the general status of the Port of San Francisco after 60 years of gradual development, from 1850 to 1910. It set the stage for what was, by comparison, a feverish period of port construction.

More than \$19,000,000 in harbor improvement bonds were issued from 1911 to 1915 to underwrite the port's advancing line of piers and wharves.

Starting with an initial \$600,000 bond fund, which in effect touched off the port's pay-as-you-go expansion, some \$32,000,000 in self-

liquidating securities have been issued in the past 90 years to finance port projects.

Additional millions in operating revenues are reinvested in pier and terminal construction, under the fiscal plan laid down by the 1863 legislation.

Depression, then World War II brought deferment to a portfolio full of plans for new harbor facilities.

As it worked out, this 15-year intermission gave the port a natural point of departure for new designs in the latest piers and terminals that have brought so many changes to the port's waterfront profile.

Simultaneously with a return to peacetime trade in 1946, the port went into Phase One of a \$20,000,000 modernization.

Today's major products of this program:

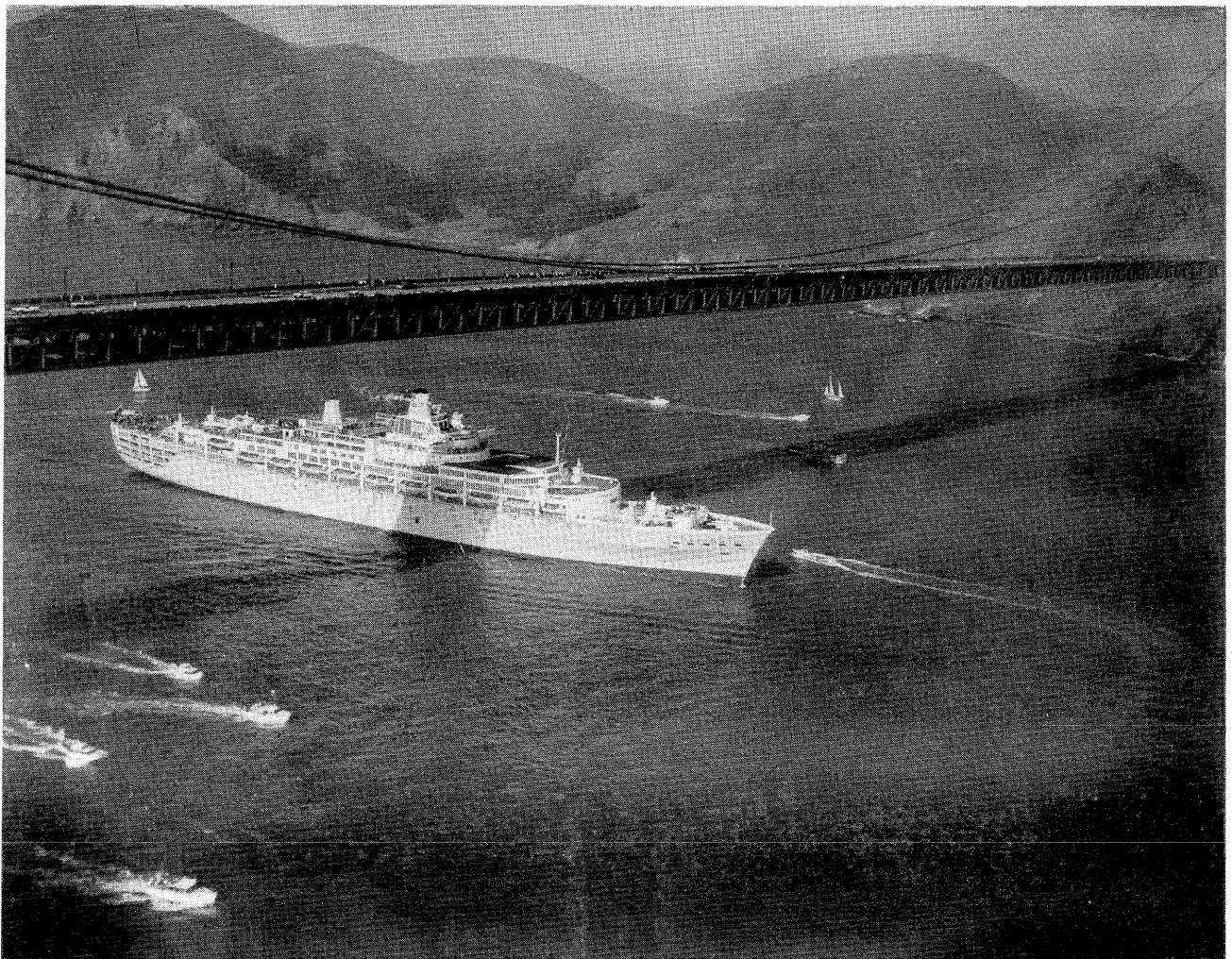
Six-million-dollar Mission Rock Terminal, opened in 1950, a 29 acre quay-type facility which ranks as the Pacific Coast's largest overwater pier.

New grain, copra and cotton terminals in Islais Creek basin, one of the bay's busiest centers of import and export shipping.

A two-million-dollar World Trade Center, constructed in the Ferry Building as the West Coast's only major mart dedicated exclusively to import-export commerce.

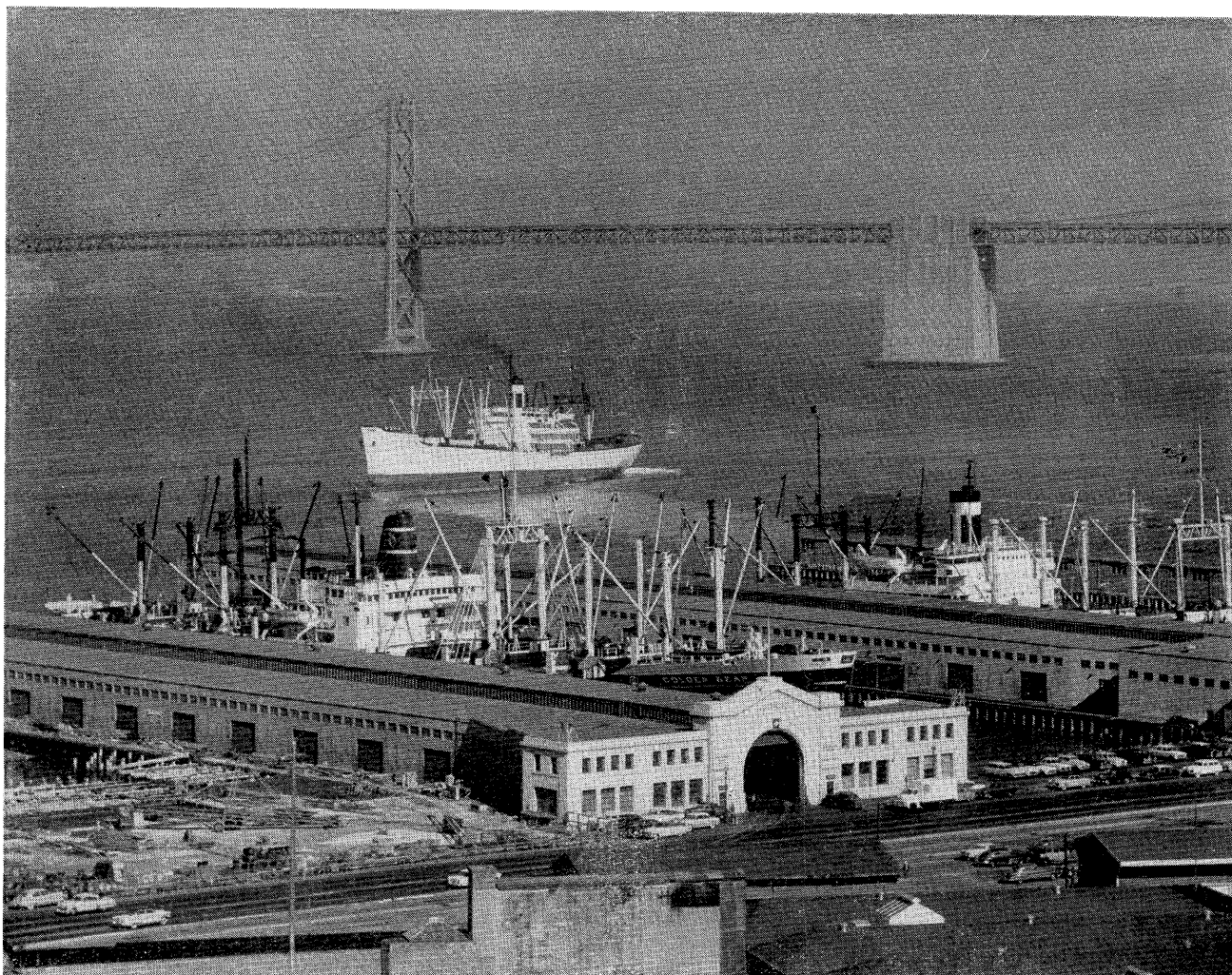
Modernization and integration of Piers 30-32, 15-17, 19-23, and 29-31-33, to produce highly efficient ship-rail-truck terminals on San Francisco's waterfront.

Phase Two of the port's "new look" is now being energized by a 50-million-dollar port bond issue authorized in 1958.



The P&O 42,000-ton ORIANA passing under San Francisco's Golden Gate Bridge on her arrival February 5, 1961, on her maiden voyage.





Gateway for ocean trade between the United States and the Far East is the famed Port of San Francisco, whose busy waterfront (shown in photo with San Francisco Bay Bridge in background) is the berthing place for 75 steamship lines plying between the U.S. West Coast and some 300 world ports. San Francisco's custom district is first among all port areas on the North American continent in the value of its annual import-export exchange with Far Eastern countries.

Its major feature is construction of a seven-berth "super terminal" in the Islais Creek area that will provide a 40-acre cargo center with full facilities for container, bulk, and general cargo.

The 30-million-dollar terminal, scheduled to open in 1966, will have clear-span transit sheds, with truck and rail docks, heavy-lift cranes at shipside, and ample area for the truck and van fleets being put into use by West Coast steamship lines as they automate their cargo handling methods.

These plans and projects, on the whole, strongly reflect the port's shift from a one time emphasis on intercoastal and coastwise commerce to a modern-day rank as the Pacific basin's major gateway for import and export trade.

The Port Authority's master

plan for future development is based on the conclusion that world trade through the Golden Gate will continue to grow along with California's phenomenal advance in population and industry—a growth that today overshadows even the gold rush era which first gave the Port of San Francisco its place among the world's great harbors.

#### **Basic Data About Port of San Francisco**

The City of San Francisco has a population of about 775,000. It is the heart of the San Francisco Bay Region which numbers 4.4 million residents and is growing rapidly. Per capita income in the area is among the highest in the world, making it a prime market for goods from abroad. Its resi-

dents spend over six billion dollars yearly in retail stores and its more than 6,000 manufacturers have established a growing demand for raw materials.

#### **Situation**

Centered strategically on the West Coast of the United States (Lat. 37° 48' N; Long. 122° W) San Francisco Bay is the largest land-locked natural harbor in the world. Its 450 square miles, varying from deep water to tidal flats, is approached through a strait known as the "Golden Gate." The City of San Francisco is on the northern end of the peninsula separating the southern arm of the bay from the ocean, and its port leads all others on the Pacific in general cargo volume, foreign trade valuation and freight and

passenger sailings. It is the home port for all major steamship lines on the West Coast and ships regularly sail from it to more than 300 ports around the globe. It is served by a network of transcontinental trucking lines and three transcontinental railroads. Its central position makes it the logical distribution center to the entire western United States, the nation's fastest growing market. The financial center of the West, it offers the world trader a full range of services in the fields of international banking and marine insurance. The port is owned and operated by the State of California and is governed by a state-appointed five-member commission, the San Francisco Port Authority. It, in turn, appoints the Port Director.

**Entrance to Harbor, Bars, Breakingwaters, etc.**

The prominent landfalls and

numerous aids to navigation make the approach to San Francisco relatively simple in clear weather. In thick weather, the currents which vary in direction and velocity make it wise for strangers to lie-off and await clearing or a pilot. The San Francisco lightship is stationed about three miles outside the bar and west-southwestward of the entrance to the Main Ship Channel. The bar is semicircular and its depth of 36 feet or less extend from 1/2 mile westward of Point Bonita to nearly one mile offshore three miles southward of Point Lobos. The extreme outer point is about five miles west-southwestward of Point Bonita. Three channels cross the bar. The center one, or Main Ship Channel, is in most general use.

It is 50 feet deep and 2,000 feet wide on the bearing 070° toward Alcatraz Light. The South Channel is an approach to San Fran-

cisco Bay from southward of Point Lobos. It is about a mile off-shore and extends parallel to the land. Vessels entering this approach and heading for Point Bonita Light on a bearing of about 375° should find depths of 34 feet or more with buoys marking the critical points. The Bonita Channel is between the eastern end of Potatopatch Shoal and the shore northward of Point Bonita. It is about two miles long and varies from 0.2 to 0.6 miles in width. Although it has deeper water, 39 feet was about the most that could be carried through safely in 1957.

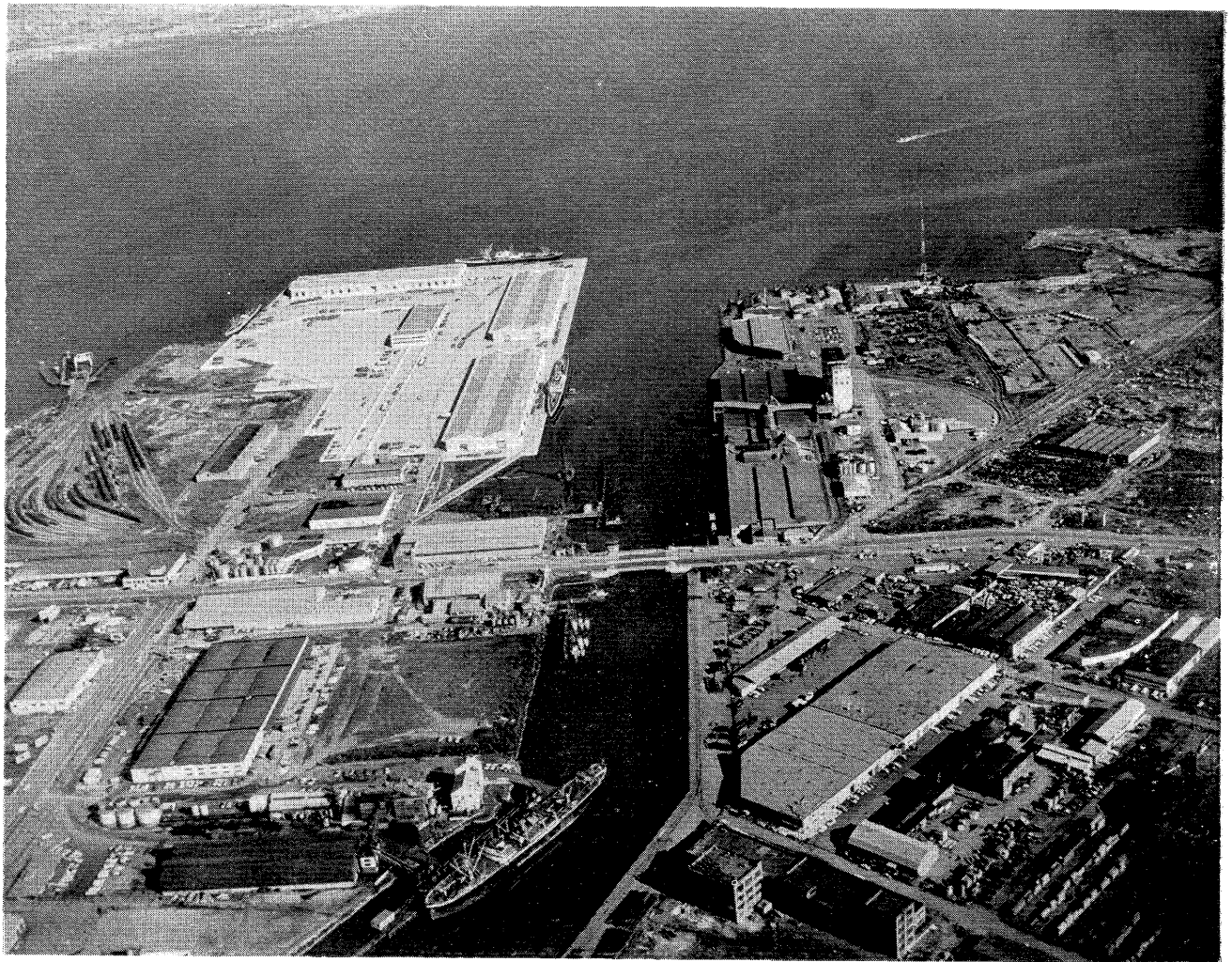
**Harbor Facilities**

The Port of San Francisco has 42 deepwater piers including Mission Rock Terminal, one of the largest overwater piers on the Pacific Coast—most with 35 feet



A Golden Gate bridge tower rises in the distance and makes a picturesque backdrop for this view of some of the Port of San Francisco's 45 deepwater piers. The port's waterfront facilities cover an area 8½ miles in length, and have a value of \$200 million.





**The San Francisco Port Authority this month invited bids for substructure work on its 60-acre Army Street Terminal, a \$25.5 million project scheduled for completion in 1966 (upper left in photo). The completed terminal will provide 8 deepwater berths, 3 transit sheds, and several acres of open storage cargo handling space. The terminal will be situated on Islais Creek Channel, where the Port now operates grain, copra, and general cargo terminals.**

of water alongside—enough for the largest cargo liners arriving in the bay. The piers provide 18 miles of deepwater berthing space and more than 218 acres of cargo-handling area. Each pier has direct rail and trucking service, enclosed cargo assembly and storage space and fire and police protection. At each pier, modern equipment makes possible the use of the latest handling methods.

Specialized facilities include a copra terminal capable of unloading bulk copra at the rate of 180 tons an hour, two banana terminals at which more than 60,000 stems of bananas are often transferred from ship to refrigerator cars via endless belts in one day, and a grain elevator at pierside with a 1,000,000-bushel storage capacity which can load ships at

the rate of 600 tons per hour.

In the elections of 1958, the voters of California authorized the Port of San Francisco to issue \$50,000,000 worth of bonds for harbor improvements. Approximately \$25 million will be spent on an eight-berth quay-type pier to be known as the Army Street Terminal. Lifts will be installed to handle container cargoes.

About 75 percent of the port's inbound and outbound cargoes move to and from the piers over the San Francisco Bay Area's modern freeway system via more than 700 truck lines. The Port of San Francisco's own Trucking Coordination Service schedules truck arrivals and departures in advance, providing the fastest ship-truck transfer on the West Coast.

The port owns and operates the State Belt Railroad, which provides switching service between the port's piers, trunk-line rail interchange points and 150 nearby industries. It handles an average of 325 cars a day over its 60-mile track system.

Foreign Trade Zone No. 3, located at Pier 46C, is operated by the Port of San Francisco under charter from the Federal Government. It is customs exempt territory and provides storage and display space and processing and manufacturing facilities for three main classes of goods: imports, exports and re-export merchandise. Thousands of shippers and traders recognize that only in the Foreign Trade Zone can they obtain these time-saving, money-saving advantages: Goods enroute from one



foreign port to another may pass through duty free; imported goods entering the zone are not subject to duty until they leave the zone and enter U.S. customs territory; domestic goods entering the zone are considered exported and freed of bonding liability; domestic goods exported through the zone are exempt from Federal tax on transportation from their point of shipment into the zone; all goods may remain in the zone indefinitely (while there, they may be unpacked, marked, sorted, processed, manufactured, exhibited and even sold without customs formalities or duty payments).

### Pilotage

Pilotage is under the jurisdiction of a State Board of Pilot Commissioners appointed by the Governor of California.

Pilotage into and out of San

Francisco Bay is compulsory for foreign vessels and vessels from or to a foreign port. It is also required for vessels sailing under a register between the Port of San Francisco and any other port of the United States. Vessels sailing under an enrollment and licensed and engaged in the coasting trade between the Port of San Francisco and any other port of the United States are exempt from pilotage unless a pilot is actually employed.

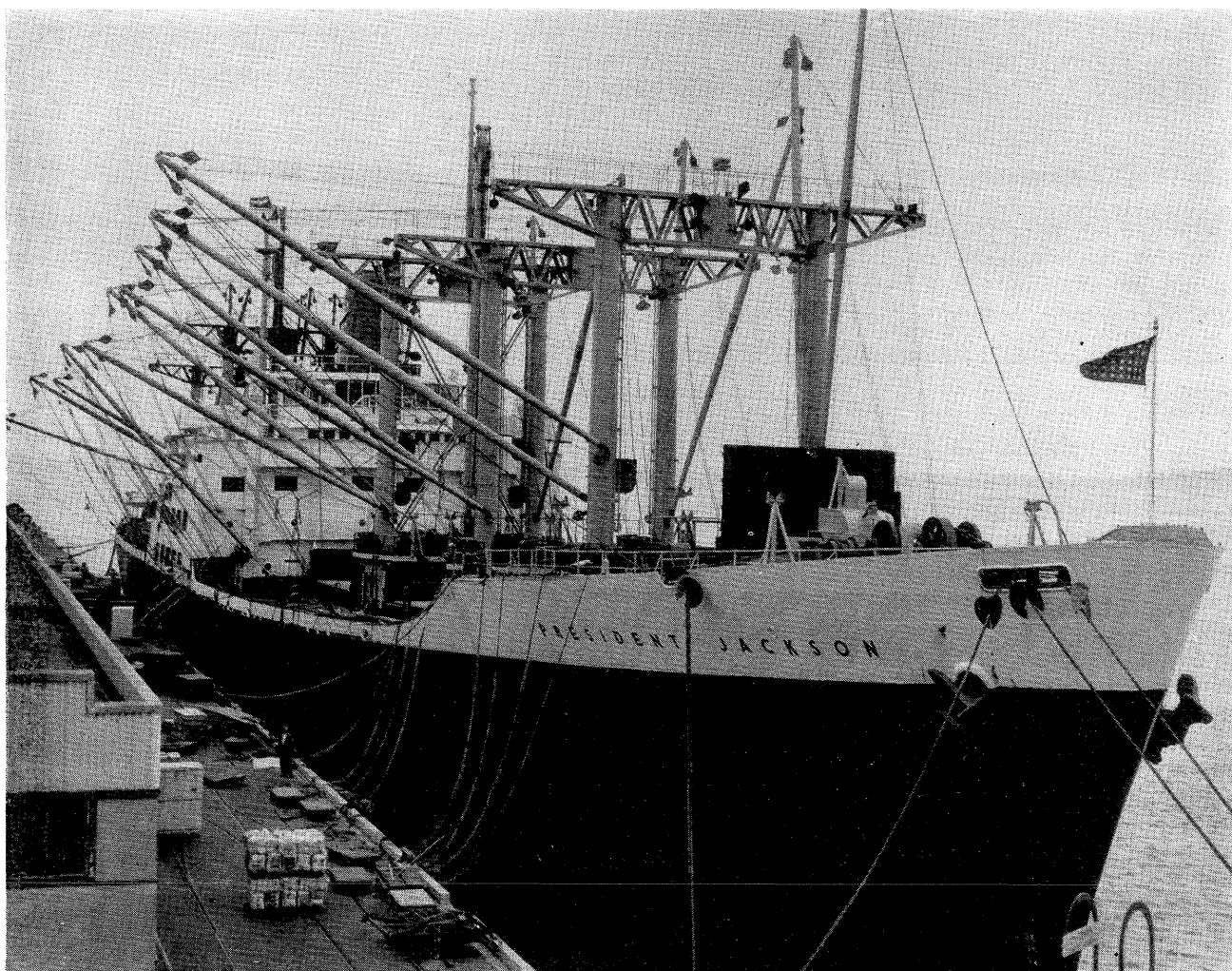
The San Francisco pilot boats keep station between the lightship and the bar, and at times anchor just eastward of the lightship. When on station under sail, a white light is carried at the masthead; when under power, a red light is displayed under the white light. A flare or torch is also burned frequently. To signal for a pilot in fog, approach the lightship as closely as possible,

blow four whistles, and lie-to.

In answer, the pilot boat will blow four blasts on the siren. When clear, burn blue light or show four flashes of the Morse lamp, or by day show the Union Jack at the fore. Pilot boats show the Union Jack at the mainmast. Requests for a pilot can also be made by radiotelephone. Such requests should be made three or four hours in advance. The charge for pilotage is \$6.25 per foot draft or fraction thereof at deepest draft.

### Tides

The mean range of tide at San Francisco is four feet. The range between mean lower low water and mean higher high water is 5½ feet. A range of about 9 feet may occur at the time of maximum tides. Daily tide predictions for San Francisco (Golden Gate) are



Mariner-class cargo-passenger vessel of American President Lines loads at home-berth Pier 50 in San Francisco. The port is headquarters for more of the big 556-foot-long U.S. merchant ships than any other U.S. port. "President Jackson", shown here, is one of our Round-The-World Mariners operated by the Line.

given in the Tide Tables, West Coast, a publication of the U.S. Department of Commerce, Washington, D.C.

### Currents

Inside the Golden Gate the flood current sets into all parts of the bay and causes swirls from the Golden Gate as far eastward as Alcatraz and Angel Islands and through Raccoon Strait, northward of the latter island. The ebb current inside the Golden Gate is felt first along the southern shore. The average duration of the ebb stream is somewhat greater than that of the flood. At the San Francisco-Oakland Bay Bridge there are large current eddies near the foundation piers which may cause ships to sheer off course.

### Bridge Clearances

Golden Gate Bridge: 232 feet at mean high water

San Francisco - Oakland Bay Bridge: 219 feet at mean high water

### Cranes

One 100-ton steam A-frame derrick with 106 foot reach; mounted on 120 × 48.1-foot towed barge; draft—11.6 feet.

One 50-ton steam A-frame derrick; mounted on 135 × 50-foot towed barge; draft—10 feet.

One 50-ton Diesel A-frame derrick; mounted on 150 × 60-foot towed barge; draft—10 feet.

One 100ton steam A-frame derrick with 100-foot reach; mounted on 125 × 50-foot towed barge; draft—3.5 feet.

One 80-ton Disel-electric revolving crane with 95-foot reach; mounted on 120 × 60-foot towed barge; draft—10 feet.

One 40-ton Diesel-electric revolving crane with 106-foot reach; mounted on 121 × 52 foot towed barge; draft—9 feet.

### Repairs

The San Francisco Bay Area offers the most modern and complete repair facilities on the West

Coast. Few harbors in the world can offers more. Unexcelled climatic conditions enable ship operators to schedule repair work without fear of lost time because of severe or unpredictable weather conditions. Marine engineers of international repute maintain offices and provide consultation and design service. Shipyards can handle construction and modification of vessels of any size. Manufacturers of turbines, propellers, diesel engines and many other basic components are located in the Bay Area. Large stocks of replacement parts are carried in local warehouses by leading manufacturers of marine machinery. Management-labor relationships are good and there is a plentiful supply of skilled labor in all repair fields.

### Anchorage

Landlocked San Francisco Bay affords excellent shelter and anchorage in all weather except occasional northerly or southerly storms during the winter months. The Capitain of the Port (a representative of the Commandant, 12th Coast Guard District) will assign an anchorage to a vessel upon request.

### Working Hours

The normal working hours for those involved in loading and unloading ships are between 8:00 a.m. and 5:00 p. m. Workers are paid regular wages for six hours of work during this period and at overtime rates for additional time and for work performed at other hours. A plentiful and skilled labor force is available around the clock.

### Supplies

Water is supplied to vessels at pierside by the City of San Francisco via metered lines. Oil is provided at oil company piers or by barge anywhere in the harbor. There are no coal handling or coal bunkering facilities at the port.

Charges (Rates shown subject to change without notice)

### Wharfage

\*(charged per ton of 2,000 lbs. or 40 cubic feet as manifested by vessel).

#### General Cargo

Foreign, Offshore &	
Intercoastal	80¢
Coastwise	40¢
Inland Waterway	25¢

#### Cargo in bulk

Foreign, Offshore &	
Intercoastal	45¢
Coastwise	35¢
Inland waterway	21¢

\*Certain general cargo items (examples — pipe, vehicles and bananas) and bulk cargoes (examples—molasses, fuel oil, vegetable oil) are charged different rates as listed in Port of San Francisco Tariff No. 3-C.

### Freetime

allowed on the piers on inbound and outbound merchandise:

	In-bound	Out-bound
Inland Waterway	5 days	5 days
Coastwise	5 days	5 days
Intercoastal	5 days	10 days
Foreign & Offshore	7 days	10 days

### Wharf Demurrage

charged on merchandise not removed from wharf area within the free time:

Merchandise (unless otherwise charged for specific commodities) 1st 5 days ..... 35¢  
Each addition 5 days ..... 70¢

### Wharf Storage

Merchandise may be placed on wharf storage if applied for to the Terminal Operator in advance of storage date and if space is available.

Merchandise (unless otherwise charged for specific commodities):

Per 2,000 lbs.	
Daily	7¢ per day
Monthly*	88¢ per mo.

\*A receiving and delivery charge is added the first month to this monthly storage rate in the amount of \$2.05 per 2,000 lbs.

### Dockage:

Dockage rate: on vessels engaged in coastwise, foreign and offshore trades.

Requests for specific information on port charges are welcomed. They should be addressed to the Traffic Dept., San Francisco Port Authority, Ferry Bldg., San Francisco, California.

### Local Regulations

Covered by the Port of San Francisco's TARIFF NO. 3-C.

### Towage

Towboats of nearly every size and description are available in San Francisco Harbor. They range from small 100 horsepower boats, for limited use within the bay, to sturdy 1,900 horsepower sea-going tugs.

### Lighters

Serving the Port of San Francisco are more than 80 barges ranging from 175 to 26,000 tons cargo capacity. There are barges for acids and caustics, molasses and sugar, explosives, bulk petroleum, bulk copra and grain, and other commodities that require special handling.

### Floating drydocks

1-length	654 feet;	width	100 feet;	capacity	22,000 tons
1- "	598 "	;	" 99 "	;	" 14,000 tons
1- "	542 "	;	" 84 "	;	" 11,000 tons
1- "	450 "	;	" 80 "	;	" 6,500 tons

### Building ways

1-length	550 feet;	width	96 feet
2- "	400 "	;	" 98 "
2- "	660 "	;	" 98 "

20	300	\$ 6.00	9,000	10,000	\$114.50
	300	500	10.50	10,000	11,000 125.50
	500	1,000	20.50	11,000	12,000 135.50
	1,000	2,000	31.50	12,000	13,000 146.00
	2,000	3,000	42.00	13,000	14,000 156.00
	3,000	4,000	52.00	14,000	15,000 166.50
	4,000	5,000	62.50	15,000	16,000 177.50
	5,000	6,000	72.50	16,000	17,000 187.50
	6,000	7,000	83.50	17,000	18,000 198.00
	7,000	8,000	94.00	18,000	19,000 208.50
	8,000	9,000	104.00	19,000	20,000 218.50

Over 20,000 gross registered tons, \$10.50 per day for each additional 1,000 gross registered tons or fraction thereof, in addition to the above rate of \$218.50.

Provided that: (a) In computing dockage halves of days only in all cases shall be considered and dockage shall be assessed therefore, as follows:

- (1) 12 hours or less shall be charged 1/2 of full day's dockage;
- (2) Over 12 hours and not more than 24 hours shall be charged one full day's dockage.



Automated newsprint Carrier, M. S. BESSEGGEN, discharges paper at the Port of San Francisco's Pier 1 newsprint terminal.



# COMMERCIAL PORT GOVERNMENT OF GUAM

By Jose B. Sarmiento  
Commercial Port Manager



Port area showing waterfront dockage space.

## General Information

The Commercial Port was established as a separate instrumentality within the Government of Guam on January 3, 1961 by virtue of Section 8 of Public Law 3, enacted by the First Guam Legislature. Section 9 of this same law, places the Port under the cognizance of the Director of Commerce with a Marine Terminal Superintendent who is directly in charge of the immediate supervision of the operation and administration of its affairs. Public Law 7-48 of July 9, 1963, has transferred the authority for the operation and management of the Port exclusively to the Commercial Port Manager.

The property on which the Commercial Port is located is a part of the Naval Supply Depot function of the Naval Station. The Government holds this land under the terms and conditions of

a 90-day Revocable Permit by virtue of the Joint Navy/Interior Agreement. The Port covers 24 1/2 acres embracing 2190 lineal feet of quay face (waterfront); #1 Warehouse consisting of ten contiguous Butler buildings (46,400 square feet of covered storage area); #2 Warehouse consisting of four Butler buildings (16,000 square feet); #3 Warehouse consisting of eight Butler buildings (38,400 square feet); an Agency Office Building housing the offices of the three principal steamship companies and containing 9,520 square feet of floor space; three Butler buildings providing 12,000 square feet of area for the maintenance, supply and repair effort; and a warehouse for vans and containerized cargo containing 12,000 square feet.

The Commercial Port is one of the three Revolving Fund instrumentalities within the Govern-

ment, and thus does not operate on appropriated funds, but must operate on the income it derives from the collection of various fees and charges levied, as per the Port Tariff, for performing various services connected directly with the loading and discharging cargo, and the terminal function of the care, custody, and warehousing of cargo. Permanent personnel number 103, and casual labor is employed as required in several categories numbering upwards of five hundred. Auxiliary stevedoring is done by the Port for the Naval Supply Depot on a man-hour rate.

Added stimulus to the development of our waterborne commerce was the lifting of security clearance by the Navy for foreign ships to enter Guam on August 21, 1962; thus, making the territory become a free port in the Pacific hemisphere. Since then, our foreign shipping has tremendously increased in tonnage and dollar value. The accompanying statistics and other pertinent data have shown the continuing rise of foreign imports into Guam.

A joint survey study of the Navy and the government is currently in progress for the relocation of a new port site. The proposed area would relieve the activity of its present congestion problem; plus, other additional facilities of adequate processing warehouses, cold storage, and industrial park which are not now available at the present site.

Normally, all privately owned and commercial vessels will be berthed at the Commercial Port area which is an organizational function of the Government of Guam on the south-eastern part of the harbor. Vessels utilizing commercial port berths are subject to such charges and fees in accordance with our existing tariff schedule.

When necessary for commercial or private vessels of 50 tons or more to utilize Navy berths, a charge of \$0.15 per day per net registered ton for the first 10 days, thence \$0.1 per day net registered ton is levied, payable to Navy authorities. Vessels of lesser tonnage are charged correspondingly less berthing fees.

Dockage fees levied commercial vessels berthed at the Commercial Port are identically charged similar rates to that of the Navy. Water is charged at \$0.25 per ton (240 gallons—1 ton) and \$5.00 for installation of meter service per vessel.

Tug and pilot services are presently available only through the Navy. The use of harbor pilots is not mandatory except when the services of tugs is desired. Charges for each tug approximate \$125.00 per hour or fraction thereof, and the pilot fee is approximately \$8.50 per hour during normal working hours plus 30% surcharge.

Formal necessary steps are currently being taken at the present time for revision of our existing rates and regulations for compliance of Subsection (e) of Section 14002, Government Code of Guam, as amended by Public Law 7-48, approved July 9, 1963.

### Carrier Lines Serving Guam

Lines	Port of Call
Pacific Far East Lines .....	U.S. West Coast & Orient
American President Lines .....	U.S. West Coast & Orient
Pacific Micronesian Line .....	Trust Territories of the Pacific Islands
Pacific Navigation System, Inc. ....	Australia, Formosa & Orient
Dominion Navigation Co. ....	Denmark, Belgium, Sweden, England, France, Germany, Australia & Orient
Daiwa Navigation Co. ....	Japan, Hong Kong & Taiwan
China Navigation Co. ....	Hong Kong, Korea & Orient
Indo-China Steam Navigation Co. ....	Thailand, New Zealand, Okinawa & New Guinea
Grusader Shipping Co. ....	Canada, Argentina, Union of S. Africa, Ecuador
Saipan Shipping Co. ....	Saipan & other Trust Territory Islands

### Statistics Reflecting Volume of Business Handled by The Port in Terms of Tonnages by Comparative Years

Import	Export	T/Shipment	
1957	130,055	49,975.6	16.813
1958	137,520	45,728	19,259.475
1959	140,038	56,459	17,988
1960	153,333	68,054	14,581
1961	107,143	48,045	20,470
1962	101,487	37,201	14,751
1963	139,530	39,964	14,258
TOTAL	909,106	345,426.6	118,120.475

(in Revenue Ton)

### Recapitulation of Arrivals of Vessels United States & Foreign Ports (Comparative Years)

Origin	1959	1960	1961	1962	1963	Total
United States	36	40	54	49	45	224
Foreign	74	75	89	77	*121	436
Total	110	115	143	126	166	660

Note:

\*Figure represents foreign carrier lines, and U.S. registry vessels from foreign port of origin.

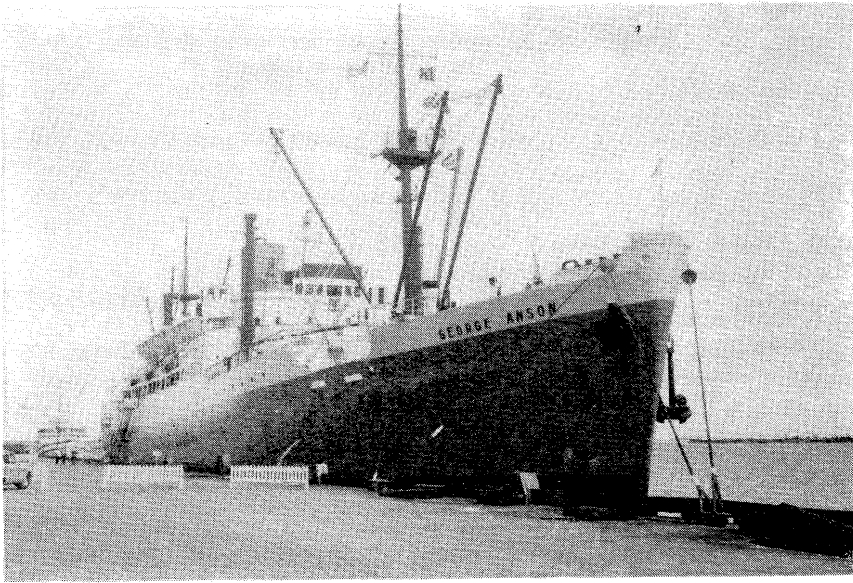
## Financial Statement

Revenue:	1961	1962	1963
Handling	345,088.23	318,295.64	412,565.39
Storage	31,717.67	11,228.64	19,090.27
Stevedoring	789,244.36	677,933.30	889,005.18
Stevedoring (Navy)	175,130.06	182,450.18	153,814.94
Others	47,210.47	66,142.23	125,053.35
	<u>1,388,390.79</u>	<u>1,256,050.29</u>	<u>1,599,529.13</u>
Expenses:			
Salaries	1,190,775.45	1,086,314.06	1,226,915.74
Supplies	56,727.56	49,964.11	44,604.28
Gas and Oil	22,973.53	19,528.70	27,108.40
Utilities	18,804.54	16,717.31	15,928.02
Retirement Fund	39,239.12	38,779.45	39,739.37
Others	49,884.08	43,134.92	50,386.94
	<u>1,378,404.78</u>	<u>1,254,168.55</u>	<u>1,404,682.75</u>
Depreciation & Amortization	125,268.00	67,692.18	66,518.92
	<u>1,503,672.78</u>	<u>1,321,860.73</u>	<u>1,471,201.67</u>
Gain or Loss	-115,281.99	-65,810.44	+128,327.46

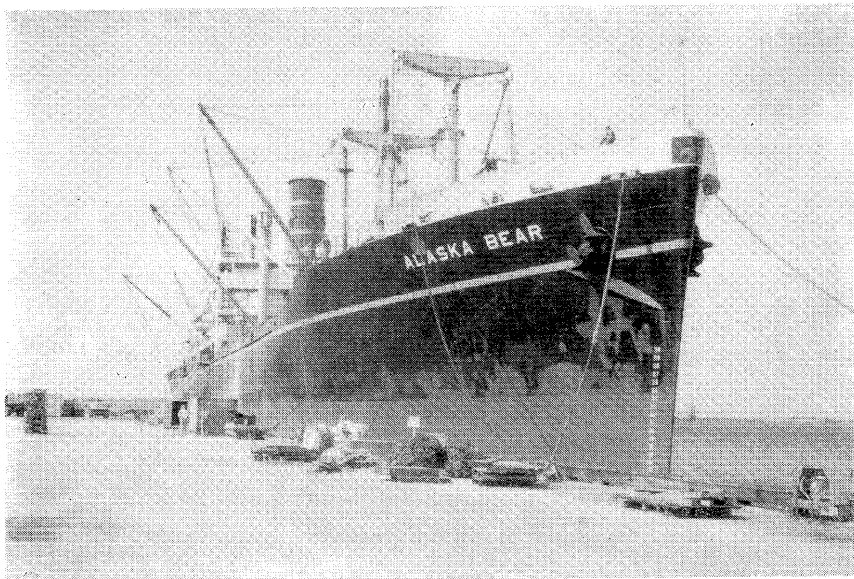


Regular issues to consignees are part of our varied bustling activities in the port.





SS GEORGE ANSON, DOMINION LINE, LONDON, ENGLAND, carrying first official tourists into GUAM! aside, cargoes from AUSTRALIA, PHILIPPINES. H O N G KONG, and JAPAN ports.



PACIFIC FAR EAST LINES, INC. SAN FRANCISCO, CALIFORNIA, ALASKA BEAR with sister vessels make GUAM their regular port of call for passenger and cargo.



Lumber issues on Sundays to relieve port of congestion problem.

# PORT OF BUENOS AIRES

By Federico R.A. Prestien

Civil Engineer

General Inspector of Hydrographic Studies

Buenos Aires is the Capital of the Argentine Republic with a population of 3,845,300 as of 31st December, 1959. It is the financial and commercial centre and the most important port of Argentina, with important industrial plants and factories established within the City and vicinity. The leading banking and financial institutions have their headquarters in the City.

This modern city, with its wide avenues, lofty buildings and spirited, enterprising people, can be justly termed the foremost of South America, and indeed, one of the most important in the world. It has numerous transport systems, including several subway lines and terminal railroad sta-

tions; commercial activity is intense, as is shown by the many industrial centres in and around the city; and it can also be said that culturally, Buenos Aires has contributed a great deal to the arts and science in their different aspects. Universities, art galleries, sports stadiums, beautiful parks and gardens, ancient churches and modern hospitals, are all to be found in this thriving and progressive capital.

The port is situated on the right bank of the River Plate which at this point is 45 kilometers wide. The facilities of the port are modern and extensive.

The port of Buenos Aires handles practically the whole of the import trade and a large propor-

tion of the grain shipped. The bulk of the remaining exports, is shipped from this port.

It is the terminus of all the passenger lines on the South American East Coast service and is also the centre of the river traffic communicating with the Provinces and neighbouring countries.

## Access to The Port

Access to the port is by the "Punta del Indio" Channel, which commences 2½ kilometres westward of the Recalada Pontoon, situated about 30 kilometres south of the Port of Montevideo, and winds into the "Banco Chico" channel, up to the outer Roads situated about 37 kilometres from the Port. Direct entrance to the port is by means of a channel running from the Outer Roads to within 10 kilometres of the port. At this point the channel branches into two; one communicating with the northern entrance of the port via the North Channel, and the other communicating with the southern entrance via the South Channel.



NEW PORT

1. Entrance to North Basin; 2. Basin A.; 3. Basin B.; 4. Pier No. 3; 5. Basin C.; 6. Wharf used exclusively by ELMA (State Fleet); 7. Pier No. 4 (Units 5 and 6); 8. Basin D; 9. State Railway Hospital; 10. State Railway Building; 11. Outer Breakwater; 12. Mitre Channel; 13. South Channel.

The Ministry of Public Works has completed the dredging of a new channel joining the North and South Access Channel of the Port of Buenos Aires, between kilometres 9.5 and 11, where both channels diverge.

This has been done to bypass the place where two lighters sunk in September 1957.

The new channel has 3 lighted buoys and it should be of considerable use to vessels drafted to the Inflammable Basin, South Dock and Riachuelo.

### Depth of Channels

The main channel from the Outer Roads is 100 metres wide with a depth of 27 feet on its axis, while the northern arm has a depth of 27' and the southern arm 25' according to latest official publications. These depths are not constant, as they depend on the dredging operations, which are being carried out. All the channels are buoyed.

Entrance to the North and South Channels is prohibited when, with a rising river, the Semaphore still shows less water than the vessel's draft. Entrance is also prohibited when with a falling river, the semaphore shows less than 50 centimetres clearance over vessel's draft.

### Description of The Port

The Port, which is artificial, comprises:

#### PUERTO MADERO—

North Basin, Docks 1, 2, 3, 4 and South Basin.

#### NEW PORT—

Basins A, B, C, D, E and F.

#### SOUTH DOCK—

First and Second Section.

#### RIACHUELO—

Comprising the district known as Boca and Barracas.

#### INFLAMMABLE BASIN—

On the south side of the South Channel, after passing South Dock.

#### SOUTH ANTEPORT BASIN AND BREAKWATER—

Under construction on north side of South Channel.

#### BUENOS AIRES ROADS—

Considered an extension of the Port.

The construction of Puerto Madero was authorized on the 27th October 1882, and the works com-

menced with the building of the South Basin on the 1st of April 1887. The works were completed on the 31st of March 1898.

The construction of the New Port was authorized by Law No 5944, sanctioned in 1908, and the works were commenced in 1914. All the works have been completed, including Basin "F", but there is as yet no access for ocean-going vessels to this Basin.

**New Passenger Landing Station.**—This problem has been partially settled by building a provisional Passenger Landing Station on the South side of Basin "A".

It can accommodate two vessels at a time and the station has sufficient comforts for the reception of passengers, the clearance of their luggage and a hall for reception of the people awaiting their arrival.

This station is provisional and it is far from fulfilling all the requisites of a modern maritime passenger station such as is required by a port like Buenos Aires, which enjoys such a great movement of vessels of all classes including modern passenger liners.

The old landing station in the North Basin has been taken over by the Navy, who next to it have an arsenal, workshops and two Dry Docks.

### Puerto Madero

Puerto Madero is the oldest part of the port, and its chainlike disposition of docks and basins (6 in all), is nowadays not practical for the ever increasing size of vessels, many of which cannot get into Docks 1 or 2 or the South Basin, owing to their beams not allowing them to pass the dock locks. They also lack manoeuvring space and at times it is quite a problem, when passing the locks, to avoid the sides of the vessels grazing or bumping against the lock walls.

Ocean-going vessels mainly operate in North Basin, Docks 4 and 5.

### North Basin

The North Basin has the form of an irregular pentagon and in one of the angles there is the entrance, 100 metres wide. The two piers at the entrance have a length of respectively 200 and 225 metres. The West side of the Basin is 390 metres long, the South side 377 metres, and the North side 335

metres. This basin has a depth of 30 feet.

The quay walls of the North Basin were originally built to permit a depth of water alongside of 21 feet, but as the Basin is dredged to 30 feet, it has been found necessary in order to protect the stability of the walls, to build a bank on a gradual slope. Vessels at the quay, when loading deeper than 20 feet, should therefore take precaution of keeping well off the quay wall in order to prevent grounding.

In this Basin the following installations and equipment are to be found:

**DRYDOCKS:** Two drydocks owned by the Government are situated adjacent to the passenger station.

**WAREHOUSES & CRANES:** 5 warehouses of total capacity of 39,200 cub. m., equipped with 16 electric cranes of 3 kilo-ton capacity.

### Dock 4

This dock is connected with the North Basin by a lock 197 metres long by 25 metres wide provided with two gates and a swing bridge. The lock underwent a general renewal in 1958. The dock is 630 metres long by 160 metres wide and is 24 feet deep. It is principally used by vessels running on regular Cargo Lines. In this dock 12 warehouses of total capacity of 180,258 cub. m., equipped with 35 electric cranes of 2½ to 3 ton capacity are available.

### Dock 3

This dock is connected with dock 4 by a lock 70 metres long by 20 metres wide with a swingbridge. The dock is 690 metres long by 160 metres wide and is 23 feet deep. The city side of the dock is used for discharging general cargo. The river side is used for loading grain from elevators, wagons, etc. In this dock the following installations and equipment are to be found:

**WAREHOUSES & CRANES:** 4 warehouses of total capacity of 90,376 cub. m., equipped with 19 electric cranes of 3 kilo-ton capacity.

**ELEVATORS:** The following two elevators and appliances for loading grain, situated on the eastern side of the dock, have been taken over by the National Grain & Ele-





#### NEW PORT

1. Basin A (a: Provisional Passenger Landing Station); 2. Subprefecture of the New Port; 3. Pier No. 2; 4. Basin B (State Fleet); 5. Pier No. 3; 6. Basin C; 7. Pier No. 4; 8. Basin D; 9. Pier No. 5; 10. Basin E; 11. Pier No. 6; 12. C.I.A.E. Electric Power Station; 13. Basin F; 14. Edison Avenue; 15. Mitre Channel (To North Channel-To Olivos).

vators Board:

"Continental" (UNIDAD III); capacity 6,000 tons in bulk and 1,200 tons in bags, having 3 tubes and 3 shoots.

"Hispano Argentino" (UNIDAD V); capacity 26,000 tons. Can load 600 tons in bulk or 160 tons in bags per hour. Two vessels can be loaded simultaneously by means of 4 tubes and 4 shoots and by one tube and one shoot. The length of the loading bridge, built of concrete, is 128 metres.

The following elevators, also situated on the eastern side, are still under private management:

"Molinos del Río de la Plata". One elevator has 5 shoots, and the other 9 shoots. Their total capacity is about 50,000 tons in bulk and 32,000 tons in bags.

On the elevator nearest to calle Belgrano there is a mechanical appliance composed of two suction tubes for discharging lighters to the Elevator.

**GRAIN DEPOSITS:** On the East side of this dock, at the back of the Elevators, there are numerous

sheds and silos for the storage of grain.

#### Dock 2

This dock connected with dock 3 by a lock 60 metres long by 20 metres wide with a swingbridge. The dock is 570 metres long by 160 metres wide and is 23 feet deep. The city side of the dock is used for discharging vessels with general cargo and cargo-liners are usually docked here. The river side is used exclusively for loading grain from elevators and/or railway wagons.

Vessels discharging "direct despatch cargo" can also operate in front of the open spaces left between the elevators.

#### WAREHOUSES & CRANES:

4 warehouses of total capacity 118,358 cub. m., equipped with 15 cranes of 3 kilo-ton capacity.

**ELEVATORS:** All the elevators and loading appliances in this dock are handled by the National Grain and Elevators Board, with the exception of the "Rosarino", which is under the management of Molinos Río de la Plata.

Situated on the east side there are the following:

"Rosarino" with two tubes and 2 sets of shoots. Capacity 7,000 tons in bulk and 5,000 tons in bags. This elevator does not operate with vessels, as it has no access to the Dock side.

"Elevador Oficial" (UNIDAD VI). This elevator is divided into 3 sections: A, B and C Total capacity: 16,000 tons.

As all the machinery of the elevator has been dismantled, it cannot be used for loading operations.

"Graneros Modelo" (UNIDAD VII), has 2 tubes and 1 shoot. Capacity in bulk 10,000 tons and in bags, 14,000. Loading can be effected at the rate of 3,800 tons per day of 8 hours.

At the back of the elevators there are large deposits and silos for storing grain.

#### Dock 1

This dock is connected with dock 2 by a lock 80 metres long by 20 metres wide with a swing bridge. The dock is 570 metres long by 160 metres wide and is 23 feet deep.

The dock is mainly used by the government owned river craft. The General Belgrano National Railway has also a station for cargo situated in the South end of the dock on the East side.

**WAREHOUSES AND CRANES:** 5 warehouses of total capacity of 130,506 cub. m., equipped with 29 electric cranes of 3 kilo-ton capacity.

**ELEVATORS:** All the elevators and loading appliances are controlled by the National Grain & Elevators Board.

Situated on the east side there is:

"Graneros Modelo" (UNIDAD VIII) has 2 tubes and 1 fixed shoot with a capacity of 27,000 tons in bulk capable of loading 8,000 tons per day of 8 hours. There is also a loading bridge with 2 tubes and an electric belt transporter.

**WAREHOUSES ON EAST SIDE KNOWN as "GALPONES DEL ESTE":** Between docks 1 and 2 on the river side and about 300 metres from the quay there are at present 5 warehouses of total

capacity of 59,500 cub. m.

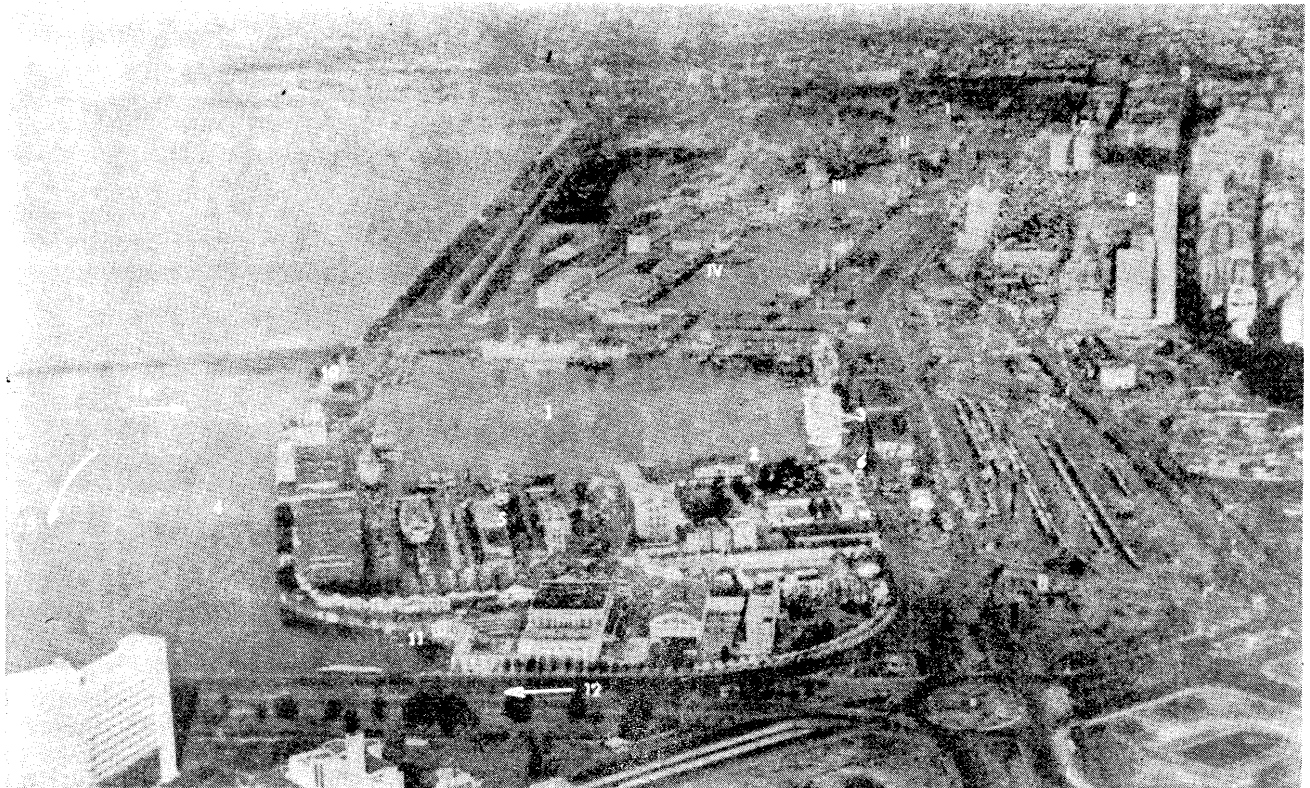
### South Basin

This basin is connected with dock 1 by a lock 184 metres long by 20 metres wide with a swing bridge. The basin is 1029 metres long with an average width of 110 metres and is 22 feet deep. The East side of this Basin is used by vessels discharging oil for Y.P.F. sulphur in bulk, materials for the State Secretariat of Navy and pipes for the State Secretariat of Public Works. Commencing from Brazil Street, the quay-wall is used by the following Receivers: Y.P.F. State Secretariats of Navy and Public Works. The National Board of Harbour Construction and Waterways has built a stretch of cement quay, 525 metres long, which extends it up to a line opposite Calle Cafarena on the city side. Then follow the M.O.P. Workshops, the floating Dock, until the bend leading to the South Channel. The cement quay is about 15 metres further in the bank where the ex-Wilsons jetties had been built, and thus the Basin

in this part is that much wider. The water on the East side is not as deep as in the centre of the Basin and when the river falls, vessels must slacken their mooring in order to slide off the bank. The National Board of Harbour Construction and Waterways, a division of the State Secretariat of Public Works, has completed the construction of 720 metres of quay, that stretches from Brazil street to Villafañe street, on the West side or City side of this basin, and is used by vessels that ply between Montevideo and Buenos Aires and also by those that go up the rivers Paraná and Uruguay.

This wharf is constructed of concrete and is divided into 24 sections of 30 metres each with five rows of piles, a wooden retention and stone slab. Its streets have granite paving, a railway line and also a track for cranes, 24 bollards, water intakes, fire equipment, telephones and electric power.

A further 550 metres has been completed and opened to public service.



**NORTH BASIN AND DOCKS**

I, II, III, IV, Docks 1, 2, 3, 4.; 1. North Basin; 2. Used by vessels of the Argentine Navy; 3. The west end of this side of the Basin is used by vessels of the Argentine Navy and passenger vessels ready to sail; 4. Ante Port; 5. Navy Yard and Dry Dock; 6. Immigrants Hotels; 7. Custom House; 8. G.P.O.; 9. Ministry of Marine; 10. Argentine Yacht Club; 11. Drainage; 12. Road to Basin "A"; 13. South Channel; 14. North Channel; 15. To New Port.



#### SOUTH DOCK

1. South Channel; 2. Inflammable Basin; 3. Entrance to South Channel; 4. To Riachuelo; 5. To South Basin; 6. Urquiza National Railway and Ferry Boat Station; 7. South Dock Customs Office; 8. South Dock Staff Office; 9. Anglo Packing Co.; 10. Oil Mole; 11. Turning Basin; 12. South Dock Second Section; 13. South Dock Power House SEGBA; 14. Grain Elevator; 15. Inflammable Section; 16. Maritime Prefecture Station; 17. Grain Elevator; 18. Y.P.E. Plant; 19. Floating Dock; 20. Semaphore; 21. M.O.P. Workshop; 22. Direccion Nacional de Vialidad; 23. Customs Station South Entrance.

The new Landing Wharf for passengers by River Boats is constructed on a site 100 metres long, with an ample Bar and Tea-room Waiting-room, Bathrooms and Inspection Office.

Facilities include 4 movable baggage-wagons for the transport of passengers' luggage. Passengers can leave their belongings in deposit for a charge of Argentine \$10.—paper per day and per package.

The stretch of quay between calle Villafañe and Calle Brandsen destroyed by fire has been totally reconstructed.

**WAREHOUSES:** On the West side, commencing from the end of Brasil Street there are 3 galvanized iron warehouses Nos 1, 2 and 3 of one story each and of a capacity of 3,385 cubic metres each.

From the end of warehouse No 1 to the limit of the basin at Calle Pinzon, there is an open quay space used by vessels employed in

the river and coasting trade.

There are oil tanks belonging to Y.P.F. situated on the East side. **CRANES:** All along this Basin and up to Calle Pinzon, there are 8 electric movable cranes of 4,000 kilos lifting capacity, placed on the open quay space. In front of the Ministry of Marine berth there are two 3,000-kilo electric cranes.

There are also 2 cranes 3,000-K.E. on the M.O.P. Wharf.

#### The New Port (Puerto Nuevo)

The New Port is situated to the north of Puerto Madero and entrance is via the North Channel. A breakwater extending from the north anteport protects the basins of the New Port from rough seas. This breakwater extends as far as Basin D and from there another breakwater protects Basin E. Between the two breakwaters a channel has been dredged to provide the entrance of coasting vessels proceeding from Olivos and other near river ports. The State

Secretariat of Public Works has still under study plans for extending the second breakwater northwards, which would allow the opening up of Basin F.

Between each basin there is an ample pier-head at which one or more vessels can operate. These pier-heads are numbered 1 to 6 and all are in use with the exception of No 1. No 5, which is the longest, can accommodate 4 vessels.

The ample and deep basins in this section of the port, provide accommodation for the larger vessels employed in the carrying trade today, which were not contemplated at the time the old Puerto Madero was designed.

Unlike the Puerto Madero, which has less water in the docks than in the North Channel, all the basins of the New Port are dredged to accommodate any vessel which can navigate the North Channel, excepting Basin F.

The New Port is the most modern and best fitted out section for



the handling of vessels, and this is where all the Liners, ELMA (State Fleet) vessels, and large cargo vessels operate.

### **Basin A**

This basin is used by passenger liners and general cargo vessels. It is 365 metres long by 140 metre wide with 870 metres of wharfage. On the Southeast side the provisional station for landing passengers has been built and it provides accommodation for two vessels at a time. This station replaces the old one in the North Basin.

#### **WAREHOUSES & CRANES:**

5 warehouses of total capacity of 133,704 cub. m., equipped with 14 electric cranes of 3 kilo-ton capacity.

### **Basin B**

This is also used for passenger liners and for cargo vessels arriving to complete their cargo from the docks or up-river ports. The basin is 525 metres long on the north side, 464 metres on the south side and 151 metres wide at its western end with 1165 metres of wharfage.

#### **WAREHOUSES & CRANES:**

10 warehouses of total capacity of 222,302 cub. m., equipped with 29 electric cranes of 3 kilo-ton capacity.

**PIER HEAD No 2.**-This is 202 metres long. Can accommodate 2 vessels. Discharging and loading operations can only be effected here by lorries. There are 3 Ansaldo cranes of 3000 ks. lifting capacity. As a rule large passenger Liners occupy and sail from this berth, after shifting from the Passenger Station in Basin "A" South side.

### **Basin C**

This Basin is 495 metres long on the north side, 585 metres on the south side and 175 metres wide at its western end with 1284 metres of wharfage.

**SOUTH SIDE - WAREHOUSES:** The 3 warehouses, Nos 4, 5 and 6, are in service. Their total length is 466 metres and are 26.80 metres wide, with a total surface of 21,000 cubic metres. They are built 20.45 metres away from the quay-side, so as to facilitate cargo operations from carts, lorries, etc. ELMA (State Fleet) has been given the exclusive use of berths

in front of these deposits, for their own vessels and those they may have an time-charter. Other vessels may operate at these berths, provided they do not interfere with the operations of the State Fleet and the cargo does not occupy too much of the storage space required by the latter. The spaces between these warehouses are roofed and the front sheltered, which enables the cranes, when placed, to run from one end to the other and be placed in the position required.

**NORTH SIDE:** This side has no sheds and is mainly used to load vessels from, lorries and waggons. Vessels with heavy lifts or having cargo for direct delivery, also operate along this wharf.

The National Grain Elevators Board has a privilege for loading vessels on this quay with grain from waggons and/or lorries, with platform or shoots.

**CRANES:** On southern quay-side, in front of Warehouse No 6, there are 10 (Ansaldo) 3,000-K.E. cranes and 3 (Portal) 3,000-K.E., which can only run along in front of the warehouses, whereas the other ten run along the quay front and deposit close to the S.W. corner of the Basin.

Between the warehouses and the hangars there are six Ansaldo electric 3,000-kilo cranes.

On the North side there are 7 Ansaldo cranes.

On pier Head No 3 there are three 3,000-kilo and one 20,000-kilo cranes.

Two electric cranes of 3,000-kilo lifting capacity (Ansaldo) have been erected on the West end, and another on (Stother & Pitt) has been erected on the North side of the West end. All these cranes have double movable jibs.

**PIER HEAD No 3:** This is 236 long, and can accommodate two vessels.

### **Basin D**

This Basin is 495 metres long on the north side, 585 metres on the south and 194 metres wide at its western end with 1,300 metres of wharfage.

The Southern side has the terminal elevator built all along the water frontage, and occupying the whole of the background of Pier Head No 4. This elevator is 318

metres long, with a capacity of 150,000 tons, and it is claimed can deliver 13,500 per day, receive 9,000, clean 3,700, and dry 500 tons.

This imposing elevator, is managed and controlled by the National Grain and Elevators Board. With normal arrival of grain vessels should get good despatch from any of the berths. Six vessels will be able to berth and receive cargo from this elevator simultaneously, from the southern side of Pier Head No 4.

There are 6 shipping lines, 27 shipping spouts and 10 sacking stations with one sack shoot.

Bagged cargo can also be loaded by filling the bags from a hopper on the hatch.

**NORTHERN SIDE:** Is paved and vessels can load from lorries and waggons and similarly discharge heavy lifts or cargo for direct delivery at Pier No 5 south end. Preliminary works are being carried out to build sheds on the open spaces, beyond the paved area.

**WESTERN SIDE:** Also paved, and vessels can operate to railway waggons and road vehicles of any class.

**CRANES:** On the North side there are 9 electric cranes (Ansaldo) and on the West side 3 all of a lifting capacity of 3,000 kilos and a range of 6 to 20 meters.

**"WHIRLEY" CRANES:** The Buenos Aires Port Administration, put into service three "Whirley" Cranes imported from U.S.A.—These have been installed on the installed on the north side of Basin "D" and they are capable of lifting up to 30,000 kilos.

**PIER HEAD No. 4:** Is 295 metres long. The whole frontage is occupied by the Terminal Elevator. It can accommodate 2 vessels.

### **Basine E**

This Basin is 495 metres long on the north side, 585 metres on the south side, and 194 metres wide at its west end with 1,300 metres of wharfage.

**NORTHERN SIDE:** Is paved and used by the Ferrocarril Nacional General San Martín and the Ferrocarril Nacional General Bartolomé Mitre, for the discharge of coal to waggons. Vessels with other classes of cargo can also discharge here.



RIACHUELO (BOCA AND BARRACAS)

1. South Channel; 2. To South dock; 3. To South Basin; 4. Ferry Boat Station and Mole; 5. Floating Dock, M.O.P. Mole; 6. Sub-Prefecture of Boca and Riachuelo; 7. N. Avellaneda Bridge; 8. Vuelta de Rocha; 9. Ship-yards; 10. Barraca Sido; 11. L. Saenz Pena Bridge; 12. Railway Bridge; 13. LaQuimica Industrial Argentina; 14. Yacimientos Carboníferos Fiscales; 15. Barraca Pena; 16. Carbonera No. 2; 17. La Blanca Packing Co.; 18. Barraca Campanite; 19. J. J. de Urquiza Bridge; 20. Central Produce Market; 21. J. M. de Pueyrredon Bridge.

**WESTERN SIDE:** It has been completely paved. The western end has been dredged, and vessels can now operate there.

**CRANES:** There are 2 electric cranes of 3,000 Kos. lifting capacity on the northern side, as well as 4 small cranes used by the Railways to discharge coal.

On the western side there are 3 electric cranes of 3,000 kilos, one of which is "Ansaldo".

On Pier Head No 5 there are two Ansaldo electric cranes.

**WAREHOUSES:** None.

**PIER HEAD No 5:** On this Pier Head, situated between Basins D and E there is the electric power house of Servicios Eléctricos del Gran Buenos Aires (Ex-CADE). This Pier Head is 523 metres long, and of this frontage, 240 metres are monopolized by SEGBA discharging their coal vessels. It is understood that this Company has a special privilege in this district of the port as they built the quay wall for the government and effec-

ted other works in return for the ground and concession. The Company has two travelling grabs to discharge their vessels, one oil intake and a 30,000-kilo crane. The tubs of the grabs have a capacity of 4 tons and can each discharge 150 tons of coal per hour. The coal storage capacity of the plant is 350,000 tons.

**PIER HEAD No 6:** On this Pier Head, at the end of the Basin, there is the electric power house of the Cía. Italo Argentina de Electricidad. This Pier Head is 310 metres long. It is paved, but has no railway tracks; only one vessels can berth there.

Lighters with machinery and material for the Power House, discharge here. There is a movable electric crane of 27½ tons lifting capacity. Also an electric travelling grab of 7½ tons capacity for discharging coals to the Power House. This grab can discharge up to 150 tons per hour, and vessels with full or part cargo

of coals can discharge at this berth. There are also two oil intake pipes of 10" each for discharging crude oil.

This pier has also been used for laying up Argentine Merchant vessels.

#### Basin F

This Basin is situated behind Basins E and D, and at right angles, separated by the wide avenue running along the west side of all the New Port Basins. The entrance to the Basin faces north. Small river craft and push-tug convoys with local produce loaded upriver discharge on the south-east side. Barges with sand and gravel discharge at the west end by suction piping.

Before the Basin can be used for ocean going vessels, the access channel around the peninsula from Basin E will have to be dredged, and the break-water must be extended. It has now 18'.

Five electric cranes of 3,000 kilos each, which had been in

Basin "A", have been placed in the N.E. side of this Basin.

### **South Dock (Dock Sud)**

The South Dock (Dock Sud) is under the control of the National Ports Administration. The Docks are situated to the southeast of the City of Buenos Aires, in the jurisdiction of the Province of Buenos Aires, and vessels have access from the Dock to the other dock areas of the Capital via the South Entrance Channel.

The Dock has two sections with a continuous quay frontage providing berthing accommodation for 22 oceangoing vessels. Depth of water is 25 feet at official low tide, with 28 feet at certain berths. Rapid loading and discharging appliances exist; also railway connections, and paved roads linking up the Dock with the City of Buenos Aires and the interior of the Republic.

#### **First Section**

This section has continuous quays along both sides. It has a width of 90 metres for the greater part of its length, widening into a turning basin before reaching the connecting channel. The West quay is 911 metres long, and the eastern side has a length of 1109 metres. Both sides are used for loading and discharging of general cargo and produce. The Anglo Frigorifico Plant is situated on the western side at the back of the quay, and meat products are loaded to vessels direct from the Freezer establishment.

On the eastern side of the Turning Basin, behind Shed No 4, there is a concrete elevator of a storage capacity of 6,500 tons in seven silos. It is provided with 4 tubes and 3 shoots. This elevator, known as UNIDAD IX, is operated by the National Grain & Elevators Board.

There are also 4 sheds with a total capacity of 19,100 tons used for storing grain, and which have mechanical transporting machinery and shoots for loading.

On the western side of this Section there is an elevator of 4,500 tons storage capacity with 2 tubes and 2 shoots for loading grain.

**WAREHOUSES:** There are six warehouses situated as follows:

Nos. 3 and 10 on the West

quay-Nos. 5, 6 and 7 on the East quay-No 8 behind the East quay. All warehouses are constructed of galvanized iron sheeting on a steel framework and are of one floor only. No 10 is used exclusively as a Fiscal Deposit for imported merchandise. The others are utilized for the storage of general produce.

**CRANES:** East side, one 30 ton crane (fixed)-two 10 ton cranes (fixed)-four 5 ton cranes (movable)-nine 3 ton cranes (movable)-nine 1½ ton cranes (movable) West side, three 3 ton cranes (movable)-nine 1½ ton cranes (movable)-nine steam crane with grab for sand discharge.

**FRESHWATER:** Vessels can be supplied with freshwater from the water connections on the wharf.

#### **Second Section**

The connecting channel is 90 metres wide with earth banks. Jetties for discharging petroleum are situated on the East side of the channel and along the East side of this section.

This section is provided with a continuous quay 1,000 mts. long on its western side.

**CRANES:** West side, four 3-ton cranes (movable)-eight 1½ ton cranes (movable), and one steam crane with grab for discharging sand.

**BERTHS:** There are seven berths in this Section, five of which are for general use; one used exclusively by the SEGBA and one elevator berth.

There is an elevator: (UNIDAD X), with a capacity of 33,500 tons, provided with a loading bridge with 5 turrets, each turret having 2 tubes and 1 shoot. The tubes are so arranged that they can all pour simultaneously, and are able to reach vessels berthed in second tier. The loading capacity of this

elevator is 6,000 tons of bulk grain per day of 8 hours.

**FRESHWATER:** Vessels can be supplied with fresh water from the water connections on the wharf.

**JETTIES FOR PETROLEUM DISCHARGE:** along the eastern bank of the connecting channel of this section, there are eight jetties for the discharge of tankers and the loading of oil barges ex-shore tanks.

**RIACHUELO (BOCA BARRACAS)**

This is a narrow winding stream flowing into the River Plate by the way of the South Channel, which has a depth in its axis of 21' and between 19 and 17 at the different berths. The stream has sloping mud banks which necessitates moorings being slackened on a falling river. The district traversed by the stream is known as Barracas and the mouth is known as Boca. It has a navigable length of 4,330 metres for ocean-going vessels. The northern river frontage has 4,090 metres of concrete wharf and 240 metres of hard wood wharf (between Pinzon and Suarez Streets). The southern side of the stream, which has 1,239 metres of wooden wharf frontage and 450 metres of cement wharf, is not used to the same extent as the northern side. The average width of the Stream is about 100 mts. It should be noted that the northern side is under the jurisdiction of the Federal Capital whereas the South shore is in province of Buenos Aires (Avellaneda district). Ocean going vessels only go up as far as Montes de Oca street close to the "Pueyrredón" Bridge, situated at the foot of Vieytes Street. All along the northern side of the Riachuelo, as far as navigable for ocean-going vessels, there is an open road frontage on which

private warehouses and coal depots are situated.

### **Basin for The Discharge of Inflammables**

The construction work of this Basin was completed some time ago, since 1954 it has been open for the discharge of tankers carrying liquid fuels including kerosene. It is situated outside the South Channel in front of Kilometre 0.500 and about 300 metres distant from the axis of the Channel and at a right angle. The dimensions are as follows: Length: 483 metres on the east side, 323 metres on the west side, 185 metres on the S.W. side and 72 metres on the south side. The dock walls at the entrance are 44 metres long on each side. The entrance is 50 metres wide. All the dockwalls of this Basin are of cement, as well as the intakes and landing dolphins. It has 6 intakes 6 dolphins and 12 jetties for mooring vessels. The present tank storage in South Dock lies to the S.E. of this Basin at a distance of about 1,000 metres. The land lying between the South Dock and the Inflammable Basin is used for erecting tanks.

Ocean-going tankers discharge at the piers on the west side. There are no facilities for reaching the city by land and therefore all the transport of officials, crew, stores, etc., must be done by launch. Tankers have not discharged at any of the piers on the East side of West Basin.

The oil for the Y.P.F. tanks on the East side of the Basin and the M.O.P. workshops is sent from the South Dock by piping that runs under the South Channel.

### **South Anteport Basin and Breakwater (Darsena al Este) (not yet opened to traffic)**

There is plenty of water in the Basins, but all the shore equipment and requirements have still to be installed and therefore this basin has not yet been opened to traffic.

This Basin, according to original plans will contain 3 slipways for shipbuilding, two floating docks (one of which will be the one situated at present in the

South Basin), and a number of jetties for the discharge of coal cargoes.

A large Power House is being erected on the northwest area of these basins.

### **"BRIDGE-TO-BRIDGE" Radiotelephone system to be tested in Newark Bay**

New York, Feb. 16—A radiotelephone system to permit instant voice communication between vessels in the New Jersey-New York Harbor will be tested for a year beginning tomorrow (Monday) on ships bound to or from Port Newark. Announcement of the test was made jointly today by The Port of New York Authority, the Pilotage Commissioners of the States of New York and New Jersey, and the New York and New Jersey Sandy Hook Pilots Association. The results of the test on Port Newark-based vessels will be used by the Pilotage Commissioners to determine the advisability of making use of the system by pilots on all vessels in the bi-state port.

The "bridge-to-bridge" system, which also will allow vessels to communicate with the Jersey Central drawbridge over Newark Bay, is designed to improve navigational safety and reduce ship delays. A similar radiotelephone system has been used successfully between vessels on the Delaware River since 1960 and the Hudson River to Albany during the past year.

In keeping with its obligations to promote and protect the commerce of the bi-state port, the Port Authority is financing the test by leasing 15 portable sets from the General Electric Company of Lynchburg, Virginia at a cost of \$3,337. It also purchased a set for use on the railroad draw-

bridge at a cost of \$510.

During the test period, all Sandy Hook pilots boarding vessels moving through the harbor to or from Port Newark will be equipped with portable radiotelephone sets. This will permit all ships on the "party line" to be aware of the location and intentions of vessels in their immediate vicinity. The radiotelephone system will supplement the normal rules of the road and signaling procedures.

In addition, vessels in the Newark Bay area will be able to communicate with the Jersey Central drawbridge to facilitate their passage under the span. The opening of the bridge is requested by three blasts of a ship's whistle. The bridge tender answers with three blasts if he is ready to open the bridge, or two blasts if he is not. The radiotelephone system will allow ships to determine in advance whether and when the bridge can be opened, so that their movement can be planned accordingly. This will be particularly helpful to pilots of vessels approaching Newark Bay from the "blind side" of the Bayonne Peninsula, who cannot see the bridge until they are within 1,000 yards of it.

The Federal Communications Commission has assigned a frequency of 156.65 Megacycles for the Newark Bay "bridge-to-bridge" system. Communications are limited by FCC regulations to a range of about 3 miles.

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(Continued from Page 8)

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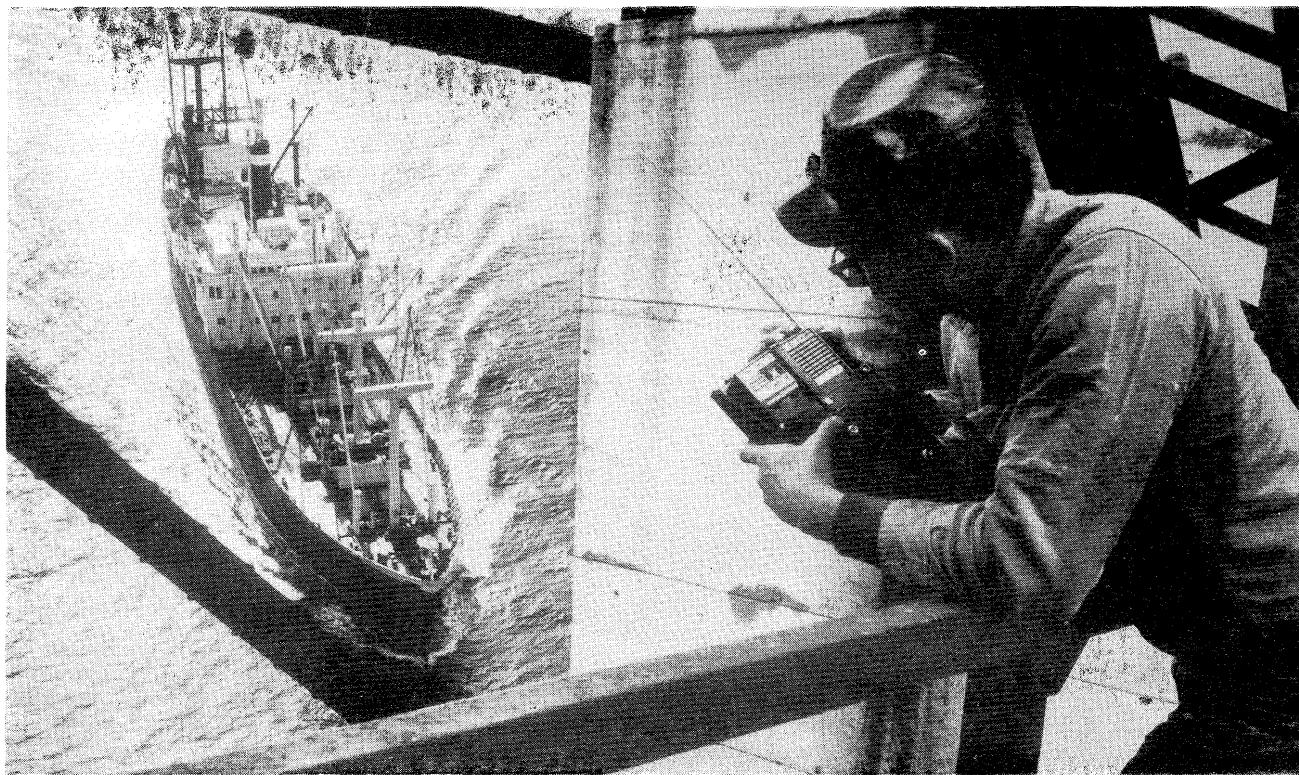
iniciativa privada en el sector pesquero.

e) Una tecnología deficiente que carece de estudios biológicos, de preparación de personal, de procedimientos de captura y de técnicas modernas para la pesca.

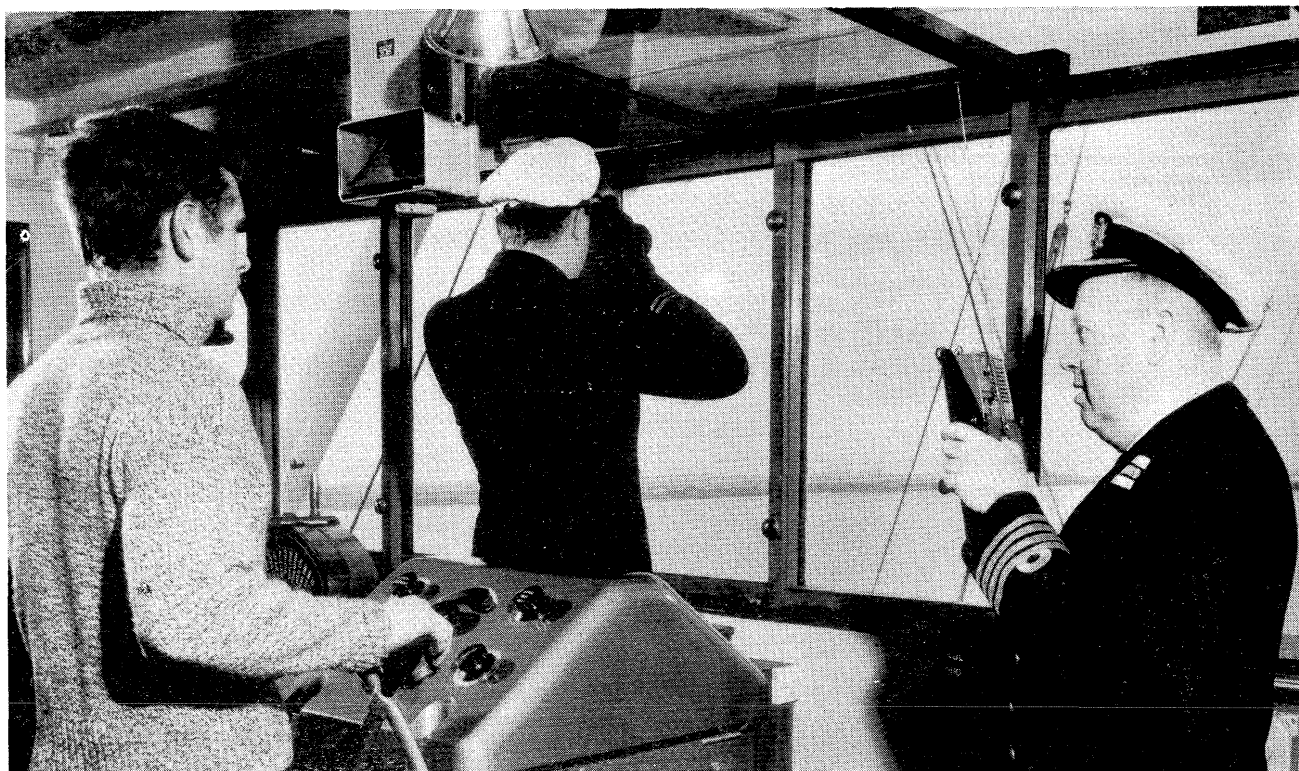
f) Falta de financiamiento en los diferentes campos de la pesca.

Zermeño Araico señala el problema y al mismo tiempo reconoce que algunos de los factores enumerados están siendo atacados. Pero existen otros, como el saneamiento en los procesos de comercialización, en los que no se han tomado las medidas conducentes para su solución.





Bridge Tender on Jersey Central Drawbridge over Newark Bay uses radiotelephone to communicate with ship approaching drawbridge. THE "BRIDGE-TO-BRIDGE" radiotelephone system, designed to improve navigational safety and reduce ship delays, permits direct voice link between ships and bridge tender to determine whether and when bridge can be opened. Vessels can then plan their movement accordingly.



Master of vessel departing from Port Newark uses portable radio-telephone set to determine Location and intention of other ships in his immediate vicinity. The "BRIDGE-TO-BRIDGE" radiotelephone system, designed to improve navigational safety and reduce ship delays, permits instant voice communication between vessels in the New Jersey-New York harbor.



Vessel bound for Port Newark approaches Jersey Central drawbridge over Newark Bay. A "BRIDGE-TO-BRIDGE" Radiotelephone System which will permit vessels to determine by direct voice communication with bridge tender whether and Newark-based vessels, beginning Monday, February 17. Announcement of the test was made jointly by the Port of New York Authority, The Pilotage Commissioners of the States of New York and New Jersey, and the New York and New Jersey Sandy Hook Pilots Association. Results of the test will be used by the Pilotage Commissioners to determine the advisability of making use of the system by pilots on all vessels in the BI-STATE PORT.

# THE FOURTH TRIENNIAL CONFERENCE of The International Association of Ports and Harbors

May 10th ---- 14th, 1965

at London, England

---- The place of meeting will be announced later ----



Proud Thames - roll on your urgent course  
Bearing the world's merchandise upon your tide  
Anon

**Central Secretariat of the International Association of Ports and Harbors**

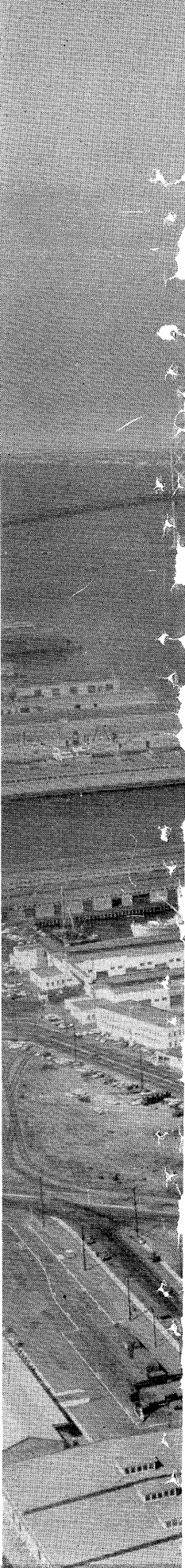
**Tokyo, Japan** *Shinichi Suzuki* (1918-1998)

attached to a steel to steel bond





California cotton and cotton-linters are large export commodities to Japan and other countries through the Port of San Francisco.



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