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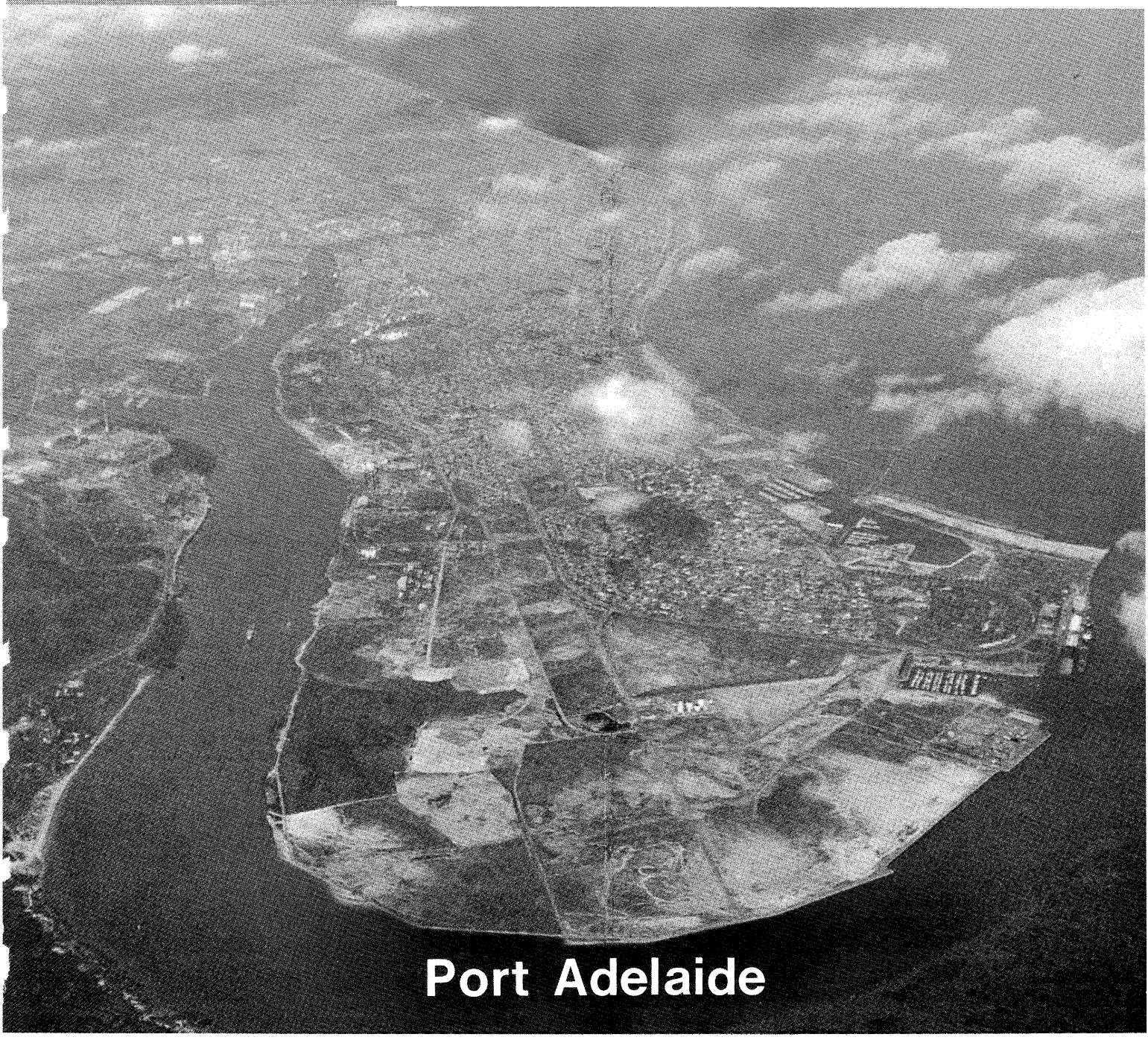
PORTS and HARBORS

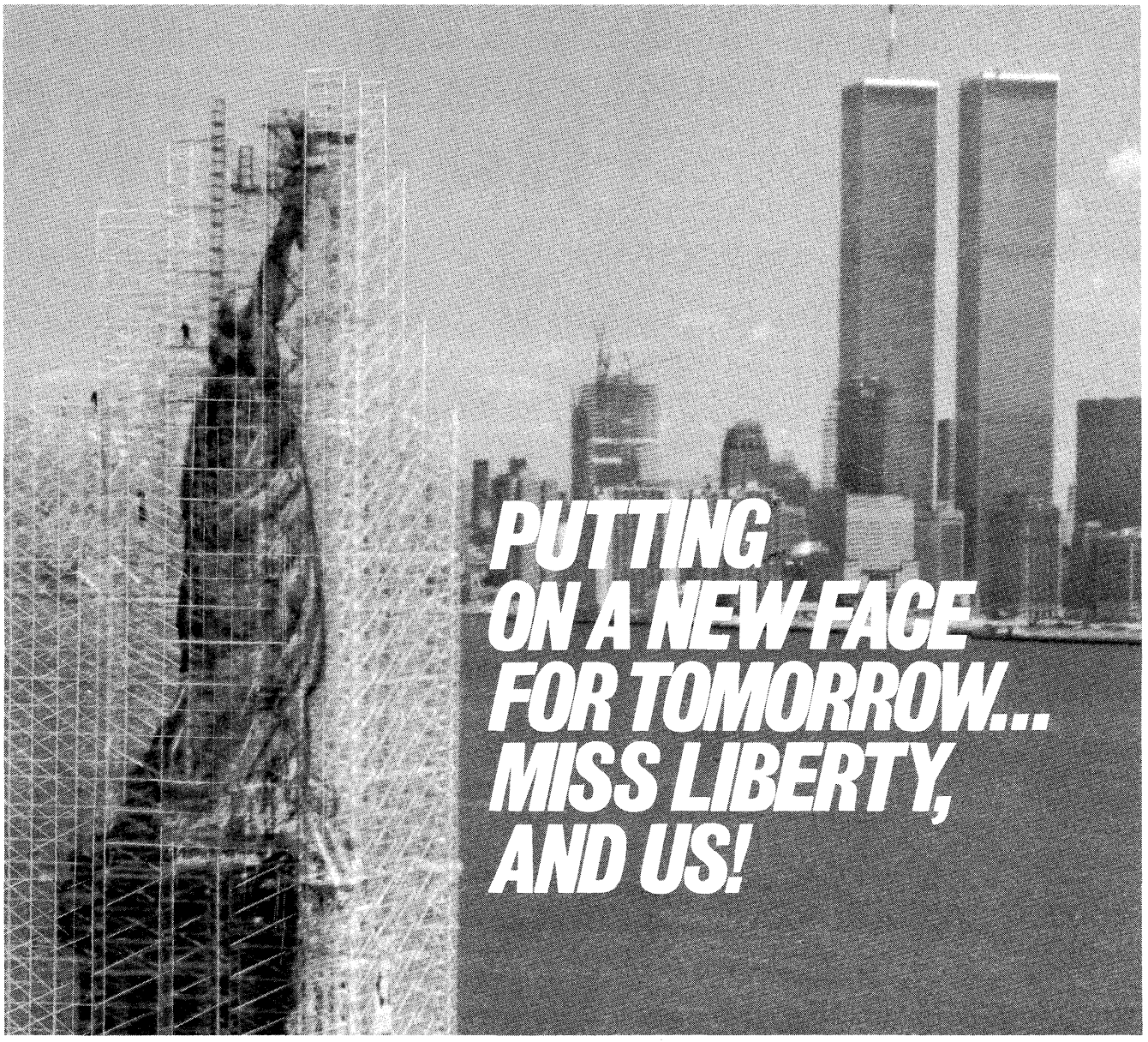
September, 1985 Vol. 30, No. 9



Port Adelaide

The Publisher: The International Association of Ports and Harbors

Kotohira-Kaikan Bldg., 2-8, Toranomon 1-chome, Minato-ku,
Tokyo 105, Japan



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Better tomorrows...that's our goal, too, at The Port of New York-New Jersey...a goal we proudly share with the lady of the harbor. Tomorrow's opportunities result from the deregulation of ocean, rail and truck industries. The future advantages for the port are: load center activities, market pricing, jumbo ships, new and improved ship schedules, new and innovative rail services, increased motor carrier services, the finest marine terminals and new market opportunities.

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OF NY & NJ

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How long can you expect your Transtainer to last? Officially, Paceco estimates 20 years. But, it's hard to say since every Transtainer built by Paceco is still in service. Even the seven units built between 1960 and 1962.

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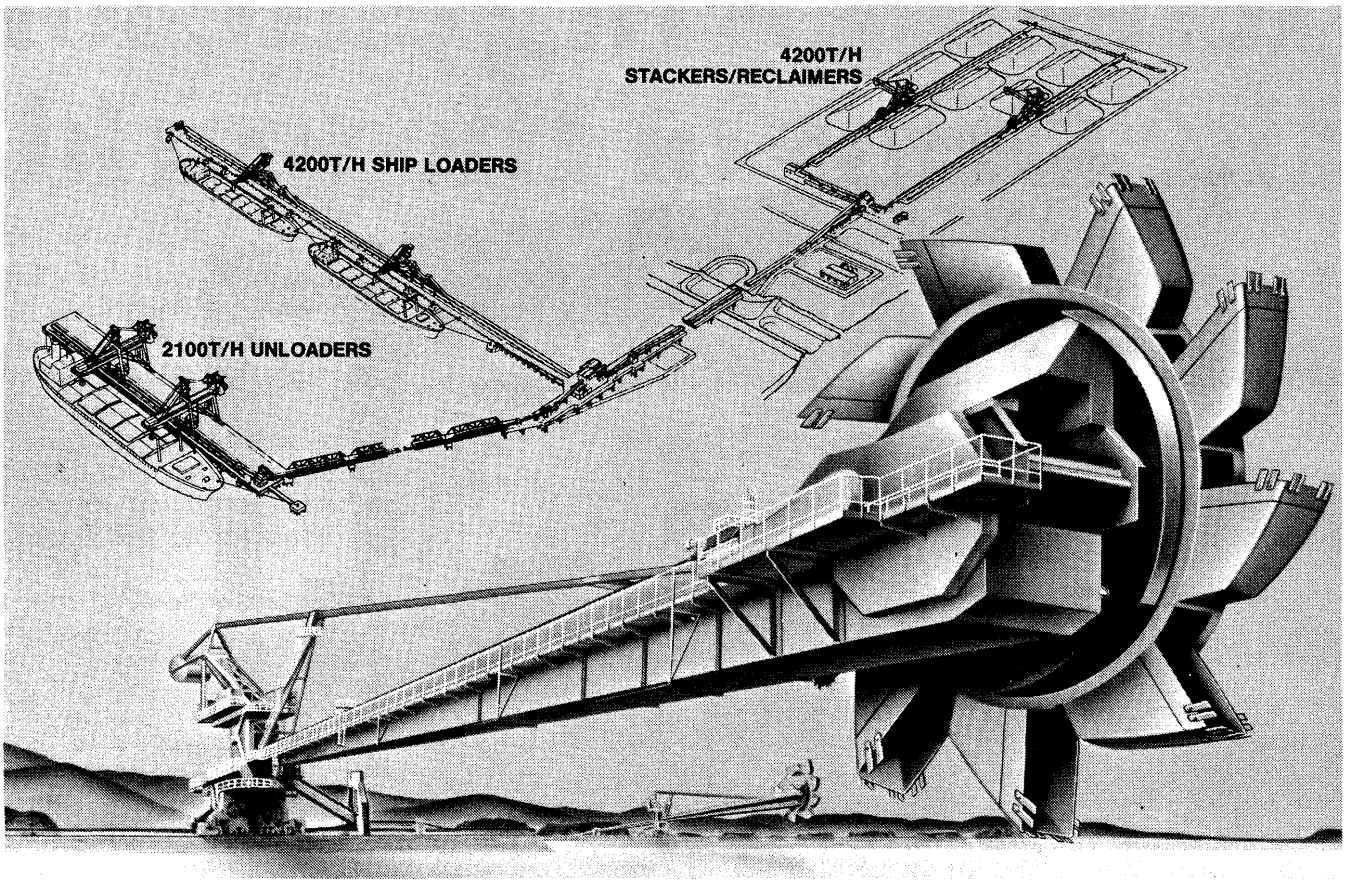

Who would you call for a complete facility capable of transhipping 10 million tons of ore per year?

This steel-maker called on Hitachi. And for reasons that went beyond a competitive bid.

Hitachi is a world leader in "Total Technology" — a concept that benefitted this purchaser in several ways.

As a major manufacturer of bulk materials handling equipment, Hitachi was able to supply all the important hardware: two ship loaders, two unloaders, 3,000 meters of conveyer, and two "Hitaclaimer" combination stackers/reclaimers — a Hitachi innovation.

But Hitachi's involvement didn't stop, or start with the manufacture of this equipment. Their experts supplied needed advice at every stage, from feasibility studies to layout planning to construction and maintenance.

In addition to Hitachi's depth of experience in bulk materials handling, this steel-maker was aided by Hitachi's great width of expertise in many fields, especially that of microelectronics and computers.

For example, by integrating a computer into almost every operation in this facility, Hitachi engineers were able to improve inventory management, maximize operating efficiency, even program maintenance schedules!

The total story.

As impressive as this large-scale working model of mecha-tronics is, it's just one example of how Hitachi is working to advance existing technologies and at the same time pioneer new ones.

Hitachi tries to apply this same "Total Technology" thoroughness to every one of their 20,000-plus projects and products. And it seems to be successful. More and more people are calling on Hitachi.

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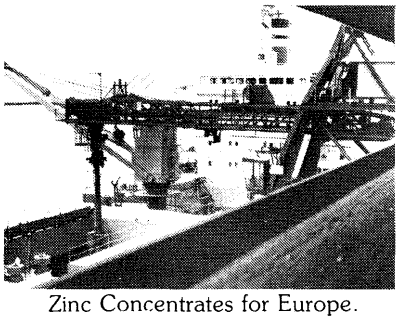
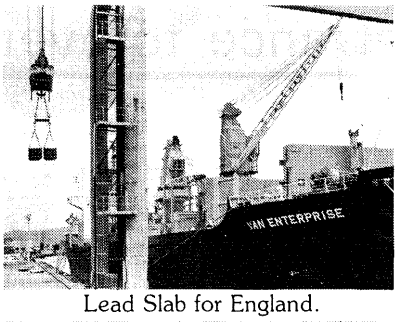
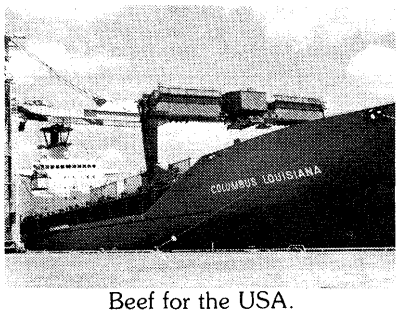


Zinc Concentrates for Europe.

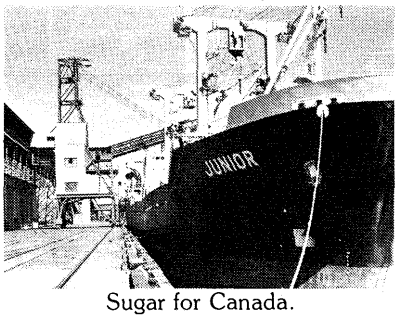


Lead Slab for England.

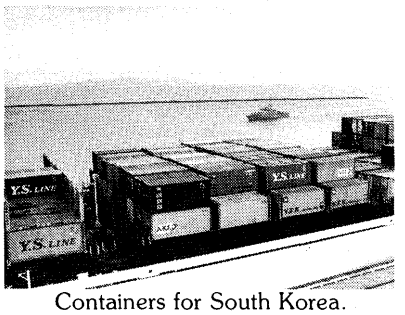
Marble for Italy.



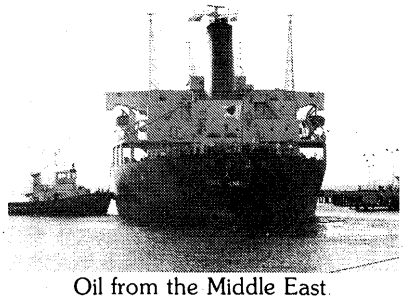
Beef for the USA.



Sugar for Canada.

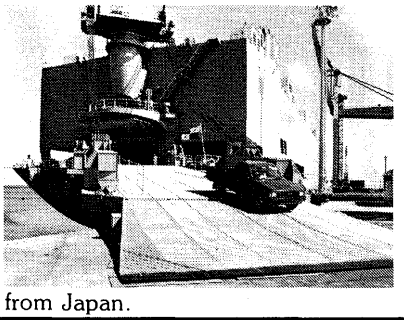


Containers for South Korea.



Oil from the Middle East.

Motor Vehicles from Japan.



MORE SHIPPERS ARE USING AUSTRALIA'S NORTHERN PORT OF ACTION for QUICKER TURN-AROUND OF SHIPS.

TOWNSVILLE HARBOUR BOARD

For further enquiries, contact the Townsville Harbour Board, Townsville, North Queensland, Australia.
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PORTS and HARBORS

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The International Association of Ports and Harbors
N.G.O Consultative Status, United Nations (ECOSOC, UNCTAD, IMO)

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September, 1985 Vol. 30, No. 9

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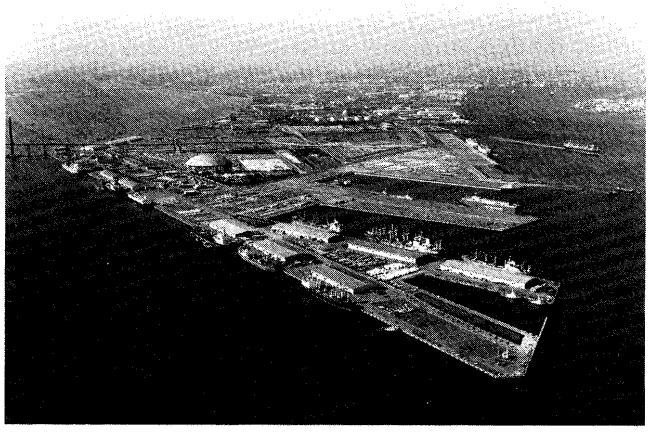
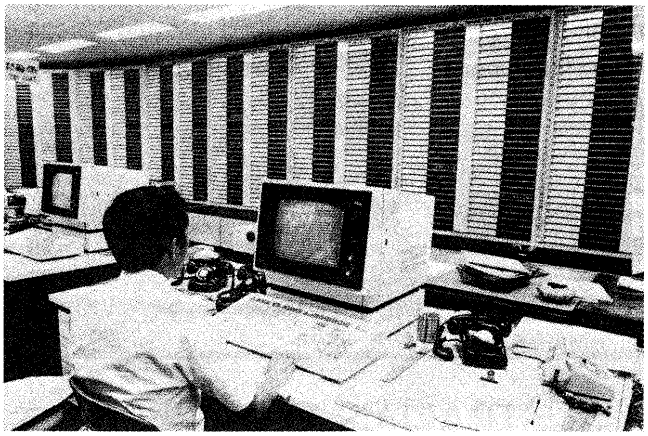
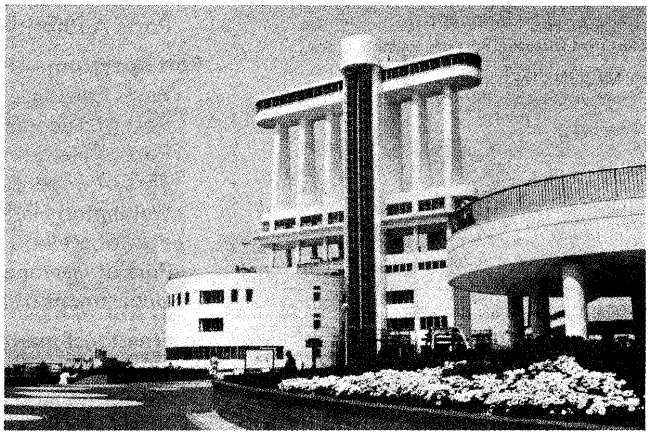


rapid



efficient



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Central Japan is the fastest growing industrial area in the country. And Nagoya Port is the very heart of this exciting activity. Last year we handled more than 100 million tons of cargo. Completely modernized and completely containerized, we're growing year by year. By rail, truck or ship we move your cargo faster, more efficiently and more economically.

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NAGOYA 455-91 JAPAN
TELEX : 4463816 NPA J
PHONE : (052) 661-4111

IAPH announcements and news

Mr. A.J. Tozzoli leaves the Port Authority of New York & New Jersey

The Secretary General received a telex dated July 17, 1985 from Mr. Tozzoli of New York which reads as follows.

- "I would like to take this opportunity to personally inform you and all my friends at the Head Office that I have announced my retirement from the Port Authority of New York and New Jersey effective August 16, 1985."
- "But I consider myself much too young to totally retire and have been honored to be selected for the President of the New York Shipping Association effective on August 19th."
- "I want to thank you and my many friends from Japan for all your support during my presidency."
- "My association with the IAPH family will always be one of my most memorable as I go forward to a new venture. Please pass on my many good wishes to all for good health and happiness."

Since 1975 Mr. Tozzoli has been a member of the Executive Committee of IAPH, and he was elected as the 15th President of IAPH at the Vancouver Conference in 1983 after serving as 3rd, 2nd and 1st Vice-President in the preceding 6 years. At the Hamburg Conference, Mr. Tozzoli was elected as an Honorary Member of IAPH. He has also served as IAPH Liaison Officer with UNECOSOC since 1974.

Secretary General Sato jointly with Secretary General Emeritus Akiyama wrote to Mr. Tozzoli expressing their deepest appreciation and thanks for his years of contribution to the development of IAPH, and at the same time wished him all success in the future. Mr. Tozzoli is to remain as an Executive Committee member until the forthcoming Conference in Seoul in 1987. (Also see the news on page 40 of this issue.)

Board meets by correspondence

Meetings by correspondence of the Board of Directors of the Association were called on August 20 and 31, 1985 on the following two subjects respectively:–

1: Site Selection for the 16th Conference of IAPH

Placed before the Board meeting called on August 20 were five invitations to the 16th Conference of IAPH to be held in 1989, from the following ports.

1. **Port of Portland, Oregon, USA**
2. **Port of Québec, Québec, Canada**
3. **Port of Miami, Florida, USA**
4. **Ports of Los Angeles and Long Beach, Calif, USA**
5. **Port of Seattle, Washington, USA**

Originally, the site selection was scheduled to be made at the post conference meeting of the Board at Hamburg. However, due to the fact that there was not enough quorum at the time of decision taking, it was postponed to this date.

2: Submission of an IAPH Position Paper to IMO

Placed before the Board meeting by correspondence called on August 31, was a draft resolution proposed to be submitted to the International Maritime Organization (IMO) as an IAPH Position Paper on "Reception Facilities in Ports for Noxious Substances".

The proposal was originally raised by the Port Safety Sub-Committee (Chairman Olson, Port of Gothenburg) of the Committee on Port Safety, Environment and Construction (COPSEC: Chairman Dubois, Port of Le Havre) to be considered by the closing plenary meeting of the Association in Hamburg.

At that time, however, there was insufficient time to give proper consideration by the Resolutions and Bills Committee either to the terms of the draft letter or to its substance upon which some checking or verification of facts appeared to be necessary.

A draft resolution reads:

WHEREAS, the convention for the prevention of Pollution from ships as modified by the Protocol of 1978 (known as "MARPOL 73/78") entered into force on 2nd October 1983,

WHEREAS, unless adequate reception facilities for the residues of oil and noxious substances carried aboard ship are provided for at ports, the objectives of MARPOL will not be achieved,

WHEREAS, it appears that such facilities are required to be in place by May 1987,

WHEREAS, ports in most countries cannot bear the capital operating costs of the reception facilities, NOW, THEREFORE, BE IT

RESOLVED, by the Board of Directors of the International Association of Ports and Harbors, at its meeting held on August 31, 1985, that the INTERNATIONAL MARITIME ORGANIZATION be urged to inform its member states that MARPOL is at the risk of being of little effect unless the member states support their ports financially or otherwise.

Reports to the 14th Conference circulated

The Secretary General circulated his Report to the 14th Conference to those who were unable to attend the Hamburg Conference together with other committee reports, on June 5, 1985.

Also sent from the Head Office to all members was the new version of "Guidelines on Port Safety and Environmental Protection" in a red binder.

The Secretary General at the same time circulated a 20-page report on the outcomes of the Hamburg Conference to all members of the Association, prior to the publication of the official proceedings of the Conference, as they are now under process of compilation and only to come out in late October of this year.

A biennial tonnage survey and notification of the number of membership dues units for 1986 and 1987

In accordance to Sec. 5 of the By-Laws of the Association, all regular members were asked to respond to the biennial tonnage survey and file the number of membership dues units for 1986 and 1987 to the head office, in the Secretary General's request dated July 18, 1985 (No. 17/85/MEDUE). The previous filing was made in 1983.

For the purposes of attaining more of members' attention and facilitating their response to this biennial routine, this is to reproduce certain portions of the provisions of the By-Laws (Sec. 5) as well as the established classified membership status, as follows:—

1. "Sec. 5: Effective January 1, 1985, and unless and until amended by Resolution of the Board of Directors membership dues of this Association shall be as follows:—

1) Each Regular Member shall pay membership dues of SDR880 per annum per subscribed membership unit.
2) Each Regular Member shall subscribe to the number of membership units based upon the annual tonnage handled by that member as shown in the following table:—

Tonnage	Nos of Membership Dues Units
Less than 1,000,000	1
1,000,000 or more but less than 2,000,000	2
2,000,000 or more but less than 5,000,000	3
5,000,000 or more but less than 10,000,000	4
10,000,000 or more but less than 20,000,000	5
20,000,000 or more but less than 40,000,000	6
40,000,000 or more but less than 70,000,000	7
70,000,000 or more	8

3) Regular Members who contract with others for the operation of their port facilities shall be subject to membership dues based upon the tonnage handled in that port.
4) For the purposes of this Section the term "tonnage handled" shall be deemed to mean the cargo tonnage in metric tons which passed in and out of the member's port or the port's boundaries, whether ocean going, coastwise, or by lake, river or canal.
5) Such tonnage shall be calculated on the weighted formula of 100% for general cargo and 20% for dry and liquid bulk cargo.
6) For the purposes of this Section "SDR" shall mean Special Drawing Rights as established and employed within the monetary system by the International Monetary Fund.
7) Such tonnage report shall be used for the purpose of calculating the number of membership dues units to which that Regular Member shall subscribe until the succeeding tonnage report is filed as herein required, irrespective of any fluctuation in the volume of tonnage handled in the meantime.
8) Members shall have the privilege of subscribing for any number of membership units in addition to the units required by other provisions of this Section.

2. Clause for the settlement of conflicts
In the event a member disagrees with the classification assigned, the member may appeal the decision to the Executive Committee, which shall have the power to affirm, reverse or modify such determination.

Special Port Development Technical Assistance Fund: Contribution Report

As reported in the previous issue, the Association at the Hamburg Conference decided to replenish the Special Port Development Technical Assistance Fund, by means of asking IAPH members to contribute to the Fund, so as to secure future funding of IAPH bursaries. For this purpose, the Secretary General's letter of solicitation was circulated to all members on June 5, 1985.

In response to the appeal, as of August 15, 1985, the contributions have been received from the members as listed in the box below.

All members' generous support to the fulfillment of the targeted amount (US$70,000) is sincerely requested by the Secretary General.

Contributions to the Special Fund
(As of August 15, 1985)

Contributors	Amount
Paid:	(US$)
Port of London:	750
Port of Copenhagen:	350
Port Services Corp., Oman	500
Associated British Ports:	3,000
Port of Houston:	1,000
Klan Port, Malaysia	200
Port of Halifax, Canada:	750
Port Alberni, Canada:	200
Pacific Consultants International, Japan:	630
Fraser River Harbours Commission, Canada	300
Cyprus Ports Authority	500
Belfast Harbour Commissioners, Canada	350
Pledged:	
Port of Rotterdam:	3,000
Directorate-General of Shipping and Maritime Affairs, Netherlands	720
Port of Amsterdam:	1,000

Visitors

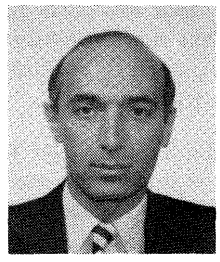
On July 25, 1985, Mr. THARA Rojthana, Dy. Director-General of Port Authority of Thailand visited the head office and was received by Dr. Sato and his staff, during his 2-week study mission to Japan from 14 to 27 July.

(Continued on page 11)

Revised Technoeconomical Exercise regarding the Yard Equipment for the Container Terminal in Limassol Port

— Transtainers vs. Straddle Carriers —

By Michael Constantinides
Senior Mechanical Engineer
Head of Mechanical, Electrical & Marine Sections
Cyprus Ports Authority



Introduction

An important prerequisite for the success or failure of a container terminal is, among others, the choice of the proper equipment and installations. This equipment not only consists the biggest single capital expenditure but in practice determines the operational procedures and capabilities of the terminal.

This, basically, consists of the ship unloading and loading gantry cranes and of the open stacking area handling equipment. Alternative solutions however for the yard equipment are many and interesting.

The objective of this exercise is to compare in monetary terms only, the investment alternatives for the yard equipment.

A management decision on mutually excluding projects is usually based on:

(i) Technoeconomic analysis of the alternatives
(ii) Relative comparisons of unit costs involved
(iii) General trends and proved practices

Very often a careful and proper Technoeconomic analysis of the alternatives for the purpose of correct management decision making, yields identical results with (ii) above.

The analysis of unit costs then, could be performed to produce the actual costing etc. for a project and not as an instrumental part for the optimum management decision on the issue of comparison of alternatives.

Herebelow I compare the two possible solutions that could be used for handling the containers in the open stacking area and I limit myself to a technoeconomical comparison of the possible solutions. Sensitivity analysis is also performed.

The figures used are those that are widely accepted and followed by all international bodies (UN, World Bank, U.K. research centres etc.) as well as practical considerations from well known and successful ports of Europe, Middle Far East, and the United States.

The capital expenditure amounts used — where applicable — are the actual figures from the recent international tendering of Cyprus Ports Authority.

Special note on the "Planning Horizon"

In comparing investment alternatives, it is imperative to compare them over a common period of time. In a sense, the planning horizon defines the width of a "Window" that is used to view the cash flows generated by an alternative. In order to make an objective evaluation, the same window must be used in viewing each alternative.

If the shortest project life (Ts) is used to define the P.H., estimates are required for the values of the unused portions of the lives of the remaining alternatives.

If the longest project life (T1) is used in determining the P.H., some difficult decisions must be made concerning the period of time between Ts and T1. If the alternative selected is to provide a necessary service, that service must continue throughout the planning horizon, regardless of the alternative selected. Consequently, when the shortest life alternative reached the end of its project life, it must be replaced with some other asset capable of performing the required service.

Therefore in the economic analysis, the most commonly used method of dealing with unequal lives of alternatives, appears to be the "least common multiple of lives" approach (LCML).

CASH FLOWS

All costs are in C£ (Cyprus pounds)

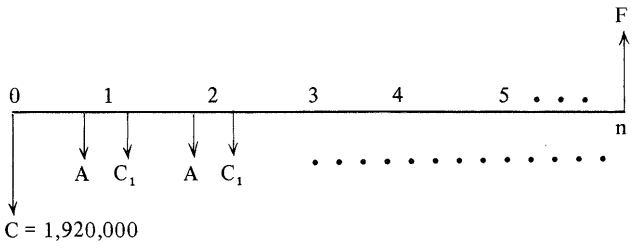
1. Transtainers

Costs associated with the purchase and operation of Rubber mounted yard cranes. (Span 23.2 m).

No. of transtainers required	:	6
Capital expenditure (CE)	:	6 x 320,000 = £1,920,000
Interest on capital spent	:	1,920,000 x 9% = £172,800/annum
Planning horizon	:	30 years (15 x 2)
Salvage value (20% of C.E.)	:	£384,000
Depreciation (straight line method)	:	$\frac{1,920,000 - 384,000}{15}$ = £102,400/annum
Minimum Attractive Rate of Return (MARR)	:	10%
Annual maintenance/repair/fuel (10%), C_1	:	C£192,000/annum with 8% annual increase (j factor)
Interest on capital held (5% spare parts)	:	96,000 x 9% = 8,640/annum

Cash flow

i = MARR = 10%
j = the percentage change in the size of the cash flow from one period to the next = 8%
n = Interest period = planning horizon = 30 years (15 x 2)
A = 172,800 + 102,400 + 8,640 = 283,840
C_1 = 192,000



Present Worth of Cost

P.W.C.
= C + A (P/A, i, n) + C_1 (P/C_1, i, j, n) – F (P/F, i, n)
= 1,920,000 + 283,840 (P/A, 10, 30) + 192,000 (P/C_1, 10, 8, 30) – 384,000 (P/F, 10, 30)

$$= 1{,}920{,}000 + 283{,}840\left[\frac{(1+i)^n - 1}{i(1+i)^n}\right] + 192{,}000 \times \left[\frac{1-(1+j)^n(1+i)^{-n}}{i-j}\right] - 384{,}000\left[(1+i)^{-n}\right]$$

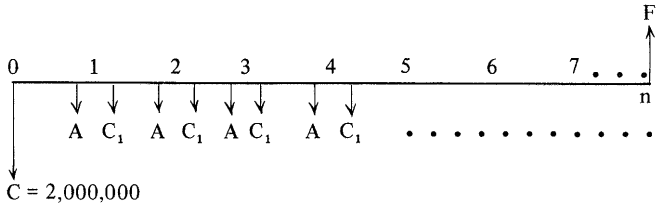
= 1,920,000 + 283,840 (9.4269) + 192,000 (21.1662) – 384,000 (0.0573)
= 1,920,000 + 2,675,731 + 4,063,910 – 22,003
= £8,637,638

2. Straddle Carriers

No. of S/C required	:	10
Capital expenditure (CE)	:	200,000 x 10 = C£2,000,000
Interest on C.E.	:	9% x 2,000,000 = 180,000/annum
Planning horizon	:	30 years (Least Common Multiple) (10 x 3)
Salvage value (20% of C.E.)	:	400,000
Depreciation (straight line method)	:	$\frac{2{,}000{,}000 - 400{,}000}{10}$ = 160,000/annum
Minimum Attractive Rate of Return (MARR)	:	10%
Annual maintenance/repairs/fuel (18%), C_1	:	360,000 with j = 8% annual increase
Interest on capital held (5% spares)	:	100,000 x 9% = 9,000/annum

Cash flow

i = MARR = 10%
j = the percentage change in the size of the cash flow from one period to the next = 8%
n = Interest period = planning horizon = 30 years (10 x 3)
A = 180,000 + 160,000 + 9,000 = 349,000
C_1 = 360,000



Present Worth of Cost

P.W.C. = C + A (P/A, i, n) + C_1 (P/C_1, i, j, n) – F(P/F, i, n)
= 2,000,000 + 349,000 (P/A, 10, 30) + 360,000 (P/C_1 10, 8, 30) – 400,000 (P/F, 10, 30)

$$= 2{,}000{,}000 + 349{,}000\left[\frac{(1+i)^n - 1}{i(1+i)^n}\right] + 360{,}000 \times \left[\frac{1-(1+j)^n(1+i)^{-n}}{i-j}\right] - 400{,}000\left[(1+i)^{-n}\right]$$

= 2,000,000 + 349,000 (9.4269) + 360,000 (21.1662) – 400,000 (0.0573)
= 2,000,000 + 3,289,988 + 7,619,832 – 22,920
= £12,886,900

It is obvious from above exercise that the recommended alternative is No. 1. (transtainers)

SENSITIVITY ANALYSIS

In the above exercise it was assumed that all the values of the parameters of the economic models were known with certainty. In particular, correct estimates of the values for the length of the planning horizon, the Minimum Attractive Rate of Return, the costings i.e. each of the individual cash flows were assumed to be available. Usually it is interesting to analyse the effects of underestimating or overestimating of certain parameter values (Sensitivity Analysis), and observe how this affects the end result.

For this particular case however, the results are so clear that the sensitivity of the measure of merit of the various parameters is considered low; still the following exercises are performed:

(1) Suppose that the capability of the straddles has been underestimated and that, the number of units required is 9 instead of 10 as in above analysis:

Straddle Carriers

Costs associated with the purchase and operation of straddle carriers:

No. of S/C required	:	9
Capital expenditure		
Interest on capital spent	:	200,000 x 9 = 1,800,000
Planning horizon	:	30 years (10 x 3)
Salvage value	:	360,000
Depreciation (straight line method)	:	$\frac{1{,}800{,}000 - 360{,}000}{10}$ = 144,000/annum
Minimum Attractive Rate of Return (MARR)	:	10%
Annual maintenance/repair/fuel (18%)	:	324,000/annum with 8% annual increase (j)
Interest on capital held (5% spare parts)	:	90,000 x 9% = 8,100/year

Cash flow

i = MARR = 10%
j = the percentage change in the size of the cash flow from one period to the next = 8%
n = Interest period = planning horizon = 30 years
A = 162,000 + 144,000 + 8,100 = 314,100
C_1 = 324,000

Present Worth of Cost

P.W.C.
= C + A (P/A, i, n) + C_1 (P/C_1, i, j, n) – F (P/F, i, n)
= 1,800,000 + 314,100 (P/A, 10, 30) + 324,000 (P/C_1, 10, 8, 30) – 360,000 (P/F, 10, 30)

$$= 1{,}800{,}000 + 314{,}100\left[\frac{(1+i)^n - 1}{i(1+i)^n}\right] + 324{,}000 \times \left[\frac{1-(1+j)^n(1+i)^{-n}}{i-j}\right] - 360{,}000\left[(1+i)^{-n}\right]$$

= 1,800,000 + 314,100 (9.4269) + 324,000 (21.1662) – 360,000 (0.0573)
= 1,800,000 + 2,960,989 + 6,857,849 – 20,628
= £11,598,210

(2) Transtainers

Suppose that the annual maintenance and repair and fuel of the transtainers has been underestimated and that actually this is 12% of CE and not 10% as aforesaid.

Costs associated with the purchase and operation of transtainers:

No. of transtainers required	:	6
Capital expenditure	:	320,000 x 6 = 1,920,000
Interest on capital spent	:	1,920,000 x 9% = 172,800/annum
Planning horizon	:	30 (15 x 2)
Salvage value	:	384,000
Depreciation (straight line method)	:	$\frac{1,920,000 - 384,000}{15}$ = 102,400
Minimum Attractive Rate of Return (MARR)	:	10%
Annual maintenance/repair/fuel (12%)	:	£230,400/annum with 8% increase
Interest on capital held (5% spare parts)	:	96,000 x 9% = 8,640/annum

Cash flow

i = MARR = 10%
j = the percentage change in the size of the cash flow from one period to the next = 8%
n = Interest period = planning horizon = 30 years (15 x 2)
A = 172,800 + 102,400 + 8,640 = 283,840
C_1 = £230,400

Present Worth of Cost

P.W.C.
= C + A (P/A, i, n) + C_1 (P/C_1, i, j, n) − F (P/F, i, n)
= 1,920,000 + 283,840 (P/A, 10, 30) + 230,400 (P/C_1, 10, 8, 30) − 384,000 (P/F, 10, 30)

$$= 1,920,000 + 283,840 \left[\frac{(1+i)^n - 1}{i(1+i)^n}\right] + 230,400 \times \left[\frac{1 - (1+j)^n(1+i)^{-n}}{i - J}\right] - 384,000 \left[(1+i)^{-n}\right]$$

= 1,920,000 + 283,840 (9.4269) + 230,400 (21.1662) − 384,000 (0.0573)
= 1,920,000 + 2,675,731 + 4,876,692 − 22,003
= £9,450,420

(3) Suppose that the annual maintenance/repair and fuel of the straddle carriers has been overestimated and that actually this is not 18% of the capital expenditure, but only 16%. Then the figure, including the j factor is replaced as follows:

New relevant annual cost:
0.16 x 1,800,000 = 288,000 instead of 324,000

New (P/C_1, 10, 8, 30) factor is $288,000 \left[\frac{1 - (1+j)^n(1+i)^{-n}}{i - j}\right]$

= 288,000 (21.1662) = 6,095,866 instead of 4,876,692
Therefore new P.W.C. = 12,886,900 − 1,219,174
= £11,667,726

(4) Simultaneous worsening of two economic model parameters

Let us assume that the capability of the straddle carriers has been underestimated (case 1 of Sensitivity) and at the same time, their annual maintenance/repair and fuel consumption cost has been overestimated (case 3 of the Sensitivity analysis).

In this case Present Worth Cost figures are as follows:

P.W.C.

$$= 1,800,000 + 2,960,989 + 288,000 \left[\frac{1 - (1+j)^n(1+i)^{-n}}{i - j}\right] - 20,628$$

= 1,800,000 + 2,960,989 + 6,095,866 − 20,628
= £10,836,227

(5) Simultaneous worsening of three model parameters

Let us assume that sensitivity 4 case exists together with sensitivity 2. In this combination, the capability of the straddle carriers has been underestimated, their annual maintenance and fuel cost has been overestimated, AND the corresponding maintenance/fuel cost of the Transtainers has been underestimated.

P.W.C. (Straddles) = 10,836,227
P.W.C. (Transtainers) = 9,450,420

Summary	P.W.C. of Transtainers C£	P.W.C. of Straddle Carriers C£
Basic model and parameters	8,637,638	12,886,900
Sensitivity 1	8,637,638	11,598,210
Sensitivity 2	9,450,420	12,886,900
Sensitivity 3	8,637,638	11,667,726
Sensitivity 4	8,637,638	10,836,227
Sensitivity 5	9,450,420	10,836,227

Conclusion

From the above monetary aspect for comparing investment alternatives it is obvious that the most economic solution for all cases under study is that of the Transtainers.

The difference is so clearly marked that one could, confidently, conclude, that the handling costs with Transtainers are considerably less compared with those of the Straddle Carriers.

Note: The above analysis was intended to aid in making better measurements of the quantitative aspects of capital investment alternatives only (although excluding labour).

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(Continued from page 8)

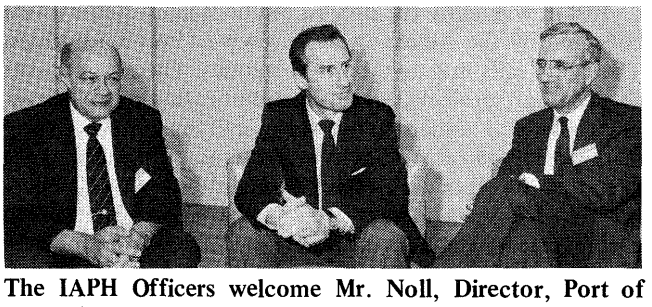
Mr. Thara, accompanied by Mr. WIWAT Poophanphanich, Technical Officer of the Authority, had visited the Ports of Kobe, Nagoya and Yokohama to observe the port facilities as well as Harbour Training Colleges located at those ports.

Membership Notes

New Member

Temporary Member

VEB Seehafen Rostock
DDR 2500 Rostock-Überseehafen
German Democratic Republic
Office Phone: 336 3200
Telex: 031 264
(Mr. D. Noll, Director)



The IAPH Officers welcome Mr. Noll, Director, Port of Rostock, a new member from East Germany (center) in Hamburg.

The Realities of Delay

By the American Association of Port Authorities (AAPA)

(Alarmed by the sluggish pace of navigation channel development in the United States and the subsequent rise in port operation costs directly attributable to this regretable situation, the American Association of Port Authorities (AAPA) recently compiled the following study.)

A Review of the Project Development Cycles for Federal Navigation Channels in the United States

The United States system of deepdraft harbors and navigation channels serves two well-defined national needs: facilitation of the flow of commerce and basic strategies of national defense.

Historically, development and maintenance of this essential transportation system has been a responsibility of the federal government. It is now well-recognized that the process by which the nation's navigation system is managed is ponderous, beset with very complex political, regulatory and administrative procedures, and counterproductive in terms of serving the national interest. All new projects require inordinately long time periods for all procedures to be satisfied. It is not unusual for the process to take 25 years or more.

This paper documents for the public, the media, and political leaders, the serious defects in the procedures and requirements which form the process by which navigation projects are conceived, validated and developed.

Billions of dollars have been invested by the private sector and port authorities in marine terminal infrastructure at U.S. port during the last quarter of a century; however, that progress has not been matched by the concurrent development of the deepdraft navigation channels required to serve the increasing flow of waterborne commerce and the growing size of vessels. Navigation channel development in the United States has long been impeded by cumbersome and time-consuming procedures that are both costly and economically counterproductive. At stake are both the economic growth and the national security interests of the United States.

"Progress has not been matched by the concurrent development of the deepdraft navigation channels required to serve the increasing flow of waterborne commerce and the growing size of vessels."

Just how lengthy the process can be is illustrated by data collected by the American Association of Port Authorities. That data falls into two basic categories. The first consists of deepdraft projects in the preauthorization phase, meaning those still under study or review by the U.S. Army Corps of Engineers. The second category includes those deepdraft projects which have been authorized by Congress but which remain incomplete as of November 1, 1984. In each category, elapsed times were calculated from the date of the initial Congressional resolutions calling for Corps' feasibility studies through October 1984.

Unauthorized Projects

In the *first category,* 64 projects were identified as under study by the Corps' districts or in various stages of review at the Washington level. For those 64 projects, the average elapsed time was *15 years, five months.* AAPA has determined that six of those projects have been deferred for one reason or another (sometimes at the request of the local sponsor). If these deferred projects are excluded, the remaining 58 projects show an average elapsed time of *15 years, two months.*

As a final check, an analysis was made on the deepdraft project authorizations proposed in H.R. 3678, the so-called "Roe Bill" legislation approved by the U.S. House of Representatives on June 29, 1984. Those 32 projects are included among the 64. Here the average elaspsed time was *16 years, seven months.* In each of the three groups, the longest pending project was New Haven Harbor (CT)–34 Years, *eight months.*

Authorized Projects

The second category consists of deepdraft projects *authorized for construction but incomplete as of November 1, 1984.* Twelve such projects were identified. Two were excluded for lack of complete data. For the remaining 10, the average elapsed time – that is from the data of the initial Congressional study resolution through October 1984 – was *25 years, seven months.* Excluding those projects which AAPA was able to determine had been subject to deferrals left a total of six for which the average elapsed time was *25 years, even.*

Some examples make the picture all the more graphic. The first concerns the deepening of the Stockton (Baldwin) Ship Channel. The first Congressional resolution calling for a Corps study was approved in March 1955, though funding for that study was not appropriated until Fiscal 1958. Congress authorized construction in Fiscal 1967. Work is now underway and is expected to be finished sometime in 1987, *or 32 years from the date of the initial study resolution.*

Corpus Christi Harbor (TX) offers a similar experience. The initial study resolution was approved in April 1960, with funding made available in Fiscal 1961. Deepening of the Corpus Christi ship channel from 40 feet to 45 feet was formally authorized in 1970, but construction will not begin until 1985 and is expected to take 30 months, *almost 28 years after the original study resolution came out of Congress.*

Although the Stockton and Corpus Christi projects have been funded and are underway or soon to be, a clear study in frustration is presented by the case of the Baltimore Harbor deepening project. The initial study was requested in July 1958 but not funded until Fiscal 1964. Deepening of the harbor from 42 feet to 50 feet was authorized by Congress in 1970. The Corps' advanced engineering and design was delayed in 1973 by the Office of Management and Budget but then resumed in 1976. The Corps issued its dredging permit in 1975 but on condition that the State of

Maryland provide a site for the disposal of the material dredged from the harbor. After years of litigation, brought mainly by environmental opponents, the state finally won the necessary court approval and proceeded to construct its Hart-Miller Island dredged disposal site.

The Hart-Miller site is now completed, but actual harbor deepening has since been held up for lack of the necessary federal appropriation. In the 26 years the Baltimore Harbor project has been pending, the state through the Maryland Port Authority and its successor, Maryland Port Administration, has invested more than $300 million in marine terminal development at the Port of Baltimore. Not counted in that sum are the additional millions spent by private sector entities in bulk handling facilities at the port, the most recent being the roughly $200 million invested by the Island Creek and Consolidation coal companies in new coal export terminals at Canton and Curtis Bay. Both terminals are specifically configured to load the 100,000- deadweight ton bulk carriers that require 50-foot channel depths. The existing 42-foot channel effectively limits the size of bulkers that can be fully loaded to Panamaxers of roughly 60,000-65,000 dead-weight tons. Baltimore's case is all too typical of what U.S. ports are experiencing.

The Process

"All new projects require inordinately long time periods for all procedures to be satisfied. It is not unusual for the project to take 25 years or more."

Fifteen major steps are entailed in the intricate process of planning, designing and implementation of Corps civil works projects (including deepdraft navigation channels) requiring Congressional authorization. Those steps are listed and described in the report. Since the late 1960s a series of federal statutes – particularly the National Environmental Protection and Clean Water Acts – and their implementing regulations have superimposed additional layers of review and study. The failure of federal agencies to file from time to time, new Corps policies and procedures have also been added to dated December 16, 1983 and February 17, 1984, regarding "Cost Recovery Impact Analysis for Deepdraft Navigation" and "Guidance on the Applicability of the Principles and Guidelines." Moreover, the Corps is now turning to simulators at its Vicksburg, Mississippi Waterways Experiment Station and the Maritime Administration's CAORF (Computer-Assisted Operations Research Faculty) facility at Kings Point for help in its analysis of deepdraft projects. Each new procedure or policy, regardless of its intrinsic value, nevertheless adds to the cumulative burden of review and thus to the time it takes to process project proposals.

Throughout its course, the process remains vulnerable to political and budgetary pressures and to the threat of legal action. No-growth budgets and staff cutbacks have made it all the more difficult for the Corps to cope with the backlog. The political climate is also changing. Port projects, regardless of merit, have been unfairly tainted by the "pork barrel" stigma. The national controversy of the past four years over cost sharing and the federal role in navigation development has since brought the process to a virtual standstill.

The Port Development "Partnership"

America's port system has evolved on the basis of a partnership between the federal government on one hand and non-federal state, local and private sector port entities on the other. By the terms of that partnership, the national government has undertaken the development and maintenance of the nation's navigation system, including its deepdraft harbors and channels. The non-federal port entities, for their part, have been solely responsible for building and operating the complementary shoreside cargo-handling infrastructure – the docks, warehouses, and so forth. This partnership rests on firm statutory and constitutional precedent dating back to the founding of the republic, nearly 200 years ago.

With respect to the federal role, the origin of national policy can be traced to the Northwest Ordinance of 1787, in which it was pledged that "the navigable waters leading into the Mississippi and St. Lawrence and the carrying places between the same, shall be common highways and forever free, as well as to the inhabitants of the said territory as to the citizens of the United States, and those of any other states that may be admitted into the confederacy without any tax, impost or duty thereof." With the ratification of the federal Constitution in 1788, the states surrendered to the federal government the power to tax or in any other way regulate commerce "with foreign nations and among the several states."

Beginning with the Survey Act of 1824, the U.S. Army Corps of Engineers, then originally called the "Topographical Bureau," assumed the task of maintaining and developing federal harbors and navigation channels. Subsequent legislation, building on constitutional and statutory precedent and culminating in the River and Harbors Act of 1899, firmly established the principle of federal control over the navigable waters of the United States. Given its claim to exclusive jurisdiction, it is only reasonable that the federal government should also assume responsibility for ensuring that those same waters are adequate to the navigational needs of the nation. And, in fact, that is the way it has worked for 160 years.

The dilemma cannot be attributed to any lack of effort by the port industry itself. Since 1946, U.S. ports have invested more than $5 billion in new and improved cargo handling facilities, more than half that sum within the past 10 years. The cash value of deepdraft marine terminals in the United States stood at $59.6 billion in 1982 and their replacement cost at $78.3 billion, according to the U.S. Maritime Administration.

That commitment was necessitated by the growth of U.S. waterborne commerce and by the increasing average size, complexity and specialization of oceangoing vessels. Those pressures continue unabated. Some 3.72 billion metric tons (bmt) moved in international seaborne trade in 1982. That volume is projected to rise to 5.22 bmt by 1990, to 6.53 by 1995 and to 7.84 bmt by the year 2000. For the United States, projections show seaborne foreign trade rising from 702 million metric tons (mmt) in 1982 to 890 mmt by 1990 and 990 mmt by 1995. The most dramatic growth is expected to occur in U.S. dry cargo trades. That, however, is predicated on the assumption that our ports will be able to handle the load.

The Maritime Administration estimates that an additional 247 seaport berthing facilities, costing on the order of $5 billion, will be required to accommodate the traffic projected for U.S. ports by the end of this decade alone.

(Continued on page 33)

The Economic Impact of the Port Industry on the New York-New Jersey Metropolitan Region

— Executive Summary —

(Extracts from "The Economic Impact of the Port Industry on the New York-New Jersey Metropolitan Region, The Port Authority of NY & NJ")

Chairman's statement

The Port of New York and New Jersey has played a significant role in the history of this country and the development of this metropolitan region. As the nation's frontiers expanded, the New York-New Jersey Port became a hub of commerce and the prime international gateway for the United States. With its superior natural harbor, the Port helped attract new industries and a large, skilled labor force. The region, in turn, flourished as this increased commerce brought new employment opportunities and larger incomes to those living and working in the area.

Today, the Port of New York and New Jersey – with major modern facilities on both sides of the harbor – remains the premier gateway of the nation and a major asset to the region's economy. Although not visible to the general public, the Port's operations contribute in many ways to the region's economic health and standard of living. The coffee we drink, the bananas we eat, and the imported goods we use – ranging from sugars to silks to steel to sorghum – are off-loaded at the Port's marine terminal facilities. The Port also serves as a gateway to export markets for manufacturers. The economic activities generated by the imports and exports shipped through the Port of New York and New Jersey span many sectors of the region's economy. The movement of each ton of waterborne trade requires not only the physical handling of cargo – landside and waterside – but also documentation, financing, brokering, insurance, and other essential trade-related services.

The purpose of this study is to quantify comprehensively for the first time the high level of economic activity generated by the port industry. It shows that the port industry contributes almost 200,000 jobs to the region. The analysis indicates that there is a measurable relationship between the amount of cargo handled and the number of jobs generated throughout the New York-New Jersey metropolitan area.

Working with the port community, The Port Authority of New York and New Jersey is deeply committed to stimulating the increased flow of cargo through this port. We believe that the expansion of commerce and the international exchange of imports and exports will benefit our standard of living as well as the quality of life in those nations with which we trade.

Alan Sagner
Chairman

Executive Summary

The port's contributions to the New York-New Jersey metropolitan area are not as immediately apparent today as they were in earlier periods of the region's history. With the introduction of containerization in the 1960's, much of the region's waterborne trade shifted away from the congested central city waterfront to the more spacious, less populated waterfront areas. Consequently the port became less visible, and unlike aviation activities, which are directly observed by the millions of passengers traveling through our airports each year, this region's waterborne trade is somewhat removed from the mainstream of everyday experience. Nevertheless, the port industry remains a vital component of the region's economic base in a number of ways.

The impacts generated by the port industry span many sectors of the region's economy. The actual handling of cargo concentrated at marine terminals and piers along the waterfront is only one part of the overall economic activity linked to the movement of waterborne trade. For example, many jobs in New York City's banking and insurance communities are generated by the trade finance and ocean marine insurance services provided in conjunction with the movement of waterborne cargo. Similarly, parts of the region's trucking and rail industries and wholesale distribution sector are linked to the physical movement of trade through the Port of NY-NJ. This report describes the linkages between the movement of waterborne trade and the many components of the port industry and quantifies their significant economic contributions to the region. The report also identifies and quantifies those elements of the industry that act as earners of "foreign exchange" for the region by handling cargo for shippers and consignees located outside the region who use the Port of NY-NJ and by providing trade-related services to facilitate cargo moving through other ports.

Highlights

- The Port of New York and New Jersey is a vital asset to the region's economy. Based on 1982 activity levels, it generates (in 1984 dollars):
  - $14.0 Billion annually in economic activity
  - 191,600 jobs
  - $4.2 Billion in wages and salaries
  - $2.3 Billion in business income
  - $0.4 Billion in state and city income and sales taxes
- These port industry impacts represent a significant contribution to the regional economy, accounting for approximately three percent of the Gross Regional Product and also generating about three percent of regional employment.
- Of the 191,600 jobs, 103,100 are direct port industry jobs with the largest components being:

- Export-Import Wholesaling and Distribution
- Ocean Transportation
- Inland Transportation by Truck and Rail
- Banking and Insurance
- Freight Forwarding and Customhouse Brokers
- Marine Cargo Handling and Terminal Operations

- Direct port industry employment can be divided into two categories, physical handling and trade-related services, both of which are needed for the movement of waterborne cargo:
  - Physical handling, landside and waterside, represents 48,100 jobs (47 percent) and generates $1.4 billion in wages and salaries for the region.
  - Trade-related services account for 55,000 jobs (53 percent) and produce $1.5 billion in wages and salaries for the region.
- The Port of NY-NJ is primarily an importer of goods:
  - Of the $14.0 billion annual economic impact, $9 billion is related to imported cargo.
  - Export of goods accounts for $3.0 billion of the total impact.
  - Cargo handled at other ports (but facilitated by the trade-related services segment of this region's port industry) generates $2.0 billion in economic activity annually.
- The region's port industry serves areas outside as well as within the region thereby earning purchasing power for local residents from external sources. One part of this outside activity was noted above: businesses in this region provide headquarter, financial, insurance, and other trade-related services for cargo movements through other ports. These activities account for 14 percent of the port industry's impacts. An even larger share of the regional port industry's economic activity is generated by the exported and imported goods handled for shippers and consignees located outside the region who move cargo through this port. Collectively, the trade-related services provided to facilitate cargo movements through other ports and the port's handling of goods for shippers and consignees located outside the region represent an "export component" of this region's port industry and account for approximately 40 percent of its total economic impact. Including direct, indirect, and induced impacts, the "export component" generates:
  - $5.9 Billion annually in economic activity
  - 81,000 jobs
  - $1.7 Billion in wages and salaries
  - $1.0 Billion in business income
  - $0.2 Billion in state and city income and sales taxes
- While a portion of the port industry's export component is related to cargo moving through other ports, over the long term the benefit that the New York-New Jersey Region gains from trade activities at other ports would likely be eroded by a deterioration of activities at this port affecting the major base of operations for the region's port industry.

Other contributions to the regional economy

Beyond the economic impacts generated by the port industry via its linkages to other industries in the regional economy, the Port of NY-NJ is an important asset to this region in other respects:

- The Port of NY-NJ's raw material imports provide regional production facilities with many critical inputs. For example, coffee processors and sugar refineries depend on the port for their coffee and sugar supplies. These industries employ 1,700 and 2,000 people respectively in the bi-state region.
- Consumer good imports through the Port of NY-NJ enable regional consumers to benefit from greater availability of products.
- Proximity to the port also provides regional manufacturers with a gateway to export markets. In regional industries, 68,000 jobs were generated directly and indirectly by the production of goods shipped through the Port of NY-NJ based on 1981 production statistics.
- Over time, technical innovations in shipping such as containerization have changed the mix of inputs (land, labor, capital) required for the movement of oceanborne trade. In contrast to the labor intensive operations which occupied most of the New York waterfront before the middle of this century, today's port industry requires relatively less pier frontage and labor and relatively more capital and upland space away from the port (e.g. for stacking of containers) for its activities. This shift has freed up waterfront land in the region.

Tides of change

This study's findings provide a benchmark of the port industry's impacts based on a cross-sectional view of the economy using cargo statistics for 1982. It is clear, however, that the industry is in the midst of major changes that will most likely affect its structure and future economic impacts. These changes include:

- Shifts in international trade patterns with the Pacific Basin now exceeding the North Atlantic in volume of trade handled. This trend is expected to continue throughout the rest of the decade.
- Deregulation and legislative developments (e.g. the Shipping Act of 1984, the Export Trading Company Act of 1982) which may redefine the traditional functions performed by individual port industry components and may change the overall distribution of port industry employment. For example, intermodalism and new point to point pricing concepts have expanded the role of steamship companies to include directly providing inland transportation services for shippers and receivers.
- Major technological changes which are occurring on the service side of the port industry. An important finding of this study is that trade-related services currently generate more jobs in the region than physical cargo handling. Historically, the shift in the weight of economic activity from physical handling to trade-related services in the port industry has been tied primarily to technological changes on the physical side such as containerization. Now, such major technological changes as computerization of trade service transactions are occurring which may have both centralizing and decentralizing effects within the region's port industry.

It should be emphasized that despite these ongoing changes, the strength of the serivce portion of the port industry will remain integrally linked to the vitality of the port. Clearly, since 86 percent of the port industry's impacts are related to cargo moving through this port, the strength of the trade-related service sector is linked directly to the region's cargo base.

New Mangalore Port move for an all-weather deep sea port

By M.R. Rangarajan
Superintending Engineer (Civil-I)
New Mangalore Port Trust
India

The existing minor port of Mangalore is situated at the confluence of Gurpur and Netravati rivers as they enter the sea. There is a bar at the mouth of the port restricting the depth of water between 2.1 m and 2.7 m at low water of spring tide. The ships lie at road-stead about eight K.M. from the port and loading and unloading of cargo are accomplished by means of lighters. Further, the port is closed for full four months during monsoon.

In order to remedy these difficulties various governments in the past and the people of this region considered number of schemes. A comprehensive scheme known as "The Mangalore Scheme" comprising an all-weather Major Port and a connecting railway link from Mangalore to Mysore via Sakleshpur and Arsikere was conceived by the people of South Kanara as early as 1883 to provide a natural and geographical outlet for the produce of the hinterland comprising South Kanara, Coorg and the erstwhile Mysore State. The Princely State of Mysore also evinced keen interest in this scheme, and got the railway link from Arsikere to Hassan, a distance of 28 miles, for early fruition of the said scheme. However, the progress on the above scheme received a set back in the year 1915 owing to the conflicting interests of the neighboring States and other factors. Despite this neglect of the port, the sea borne trade of Mangalore expanded from under one crore of rupees in 1919 to four and a half crores in 1946, providing the importance of Mangalore in the economy of Karnataka and its pre-eminent position as the natural outlet for the produce of the southern areas of that territory.

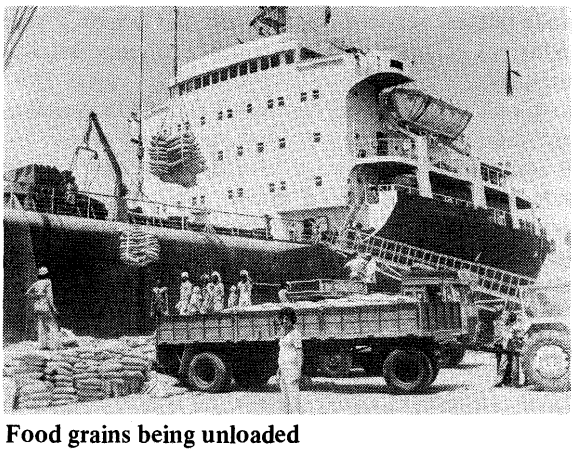
The successive governments appointed a number of committees to go ahead with the question of developing the minor port at Mangalore into a major one. The important ones among them are the Ports Technical Committee in 1946, the West Coast Major Ports Development Committee in 1948, and the Intermediate Ports Development Committee in 1958.

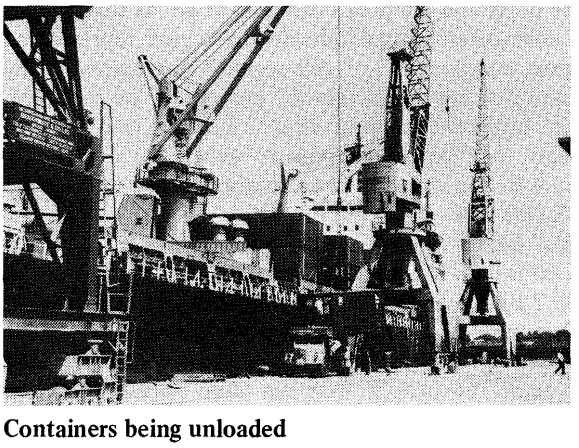
The terms of reference of the Intermediate Ports Development Committee were to select suitable intermediate ports in India for intensive development in the order of priority and to determine the question of development required at these ports. This Committee after a detailed study of economic, engineering, navigation and traffic aspects relating to the Karnataka ports of Karwar, Bhatkal, Malpe and Mangalore finally recommended Mangalore for development as a deep sea all-weather port.

Present Facilities Available:

1. Four general cargo berths having draughts varying from 9.45 m to 10.1 m with a shallow draught berth of 6.5 m at the southern return.
2. An oil jetty with a draught of 9.75 m.

Entrance gate


Food grains being unloaded


Containers being unloaded

3. An Iron Ore berth with a draught of 12.5 m which is the deepest inner harbour berth in this country capable of receiving 60,000 DWT ore carriers.
4. Three transit sheds behind the berths in the alongside wharf having a total storage capacity of 18,000 tons and two additional pre-stressed concrete long span modern transit sheds of storage capacity of 8,000 tons each. By constructing these long span 37.00 m single span pre-stressed concrete girders for the additional transit sheds

this port has established a technological break-through in the construction of port storage sheds in this country. This port has also taken up construction of yet another still longer span shed of 41.00 m with prestressed concrete girders to provide storage facilities to the newly commissioned fourth general cargo berth.

5. Two numbers of warehouses of 4,000 tons capacity each, open space around for stacking one lakh tons of cargo in open space. The port has also leased out warehouse plots to other user agencies such as Central Warehousing Corporation, Consolidated Coffee, India Coffee Board etc.
6. The port has about 25,000 sq. m open stackyard apart from 5,000 sq. m of covered stackyard.
7. Large areas of open space are available both in and outside the wharf for storage purposes.
8. A systematic well laid net-work of roads is the nerve system for port activities. With this in mind, the port has also taken up upgrading of the entire road net-work in and around the harbour by strengthening and also paving the entire system with bituminous mecadum and asphaltic concrete by deploying central hot mixed plant mechanical pavers etc.
9. All the berths have been provided adequate number of wharf cranes and mobile cranes and other handling facilities like fork-lifts, pay-loaders etc. required by the port users.

Traffic:

The traffic through this port has recorded a steep increase from 94,000 tons during 1974 – 75 to 33,82,438 tons during 1984 – 85. With the establishment of various industries in the hinterland of the port, the traffic through this port is expected to record a steady increase.

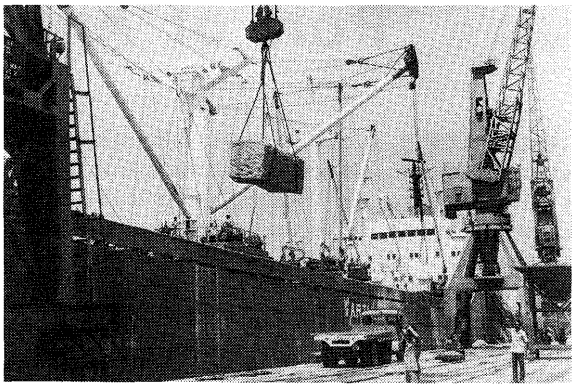
Future – The Horizon is Bright:

The winds of change are blowing over the sea at Mangalore. The coming years will witness magnificent developments in the port and crowing comes in the form of containerisation. The port has already made a beginning in handling containers with the export of coffee. The newly constructed general cargo berth has been designed to handle modern container vessels, with 41 m single span container freight station backed with an extensive open area.

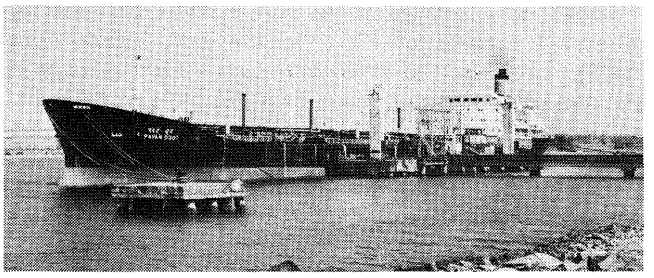
The port has already submitted proposals for constructing the berth in the balance portion on the western side of the eastern dock in continuation of the fourth general cargo berth which is now awaiting approval of the Government. By the end of Seventh Plan, the port will have two more general cargo berths and sophisticated modern tugs and other cargo handling equipments.

The Kudremukh Iron Ore Company are putting up a pelletisation plant of three million tonnes capacity per annum inside the wharf area which is scheduled to be commissioned during 1986. With the commissioning of the pellet plant, the port will be handling three million tonnes of pellet export besides the export of the iron ore concentrates. Augmentation of the ore berth to handle over one lakh DWT ore carriers is also being thought of.

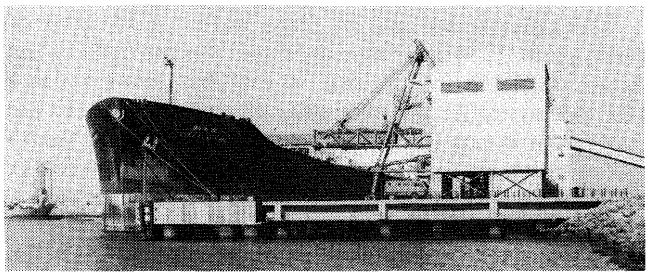
M/s. Mazagon Dock Limited, Bombay have now established a pipe coating plant and off-shore platform fabrication yard at this port. The rated capacity of this plant is about 250 K.M. of coated pipes per annum. With the intensification of the efforts all over the world for extensive exploration and production of off-shore oil and natural gas,



Huge granite blocks being exported



Oil tanker at oil jetty



Iron ore concentrate being exported

the requirements of concrete coated pipes is expected to increase all over the world and particularly in South-East Asia where there are not many pipe coating plants. The establishment of this pipe coating plant has generated a traffic of 1.5 lakh tons per annum to this port besides generating ample employment opportunity to the local people.

The Government of India have already taken a decision for the establishment of a six million tonne oil refinery at Mangalore near the port for which the port has to create suitable infrastructural facilities such as construction of oil jetties for receiving crude and expansion of the present oil jetty for the export of petroleum products including deepening of the port to receive 1,20,000 DWT LR-2 tankers. The work of preparation of the detailed project report for the port facilities to be created for the establishment of an oil refinery at Mangalore has already been prepared. The establishment of an oil refinery will accelerate the industrial growth of this area, as there is scope for many ancillary industries to come up in this region.

The New Mangalore Port also offers an ideal location for the establishment of a "Free Trade Zone" if established, will boost up the export through this port and bring a sizeable foreign exchange to the country. This compact port with all its modern facilities and ambitious expansion programme ahead of it, is bound to play a vital role in the economy of this country in general and prosperity of this region in particular.

Port of Antwerp in 1984

The steady growth in the economic situation in the OECD countries and the revival of trade relations accompanying it continued last year. This was also reflected in the transport sector, which led to favourable results in most European ports in 1984[1]. Thanks to its strong competitive position the year was extremely successful for the port of Antwerp and many new traffic records were set.

Shipping traffic

16,802 vessels called at the port in 1984, representing an overall tonnage of 116.8 million gross register tons (GRT). As opposed to 1983 this means a slight increase in the number of seagoing vessels (+ 3.6%) but a considerable rise in the tonnage (+ 7%). The overall tonnage was the highest ever to be recorded in Antwerp. The average tonnage of the seagoing vessels calling at the port amounted to 7,000 GRT.

Cargo traffic: many records broken

The high growth rate of cargo traffic in the port of Antwerp in 1984 was unprecedented. On the basis of the figures available for the first 10 months, during which a 15% rise in traffic was recorded, the cargo traffic for the entire year is expected to approach or even exceed the 90 million ton mark (as opposed to 80.3 million tons in 1983). The growth in incoming traffic was 12%, while that in outgoing traffic was 19%.

The increase in general cargo traffic was especially remarkable and it may well reach a record total of 38 million tons, as opposed to 32.3 million tons in 1983 (+ 17%).

However, the greatest rise in traffic was recorded in the container traffic sector where there was a 22% increase so that a total of 1,260,000 TEU or 10.8 million tons of cargo is expected to be reached in 1984. Other general cargo sectors where a very positive balance is expected for 1984 on the basis of the results recorded for the first ten months of last year are fruit traffic (10 months: 675,000 tons, + 19%), bagged cereals (10 months: 1,410,000 tons, + 53%), flour and sugar (10 months: 1,362,000 tons, + 14%).

The 1984 balance of iron and steel traffic is also expected to be extremely positive. At the basis of the sharp increase (+ 40%) in European exports of iron and steel products via the port of Antwerp (10 months: 7.2 million tons) lay the high rate of the dollar, which was favourable for the European steel industry.

In the case of bulk cargo, very favourable results on the basis of the same 10 month period are expected for oil traffic (10 months: 17,381,400 tons, + 9%), ore traffic (10 months: 10,448,000 tons, + 33%) and coal traffic (10 months: 4,898,700 tons, + 29%).

(1) The Study Centre for the Expansion of Antwerp recorded the following growth rates for 1984 in the other North Sea ports where over 20 million tons were handled; Amsterdam (+ 7.1%), Bremen (+ 6.8%), Dunkirk (+ 10.3%), Ghent (+ 10.8%), Hamburg (+ 5%), Le Havre (+ 0.5%), Marseille (+ 3.1%), Nantes-St. Nazaire (+ 2.7%), Rotterdam (+ 4.9%), Rouen (+ 2.5%).

Expansion of the port assured

1984 was above all notable for the great efforts made in the port to improve services available to shipping and inland carriers.

The continuing dredging of the Western Scheldt and its approaches deserves to be mentioned first. The work being carried out to deepen the channels will at a later stage make them accessible for large bulk carriers with draughts of up to 50'.

A logical extension of this dredging programme is the construction of the Berendrecht Lock, the largest in the world. Last year 1,720 million Belgian francs were spent on this. The work is running according to schedule and the lock is beginning to take shape. The expected inauguration date is still early 1987.

With regard to maritime traffic control further important advances were made in connection with the extension of a radar system both in the port itself and along its maritime access route. On the one hand the Economic and Social Inner Cabinet of the Belgian Government has awarded contracts for the installation of the electronic equipment of the shore radar chain along the Western Scheldt and on the other the first phase of the construction of the port radar system has been completed and in spring two unmanned radar stations at the Antwerp lock complexes were inaugurated.

The port authorities have also drawn up a medium term plan for the modernization of the central dock area on the right bank of the Scheldt. As a result of this modernization the cargo handling capacity of this part of the port will be greatly increased, which will be of special benefit to maritime and inland navigation traffic. The whole is to be carried out in three phases, which taken together will require overall investments of 500 million BF. Priority has been given to deepening the quay walls on the southern side of the America Dock and work has already begun on the first phase of the project.

In 1984 the Government Inner Cabinet also approved the further expansion of the first part of the port on the left bank of the Scheldt. In particular contracts have been awarded for the fourth and last phase of work (1,170 m of quay wall) on the Vrasene Dock, which is intended to handle general and dry bulk cargo. All in all the Vrasene Dock with its 4.5 km of quay wall will have cost 2,535 million BF.

Work was also continued at the Doeldok and the raising of the surrounding sites. The Doel Dock's presently shape includes 1,100 m of sloping wall and 1,500 m of undeep foundated quaywall.

Inland traffic: Infrastructure improvements

In addition to the above mentioned port infrastructure work, important improvements have been and are being carried out or are being planned for the benefit of the carriers who link the port with the hinterland.

With regard to inland navigation traffic work has continued on widening that part of the Albert Canal which forms the link with the docks. At the same time contracts were awarded for the construction of a new inland naviga-

tion lock at Wijnegem which is suitable for push-tug traffic of up to 9,000 tons. Belgian Railways decided in the autumn to modernise the important Antwerp North marshalling yard, where an average of 2,300 waggons are moved every day. By investing some 3,500 million BF over five years capacity will be increased, shunting speed doubled, operational safety increased and productivity improved.

1984 was the "year of the bridge" for road transport. No less than three new bridges were built, two of which have already been opened to traffic: the Noorder Bridge (designed for extra heavy convoys of up to 360 tons) on one of the busiest approach roads to the port and the Meestoof Bridge over the Boudewijn Lock, which means a dual carriageway on another important traffic artery on the North-South axis. The third bridge (the Frederik-Hendrik Bridge) spans the Zandvliet Lock and will be opened to traffic in early 1985.

The Government Inner Cabinet has also awarded the contracts for the Liefkenshoek Tunnel so that a start can be made on this third tunnel under the Scheldt, downriver from Antwerp, in early 1985.

Private sector: increased confidence

The constant growth in the volume of cargo, especially of general cargo, has strengthened the confidence of many companies in the future of the port and has encouraged them to invest in new, mainly high-technology handling equipment.

A new mobile Gottwald crane with a large lifting capacity has been installed at a terminal at the Delwaide Dock to handle containers arriving by Rhine barge and coaster.

At another terminal of the same dock a second gantry crane as well as two general cargo cranes with a lifting capacity of 32 tons have been installed. Three cargo-handlers have introduced pneumatic unloading installations for handling soja products, rice/malt and tapioca respectively.

Various firms have invested considerable sums in expanding their fleet of vehicles and logistical material.

The available specialized covered storage space continues to increase and already amounts to over 300 hectares. Thus, for instance, new storage areas for fertilizers (a 70,000 ton capacity) and sugar (a 100,000 ton capacity) have been completed and have come into service at the Canal Dock.

To an ever increasing extent use is being made by ship's agents/freight forwarders and cargo-handlers of digital data transmission and communication equipment for processing documents and greater efficiency in terminal operations respectively.

In order to achieve a coherent approach in this field a special working group to coordinate developments has been set up at the suggestion of the Antwerp Community of Port Interests (AGHA) which will take the data processing projects of the public sector into consideration. These projects involve on the one hand an integrated traffic control system and on the other the movement of maritime traffic in general, with special reference to the movement of dangerous goods. This latter project is being carried out jointly with some 15 other European ports.

Industry

Industrial activity in the port has continued to revive after the difficult period of the early eighties. This is shown by the volume of cargo handled at the quays of industrial enterprises. An illustration of this is the fact that industrial traffic on the right bank of the Scheldt increased by 4% over the first ten months of 1984, while industrial port traffic on the left bank got under way with the 40,000 tons of incoming and 35,000 tons of outgoing LPG at the new LPG installations of Antwerp Gas Terminal during its first year of operations. Many industries carried out their current investment programmes in 1984.

BASF-Antwerp took a whole series of measures to rationalise and maximalise operations, especially in the energy sector, which in all involved investments amounting to 1,500 million BF.

Degussa-Antwerp also improved its infrastructure, concentrating on expanding capacity and improving production technology.

General Motors Continental announced a comprehensive new investment programme involving new paint spraying installations for the cars assembled in factory 2. This new project requires the investment of another 6,200 million BF in addition to the 15,500 million BF invested over the period 1978-1984.

The Belgian Refining Corporation is currently investing 1,200 million BF in its Antwerp refinery (ex-Albatros) to improve its production processes. A "visbreaking" column and a soft cracking unit are being built with this end in view.

By investing 200 million BF Cargill-Antwerp has adapted its installations to be able to handle rapeseed as well as soja beans. The new rapeseed precrushing installations have a capacity of 1,000 tons a day.

Port promotion

The Port of Antwerp Promotion Association, acting as coordinator in the field of promotion for the Antwerp port community, has carried out an intensive action programme in Belgium and abroad.

In Antwerp a "French Shippers' Day" was organized besides receiving various groups of visitors. Traditionally also a special programme was drawn up for the members of the international transport press and cooperation was given to the organization of the 4th Open Door Days "Know and Support your port".

Regarding activities abroad in first instance the promotion missions to the ASEAN-countries and to South Africa should be mentioned. "Port Days" were further organized in Cologne, Essen, London, Birmigham, Düsseldorf and Mönchengladbach.

Within the framework of the promotion actions aiming at the port's shipowners clientele, a common Antwerp initiative was taken on the occasion of the Ro/Ro 84 Conference and Exhibition in Nice.

When carrying out its P.R. assignment, the Association again made use to a large extent of the audio-visual means and of the printed documentation it disposes of.

Ports Authority of Fiji

(Extracts from "Information Handbook 1985, Ports Authority of Fiji")

General

Fiji's location in the Pacific makes it the natural focus of the region's shipping services.

It is also a major port of call for transpacific container and other cargo services and for thousands of passengers aboard cruise liners.

At the same time, local ships are constantly moving between the country's major ports and the many scattered islands.

To guarantee efficient port services and facilities, the Ports Authority of Fiji (PAF), a statutory body, was established by an act of Parliament on November 1, 1975, to administer the nation's three ports of entry—Suva, Lautoka and Levuka.

Before the Authority was set up, Fiji ports had congestion problems causing delays in ship turn-arounds and cargo delivery. Associated problems, such as breakages and pilfering were common because of poor cargo handling.

PAF's steady development programme has reorganized and streamlined operations in the three ports. Today, turnaround times have been speeded up; cargo is ready for delivery shortly after discharge; damage and pilferage of cargo has been minimized; access to uncleared cargo is facilitated through neat and correct storage; the ports are tidier, with an improved working environment. The general all-round appearance of the ports is one of organized efficiency.

Organization

PAF has a Board of seven members – a Chairman and six other Members appointed by the Minister.

Its Chief Executive, the Director-General, is also appointed by the Minister.

PAF's headquarters are in its own building at the corner of Honson Street and Laucala Bay Road in Suva. The building contains spacious conference facilities which can be hired.

Functions

The functions of the Ports Authority are described in the Act of Parliament which created it.

These include:

(a) to provide and maintain adequate and efficient port services and facilities in ports or the approaches to ports;
(b) to regulate and control navigation within ports and the approaches to ports;
(c) to promote the use, improvement and development of ports;
(d) to co-ordinate all activities of or within ports;
(e) to acquire such land and execute such works and do such acts and things as may be necessary in respect of the functions of the Authority under the provisions of this Act or of any other written law;
(f) subject to the provisions of this Act, to do all things necessary or convenient to be done in connexion with or incidental to the performance of its functions under this Act or any other written law.

Ports of entry and anchorages

There are three ports of entry into Fiji – at Suva, Lautoka and Levuka. Other ports and deep water anchorages are at Malau, Savusavu and Vuda Point.

Port of Suva

Suva, Fiji's largest port, is situated on the south-east coast of Viti Levu. The city is the centre of Government and commerce. A multi-million dollar modernization programme began in the port in October 1982.

Suva's first wharf was built in 1881 next to Nubukalou Creek, not far from Pier Street. It was about 400 ft long and had a 150 ft finger pier. Another 200 ft finger pier was added on the seaward side in 1900.

The shift of the seat of Government from Levuka to Suva led to the growth of Suva's port trade, and with it the trade and industry that served the new capital's hinterland.

As sailing ships gave way to coal-burning steamers and the volume of cargo handled by the port grew, so did port services. Construction of the King's Wharf began in 1912 and this wooden structure served the requirements of the port for nearly 50 years. In 1961 the Wharf was paved with a concrete deck and piles and additional cargo sheds were built.

By the early 1970s rapid technological changes in the shipping industry, notably the arrival of container and roll-on/roll-off facilities, imposed additional constraints which were not envisaged in the design of the wharf.

By 1980 it was obvious that major reconstruction and redesign of the Suva Wharf area was necessary and work on this began in October, 1982.

Construction work included repairs to underdeck beams, slabs and concrete piles that had been damaged by the impact of ships of a size never imagined by the engineers of the 1960 structure.

The face of the wharf is now equipped with better fenders to absorb the berthing impact of ships. The western corner of the Walu Bay Wharf has been decked over for roll-on/roll-off cargo, and the stability of the wharf's sheet pile wall has been increased by the placing of rock foot protection together with concrete anti-corrosion lining.

The light traffic working area has been increased by building new access bridges over existing wells. Other heavy duty decks and access bridges have been built for roll-on/roll-off cargo. The final upgrading and rehabilitation of the port will be completed in 1985, and it is envisaged that it will be capable of serving Fiji maritime traffic until at least the year 2000.

Container storage facilities

The Ports Authority of Fiji has recently completed a major upgrading of its facilities at the Port of Suva to cater for an increased volume of international trade.

The container yard has a total capacity of 534 twenty foot containers including slots for freezer containers.

The provision of this facility means that unit users now have the alternative of a safe and fully secured storage at competitive rates without the extra costs that are incur-

(Continued on next page bottom)

Ports Canada

(Extracts from "Ports Canada, Report to the Minister 1984")

Chairman's message

I am pleased to submit the 1984 annual reports of the Canada Ports Corporation and the local port corporations of Vancouver, Montreal, Halifax, Prince Rupert and Quebec.

Since the enactment of Bill C-92 in February 1983, Ports Canada has worked steadily toward a definition of its roles and responsibilities and is completing the work on its corporate mission.

As local port corporations received their letters patent and accepted responsibility for their own operating autonomy, it has been necessary to adjust the staff and management structure inherited from the National Harbours Board. It has not been an easy or comfortable year for the staff and management as these adjustments have been made. The Board gives its thanks and appreciation to all members of staff and management within the Ports Canada system for their dedication and patience through this period.

Recognition must be given for the progress made during this formative period, to the Members of the Board of Directors and the former Chairman, Mr. Glenn McPherson.

The Board of Directors also wants to acknowledge the contribution of Mr. Jacques Auger who was President through the formative twenty-two months. After more than twenty years of service in the public sector of transportation. Mr. Auger leaves his office at Canada Ports Corporation to take up a career in the private sector. He carries the Board Members' good wishes for success.

We thank the Minister for the policy direction given to the Ports Canada system in the Vancouver speech of January 24th, 1985. That direction and challenge has been accepted by the Board of Directors.

We look forward to an active, interesting year ahead.

A.R. Huntington, Chairman of the Board

Review of business

Canada Ports Corporation's non-corporate ports accounted for 12.2% of the traffic handled at all Ports Canada facilities in 1984, an increase of 1% over the 1983 level of 8.7 million tonnes. Traffic at Ports Canada as a whole was below budget by 6.5% (5.2 million tonnes), while traffic at non-corporate ports was below budget by 17% (1.9 million tonnes). Only the ports of St. John's and Belledune achieved 1984 targets through increased petroleum products and phosphate rock, respectively.

Below-budget performance was a result of commodity flows which account for significant portions of traffic at the non-corporate ports: the ports of Saint John, Trois-Rivières, Prescott, Port Colborne and Churchill handled between 10% and 73% less grain than forecast, due primarily to the summer drought, the Valleyfield bridge damage, and some difficulty with unit train services at Trois-Rivières.

Potash handled by the Port of Saint John was below

(Continued from page 20)

red when units are taken out of the wharf area for storage.

Port of Lautoka

Lautoka is the second largest port of entry in the country and handles the bulk of Fiji's sugar and timber exports.

The port services the shipping needs of Western Viti Levu and is the base for local cruise vessels which ferry passengers to and from the many holiday resorts on offshore islands.

In addition to the Ports Authority of Fiji owned wharf, other port facilities include a number of privately owned terminals for the handling of petroleum, gas, bulk sugar and molasses. PAF owned facilities for handling of other cargoes and passengers remain unchanged since the construction of the main wharf in 1959 – 1961.

Plans are now being considered for the upgrading and rehabilitation of general cargo, pine chips and local passenger traffic facilities at the port.

Port of Levuka

The Levuka Wharf, situated on the East coast of the island of Ovalau, was built in 1886. This was known as Queens Wharf and comprised timber super-structure supported on concrete piles. The main pier of the wharf was extended in 1924 with the construction of Kings Wharf which consisted of a concrete deck approximately 10 metres wide supported on concrete piles.

The total length of the pier is now approximately 180 metres and this provides adequate berthing space for overseas vessels along its eastern side. Alternatively, berths for approximately 10 fishing vessels are available when the pier is not used by tankers or cargo vessels.

The Port of Levuka was for many years the centre of the entrepot trade in Fiji-produced copra. This trade died when mills were established in Suva and Lautoka for converting copra into coconut oil for export.

The port is now the base for fishing vessels which supply the town's tuna cannery.

Port Labour

PAF is the sole stevedore of labour in the ports under its control. In Suva permanent dockworkers are employed whilst in Lautoka and Levuka casual dockworkers are engaged to provide this service.

PAF has licensed the Fiji Inter-Island Shipowners' Association to stevedore local vessels which use inter-island wharves at Suva.

budget by over 80% due to difficulties at New Brunswick potash mines. Forest products decreased at Saint John and Trois-Rivières, due to industry decisions. Although petroleum products were generally above budget, particularly at Saint John (110%), some ports were below budget, as a result of a variety of factors including declines in imports and distribution.

A general decline in coal exports had an adverse effect on projected transshipment traffic, especially for coal at Sept-Iles. Container traffic at the Port of Saint John was 8% below budget.

Lower-than-budgeted traffic for 1984 is reflected in Canada Ports Corporation's financial performance indicators.

The Corporation continued its efforts to improve efficiency and productivity. The total workforce (excluding local port corporations') was reduced from 393 at the beginning of 1984 to 373.

Balance sheet

as at December 31, 1984

	(in thousands of dollars) 1984	1983
Assets		
Current		
Cash	$ 894	$ 1,356
Investments	59,134	92,814
Accounts receivable	4,116	13,405
Due from Canada	3,468	2,017
Materials and supplies	530	756
	68,142	110,348
Long-term		
Investments	19,973	26,476
Amounts receivable	–	238
	19,973	26,714
Investment in Ridley Terminals Inc.	19,733	19,271
Fixed	137,321	289,510
	$245,169	$445,843
Liabilities		
Current		
Accounts payable and accrued liabilities	$ 14,607	$ 19,195
Grants in lieu of municipal taxes	678	2,031
	15,285	21,226
Long-term		
Accrued employee benefits	1,562	3,506
Financing provided by a province	18,596	19,406
Loans from Canada	104,110	166,617
Recoverable contribution from Canada	–	49,152
	124,268	238,681
Equity of Canada		
Contribution from Canada	20,072	20,072
Contributed capital	142,319	322,385
Deficit	56,775	156,521
	85,544	165,864
	$245,169	$445,843

Ports Canada Profile

"Ports Canada" describes a federal system of 15 ports* administered pursuant to the Canada Ports Corporation Act. The Act which was proclaimed in February 1983, established the Canada Ports Corporation as an agent of Her Majesty the Queen and provides for the establishment of local port corporations, with a high degree of autonomy. On July 1, 1983, the Ports of Vancouver and Montréal were granted local port corporation status. On June 1, 1984, the Ports of Prince Rupert, Halifax and Québec were also granted similar status.

Ports Canada assets include an investment in Ridley Terminals Inc., a corporation jointly owned with Fednav Limited, established to build and operate a world-scale coal terminal facility at the Port of Prince Rupert, B.C.

Ports Canada handles nearly half of all Canadian waterborne cargo. Its principal business is to provide an efficient national port system to facilitate Canada's trade objectives. This is based on the principle of responsible management within a private-sector discipline, and a high degree of autonomy in the administration of ports within the system.

*Belledune, N.B.: Chicoutimi/Baie des Ha!Ha!. Québec; Churchill, Manitoba; Halifax, Nova Scotia; Montréal, Quebec; Port Colborne, Ontario; Prescott, Ontario; Prince Rupert, B.C.; Québec, Québec, Saint John, N.B.; St. John's Nfld.; Sept-Iles, Québec; Trois-Rivières, Québec; Vancouver, B.C.

Statement of income

for the year ended December 31, 1984

	(in thousands of dollars) 1984	1983
Revenue from operations	$ 27,229	$ 28,623
Operating and administrative expenses	18,530	19,703
Depreciation	6,651	6,005
Grants in lieu of municipal taxes	2,317	2,348
Interest expense	3,568	3,053
	31,066	31,109
Net loss from operations	(3,837)	(2,486)
Investment income	8,160	7,713
Net income before the undernoted items	4,323	5,227
Net income of ports established as local port corporations	2,866	22,714
Unusual item	–	(11,800)
Share in loss of Ridley Terminals Inc.	(2,697)	–
Net income	$ 4,492	$ 16,141

Statement of deficit

for the year ended December 31, 1984

	(in thousands of dollars) 1984	1983
Deficit at beginning of the year	$156,521	$185,542

(Continued on next page bottom)

Port of Tacoma

(Extracts from "Port of Tacoma Annual Report 1984")

Executive Director's message

1984 marked one of the most significant years of growth and change in the history of the Port of Tacoma. The catalyst for much of this change was over $40 million in new terminal construction at the Port to build new, state-of-the-art facilities for both Totem Ocean Trailer Express and Sea-Land.

The Port also made major progress in a number of other areas, which can best be summed up by one word – momentum. In addition to building new terminal facilities in 1984, the Port was building momentum.

A wide variety of projects, accomplishments, and developments added to this momentum – building a Port of Tacoma World Trade Center, receiving authorization to expand the Port's Foreign Trade Zone #86, gaining new shipping lines at the Port, having existing shipping lines add new vessels and increasing their vessel calls, building a second dockside intermodal yard, co-sponsoring a major World Trade Expo in Tacoma, and having major increases in container traffic and overall tonnage.

During 1984, the Port of Tacoma handled 8.2 million tons of cargo, a 5% increase over 1983. Container traffic was up 13%, to 150,300 TEUs. The Port's total gross revenues totalled $28.6 million, with a net income of $11.5 million. In short, the Port had a very impressive year in 1984, in terms of revenues and cargo handling.

Like the Port, the City of Tacoma and Pierce County are also enjoying an era of major growth. Realizing how important international trade is to this area's continued growth, and how important cooperation among various governmental groups and agencies is to keep building together for the future, the Port will continue to work with various groups to plan for the future.

As the Port of Tacoma builds for the future, we are continuing to develop our strongest selling points, those unique benefits and services which we can offer businesses and shippers. We call these "The Tacoma Advantage," and you will find some of these highlighted in this Annual Report.

L. M. Kileen
Executive Director

(Continued from page 22)

	1984	1983
Net income	4,492	16,141
	152,029	169,401
Deficit assumed by local port corporations	(95,254)	(80,316)
Surplus transferred to a local port corporation	–	67,436
Deficit at end of the year	$ 56,775	$156,521

Statement of contributed capital

for the year ended December 31, 1984

	(in thousands of dollars) 1984	1983
Contributed capital at beginning of the year	$322,385	$349,361
Contributed capital transferred to local port corporations	(180,066)	(26,976)
Contributed capital at end of the year	$142,319	$322,385

New terminal construction

During 1984, the Port's largest terminal construction project in history was underway. The project involved two stages – relocating Totem Ocean Trailer Express (TOTE) which first came to the Port in 1976, and building a new terminal for Tacoma Terminals, Inc., a subsidiary of Sea-Land Service, Inc., at the former TOTE site.

TOTE's new 33-acre terminal, located on Blair Waterway was opened in August, 1984. The $10.5 million facility, which is eight acres larger than their previous one, was designed to handle TOTE's two roll-on, roll-off, trailerships. The state-of-the-art TOTE facility has parking for nearly 1,400 trailers.

The 76-acre Tacoma Terminals site, which opens in May, 1985, is a two-berth terminal featuring four container cranes, and storage for nearly 2,500 containers. The cranes, built by Hitachi in Japan, were shipped to the Port fully assembled. This was the first time that cargo of this size had crossed the Pacific by ship.

Over 400,000 TEUs are expected to be handled by Tacoma Terminals during its first full year of operation. The terminal site, which includes a dockside intermodal yard, is expandable to 150 acres.

Container and shipping activity increase

During 1984, the Port's overall container traffic increased 13%, to 150,300 TEUs. In addition, a number of shipping lines also improved their container service to Tacoma during 1984. Star Shipping, a major shipping line which calls at Tacoma, increased their service from Japan to Tacoma to three times a month during 1984. Star has also placed orders for three new vessels, the first of which called at Tacoma in March, 1985.

EAC Lines introduced four fully cellular container vessels in their service in 1984, replacing their combo vessels. The vessels, each with about a 1,000 TEU capacity, serve the Pacific Coast, Southeast Asia, and Western Australia. Hoegh Lines, a shipper offering Middle East and Pacific services through the Port, introduced four new vessels into their Pacific trade. These combination vessels have a 1,660 TEU container capacity.

Adding to the list of over 20 shipping lines which call at the Port was Lloyd Brasileiro, which started a new container service between the West Coast and South America in 1984. The three Lloyd Brasileiro vessels call at the South American ports of Rio, Santos, and Paranagua. In March of 1985, Maersk Line chose Tacoma as its port for containership service between the Pacific Northwest and the Far East. Their service will start this June.

To better accommodate today's newer container vessels, the Port expanded the wharf of its primary container terminal – Terminal 4 – by 300 feet during 1984, and started on plans to add two new container cranes there.

This will enable the Port to better handle its increased container volumes. July, 1986, is the target date for the first new crane.

Balance sheets

December 31, 1984

	1984 $000	1983 $000
Assets		
Land, Facilities and Equipment, at cost	181,431	165,005
Less accumulated depreciation	42,726	38,216
	138,705	126,788
Construction work in process	33,298	11,238
Net land, facilities and equipment	172,003	138,027
Sinking, Redemption and Special Funds	12,564	36,385
Current Assets		
Cash	217	285
Temporary investments at cost, plus accrued interest and unamortized premium or discount; market value of $23,823,856 in 1984 and $21,627,714 in 1983	23,798	21,618
Accounts receivable, less allowance of $320,000 in 1984 and $210,000 in 1983	4,552	3,921
Taxes receivable	359	350
Bond redemption funds, current	6,182	5,649
Contracts receivable	126	203
Prepayments and other current assets	2,345	2,829
Total current assets	37,582	34,858
Deferred and Other Assets	4,077	4,854
Total Assets	226,229	214,125
Equity and Liabilities		
Equity		
Operations	75,883	65,843
Taxation	45,639	43,934
Grants	8,876	9,044
Total equity	130,399	118,822
Long Term Debt		
General obligation bonds	32,620	33,240
Revenue bonds	50,950	52,410
Other	992	1,267
Total long-term debt	84,562	86,917
Current Liabilities		
Outstanding warrants	2,236	214
Accounts payable	2,558	1,569
Payroll and taxes	690	657
Retainage under construction contracts	473	257
Accrued interest	785	1,926
Current portion of long-term debt	2,355	2,198
Total current liabilities	9,100	6,823
Operating Reserves	2,166	1,562
Commitments	–	–
Total Equity and Liabilities	226,229	214,125

Statement of operations

Years Ended December 31, 1984

	1984 $000	1983 $000
Revenues		
Terminal services	18,292	18,498
Property rentals	10,274	9,468
Total revenues	28,566	27,966
Operating Expenses		
Operations	9,859	9,908
Maintenance	3,047	2,567
Administration	3,941	3,560
Total before depreciation	16,848	16,037
Depreciation	4,638	4,372
Total operating expenses	21,487	20,409
Income from Operations	7,079	7,556
Other Income (Expense)		
Interest income	6,077	5,240
Interest expense	(2,929)	(3,293)
Gain on sales of assets	14	3
Other expense, net	(269)	(372)
Deferred pension costs	(521)	–
Total other income, net	2,372	1,577
Income before Non-Operating Income	9,451	9,134
Non-Operating Income (Expense)		
Ad valorem tax revenues	4,362	4,001
Interest on general obligation bonds	(2,276)	(1,658)
Total non-operating income, net	2,086	2,342
Net Income	11,537	11,476

Port of Tacoma Profile

The Port of Tacoma was established in November, 1918, by an overwhelming vote of the citizens of Pierce County. As a public corporation operating under state-enabling legislation, the Port is engaged in the acquisition, development and operation of harbor improvements; rail, motor, and water transfer and terminal facilities; commercial transportation and storage facilities; and industrial improvements. While the Port employs only about 180 workers, Port activities are responsible for an estimated 12,000 jobs throughout Pierce County.

Operating in the public interest, the Port has established the Commencement Bay Industrial District and the Frederickson Industrial Development District within Pierce County to further pursue these responsibilities. Over the years, the Port has grown from its original 240 acres to a prosperous seaport and industrial complex occupying over 2,400 acres.

The Port is located in Commencement Bay, which is considered one of the five best natural harbors in the world. Situated in the Puget Sound region of western Washington State, Tacoma is a rapidly growing Gateway Port, ideally suited for Pacific Rim trade.

Port of Helsinki

(Extracts from "The Port of Helsinki, Annual Report 1984")

Review of Finnish Foreign Trade

The Finnish economy showed further steady and balanced development during 1984. Overall output grew at around 3%. The value of foreign trade rose to represent around one quarter of total supply and demand. Imports of merchandise totalled 74,700M FIM, while exports accounted for 80,900M FIM. As a consequence, the previous year's trade deficit was turned into a substantial surplus.

Support for the growth in the economy came primarily from strong demand for Finnish exports to western markets. The upswing in exports was particularly sharp, owing to the fact that the forest industry and metals industry, the two most important industrial branches in the country, both experienced peak growth in the same year. Considering conditions on other fronts, imports showed little development. Imports of merchandise did, however, remain almost at the level of the previous year.

Maritime traffic still holds a dominant position in the transporting of Finland's foreign trade. Measured by tonnage, some 85% of all shipments are carried by sea, accounting for 77% of the total value of goods transported. The quantity of goods transported to and from Finnish harbours rose to record levels during 1984, in excess of 50.1 million tons. Import shipments totalled 29.4 million tons, while exports were 20.7 million tons.

Port Traffic

In terms of traffic through the Port of Helsinki, 1984 was an extremely successful year. Once again, the volume of overseas goods traffic handled rose to a new record, 5.6 million tons. With the inclusion of coastal traffic, the aggregate goods traffic figure stood at 6.7 million tons. The most positive aspect was the increase in export shipments, as a result of which outgoing traffic through the Port of Helsinki broke through the 2 million tons barrier for the first time. The upward growth in exports has continued unabated for a decade now, during which time export shipments have increased threefold.

Exports

The sharp growth in export shipments began in the autumn of 1983, and the boom continued throughout the year under review. Exports through the Port of Helsinki reached record levels, exceeding 2 million tons for the first time. The growth rate on the year, 14.5%, kept pace with the national increase in seaborne export traffic. The Port of Helsinki maintained its position as the nation's third-largest export harbour, with some 10% of the national volume. In terms of the value of goods shipped, Helsinki accounted for more than 25% of Finland's exports by sea.

The wood processing industry is the most important single customer for the Port of Helsinki. Among exports, as much as 50% of the total was shipments of forest industry products[1], chiefly paper products, but with significant amounts of plywood and board, as well as sawn timber. In comparison with the previous year's volume, the growth in shipments of forest industry products was somewhat below average.

Exports by the metals and engineering industry rose to around 400,000 tons[1], which was almost twice the amount recorded in 1983. Hence exports of machinery and equipment showed faster than average growth, totalling some 150,000 tons.[1] The Port of Helsinki was the major export harbour for machinery and equipment, and now handles roughly half of these shipments from Finnish suppliers.

Other important export customers were in the chemicals and foodstuffs industries, with the Port of Helsinki taking roughly one-sixth of Finnish export shipments from these sectors.

In the field of exports, the Port of Helsinki's sphere of influence extends across the entire country, although it naturally is weighted towards suppliers in the south of Finland. The most important manufacturing areas for the Port are in Häme Province (the Tampere area), the Lahti region, the Kymi Valley, Western Uusimaa, and the Pori district. In addition, the large number of regular sailings from Helsinki make it an ideal embarkation point for express deliveries by the paper industry, and considerable consignments of paper are transported long distances to Helsinki for shipment onward.

[1] National Board of Customs Statistics, 1984.

Container Traffic

Container traffic through the Port of Helsinki has been expanding vigorously for several years now, but the increase recorded in 1984 was particularly notable. The number of units passing through the Port was up by more than 20% on the previous year's figure. The growth was fuelled by the favourable development in exports, which at the same time helped to redress the normal imbalance in favour of imports in this sector.

The use of containers has spread rapidly, since the cargo traffic passing through the Port of Helsinki is for the most part well suited to this form of transport. A further factor leading to the concentration of container shipments in Helsinki is the comprehensive and regular ferry connections to and from the capital. Helsinki has thus become Finland's largest container port and in 1984 the Port of Helsinki handled some 82% of the country's container imports, and 73% of her container export shipments. The largest flows of container traffic were on the Baltic and North Sea lines, with the West German routes taking some 40% of the overall total, alongside 20% to and from Great Britain, and 15% between Sweden and Finland.

Finances

Traffic

The maintenance of traffic volumes at a high level was a contributory factor towards the Port Authority's satisfactory result for the year.

Revenue

Total revenue was 171.9 million FIM, an increase of 19.3 million FIM (12.6%) on the figure for 1983. The most notable growth was achieved in charges for goods (8.1

(Continued on next page bottom)

Port of Copenhagen

(Extracts from "Annual Report 1984, Port of Copenhagen")

General Manager's report (extract)

The rate increases carried out during the year, combined with the future effects of the resource adaptations to the current level of activity in the Port of Copenhagen completed so far, are expected to yield additional improvements in the financial results of the years to come.

Out of the profit for the year, amounting to Dkr. 6.3 million, an extraordinary allocation of Dkr. 3 million has been made to icebreaking fund. The balance, Dkr. 3.3 million, has been transferred to the reserve fund.

This improved result – as compared to the years immediately preceding – does not warrant permanent improvement of the Port's financial position. The profit derives from the much smaller allocation for adjustment of pension commitments this year. In fact, it has given the Port Authority a reversal of Dkr. 2.3 million due to the general development in civil service pensions in 1984.

A similar situation cannot be expected in future, and repeated large allocations to meet pension commitments must be anticipated. Ongoing negotiations with the Port Authority's personnel regarding future pensions are expected to be completed in the coming year.

Main events

1984 was epoch-making for the Port of Copenhagen in two respects:

1) The continued decline in turnover over the past decade was reversed into a modest advance, despite all predictions of a sustained fall in the previously large energy imports via the Port.
2) The subsidiary, Copenhagen Free Port and Stevedoring Company Ltd., (KFS for short), changed its organizational structure to favour customer and financial development.

Turnover

Our progress reflects the fact that vigorous efforts, e.g. on the part of the new marketing department established last year, have made it possible to convince increasingly larger sectors of the business community of the financial gains reaped from the important base port, Copenhagen. It is also gratifying to note the progress in spite of Government-backed support of industrial development outside Copenhagen, the large drop in sales of oil products, and intensified competition from road and rail transport.

The coming year will be marked by intensified marketing efforts. Our intention is to give the business community an impartial account of the financial advantages which the long-distance transport of goods by sea can bring to the individual company. It is hoped that these efforts will effectively check the fall in turnover recorded in the past few years. In addition, we look forward to a substantial increase in turnover deriving from an agreement with Danish State Railways ensuring that from mid-1986, "the eastern Denmark Road" will pass through the Port of Copenhagen.

Image of the Port of Copenhagen

A public opinion poll taken in the course of the year verified that unfortunately many Copenhageners and politicians are very indifferent about the Port of Copenhagen. This negative public attitude is not found in other Danish ports and may have a detrimental influence on the decisions made by the environment regarding Port developments.

The event called "Port Week 1984", directed at Copenhageners, politicians, customers and personnel, was intended to counteract this negative attitude. A public opinion

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(Continued from page 25)

million FIM), and in rents and other income (5.8 million FIM). Overall income was rather more than 2 million FIM above that budgeted, although income from ancillary services fell 3.7 million FIM short of the budgeted figure. All the most important harbour tariffs were increased during the course of 1984.

Expenditure

Total operating expenditure came to 166.4 million FIM, an increase of 15.9 million FIM (10.5%) on the previous year. During the year the Port Authority's workforce declined by 43 persons, and this moderated the growth in personnel costs. The growth in other operating costs stemmed largely from construction fund contributions paid on the Port Authority's premises at Eteläranta 10, and from increased quay cleaning and maintenance costs as a result of the exceptionally snowy winter. Capital costs grew by 6.7 million FIM (11.9%), primarily due to the appreciation of fixed assets performed in 1983 and the extraordinary depreciation items presented in the final accounts. Overall expenditure was around 4.5 million FIM (2.7%) below that budgeted, with nearly 3.9 million FIM of this shortfall coming from expenditure on ancillary services.

Result

The result for 1984 shows a surplus of 5.5 million FIM, although extraordinary depreciation was carried out to a total of 3.2 million FIM. The result achieved is 6.6 million FIM better than that presented in the budget. The gross margin was 69.4 million FIM, or 18.7% greater than in 1983.

If revenue is compared against actual use of funds, it can be seen that the Port produced a financing surplus of 45.6 million FIM which could be used for covering other costs incurred by the City. The yield on fixed assets represented 6.8% calculated against the current value of fixed assets. In 1983 the corresponding figure was 6.3%, calculated against the acquisition cost figure, which also included, however, the appreciation of fixed assets carried out in 1974.

Investments

The Port Authority carried out investments to a total of 22.4 million FIM, and capital outlays for public works and drains totalled 10.4 million FIM. The value of fixed assets rose to 948.9 million FIM. The additional appreciation of fixed assets made necessary by the index adjustment and reduction in interest from 6% to 3% served to increase the value of fixed assets by 274.5 million FIM.

poll, taken immediately after the end of the Port Week, reflected an incipient, mild change of attitude among Copenhageners. An annual Port Week event, combined with sincere and objective press information about Port development, will hopefully have a favourable effect on the image of the port.

Port Counsil of Copenhagen

In the first year of existence, the Port Counsil of Copenhagen, a user board, has shown how objective advice to port and customers can influence and improve the Port's situation. For example, this applies to advice on rate matters and the future of KFS, including the transition to more modern service-minded functions.

Erik Schäfer
General Manager

Balance sheet

As at December 31, 1984

	1984 Dkr. '000	1983 Dkr. '000
Assets		
Fixed Assets		
Tangible fixed assets		
Land and buildings	243,422	207,137
Port installations and machines	33,610	33,650
Operating equipment, furnishings and fittings	12,566	13,113
Tangible fixed assets in course of construction	19,239	19,226
	308,837	273,126
Financial fixed assets		
Participating interests in the subsidiary KFS	5,825	
Amount payable from the subsidiary KFS	1,127	37,562
Capital holding in Prøvestenens Dampforsyning Nord ApS	52	53
Other securities and participating interests	464	473
Other receivables	5,258	7,265
	12,727	45,353
Total fixed assets	321,565	318,479
Current Assets		
Stocks	1,562	1,332
Receivables		
Amounts payable by P.D.N. ApS	899	0
Amounts payable concerning operations	11,733	13,506
Other receivables	4,077	3,940
Accruals	1,822	1,632
	18,532	19,078
Bonds	56,884	54,987
Cash in hand	16,380	4,399
Total liquid assets	93,360	79,796
Total Assets	414,925	398,275

Liabilities		
Net Capital		
Reserve fund	91,478	123,455
Icebreaking fund	8,905	5,791
Reassessment reserve	10,846	15,892
Net capital, total	111,230	145,138
Transfers		
Pension fund	156,000	156,000
Relief fund	1,534	1,390
	157,534	157,390
Long-term Creditors		
Debt to the subsidiary KFS	22,395	0
Mortgage debt	6,219	2,354
Debenture loans, etc.	58,622	61,532
Bills payable	1,458	0
Nordiska Investeringsbank	10,153	0
	98,848	63,886
Short-term Creditors		
Long-term debt payable next year	7,455	3,113
Bank debt	8,281	6,066
Trade debtors	9,256	8,221
Debt to P.D.N. ApS	0	124
Deposits	921	1,088
Other debts	14,190	12,374
Accruals	7,205	875
	47,312	31,861
Transfers and creditors, total	303,695	253,137
Total Liabilities	414,925	398,275

Profit and loss account

For the year ended December 31, 1984

	1984 Dkr. '000	1983 Dkr. '000
Turnover	105,504	92,480
Work carried out for own account and entered under assets	4,835	5,683
	110,339	98,163
Operating expenses	18,108	15,344
Administration expenses	8,965	10,219
Personnel expenses		
Salaries/wages etc.	49,793	
Allocation to pension fund	9,556	
Social security contributions	1,661	
Other personnel expenses	439	
	61,451	60,015
Depreciation of tangible fixed assets	11,046	10,454
Allocation to icebreaking fund	300	300
Total expenses	99,872	96,332
Result of primary operations	10,467	1,831
Interest received	18,563	
Interest paid	14,084	
	4,479	3,109
Profit before extraordinary items	14,947	4.940

(Continued on next page bottom)

Wellington Harbour Board

(Extracts from "1984 Annual Report, Wellington Harbour Board")

General Manager's report (extract)

Corporate Plan and Objectives:

During the 1984/85 year Management and the Board will be bringing together a Corporate Plan which will set out the short, medium and long term objectives and how these will be achieved.

In the meantime and especially during the second half of the current year we have set as our principal goal the objective to become commercially orientated giving maximum emphasis to the service to and the need of the customer. The slogan of the NEW LOOK PORT WELLINGTON is progressively being etched into everything we do with a concerted effort towards achieving greater efficiency, cost effectiveness and reliability of service.

Restructuring:

The restructuring of the management organisation and responsibilities commenced in May 1984 and will be an on-going exercise for the next twelve months as we review all sections of the Board's activities. This not only includes position responsibility but also functions such as the floating dock, floating crane, tugs, dredging, use of buildings and the like.

The introduction of corporate management practices with greater delegated responsibility is now showing its benefits and will continue to do so in the years ahead.

The last 6 months have seen some dramatic changes in style, direction and approach, and these changes have required considerable adjustment by the Executive Staff, as they have accepted the additional responsibilities and accountability. I must pay tribute to Charles Hardy as Assistant General Manager, and the other Executive Officers for the manner, determination and tireless effort they have contributed to ensure the changes to the New Look Port Wellington succeed.

(Continued from page 27)

Extraordinary income	84	
Extraordinary expenses	−99	
	−14	1,989
	14,932	6,929
Adjustment of the Pension Fund and the Relief Fund (income)	2,115	−11,192
Profit before subsidiary company's result, income 1984	17,048	−4,263
Net result KFS before reconstruction	−10,706	−12,426
Profit for the year 1984	6,341	−16,689
to be distributed as follows:		
Extraordinary allocation to icebreaking fund	3,000	0
Transfer to reserve fund	3,341	0
	6,341	0

Trade:

The gross cargo throughput of 5,791,403 tons for the year to 30 September 1984 was the third highest on record. The increase, I suggest, has been for three principal reasons.

1. The substantial increase in imports – particularly in ckd and steel from Japan. The gross overseas imports increased by 14.9% over 1983 to reach a total of 1,526,000 tons.
2. The greater movement in cargo by coastal shipping with the introduction in June 1983 of the Pacifica Company's 'SOFE' Lyttelton/Wellington service. The total coastal tonnage increased by 12.8% over 1983 to reach a total of 3,314,500 tons.
3. The attractiveness of the extremely efficient container terminal at Wellington, the box exchanges at the Wellington terminal being one of the fastest rates in the world.

We should, however, express our concern as to:

1. Whether the imports will be maintained at the current rate, and
2. the drop in overseas exports of 75,000 tons due mainly to the decline in meat exports to North America and Europe.

Cost Centre Budgeting – Chart of Accounts

During the year we made the first attempt to introduce cost centre budgeting. The new budgeting method came into force on 1st October 1984. The transition to the new areas of financial responsibility also required adjustments to the chart of accounts.

Considerably more sophistication will be introduced during the next twelve months so that at the end of the day Management and the Board will be able to monitor and identify reasons for performance in specific areas of responsibilities.

Frank Baldwin
General Manager

Balance sheet

As at 30 September 1984

	1984 $000	1983 $000
Current Assets		
Cash & Deposits	3,199	2,598
Debtors	3,388	2,093
Stores & Materials	429	466
	7,017	5,157
Less Current Liabilities		
Creditors	2,400	1,513
Loans Repayable Within One Year	8,893	1,670
	11,294	3,184
Working Capital	(4,277)	1,973
Investments	15,304	13,885
Fixed Assets	93,975	45,369
	105,002	61,228

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Port of Melbourne

(Extracts from "Annual Report 1983/84, Port of Melbourne Authority")

Trade review (extract)

With the end of the drought in Eastern Australia and the easing of recessionary economic conditions in Australia and overseas, a total of 18,473,000 revenue tonnes of cargo was handled through the Port of Melbourne in 1983/84, a rise of 5.8% on the 1982/83 result. 1983/84 completes three years of widely fluctuating trade through the Port from the record 1981/82 level (19.3 million revenue tonnes) into the 1982/83 trough (17.5 million revenue tonnes, comparable with 1976/77 trade levels) and followed up with the latest result, a modest but welcome increase.

In January 1983 trade slumped dramatically under the weight of contracting economic conditions, both locally and overseas, and severe climatic conditions in eastern rural areas in Australia. Fortunately, with rainfall occurring in many drought areas in March 1983 and with the United States economy gathering pace, the prospects for a trade recovery were very good when 1983/84 began, although it wasn't until the first three months of 1984 that the recovery began to provide firm gains in trade.

The trading sector to signal the recovery was overseas imports, in September 1983, influenced mainly by the end of a prolonged stock reduction period in the local economy, improving corporate profitability and lower interest rates. Overseas exports failed to recover with the same punch, and performance in that sector remained patchy to the end of the year, buoyed only by greater exports of empty containers. Australia's best performing export commodity in 1983/84, wheat, is not shipped in bulk through the Port of Melbourne and thus failed to influence export tonnages. The coastal sector benefitted from the end of the drought and better general economic conditions too late in the financial year to completely wipe out the trade shortfalls incurred in the December half.

The full effects of potential trade recovery were difficult to predict at the beginning of the year, and the 5.8% increase in trade which was finally recorded was greater than expected due mainly to the strength of the recovery in the overseas import sector. As an illustration of the unpredictable nature of trade results during the year, the final month of the financial year was unexpectedly a June record in revenue tonnes (boosted substantially by overseas exports of empty containers, however) and this added an unprecedented 2.5% to year-to-date total trade growth taking it from 3.3% to 5.8%.

The trade recovery was insufficient to return total container throughput to the 500,000 mark. The throughput of 491,600 TEUs finally recorded was 6.8% greater than the 1982/83 figure, and the 1/2 million mark should be comfortably surpassed in 1984/85.

The decision in August by the Australia Northbound Shipping Conference to keep Adelaide traffic centralised in Melbourne for a further 2 years is welcomed as a sensible outcome which will give South Australian shippers the most frequent and lowest cost conference service possible.

The PMA is looking forward to a year of consolidation

(Continued from page 28)

Less Term Liabilities		
Net Public Debt	25,843	34,123
	79,159	27,105
Public Equity Represented as follows:		
Capital	8,522	7,953
Revenue Reserves	15,304	13,885
Asset Revaluation Reserves	49,316	–
Sinking Fund Reserve	6,015	5,265
	79,159	27,105

Revenue and appropriation statement

For the year ended 30 September 1984

	1984 $000	1983 $000
Income		
Shipping Charges	2,639	2,620
Shipping Services	1,980	1,761
Cargo Charges	10,054	8,852
Cargo Handling Charges	8,530	8,736
Licences & Fees	395	317
Sundry Revenue	206	176
	23,807	22,464
Less Expenses		
Wages, Salaries & Levies	15,270	15,142
Contract Services, etc.	2,657	2,877
Materials	1,628	1,547
Other	253	120
Interest	3,494	3,422
Depreciation	1,663	1,686
	24,967	24,796
Net Revenue from Operations	(1,160)	(2,331)
Other Income		
Rents	1,727	1,760
Interest	2,839	2,224
Sales of Assets	21	(3)
	4,588	3,981
Exceptional Items		
Accrued Annual & L.S. Leave	(934)	–
Revenue before Appropriation to Reserves	2,493	1,650
Appropriations		
Special Funds	(1,599)	(2,680)
Sinking Funds	(572)	(570)
Loan Repayments (Regular)	(321)	(303)
	(2,492)	(3,563)
Balance Transferred to Capital	–	(1,904)
	2,493	1,650

of trade gains, and is particularly hopeful that primary produce and merchandise exports will soon follow the lead given by the other trade sectors.

Profit and loss statement

for the year ended 30th June 1984

Current cost

	1983/84 $000's	1982/83 $000's
Historic Cost Operating Surplus (Deficit) before Abnormal Items	21,759	9,081
Plus Loss on Sale of Assets included above National Interest on Superannuation	10	139
– Provision for Active Members	(13)	–
– Provision for Inactive Members	1,959	–
	23,715	9,220
Less Depreciation Adjustment	11,851	12,896
Current Cost Operating Profit Before Abnormal Items and Finance Charges	11,864	(3,676)
Less Abnormal Items		
– Additional Superannuation	11,641	10,815
	223	(14,491)
Less Finance Charges		
– Loans and Deferred Credit Expenses	10	208
– Interest Expense	23,272	15,395
– Foreign Exchange Losses	1,199	1,119
	24,481	16,722
Current Cost Operating Surplus (Deficit) after Finance Charges but before Extraordinary Items	(24,258)	(31,213)
Less Extraordinary Items		
– Compensation paid for Surrender of Leases	–	1,011
– Contributions paid from Lessees and Others	–	140
	–	871
Current Cost Operating Surplus (Deficit) after Extraordinary Items but before Gains and Losses on Holding Monetary Items	(24,258)	(32,084)
Plus Gains on Holding Monetary Items	15,689	22,657
Less Loss on Holding Monetary Items	1,539	2,438
	14,150	20,219
Current Cost Surplus (deficit)	(10,108)	(11,865)
Retained Surplus at Beginning of Year	44,973	62,838
Total Available for Appropriation	34,865	50,973
Payment of Public Authorities Dividend	6,000	6,000
Retained Surplus	28,865	44,973

Balance sheet

as at 30th June 1984

Current cost

	1983/84 $000's	1982/83 $000's
Capital and Reserves		
Accumulated Current Cost Surplus	28,865	44,973
General Reserve	15,037	15,037
Current Cost Reserve and Contributed Capital	261,317	240,884
	305,219	300,894
Represented by		
Current Assets		
Cash at Bank and on Hand	42	32
Debtors	6,749	5,592
Prepayment	234	451
Stores	2,926	3,151
	9,951	9,226
Investments		
Investments	25,789	17,948
Housing Advances	530	592
	26,319	18,540
Non-Current Assets		
Deferred Debtors	571	–
Fixed Assets at written down Current Cost	526,284	500,136
Work in Progress	24,409	21,850
Leased Assets	8,475	–
Deferred Expenses – Foreign Exchange Losses	8,980	9,210
	568,719	531,196
	604,989	558,962
Total Assets		
Less		
Current Liabilities		
Bank Overdraft	1,088	1,275
Sundry Creditors & Accrued Liabilities	11,110	7,692
Deferred Contract Payments	–	8,240
Short Term Borrowings	13,825	17,939
Provisions	11,941	10,072
	37,964	45,218
Non-Current Liabilities		
Superannuation – Active & Inactive Members' Fund	8,215	6,884
Long Term Borrowings	206,052	182,205
Provisions	37,354	23,761
Lease Liability	9,060	–
Deferred Income	1,125	–
	261,806	212,850
Total Liabilities	299,770	258,068
Net Assets	305,219	300,894

Port of Geelong

(Extracts from "1984 Annual Report, Port of Geelong Authority")

Chairman's report (extract)

1984 was a year of considerable growth and development for the Port of Geelong.

External factors combined with the Port Authority's continued drive to improve both the level of trade and our facilities to handle it efficiently, to achieve a substantially increased volume of shipping through the Port and a satisfactory trading result.

Victoria was at the forefront of the national economic recovery, which gained strength as the year progressed. The rural economy in particular, buffeted by widespread drought through 1982/83, experienced a dramatic upturn in 1984. A good season produced record grain harvests and firmer prices for most agricultural commodities.

The Port handled a record 3.03 million tonnes of grain exports for the year, as well as improved volumes of general cargo.

Development and Diversification

The Authority's contribution to regional economic development is a vital component of the far-reaching Port of Geelong Development Plan which we unveiled in 1983.

The plan aims to ensure the orderly expansion and technological advancement of the Port's facilities to meet growing user needs through to the year 2010.

Access to the Port is one of the major issues addressed in the Development Plan. To accommodate even larger vessels, the Plan maps out a progressive dredging programme which commenced during the year under review.

The $3 million project to deepen the access channel to the pier serving Alcoa's Point Henry aluminium plant was completed in December.

Investigations have already begun to determine our next dredging priority.

In November, the Authority entered a new field of activity with the opening of a new public cold store adjacent to Corio Quay. The Port is now able to offer shippers an integrated service covering loading/unloading facilities, stevedoring and chilled or frozen storage.

During the year ahead, the Development Plan will be re-appraised and revised in the light of changes and emerging trade patterns to ensure that future stages accurately meet users' needs.

Port Trade

Overall, the Port recorded a significant increase of 25.75% in gross tonnage handled in 1984.

The major increase was in bulk grain exports, which reached a record 3.03 million tonnes, 500% higher than the volume shipped in the drought-beleaguered previous year. Geelong continued to be the major grain handling port in the southern hemisphere.

Trade in containers and agricultural equipment also increased, as did steel with the introduction of a scheduled service by the NYK Line for the Ford Motor Company.

Imports and exports of oil and petroleum products remained relatively stable, as did imports of fertilizer raw materials and alumina.

Community Involvement

During 1984, the Port Authority was pleased to be able to play a more active role in the affairs of our local community.

In addition to our commitment to the economic development of the Geelong region, the Authority is also keen to make a positive contribution to the social and environmental welfare of the area in which we operate.

In December, we completed construction, on Port Authority land, of a small heliport for use by regional emergency services, as well as news media and commercial flights.

The Authority has been working closely with the City of Geelong and the Geelong Regional Commission on a major foreshore development and beautification programme. The first stage, soon to be completed, provides an attractively landscaped public open space adjacent to Cunningham Pier.

As an extension of the foreshore programme, the Authority has also contributed to the cost of a feasibility study for development of a marina close to the city.

Neil G. Samuels
Chairman

Revenue statement

for the year ended 31 December, 1984

	1984 $000	1983 $000
Revenue from		
– Cargoes	7,542	5,151
– Ships	1,685	1,729
– Stevedoring and Other Port Services	5,322	3,243
Rippleside Ship Repairs	1,327	1,000
Rents	301	305
Miscellaneous	49	24
	16,229	11,455
Expenses for		
– All Port Operations	5,732	3,878
– Rippleside Ship Repairs	1,155	830
– Administration	3,033	3,129
– Maintenance	657	376
– Depreciation and Amortization	1,948	1,806
– Interest	33	52
	12,561	10,074
Net Profit before Investment Income and Extraordinary Items	3,667	1,380
Investment Income	1,261	1,183
Net Profit before Extraordinary Items	4,929	2,564
Extraordinary Items	–	431
Net Profit for Year	4,929	2,995

(Continued on next page bottom)

Department of Marine and Harbors Port of Adelaide

(Extracts from "Annual Report 1983-1984, Department of Marine and Harbors")

Director's preface (extract)

A significant trade turnaround was evident in 1983-84, following the severe international recession of 1982-83 and the worst national drought in memory.

Increased tonnages (up 23.2%) and a 12% rise in port charges contributed to the Department's call on Consolidated Revenue being reduced by 52.6% to $4.5M.

This would have been cut back even further, but for a sharp increase in interest, debt redemption and superannuation costs, which rose by $1.6M to $14.9M, effectively overshadowing the operational surplus of $10.4M.

The above costs absorbed 47.6% of all port revenue in 1983-84 and the future impact of this sector on port revenue and on shipper costs – in the absence of corrective measures – could produce wider economic problems. These charges have risen from $11.8M in 1981-82 and $13.3M in 1982-83, and the trend has been drawn to the Government's attention.

While expenditure rose 2.5% for the year, due chiefly to higher salaries, wages and increased costs in goods and services, the rationalisation of staff numbers continued, the total employed falling by 4.4%. Since June 30, 1981, the reduction in staff numbers has been 10.4%.

New facilities and improvements accounted for $8.4M, while a further $1.1M, in small craft facility programs was covered by additional works grants for fishing and recreational boating.

Major development expenditure involved widening of the Port Pirie Shipping channel, deepening of the swinging basin, and the installation of further navigational aids as part of the project. Of the total cost of $5.8M, $4.7M was spent at Port Pirie in 1983-84.

Despite the strenuous efforts of the South Australian Shipping user Group, in which the Department operates with the Chamber of Commerce and Industry and major importing and exporting companies, there was no successful conclusion to negotiations with ANSCON/ANZECS regarding a direct Liner service with Japan and South Korea. However, alternative negotiations were begun with non-conference organisations capable of providing the required level of direct calls, and there were indications that another group may seek involvement of its own volition. On the eve of the new financial year, these steps were looking very promising and were being followed up.

A first-release area of 13 hectares adjoining the container terminal at Outer Harbor, within Container Industry Park, was being prepared as a new industrial estates initiative and is to be marketed on a national basis.

In conjunction with the Department of State Development, broader marketing efforts relating to industrial estates were under consideration for the 1984-85 fiscal year, and considerable preparatory work is being undertaken on site.

One of the year's most significant events was the completion of the new Port Bonython Jetty and export facilities for crude oil, condensates and LPG, and the handover of the facility to the Department of Marine and Harbors by Santos Ltd., on behalf of the Cooper Basin producers.

Nearly three-quarters of a million tonnes of product was shipped out during the year, adding significantly to the State's export performance. The first shipment of LPG

(Continued from page 31)

Balance sheet

as at 31 December, 1984

	1984 $000	1983 $000
Funds of The Authority		
Contributed Capital	6,169	5,831
General Reserve	19,241	19,212
Accumulated Net Revenue	25,637	20,737
Total Funds	51,049	45,782
Represented by –		
Current Assets		
Bank and Imprest Accounts		5
Investments – at Cost	10,673	8,103
Accounts Receivable	1,155	1,352
Prepayments and Accruals	1,817	819
Stores – at Cost	138	140
Other Deposits – at Cost	4	–
	13,791	10,420
Less		
Current Liabilities		
Bank Overdraft	233	5
Accounts Payable and Accruals	2,240	679
Long Service Leave	219	239
Annual Leave	336	288
Loans	–	210
	3,030	1,423
Working Capital	10,760	8,996
Non Current Assets		
Fixed Assets	39,784	36,152
Investments – at Cost	929	1,034
Other Deposits – at Cost	141	156
	40,854	37,343
	51,615	46,340
Less		
Non Current Liabilities		
Loans	450	450
Long Service Leave	116	108
	566	558
Net Assets	51,049	45,782

is due to leave the port early in the 1984-85 period, en route to Japan.

On a final – and more positive – note. An initial meeting was held on June 18 of the new Ports Liaison and Advisory Committee, established by the Minister through the Department to provide direct input into port development by representatives from industry, commerce and both State and Federal areas. Members were invited to join the committee on the basis of their individual experience and expertise, rather than as representatives of any particular organisation.

In looking ahead to the new financial year, indications are that excellent rural conditions and much-improved industrial activity should provide the basis of higher port throughput and better utilisation of services and facilities.

★ J.M. Jenkin
Director

Recurrent receipts and payment

for the year ended 30 June 1984

	1984 $000	1983 $000
Receipts		
Shipping and Cargo		
Wharfage	15,208	11,947
Tonnage Rates	2,870	2,315
Conservancy Dues	1,467	1,092
Pilotage Fees	1,411	924
Bulk Handling Charges	5,909	4,011
Container Crane Hire Charges	138	142
Labour Recoveries	1,858	1,371
Sundries	585	662
	29,446	22,464
Leases, Licences and Rental	1,578	1,431
Fishing Industry	246	223
Other Services	53	47
Total Receipts	31,323	24,165
Payments		
Commercial Port Operations and Maintenance		
Shipping Facilities and Services	5,034	5,284
Cargo Management	7,160	7,596
Port and Trade Development	402	312
Planning and Design	75	65
Industrial Estates Management	162	56
	12,833	13,313
Fishing Industry		
Operation and Maintenance of Fishing Havens and Facilities	560	427
Provision and Maintenance of Safety Standards	216	172
	776	599
Operation and Maintenance of Recreational Jetties	236	184
Operation and Maintenance of Recreational Boating Facilities	48	40
Maritime Safety	258	195
Pollution Management	11	3
Executive, Administration and Professional Services	6,692	6,067
Total Payments	20,854	20,401
Excess of Receipts over Payments	10,469	3,764
From which are to be deducted –		
Other payments on behalf of the Department		
Debt Servicing Costs	12,960	11,603
Superannuation Contributions by Government	1,445	1,175
Public Building Department Services	14,920	525
	29,325	13,303
Balance being Recurrent Cost of Marine and Harbors Department met from Consolidated account	4,451	9,539

★ Mr. John Jenkin for top WA post

John Jenkin, well known to Australia's shipping industry as the energetic and innovative South Australian director of Marine and Harbors, is leaving the Department to take up an executive appointment in Western Australia.

Mr. Jenkin will be heading up two authorities. He will be general manager of the WA Department of Marine and Harbours as well as chairman of the newly formed Maritime Council of WA.

Mr. Jenkin, 45, was an Australian Trade Commissioner before he was appointed the Department of Marine and Harbor's first commercial director in 1977. He was later promoted to deputy director and became director of the department in 1983.

Born and raised in WA, Mr. Jenkin said his move back to the West was for both career and personal reasons.

"I feel I have reached the stage that I set out to in SA," he said.

"My principal task was to get the shipping services going again. The European services were the first, and now the Japan service has also been achieved."

"It is also my personal belief that heads of government departments should keep moving; I am against the concept of staying in one place forever."

Mr. Jenkin said much had been achieved in recent years for shipping in South Australia and for the Port of Adelaide, but he was quick to note the important roles played by other groups and organisations.

(Shipping & Ports Journal)

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(Continued from page 13)

– *The Realities of Delay* –

That investment will have to come from non-federal sources, principally port-generated revenues. Before making a commitment, however, the ports must know what they can expect from the federal government. Channel depths and characteristics are key criteria in the planning of marine terminals. Successful long-term planning by port authorities depends quite fundamentally on the concurrent modernization of the nation's deepdraft waterways.

"Meaningful changes which would substantially reduce typical project development cycles are essential if national needs for port and navigation system capabilities are to be accommodated."

The U.S. port industry views "fast-tracking" reforms in the procedural systems by which channel and harbor projects are authorized and developed as a critical legislative objective. Meaningful changes which would substantially reduce typical project development cycles are essential if national needs for port and navigation system capabilities are to be accommodated. As things stand now, the system is faltering. It is simply not responsive. Reform is essential to ensure the viability of an essential asset – the U.S. navigation system.

The Harbors & Navigation Committee of the American Association of Port Authorities is currently preparing detailed proposals for reform of the process. That work is expected to be completed shortly.

(VIA Port of New York-New Jersey)

International maritime information: World port news:

ISGOTT recommended : IMO

The Fire Protection sub-committee has decided not to develop its own guidelines for oil tankers not fitted with inert gas systems. Instead it has recommended the MSC to recognize the *International Safety Guide for Oil Tankers and Terminals* for use by Member Governments in association with national regulations.

The Guide is produced jointly by the International Chamber of Shipping, the Oil Companies International Marine Forum and **the International Association of Ports and Harbors,** all of which have consultative status with IMO. It was first issued in 1978 and the second edition was published in 1984.

Inert gas systems are required on all tankers of 20,000 dwt and above (the date when this requirement becomes effective may vary according to the size and type of the ship). Tankers of less than 20,000 dwt are not required to be fitted with an inert gas system but must be provided with a deck foam system. *(IMO NEWS)*

Danger of using cargo oil as fuel: IMO

The dangers of using low flashpoint cargo oil as fuel were highlighted in a note from France which was considered by the Committee.

This practice was the subject of a circular issued by the MSC in 1983 which pointed out that it was a serious source of danger to ships and persons both at sea and in port.

The circular stated that, in some known cases, the transfer of cargo oil to the bunker system had been carried out by means of a cross connection between the cargo and bunker piping systems.

It went on to refer to a casualty aboard a tanker where crude oil leaked from a cargo tank into an adjacent bunker tank. The crude oil was then transferred together with the fuel oil into a heavy oil day tank and subsequently into a double bottom tank. As the tanker was under repair the flame of an oxy-acetylene torch being used for repair work ignited the hydrocarbon vapours which had escaped into the engine room.

The French note said the practice was dangerous and was clearly contrary to regulation II-2/15.1 of the 1981 SOLAS amendments, which put limitations on the use of oil as fuel when it has a flashpoint of less than 60°C.

The 1983 circular provided a very useful warning to Member Governments but did not, however, put an immediate stop to these practices since, between 10 April and 11 May 1984, four ships were detained in French ports as the fuel in day tanks and setting tanks located in the engine compartments had a flashpoint between 20.5°C and 48°C.

The note described ways in which bunker fuel could be checked and said that if the flashpoint was below 60°C it was proof of bunker contamination.

The Committee referred the subject to the Sub-Committee on Fire Protection, requesting it to consider the problem urgently and to prepare a draft Assembly resolution for consideration at the Committee's next session.

(IMO NEWS)

"Multimodal transport and containerization": Report by the UNCTAD secretariat

– Guidelines on the introduction of containerization and multimodal transport and on the modernization and improvement of the infrastructure of developing countries –

(United Nations Publication, Sales No. E.83.II.D.14)

Summary and Conclusions: –

(i) After being confined largely to trade among developed countries, containerization and, to some extent, multimodal transport are increasingly spreading to developing countries' trade. With a few exceptions, however, containers carried in the trade of developing countries have rarely moved beyond port boundaries because the inland transport infrastructure and equipment in these countries have not in general been adapted to the needs of container transport.

(ii) Where alternative modes are available, the choice of the mode of inland transport for the carriage of containers is primarily affected by considerations of cost and quality. While no generally valid statement can be made regarding the absolute cost levels of individual modes, comparisons are possible which indicate cost advantages for road haulage over short distances and for rail and inland waterway transport over long distances. These three modes of inland transport can be employed complementarily, each mode taking over the transport leg for which it is best suited: i.e. trunk line movements of containers can be effected by rail and inland waterway, and distribution and pick-up services by road vehicles.

(iii) The carriage of containers demands a minimum of infrastructure and transport equipment. In many developing countries, the roads and railways would not support the axle loads of vehicles carrying large freight containers. There are specific problems regarding bridges and, owing to the height of containers, regarding tunnels. The creation of new infrastructure and the upgrading of existing facilities require considerable finance. It might be possible to reduce infrastructure investment by employing special container-carrying vehicles (increased number of axles to reduce axle loads; lower carrying platforms, etc.) but the equipment cost would then be higher.

(iv) The introduction of door-to-door transport of containers requires an integrated planning of infrastructure

and operations. The co-ordination of various planning authorities at the national level is necessary.

(v) As large container vessels call at a limited number of ports, international inland transport of containers will increase. As a consequence, the planning of international road, rail and inland waterway transit connections is of the utmost importance. Unless an international planning approach is taken, time, space and quality gaps in the infrastructure of individual countries will invariably result in bottlenecks at frontiers, a problem that is particularly relevant in the case of rail transport of containers. It would therefore seem advisable to delegate some planning and co-ordinating work to international organizations, at a regional or subregional level.

(vi) Multimodal transport of containers requires coherent and comprehensive transport policies to ensure optimum use of existing and new investments. This calls for co-ordination of investment policies between the national authorities that decide on infrastructure investments and transport users. Furthermore, regulations, tariffs and user charges should not unduly hamper container transport by any mode, as this could also lead to under-utilization of existing infrastructure or to over-investment in new infrastructure.

(vii) Promotion of multimodal transport and optimum use of infrastructure require careful consideration of the institutional aspects. Each Government must decide to what extent the public sector should actively participate in transport operations and establish a clearcut functional division between the public sector and the private sector in the transport of containers.

(viii) At the international level, an active policy of facilitating the use of infrastructure for international container transport should be pursued. Various international conventions aimed at facilitating border crossings have been adopted. Developing countries might consider becoming contracting parties to such conventions or at least applying some of their provisions. Technical assistance may be required for the implementation of such provisions.

(ix) The financing of international infrastructure projects is one of the most difficult problems of international transport in general and of container transport in particular. If the infrastructure is to be used mainly for transit trade, the country of transit may be unable or unwilling to finance such costly infrastructure. In such a situation the transiting country might have to make a considerable financial contribution, which would impose a heavy burden, especially on least developed land-locked countries. To resolve such problems, it might be desirable to draw up guidelines, at a regional or global level, on international co-operation in infrastructure investment financing and on the levying of user charges in international transport.

(x) To assist developing countries to cope with the financing problems arising from the need to upgrade existing and to create new infrastructure, additional financing facilities should be provided at a regional or global level. Provision of such facilities would be an important step towards the effective implementation of the International Development Strategy for the Third United Nations Development Decade in the field of transport.

(xi) Technical assistance is needed in the form of advice on policy formulation and infrastructure and equipment planning. Furthermore, the training of those involved in multimodal transport operations is essential to ensure smooth container flows and optimum infrastructure utilization. Training needs are not confined to multimodal transport operators and modal carriers, but apply equally to administrative personnel, in particular in the customs services.

"Containerisation in the Developing World 1970/1990" by CSR Consultants Ltd.

While world container traffic growth prospects remain bouyant, sweeping changes in the structure or pattern of the trade will continue to feature prominently in the period to 1990 according to a recent report "Containerisation in the Developing World 1970/90", published by CSR Consultants Ltd.

Citing the five-fold increase in world container traffic volumes over the period 1970/1982 when traffic rose from 47 million tonnes (mt) to over 280 mt at an annual average 16.2%/annum, the report states that "the declining proportionate share of global traffic moving on the mature trades to and from North America, Western Europe and, to a markedly lesser extent, the Far East – very nearly 90% of the global traffic in 1970 as compared with 75% in 1982 – goes some way toward underlining the rapid and progressive extension of containerised traffic occurring throughout the 1970's and early 1980's, particularly that involving countries within the developing world".

Noting that although "containerisation in a developing world context, is not wholly appropriate as regards both its technology and attendant techniques" the report points out that containerised traffic volume growth in the developing countries of Latin America, Africa, the Near and Middle East, South and East Asia, etc. has proceeded at a phenomenally rapid rate of late, traffic virtually quadrupling over 1974/1978 and doubling again over 1978/1982 to total some 73 mt. Underlining the uncertainties arising from such a situation the report asserts that developing country containerised traffic volumes will continue to grow at a faster pace than the levels of trade between the developed nations "although the implications of such development – which will also involve a continuing shift in emphasis away from rapidly maturing containerised trades with capital surplus oil-producing countries and 'established' NIC's – are far from clear-cut at this juncture.

Looking ahead the report suggests that world container traffic will be running at a level of around 411 mt in 1990 an increase of some 43% over the volume of 1982 traffic. Enlarging on this the report says that "while clearly far lower than preceding historical rates of growth the estimates shown, which may be construed as conservative, indicate continuing substantive growth in the overall volume of seaborne container traffic throughout the period of forward analysis – something like 120 mt over 1983/1990. By comparison with the forward prospects for virtually any other sector of international seaborne trade – particularly depressed dry and liquid bulk commodity trades – this is highly exceptional, supporting the viewpoint that, while much abated, the container revolution is far from over.

The pioneering regions of the world – North America, Western Europe, the Far East, Australasia etc. – are expected to continue to account for a declining proportion of the overall traffic – 66% in 1990 as compared with 75% in 1982. Conversely, the importance of the rapidly expanding traffic of developing countries in South and Central America, the Near and Middle East, South and East Asia and Africa will continue to increase – to some 36.0% in 1990 from a 1982 level of no more than 25.4%. Indeed, on the basis of the most favourable growth assumptions made, developing world containerised traffic within the four areas could be running at a level as high as 165.4 million tonnes in 1990 – equating to a 37.3% share of the global traffic estimated for that year.

SeaDocs pilot project for document handling registry

SeaDocs Registry Limited, a subsidiary of the Chase Manhattan Corporation, has announced that a pilot project to test its new system for controlling documentation associated with sea transportation of oil cargoes will begin in the near future. The test will utilize cargoes originating at the Teesside terminal, operated by Phillips Petroleum, which handles oil from the Ekofisk complex of fields in the Norwegian Sector of the North Sea. Owners of the terminal are the Phillips Petroleum Norway Group and Norpipe Petroleum U.K. Ltd.

SeaDocs operates a central registry intended to secure the safety of cargo documentation and facilitate the flow of documents between the various parties to the commercial transactions involved in shipping, trading and financing cargoes. The test will consist of four stages. Existing documentation systems will be reviewed in a first stage. Stages 2 to 4 will be a series of trial runs: Stage 2 will involve dry runs to compare the Registry's results with those of present trading practices; in Stage 3 the Registry will run in parallel with current operations and in Stage 4, provided results are in line with expectations, live operations will be conducted.

An agreement covering the pilot project is currently being circulated among interested parties. Following its execution, the project will begin.

SeaDocs pilot project – overview

A Pilot Test – the last stage of development of SeaDocs – will take place using cargoes of Ekofisk crude oil shipped from Teesside. In cooperation with shippers, carriers, traders, banks and agents, the Pilot Test will last nine months, and will ensure that SeaDocs systems fit with current operational practice in the industry. This approach provides a low risk environment for participants to evaluate SeaDocs in practice:

Preparation Phase

To analyse:
- document handling and communications procedures
- TBN trading practices
- nomination procedures for both lifting dates and vessels
- carrier documentation practices

leading to:
- an assessment of the impact of SeaDocs on current practices and procedures
- a detailed implementation strategy
- clear identification of changes in risks, costs and benefits involved in use of SeaDocs

Trial Run Phases

A three phase controlled environment for testing the systems and introducing the Operating Procedures.

Paper Test – an after-the-fact test utilising copies of documents and messages to test the correctness of SeaDocs's procedures.
Parallel Test – using copy documents and messages, SeaDocs will operate contemporaneously with the existing procedures in order to prove effectiveness.
Live Test – live operations with original documentation being handled by SeaDocs.

Result: a proven system, evaluated on practical experience, leading to full operational capacity.
Costs: will continue to be met by SeaDocs. Moreover, Participants in the Pilot will receive a discount at inception of commercial operations.
Commencement: 27 May 1985
Participation: based on execution of an Acceptance Document to the Pilot Project Agreement.

Brazilian port news in brief

- The ports controlled by Cia. Docas do Espirito Santo handled 91.8 million tons of cargo in 1984, corresponding to 10% of the country's income.
- The Ministry of Transportation determined that all exportations originating from the North and Northeast of the country shall be centralized in the ports of Rio de Janeiro and Santos, whereto they shall be transported by coastal trade vessels.
- The government of the State of Pernambuco has authorized the construction of a quay for general cargo at the industrial port complex of Suape, estimated in 30 billion cruzeiros. *(Portos e Navios)*

"Privatization" of Ports Canada

Canada's new Conservative government appears to be seriously considering the possible sale of the Canada Ports Corporation (CPC) to private interests, according to a recent report in the *Journal of Commerce* (June 11, 1985). In the article, Ports Canada Chairman Ronald Huntington is quoted as saying, "I don't think we are ready for privatization now, but if the new directors and managers can remain free of political interference then, yes, we could be privatized within 10 years." Created in 1983, CPC replaced the former National Harbours Board under an act that also allows qualifying ports a much greater degree of autonomy than under the previous regime. Fifteen ports belong to the CPC system; thus far, five – Montreal, Vancouver, Quebec, Halifax, and Prince Rupert – have been granted local port corporation status. Mr. Huntington pointed to the "very successful" example of the Associated British Ports, where "the final 48.2 percent of government-held shares has just been put on the market, and values have held up well, despite the loss in port revenues resulting from a prolonged coal strike."

While privatization may be 10 years off, Mr. Huntington has already made a number of changes that appear to be leading in the direction of a lessened role for the central government. Within the past three months, CPC's headquarters staff in Ottawa has been cut by 24 percent to 97, with Mr. Huntington stressing that CPC should act as a service center rather than in a "command role" for its ports. He has also made it clear that in his judgment CPC port corporations should restrict themselves to landlord-type relationships and not compete with stevedores and other private sector port interests. *(AAPA ADVISORY)*

Halifax Port computer system provides speedy data on hazardous cargo

By Sally Smith, Business Reporter

Two years ago, a ship carrying dangerous cargo arrived in Halifax with damaged containers and spilt cargo. Port officials and government agencies knew the contents of the containers and knew there were chemicals onboard, but they did not know what would happen should the two mix.

It took about 24 hours to find out the combination of champagne, or wine, and phosphorous pentoxide could be very dangerous, and longer than that to figure out how to deal with it.

A few months ago, a similar situation occurred and it took port officials, and other groups, valuable time to determine what they were faced with and how to get rid of it.

To prevent such situation from recurring, the Halifax Port Corporation recently invested in Hazardline which provides, via a computer link-up, access to information on 80,000 chemicals within minutes.

Acting harbour master George Malec said Halifax is the first Canadian port, and the first organization in the Maritimes, to install a Hazardline.

Mr. Malec said Halifax, as a large east coast port, is a major transfer point for dangerous goods. Many local companies ship chemicals, petroleum goods and other goods, while other dangerous cargo is transfered and moved to other Canadian points by rail or road.

Hazardline provides information on first aid, symptoms, leaks and spill procedures, permissible exposure level, chemical name, chemical formula, physical description, wash, immediately dangerous to life or health concentrations and a number of other things.

Access to the system is available 24 hours a day, seven days a week. Mr. Malec said this is important because so much cargo moves through the port at off-hours such as weekends and nights.

Operators can also input symptoms and the computer will cross-reference the information and provide details on chemicals that could cause the symptom.

Mr. Malec said the speed information can be obtained is very important because the sooner information is available, people can be at the scene and know what to do.

St. John's Port Corporation

The Port of St. John's officially became a local port corporation on June 1, 1985, when the Honourable John Crosbie, on behalf of the Minister of Transport, presented letters patent to the new Chairman of the St. John's Port Corporation, Mr. Fred Milley.

The port achieved its new status by successfully meeting the criteria as outlined in section 6.1 of the Canada Ports Corporation Act. That is:

(a) the port is of national or regional significance;
(b) there is demonstrated local interest in the management of the port;
(c) the port will likely be financially self-sufficient.

The first board meeting was held on June 17, 1985, at which time the various by-laws, tariff notices and other resolutions governing the administration and operation of the corporation were approved. As well, David Fox was appointed Port Manager and Chief Executive Officer of the St. John's Port Corporation. *(Ports Canada)*

"Port of Saint John – A New Era" to be Port Days theme

Saint John Port Days 1985 will be held October 7th and 8th with "Port of Saint John – A New Era," the theme for the annual event. It stresses the enormous changes that have been taking place in the shipping world. The announcement was made by Doug Anderson, Committee Chairman for Port Days.

"Advanced technology, new regulations and economic trends are factors which have necessitated change at Saint John. Saint John must keep up with these changing times in order to maintain its world class status. The Port of Saint John has always had to deal with changes," remarked Mr. Anderson. "We survived the change from sail to steam, and we will survive the present revolution in shipping."

Port Days 1985 will address current changes and trends, both positive and negative. Under the direction of Gordon Mouland, Port of Saint John General Manager; Joseph Streeter, Director, Canada Ports Corporation; and Emlen Hare, Director of Marketing for the Port, a diverse group is being lined up to participate in panel discussions addressing the current changes and other topics of interest.

"It won't be all hard work, though," said Mr. Anderson, "1985 Saint John Port Days will provide visitors with a chance to renew old business acquaintances and start new ones. A much enjoyed feature of past port days, the Princess of Acadia cruise in the Bay of Fundy, will be repeated. Most activities will be held at the Saint John Trade & Convention Centre."

Thunder Bay's Port Manager heads IAGLP

Thunder Bay's Port Manager, Jerry Cook, was elected President of the International Association of Great Lakes Ports at its Annual Meeting held recently in Toledo, Ohio. Jim Hartung, Port Director at Burns Harbour, was elected American Chairman of the Association.

The I.A.G.L.P. is composed of 19 American and 6 Canadian Ports on the Great Lakes System. Its purpose is to provide the forum for an exchange of information relative to port matters and to encourage the development and use of the Great Lakes System.

The St. Lawrence Seaway, on which all I.A.G.L.P. member ports and their communities are dependant, is facing stiff competition from other coastal ports and modes. Efforts to have user costs contained in order to maintain a competitive position, have been a priority of this Association for many years, "and", says Jerry Cook, "we will continue to apply pressure and make recommendations which will encourage the Seaway's competitive position in the maritime trade".

U.S. Port Traffic

Import/export cargoes handled at U.S. ports this past December rose for the third consecutive month. Moreover, it was the best December showing in three years. Imported cargo dipped somewhat below prior month's levels (due mainly to drops in tanker imports), but nevertheless, were significantly better than any December since 1980. Overall, it was the best calendar year for U.S. ports as a group since 1981, with each category except tanker exports showing marked improvement from 1983 and the abysmal year of 1982. The six-year pattern, by cargo category, is shown below:

U.S. Waterborne Exports and Imports 1979-1984
(millions of short tons)

	1984	1983	1982	1981	1980	1979
Exports						
Tanker	32.4	33.9	59.2	68.4	38.5	35.1
Dry Cargo	343.8	330.4	333.9	346.0	364.9	359.4
Total	376.6	364.3	393.1	414.4	403.4	359.4
Imports						
Tanker	268.1	254.5	270.6	336.2	362.0	442.8
Dry Cargo	148.9	117.4	113.5	142.3	140.6	160.8
Total	417.0	371.9	384.1	478.5	502.6	603.6
Total Dry Cargo	492.7	447.8	447.4	488.3	505.5	485.1
Coal Exports	−80.8	−76.9	−105.2	−110.2	−89.9	−65.2
NET	411.9	370.9	342.2	378.1	415.6	419.9

SOURCE: U.S. Bureau of the Census data

Automated pricing model for ports

A study aimed at developing an automated pricing model for application in the port community is being conducted by Applied Systems Institute, Inc. (ASI) under the sponsorship of the Maritime Administration's (MarAd) Office of Port and Intermodal Development. The model will be designed to facilitate the calculation of reasonable compensatory dockage and wharfage tariffs and rental prices for crane usage at U.S. public marine terminals. The MarAd pricing formula devised by ASI and presented in the report, *Usage Pricing of Public Marine Terminal Facilities,* will be used as the basis for developing the pricing model. To help in the new study, ASI has again retained Messrs. Paul Amundsen and Mort Cohen, who worked in the derivation of the MarAd pricing formula. The project will be conducted in two phases, each comprised of three tasks as outlined below:

Phase I

Task 1	Review of Formula Implementation
Task 2	Pricing Model Design
Task 3	Preparation of Phase I Interim Report

Phase II

Task 4	Pricing Model Automation
Task 5	Model Validation
Task 6	Preparation of Final Report

Under Task 1, ASI is currently seeking information from the field on (1) the experience gained by ports in testing the formula and (2) port revenue structures. To do so, ASI has made preliminary telephone calls to 20 ports and is preparing follow-up form letters. The 20 ports contacted thus far include the 17 ports that participated directly in the previous pricing study. *(AAPA ADVISORY)*

Private firms servicing on a trial basis for Coast Guard navigation aids

The U.S. Coast Guard is planning to contract with private firms on a trial basis for the on-site servicing of aids to navigation in five selected locations. The program, says the Coast Guard, comes in response to a directive from Congress to determine if the private sector can do the job as effectively and economically as the Coast Guard. The Coast Guard plans to issue contracts before September 30, and will report to Congress after it completes a period of evaluation. Work required by the contracts will include the positioning and onsite servicing of lighted and unlighted buoys and beacons.

The five waterways are the "noncritical" positions in each of the following locations:

1. From Hampton Harbor (NH) south to the Annisquam River (MA), including the Merrimack River, with 140 aids to navigation (buoys and fixed aids).
2. The New Jersey Intercoastal Waterway, with 460 aids.
3. The Virginia Inside Passage, with 325 aids.
4. The San Joaquin River and Sacramento Ship Channel (CA) with 240 aids.
5. The Snake River (ID) and part of the Willamette River (OR) with 180 aids.

The 1,370 aids in these waterways represent about three percent of the total under Coast Guard responsibility. The waterways, according to the Coast Guard, are "representative" to the extent that they are trafficked by all types of users and vessels, including both sail and power recreational boaters, commercial and recreational fishermen, tug and barge operators, and large bulk carriers.

(AAPA ADVISORY)

Navigation Board appoints new Port Commission Chairman : Port of Houston

At a joint meeting of the Harris County Commissioners' Court and the Houston City Council on July 2, 1985, Archie Bennett, Jr. was appointed chairman of the Port Commission of the Port of Houston Authority. Bennett took the oath of office Monday, July 8, in the World Trade

Building, 1520 Texas Avenue.

Bennett will replace Fentress Bracewell who resigned on June 11, 1985, after 15 years as Chairman.

Bennett, founder of the Houston-based Mariner Corporation, which owns 25 hotels, was born and raised in Houston, attended Houston public schools and graduated from the University of Houston. He began his business career in 1963 by founding the Delta Company, which specialized in real estate.

Long Beach FTZ 50 expands to California commerce center at Ontario

The Port of Long Beach Foreign Trade Zone No. 50, the only such facility in Southern California, has taken a quantum step with expansion of its Foreign Trade Zone Grant to include the 1350 acre California Commerce Center in Ontario.

Approval of the Port of Long Beach application to add Ontario to the parent FTZ 50 in Long Beach was recently authorized by the Foreign Trade Zones Board in Washington, D.C.

Toyota Motor Manufacturing truckbed plant in Long Beach and the National Steel and Shipbuilding facility in San Diego have previously been designated as subzones of FTZ 50 but this is its first expansion.

Noting that this grant will prove to be of great importance to the international trade community throughout Southern California, Commission President Jim Gray stated, "This expansion of the Foreign Trade Zone program to include a major commercial industrial park is a necessary step in the Port's plan to ensure larger scale zone operations. It further reflects the joint cooperation of the Port of Long Beach, local governments and private industry in facilitating commerce and trade."

The Foreign Trade Zone expansion envisioned will be an important factor in the continuing program to attract new industry and encourage existing industry to expand in the greater Los Angeles Area. With the California Commerce Center adjoining the Ontario International Airport, the potential benefits are additionally enhanced.

In terms of space set aside for FTZ activities, the grant of authority in Ontario makes the Port of Long Beach Foreign Trade Zone No. 50 one of the largest combination public and private land grant zones in the United States.

World Cruise Center construction approved: Port of Los Angeles

Following a public hearing during which two speakers voiced support for the World Cruise Center, the Harbor Commission approved a Level III Coastal Development Permit for construction of the $61 million facility. Included in the planned development are construction of a new terminal at Berth 91 and modifications to the existing terminal at Berths 93A and B. The western half of the shed at Berths 93A and B will be converted to indoor parking. A hotel and parking structure will be built elsewhere in the complex. Another new terminal and wharf will be added to Berths 93D and E. The seven passenger lines serving the Port of Los Angeles will be accommodated at the five-berth World Cruise Center due for completion next year.

(WORLDPORTLETTER)

San Pedro Bay ports confirm 2020 Master Plan is on track

The Ports of Los Angeles and Long Beach are continuing to work with the U.S. Army Corps of Engineers to complete the 2020 Master Plan, according to an announcement by officials of the three agencies.

The plan to dredge deepwater channels in both ports and to create 2600 acres of new land from dredged spoils by the year 2020 was released to the public in July of 1984, and is currently being revised in response to comments received from the general public and regulatory agencies. The final 2020 Master Plan will be released in October 1985.

Despite recent reports alluding to the Army Corps shelving the project, the finalization of the 2020 Plan continues to be a joint effort between the Army Corps and both ports, according to spokespersons.

Efforts by the Army Corps to proceed with development of a site specific project within the plan to be financed with federal funds have been postponed pending resolution of cost-sharing proposals for federal dredging projects currently before Congress. However, both ports are proceeding with implementing their own site specific projects within the 2020 Plan. *(Worldport LA News)*

General cargo, autos report increases at Port Baltimore

Substantial increases in port of Baltimore general cargo and automobile imports were recorded at two different marine terminals during the first five months of 1985, the Maryland Port Administration reports.

Cargo handled at South Locust Point Marine Terminal increased 23 percent in January-May 1985 over a comparable five-month period in 1984, the MPA statistics reveal.

A total of 304,812 tons of general cargo was handled at the terminal in January-May 1985. During the same period in 1984, 247,799 tons of cargo was handled at the terminal.

Container cargo handled at the terminal increased 19 percent in January-May 1985, reaching 185,634 tons as compared to 156,086 tons handled for the same period in 1984. General cargo in January-May 1985 stood at 61,603 tons, a 44 percent increase over the 42,753 tons handled for the same period in 1984. Steel cargo marked a 228 percent increase in January-May 1985, reaching 4,251 tons compared to just 1,293 tons for the same period in 1984.

Import automobile volume at the port's Dundalk Marine Terminal increased by 17,630 vehicles in January-May 1985 over the comparable five-month period in 1984, the MPA also reports. This is a 17.6 percent gain over the last year.

Improved cargo movement goal of Port of Baltimore

A computerized cargo release system which will enhance the efficient and economical movement of goods through the port of Baltimore is currently being developed by the Maryland Port Administration.

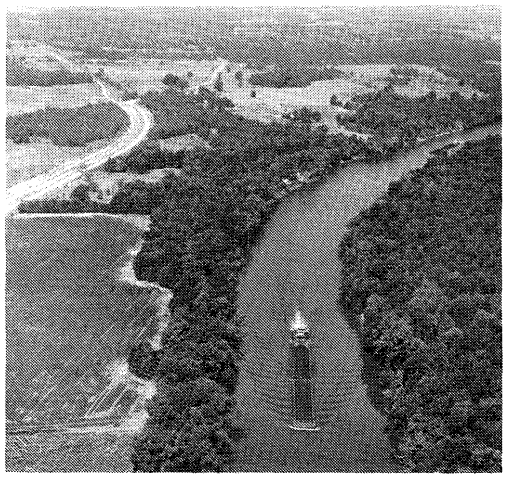
The Automated Cargo Release and Operations Service

System (ACROSS) is being designed to eliminate delays in cargo clearance and shipment by allowing members of the maritime community to readily track and process cargo through the port. ACROSS will directly interface with the U.S. Customs Automated Commercial System allowing instant communication between Customs and the maritime industry.

Among the groups to benefit from the system will be customs brokers, freight forwarders, intermodal carriers, the MPA and U.S. Customs.

Design of the system should be completed in the next several months. The system's design will focus on the necessary requirements to interface with Customs, and on factors that will enhance cargo release and movement of goods. The entire system should be implemented by October 1986, according to the Maryland Department of Transportation (MDOT), which is funding the project.

Tennessee-Tombigbee Waterway dedicated on June 1, 1985 at Mobile



The 234-mile-long Tennessee-Tombigbee Waterway substantially shortens barge route distances between numerous inland points and the Gulf of Mexico, via the Port of Mobile. Economists have projected that shippers in 14 states adjacent to the Tenn-Tom will save as much as $77 million during the waterway's first full year of operation. By modernizing and expanding its waterfront facilities, the Port of Mobile has readied itself for the expected increased volume of cargo.

Tenn-Tom:– Notes of Interest

As long ago as the early 1700's, a waterway was proposed to link the Tennessee River with the Tombigbee River. The project was authorized by Congress in 1946; funding was earmarked in 1967.

Construction of the waterway began in 1972. The Tenn-Tom opened for business in January, 1985, some 19 months ahead of its original schedule.

The 234-mile-long waterway is the most extensive project ever undertaken by the U.S. Army Corps of Engineers. Some 307 million cubic yards of earth were moved, more than was excavated for the Panama Canal.

The Tennessee-Tombigbee Waterway connects some 16,000 miles of navigable inland waterways and substantially shortens the barge route distance from many points in mid-America to the Port of Mobile and Gulf of Mexico.

Anthony J. Tozzoli appointed President of New York Shipping Association

Anthony J. Tozzoli, a world-recognized maritime expert on ports and harbors, has been appointed President of the New York Shipping Association according to the NYSA Board of Directors. Mr. Tozzoli is leaving his post as Director of the Port Department of The Port Authority of New York and New Jersey to direct the NYSA which represents more than 135 steamship lines, terminal operators and other member companies in negotiations and administration of contracts with the International Longshoremen's Association. Mr. Tozzoli will take up his new post on July 23.

According to Karl Wettstein, Chairman of the NYSA Search Committee, the entire Board of Directors and the full membership enthusiastically endorsed Mr. Tozzoli as the new President. Mr. Wettstein said, "We are all looking forward for Tony to bring his innovative leadership to the problems of the port."

During Mr. Tozzoli's years at the helm of The Port of New York and New Jersey, container traffic rose from 1.2 million TEU's to more than 2 million TEU's and has made the Port the largest container port in the world. Container cranes grew from a burgeoning 14 to 42. He has negotiated leases for all major port facilities while optimizing usage of marine properties, directing trade and tariff analysis, and overseeing all coastal and harbor affairs.

In his new position, Mr. Tozzoli will lead the NYSA in its collective bargaining agreements with longshoremen in the harbor. He will also be a key figure with other port management groups representing the 36-port range along the Atlantic and Gulf coasts in negotiations for future master contracts with the International Longshoremen's Association. Mr. Tozzoli was one of the leaders in recent negotiations between the NYSA, ILA, the Port Authority and the Puerto Rico Marine Management, Inc. that led to the acceptance of a new fringe benefit formula in New York harbor.

Ship industry groups end controversy with revised plan for funding longshore worker benefits in Port of NY-NJ

Waterfront management and labor, the bi-state port authority and Puerto Rico shipping groups recently reported agreement on a revised method of employer funding of pensions, pay guarantees and other contract benefits of union longshoremen in the Port of New York and New Jersey effective July 1.

Widely supported by ship industry elements, the accord will also end all litigation over a funding formula for the local port labor contract that is pending before the Federal Maritime Commission and the federal courts.

Reported jointly by New York Shipping Association,

Inc. the International Longshoremen's Association, AFL-CIO, the Port Authority of New York and New Jersey, the Puerto Rico Maritime Shipping Authority and Puerto Rico Marine Management, Inc., the revised method of assessment will enable the port to compete more effectively for cargo moving to and from inland points of the country and overseas areas, it was noted.

The new plan will replace the existing management-labor assessment formula based almost totally on cargo tonnage that had been subject to legal controversy and invalidated by the FMC last February. Additionally, it will supersede an interim tonnage/manhour funding plan, also set to begin on July 1, that was submitted to FMC by management and labor on April 29 to comply with an order from the federal ship agency.

The revised formula features a sharply reduced rate on cargo tonnage from the current level and introduction of a series of flat charges that apply in limited and specified circumstances to containers moving through the harbor. However it does not affect the contract fringe benefits or the total funding required to provide them. Highlights of the new agreement are:

- Continuation of payments by ocean carriers to NYSA-ILA contract funds based on cargo tonnage at the reducted rate of $5.85 per assessment ton from the present rate of $8.90 per ton;
- Introduction of a flat $65 per container assessment on through-movement containers destined for or originating within 260 highway miles of New York except for Puerto Rico trade containers, which will have a through-movement charge of $15;
- Introduction of a flat $25 assessment for each movement of a container – empty or loaded – that is transshipped;
- Introduction of a flat $40 assessment on each empty container except for those in Puerto Rican trade where the assessment on empty containers will be $15 on each unit;
- Continuation of the current assessment rate of $5.50 per manhour for cargo moving in domestic coastwide trades and for excepted cargo items such as lumber, newsprint and steel; and
- Continuation of the present assessment rate of $2.50 per manhour for passenger ships and the present five cents assessment per box of bananas.

The funding program, which applies only to ocean carriers, stevedores and other ship industry employers subject to the NYSA-ILA labor contract, is necessary to finance the package of benefits for union longshore workers in the bi-state port area. In addition to pensions and guaranteed annual income, the fringes include comprehensive health and medical services, paid holidays and paid vacations among others.

The current full tonnage assessment method, in use for more than ten years, was challenged by the Port Authority and PRMSA in complaints filed with the FMC, which declared the full tonnage method invalid following a year-long investigation. *(NYSA-ILA)*

Port of Oakland passes $67.6 million budget

The Oakland Board of Port Commissioners approved a record $67.6-million budget, reflecting a 25 percent increase in revenues.

Board President H. Wayne Goodroe said the new budget will "guarantee that the Port continues to operate in a fiscally prudent fashion and that it has the resources to continue providing more jobs and prosperity for Oakland and the East Bay."

The budget becomes effective on July 1, 985. In addition to the forecast of a $13.7-million increase in revenues, the budget reflects a $4.7-million increase in operating expenses for the Port's three revenue generators – the maritime, aviation and properties divisions.

Revenue from aviation is expected to be up $7.5-million, due mainly to rate increases adopted to pay for the airport's $40-million expansion program, including Lionel J. Wilson Terminal, a two-gate extension at Terminal I, a new hydrant fueling system, and expansion of the airport parking lot.

Maritime revenues are projected to be $4.8-million higher in the 1985–86 fiscal year. This reflects new business that came to the Port during the current fiscal year, including both new shipping lines and additional cargo. The Port had a record cargo volume of 12.9-million revenue tons in 1984.

The Port's third major revenue producer, the properties division, anticipates a $950,000 increase in revenue during the coming fiscal year.

Set aside in the budget is $1.6-million to pay the City of Oakland for services, such as police and fire protection, provided by the City. The Port is the only city agency that pays for city services. The budget notes that $13.6 million are available for future capital improvements to meet the Port's large capital requirements necessary to maintain the Port's position in the highly competitive maritime and aviation industries.

Oakland to develop new $38 million terminal

The Port of Oakland plans to develop a new $38 million container terminal to accommodate the increasing amount of cargo moving over its wharves.

In April, the Oakland Board of Port Commissioners approved in principle the new terminal concept and subsequently the retention of engineering services and property acquisitions necessary to the development.

"Our goal is to always maintain our cargo handling capacity at an acceptable level above forecasted demand to insure expansion capability for our present users and to have the opportunity to attract new shipping line activity to the Port," said James O'Brien, deputy executive director, Port of Oakland.

"We believe the availability of the new terminal in mid-1988 will ensure that objective continues to be met," he said.

Efficiently operated and strategically located on the mainland side of one of the world's great harbors – San

Francisco Bay – the Port of Oakland's appeal to the trading and shipping community has been growing over the years.

Oakland handled a record 12,981,314 revenue tons of cargo in 1984, an increase of 10.8 percent over the 1983 figure. And there are strong indications that this trade will continue to rise.

One of the largest container ports on the U.S. Pacific Coast, the Port of Oakland's marine terminal facilities are located along 19 miles of water-front covering an area of more than 500 acres.

The Port operates nine container terminals and two breakbulk terminals. Of the nine container terminals, two are multi-purpose facilities, equipped to handle containers and roll-on/roll-off cargoes as well as breakbulk. Direct railroad access is provided to many of the facilities.

The Port has developed these facilities both through independent research as well as through ongoing discussions with ocean carriers and terminal operators throughout the world.

This process serves a two-fold purpose. Ocean carriers are kept abreast of the Port's long-range development plans and the Port is assured that these plans are compatible with the carriers' objectives. *(Port Progress)*

Panel delivers report on Governor's Study Commission on Ports : South Louisiana Port

While Louisiana is a national maritime leader, its ports need a centralized marketing plan and more state co-operation, a state panel was told in May.

Dr. Anatoly Hockstein of Louisiana State University's Ports and Waterways Institute delivered the report of the Governor's Study Commission on Ports. The commission, headed by Senator F.E. "Hank" Lauricella, began its work nine months ago.

The study defined several problems facing Louisiana's ports and recommended possible solutions.

Hockstein began his report by describing Louisiana's prominent position in national maritime activity.

"The statewide and national significance of Louisiana's water transportation industry should not be underestimated," Hockstein said. "Louisiana ports provide over 43,000 persons with an annual payroll of $700 million."

"Louisiana handles 20% of the nation's total foreign trade," he said. "Most of this is bulk cargo."

"Only 2% of this activity is general cargo," he continued. "We need to establish a reputation for general cargo handling."

This should be done by "enhancing intermodal developments," Hockstein said. "This is the single most critical factor in the success or failure of Louisiana ports."

New container facilities, smoother rail-switching operations and port-owned liner trains were suggested in the report as ways to encourage and facilitate general cargo handling. Hockstein drew attention to the South Louisiana Port Commission's evaluation program which suggested construction of a break-bulk facility. "This would be an incentive to aggressive industrial development in Louisiana."

Hockstein also emphasized the need to more fully develop the lower Mississippi River region, which he called "a great asset unsufficiently explored."

Regular maintenance dredging and topping-off facilities would allow deeper vessel access in that area, he said. "This would result in savings to shippers and also divert cargo from competing ports," he said.

In defining the state's role in port activity, Hockstein said state governments must realize that "a port is also a key component of a region's economic infrastructure, and can serve as a powerful inducement for industrial location."

The study recommended the dissolution of eight inactive ports, changing two more ports to industrial development districts, and the promotion of a "regional industrial agglomeration for small ports sharing the same market," said Hockstein.

Budget requests for capital outlay should be routinized to comply with a predetermined methodology, he said.

Ports also need to improve their financial management and increase sources of revenue, the study revealed.

Creation of a revolving loan fund should be considered, Hockstein said. "This would improve access to capital markets, particularly for small ports that currently lack revenue-generating activities."

Other problems addressed by the study included river operations during fog, user fees and port administration.

Hockstein said that Civil Service and ethics restrictions may reduce flexibility and expertise in port administration.

"Frequently Civil Service pay ranges compare unfavorably with both the private sector and with port authorities in other states," read the report.

"The Ethics Code should be amended so that persons with maritime experience won't be discouraged from serving on Louisiana port commissions," Hockstein said. "Presently this would be construed as a 'potential conflict of interest.' " *(Port View)*

EVHA contract reaffirms LSIS global database strategy

The next crucial phase in the development of the European ports informatics project is being undertaken by LSIS on behalf of EVHA (the European Ports Data Processing System). As well as affirming LSIS's technical and marketing expertise in this field, the contract is indicative of a trend towards global links in the industry and the provision of sophisticated intelligence services.

EVHA consists of 16 members including the British Ports Association and such major facilities as Rotterdam, Antwerp, Le Havre and Copenhagen. Recognising the need for more effective communications between ports in Europe, and the tremendous potential of a centralised database, a select group of these ports launched the EVHA concept with EEC backing.

The organisation has already carried out a substantial amount of development work, and has investigated such aspects as the mechanics of communicating information on vessel's ETAs, hazardous cargoes and vessel characteristics between ports. Such an exchange of information would enable ports to deploy their resources more effectively, and build up a comprehensive statistical database which could be used in a variety of ways.

The project is now being taken a step further with the help of LSIS expertise. The definition phase of EVHA's development is being carried out by LSIS, and a central

element of this work is an assessment of its commercial viability. This involves a thorough examination of the technical requirements as well as potential areas of demand for such a database.

Since the contract was awarded in October detailed discussions have been held in most of the ports, and it is intended to visit all EVHA members. A wide spectrum of interests are being consulted, from freight forwarders to port operators and stevedores.

A baseline description of the database has already been developed, and this is now being discussed with potential users at the remaining EVHA ports. The LSIS database is providing a valuable input for these studies, because as well as establishing current traffic levels within EVHA's operational area, future levels are being evaluated. Movements outside this area are also being studied.

In the case of the EVHA contract, LSIS is joined by the Shipping Economic Advisory Group of Lloyd's of London Press (SEA Group); Datenbank Bremische of West Germany, experts in port automation/operation; and Logica, the well known software house which are sub-contractors for the communications network. *(Lloyd's Review)*

Consultancy contracts signed with Mexico: Port of Le Havre

The Port of Le Havre, in association with the Port of Marseilles, recently signed two consultancy contracts with Mexico, covering training projects (Marseilles) and the establishment of a decentralized administrative system in the new industrial port of Altamira (Le Havre).

A team from Le Havre has already been out to Mexico since the signing of the contract and many others will follow throughout 1985.

These important contracts are a tangible result of the links that have grown up over the years between the port of Le Havre and the Mexican port authorities, starting with the establishment of a Mexican freeport area in Le Havre in June 1980, followed in 1981 by the first consultancy contract for a traffic forecast and then in 1984 by the organisation by the port of Le Havre of a symposium in Mexico on French experience in port management, and the visit to Le Havre of the Mexican Minister of Transport.

(Flashes)

Secretary of State promises support for channel deepening: Port of Rouen

French Secretary of State for the Sea, Mr. Guy Lengagne, has promised continued support from the government for the port's programme to deepen its access channel along the river Seine to allow outgoing vessels drawing up to 10 metres to pass on a single tide.

Mr. Lengagne, who visited the port for the first time since taking office in March 1983, confirmed that the government would continue to back the programme financially until it was completed.

He had seen to it, he said, that government credits for the project in 1985 would enable work on the channel to be continued at a rate comparable to that of previous years.

Noting that work carried out in 1983 and 1984 had already extended the port's draught limitations to 9.8 metres, he said that the programme would benefit a large range of different types of traffic, from cereals exports to containers.

The Secretary of State also promised government backing for the modernisation of the port's dredging equipment and improvements to upstream facilities in the city of Rouen itself. The trend towards the creation of bigger terminals away from the cities meant that there was a danger that quays and cargo-handling areas in city centres, like those at Rouen, could become "devitalised". The trend was present at Rouen, he said, but the city had not "lost the mysterious, fascinating charm of the port cities, born out of the close intermingling of maritime life and urban life".

Mr. Lengagne opened the speech he gave at the port by saying that his purpose in coming to Rouen, albeit belatedly, was to underline the often ignored fact that Rouen was France's fourthranking sea port despite the fact that it was situated nearly a 100 kilometres from the sea.

"We have here the illustration of this simple fact: the strength of a great port is not only the result of its natural nautical facilities; it is also the fruit of its aptitude to offer its users an ensemble of competitive services, both in terms of price and quality.

"The diversity of its commercial activities, then, is the most striking proof of the success of a modern port of international dimension."

It was for these reasons, he said, that the results achieved by the Port of Rouen were particularly interesting. It was the leading port in Europe for cereals exports, the leading French port for flour shipments, the third-ranking port for container traffic and had more than 70 regular liner services.

(Rouen Port)

300,000 jobs & DM 1.3 milliards taxes throughout total Federation: Bremen Ports

The functionability of the Bremen ports is not only of the greatest importance for the territory of the smallest Federal German State; it is so for the overall political economy of the Federal Republic too. This is now a substantiated fact from a new study of the Bremer Ausschuss für Wirtschaftsforschung (BAW) – Bremen Committee for Economic Research – which was commissioned by the Bremen Senator for Ports, Shipping & Traffic.

According to this, some 300,000 people owe their employment to the Bremen and Bremerhaven ports; in respect of which is also an annual flow of income tax amounting to DM1.3 milliards. This notable inter-regional service rendered by Bremen is, however, by no means suitably honoured with counter-moves. Since 1959 Bremen, within the framework of the Federal States Financial Compensation System, has constantly received only DM24 millions per year. This sum, in view of the expanding investment and maintenance performance, needs drastic upwards adjustment.

The analysis also demonstrated that Bremen/Bremerhaven has up to now been able to retain its international competitiveness against the Rhine/Schelde ports, despite

the competition-distortions of the existing present traffic policies. This is particularly to be noted in respect of the value-creation intensiveness of general-cargo handling.

(Bremen International)

10% increase in transhipment of goods: Port of Amsterdam

The Amsterdam Port Management states that the transhipment of goods in the Amsterdam harbour has taken a favourable turn in the first three months of this year as compared with the same period of last year. This ten percent increase in the total sea-going transport amounting to 6.6 million tons during the first quarter of 1985 is due in the first place to the 45% growth in the transport of dry bulk.

The greatest increase was shown by the transport of coal and ores. In the past quarter, the transport of ores has been tripled (288%) to a level of 295,000 tons as compared with the same period in 1984 and the coal transport has doubled (193%) to a transhipment of almost 1.5 million tons.

Compared with the fourth quarter of 1984, this, however, indicates a stabilization in coal transport and a drop in ore transport of 30%.

The total general cargo package in the past quarter has dropped by 0.2% to a total of 656,000 tons, which is due in the first place to the prolonged fall-off in the transport of timber and the recession in the transport of cars, amounting to 17.6% down to 70,000 tons and 38.4% down to 47,068 tons, respectively.

Container transport has risen by 11% to a good 195,000 tons, as a result of which the remaining general cargo, including the roll-on/roll-off variety, shows an increase of 2.9% to almost 343,000 tons.

During the past three months 1,194 sea-going vessels have been handled in the Amsterdam harbour, which is 253 ships more than in the first quarter of last year.

EC policy threatens Dutch ports' position as grain centres

The European Commission's present policy on grain imports is threatening the Dutch ports' position as centres for the distribution of grain. According to Mr. G. van Nieuwenhuizen, chairman of the Verneniging Amsterdamse Graanhandel (Amsterdam Grain Traders Association), warned that unless an "unlimited imports' policy is adopted by the EC, the Ports of Amsterdam and Rotterdam were threatened as centres of the European grain trade.

He urged government officials and representatives of private industry to press for a freer import policy for overseas grain. Present policy to protect the EC's production by limiting imports boded badly for Dutch ports, he said during the recent annual meeting of the Association.

Countries which processed grain and grain products, such as the Netherlands, were threatened by the policy, he said. "We have been aware of this trend for several years now, but the situation has never been so acute. Ports in the Netherlands, Belgium and West Germany registered a total loss in the handling of agricultural products last year. The total amount of such products handled in the three countries, fell by 13 percent to 37.5 million tons in that period when compared with 1983," he said.

Amsterdam was an exception to this rule, he noted. In 1984, Amsterdam handled a total of 5.6 million metric tons of agricultural products, a 16 percent increase over the previous year's 4.8 million tons seen in the handling of grain, seeds and raw materials for fodder. In addition, imports of molasses rose to 725,000 tons, from the 513,000 tons handled in 1983. *(Haven)*

Green light for old docklands restructuring : Port of Rotterdam

Rotterdam's city council last month adopted a basic plan for the restructuring of the city's old docklands. A drastic land reallotment will give the conventional general cargo firms in these areas better chances to adjust to transport developments. The City of Rotterdam is sinking 92 million guilders in the infrastructure, whereas the firms will invest 450 million guilders in new suprastructure. The Dutch economics ministry will shoulder 57 millions of this amount and the City of Rotterdam is prepared to lend between 75 and 100 million guilders towards the firms' investments. In 1984, the conventional general cargo terminals in these areas handled 15 million tonnes of cargo between them. *(Newsletter)*

Brochure on consultancy in port-related matters : Port of Rotterdam

TEMPO stands for Technical and Managerial Port Assistance Office, a department of the Rotterdam Port Authority. This office initiates, organises and coordinates advice on port construction, port management, shipping movements, safety and environmental issues, social and medical facilities, and training. TEMPO specialises in developing tailor-made training programmes for foreigners. In the last few years, TEMPO has completed projects for ports in countries all over the world, including Indonesia, Mexico, Singapore, India, Brazil, Japan, the People's Republic of China, Ghana, Kuwait, Sri Lanka, Honduras and Kenya. A new brochure on the Rotterdam port consultancy service is available free on request. Please write to: TEMPO, P.O. Box 6622, 3002 AP Rotterdam, Netherlands. *(Newsletter)*

SwedPort helps Dar es Salaam improve loading/unloading capacity

SwedPort, a Gothenburg-based consultancy company formed in 1984, has received an order to present a plan to solve some of the port problems at Dar es Salaam in connection with the construction of a new container terminal, which will absorb three of the existing eleven berths at the port. To be able to handle the break-bulk cargo at the remaining eight berths, extensive loading/unloading at moorings with the use of lighters was considered necessary.

The Swedish International Development Authority (SIDA) was approached for financing this portion of the Dar es Salaam port rehabilitation and extension programme, which is financed through the World Bank. SwedPort then

got SIDA's commission to suggest actions to improve capacity of the eight berths in question so as to avoid the costly and time-consuming lighter operations. It is expected that the Port Authority will get faster relief of their problems at a much lower cost. The scheme will include the infusion of know-how and training, meaning a transfer of technology with a more lasting effect than physical investment in itself would provide.

SwedPort Consulting AB, which is the full name of the new consultancy company, started as an informal co-operation between the four bodies that now co-own SwedPort. They are the Port of Gothenburg, TransConsultants, SSPA Maritime Consulting and Scandiaconsult.

Sweden's exposed position as a heavily trade dependent country, located at some distance from the great trade routes of the world, has forced Swedish shipping and port interests to trim themselves to top efficiency to stay in the market. At the same time, the scale of operations is relevant to the conditions in most developing countries and it is believed that Swedish experience and know-how could be useful to ports in other parts of the world – for example at Dar es Salaam.

The Port of Gothenburg is well known for its high efficiency as Scandinavia's main commercial port, and TransConsultants (of the Transatlantic Group), has been in the forefront i.a. in developing the high sea ro-ro traffic which should be of particular interest to third world countries. SSPA, with its sophisticated know-how related to ships' movements in narrow waters and their demand on harbour facilities, provides optimal solutions to access by ships of ever increasing sizes; and Scandiaconsult adds its long experience of international consultancy in the port and harbour sector.

Training programme for Mexican port completed by Port of Gothenburg Consultancy

Mexican harbour workers in Gothenburg's Älvsborg Harbour with Port of Gothenburg instructor.

An educational programme for the Mexican port of Lázaro Cárdenas has been completed by the Port of Gothenburg Consultancy AB.

Anticipating a shift to more containerized cargo at Lázaro Cárdenas, Mexican authorities signed a contract with the Swedish port to prepare port personnel for new demands on cargo handling techniques and organization.

The programme has involved training for top and middle management members as well as maintenance personnel and truck drivers. Among the subjects are terminal lay-out and work organization, productivity evaluation, cost analysis, leadership, maintenance planning and the operation of heavy cargo-handling equipment. The training took place at Lázaro Cárdenas as well as at Gothenburg.

Helsingborg Transport Center

On 29 October 1984 an agreement was signed by the Swedish State Railways (SJ) and the community of Helsingborg, aimed at transforming Helsingborg into a highly modern transport center. The railway station issue discussed for so many years has been solved. Essentially, the agreement covers the following items:

- a new freight train ferry line Helsingborg – Copenhagen
- a new central station in combination with a new ferry terminal for both the Scandinavian Ferry Lines (SFL) and the Swedish and Danish State Railways (SJ/DSB)
- a railway tunnel under the central parts of the city

Time Schedule and costs

Project	Estimated expenses million SEK (value 1983/84)	Start of construction work	Completion
Freight train ferry berth in the South Harbour	75	1985	June 1986
Joint passenger train and car ferry terminal	51	1987	1991
Central station and terminal buildings for ferry traffic	93	1987	1991
Single-track railway tunnel to central station and underground yard	284	1986	1991
Marshalling yards at Raus	41	1985	June 1986
Reconstruction of the railway line Ängelholm-Kattarp and the viaduct over Drottninggatan	62	1991	1992

Gothenburg starts gas disinfection of goods

The Port of Gothernburg has installed a gas disinfection plant at the Skandia harbour. The Port wants to be sure that no noxious insects are hidden in the wooden casing material in which some of the goods passing through the port is packed. The reason for this new arrangement is the prescriptions made by Australian and New Zealand authorities that all wooden material must be treated by disinfectants before being imported into the countries in question.

As Gothenburg has frequent direct shipping connections with Australia, the Port decided to invest in the disinfection facility now taken in use. The Port has co-operated in this matter with the Transatlantic Shipping Co., the Wilson & Co and Volvo Penta.

The gas equipment allows 10 containers to be handled at a time. After the containers have been placed in the disinfection hall and their doors have been opened a tent is being lowered around the containers and methylbromide

gas is being pumped into the tent. After 15 hours' treatment the operation is over and a certificate is signed by the Anticimex company, experts on disinfection and authorized to issue certificates.

Joint venture ABP and Rosehaugh proposed major property development at Southampton

Associated British Ports Holdings PLC and Rosehaugh PLC have recently announced the formation of a new joint property development and investment company.

The new company, to be known as Rosehaugh Associated Ports Developments PLC is owned in equal proportions by Associated British Ports Holdings PLC through a subsidiary, ABP Properties Ltd., and Shearwater Property Holdings PLC, a subsidiary of Rosehaugh.

The new company unveiled proposals for its first major project – the redevelopment of some 50 acres at ABP's Port of Southampton, to include the Princess Alexandra Dock.

The proposed £50 million development will be one of the largest urban renewal projects in the country and will provide a waterside village containing a marina for up to 600 boats, restaurants, speciality shopping, houses, studios and offices with considerable car parking in a parkland setting. It is hoped that the first phase will be open for Summer 1986.

The Chairman of Associated British Ports Holdings, Mr. Keith Stuart, said: "This is an important development both for Southampton and for ABP. The new joint company with Rosehaugh is an example of our overall policy of diversification through joint ventures in partnership with well established companies of proven track record. We are very pleased to be working with Rosehaugh on this exciting scheme."

ABP's Joint Managing Director, Mr. John Williams, commented: "Several schemes for the Princess Alexandra Dock were considered before Rosehaugh's scheme was selected. We believe that the development will be exceptionally attractive, and that it will provide an excellent balance between the demands of commerce and leisure. We are confident that the scheme will be of great benefit to the City of Southampton, as well as to the business of ABP."

Mr. Godfrey Bradman, Chairman of Rosehaugh, said: "The joint company between Rosehaugh and Associated British Ports Holdings has considerable potential and should prove to be a valuable investment to both groups. My colleagues and I share ABP's enthusiasm for this important venture."

ABP Chairman to be next President of the Chartered Institute of Transport

The Chairman of Associated British Ports, Mr. J. Keith Stuart, MA, CBIM, FCIT, has been elected President of the Chartered Institute of Transport to take office on October 1st 1985. Mr. Stuart is also Chairman of ABP's parent company Associated British Ports Holdings PLC, which was privatised in 1983.

Mr. Stuart was elected a Fellow of the Institute in 1976 and has played an active part in the work of the CIT, having been Vice President and Chairman of the Education and Training Committee. Mr. Stuart will deliver his presidential address to the Institute in London on October 14th.

PLA welcomes STOLport

The Port of London Authority welcomes the announcement by the Secretary of State for the Environment, Patrick Jenkin, that he has granted outline planning consent to develop the STOLport in the Royal Docks.

PLA, who are the landowners of the 90 acre site, entered a lease agreement in 1983 with the developers, John Mowlem PLC, and have been working closely with them on various aspects of the airport project. It is hoped that development work will now proceed quickly on the site which is located on land between PLA's Royal Albert and King George V Docks in the London Borough of Newham. PLA will ensure that other on-going activities within their dock estate do not hinder the STOLport's vital preparatory and construction work.

PLA has always seen the STOLport as a major element in the successful redevelopment of the Newham area of London's Docklands. It sees this imaginative project acting as a catalyst and giving impetus to other developments. PLA also looks forward to working with other interested parties to develop additional projects in the remaining 300 acres of its Royal Docks estate.

The STOLport will not only bring much needed new employment to London's Docklands, to replace its traditional dock industry, but will also provide London with an unique airport facility.

New navigation systems boost Australia's exports

A major improvement to north-west Australia's shipping lanes is likely to have a significant impact on our exports from that region, the Federal Minister for Transport, Mr. Peter Morris, said recently.

"The Federal Government will spend $5.3 million next financial year upgrading two major systems of navigational aids, the main one being that marking the approaches to Port Hedland.

Mr. Morris said these improvements would be a great boost for Australia's mining industry.

"Transport costs will be greatly reduced and efficiency enhanced, thereby stimulating our commercial viability in overseas markets.

"The $4.3 million Port Hedland project will allow vessels up to 265,000 tonnes to enter the port, compared with a current maximum of 100,000 tonne vessels.

Crane invention world first: Port of Adelaide

A container crane positioning device, designed to reduce driver strain and prevent time-consuming sway when lifting ship's containers, has been successfully tested and used

on the Port of Adelaide container crane.

The multi-purpose, automated device was designed and built by senior Department of Marine and Harbors electrical engineer, Mr. Jim Biggs.

The Minister of Marine, Mr. Roy Abbott, praised the efforts of the DMH electrical section for producing the efficient system which is fully integrated with the crane's existing electrics.

Positioning containers as they are loaded or unloaded from ships has, until now, been done by the trained eye of the crane driver from a height of approximately 25 metres.

The new positioning/anti-sway equipment eases the burden of assessing distances by the driver, allowing him to concentrate on other details.

Similar devices of lesser quality because of their limited capacity are available from overseas at a prohibitive cost of over $150,000. Mr. Briggs produced the present system for around $10,000.

Its advantages include rapid swingless cross-travel motion, automatic braking when the container nears the wharf from any height, optional selection of any desired target and analysis of performance by the crane for future adjustment.

The programmed crane positioning system is so advanced in technology, that it is thought to be only one of its kind operating in the world.

(SPJ South Australia)

International yacht race attracts considerable interest : Port of Melbourne

The 'Melbourne to Osaka (Japan) Double-Handed Yacht Race' to be conducted in 1987 to celebrate the 120th Anniversary of the Port of Osaka and to further cement the city/port sister relationships between the two cities has attracted considerable international interest. Hundreds of enquiries have been received from 17 nations around the world, with positive entries from Japan, Australia and the United Kingdom already submitted.

The race, scheduled to commence on Port Phillip Bay on 21st March 1987 will be sponsored by the Yamaha Motor Co. Ltd. The Yamaha Motor Company is Japan's largest boat and yacht manufacturer. The winning yacht will receive the 'Yamaha Osaka Cup'.

It is anticipated that following the inaugural race in 1987 the event will be conducted on a 3/4 year cycle basis and will follow the popular trend which cruising and racing yacht competition enjoys in Europe, the United States and Australia, and will increase the sports popularity in Japan. The Melbourne-Osaka race also follows three single handed trans-Pacific yacht races from the United States and Japan.

The race, in two divisions, one for racing yachts and the second for cruisng vessels with no handicapping and all places to be determined on elapsed time. Considered to be a major test "of man and boat" the event will take the two-handed yachts over a 5,500 nautical mile course to Japan taking some 40 to 60 days to complete.

Organised by the Nippon Ocean Racing Club and the City of Osaka in Japan, and assisted by the Sandringham Yacht Club, City of Melbourne and the Port of Melbourne Authority in Australia the race objectives are:

* to promote international goodwill
* to further relationships between Melbourne and Osaka
* to promote citizen exchange between Japan and Australia
* to stimulate the human interest in the sea and marine sports/activities
* to develop a keener interest in the relationship between man and the sea.

Principal port statistics for 1984 in brief: Marine Department Hong Kong

(Cargo tonnage quoted in TONNES)

		1984	1983–1984 Comparison
1	Total number of Ships entered and cleared:	167,670	+ 9.97%
	(a) Number of Ocean-going ships entered and cleared	23,783	+ 3.59%
	(b) Number of river trade ships entered and cleared	143,887	+11.10%
2	Total cargo loaded and discharged:	47.480m	+ 9.53%
	(a) Cargo loaded and discharged from Ocean-going ships	41.540m	+ 9.51%
	(b) Cargo loaded and discharged from river trade ships	5.940m	+ 9.65%
3	Coal and petroleum products loaded and discharged by Ocean-going ships	9.812m	+10.00%
4	Total container throughput in T.E.U. loaded and discharged	2.109m	+14.81%
5	Total number of passengers embarked and disembarked:	10.227m	+ 8.13%
	(a) Number of passengers embarked and disembarked by Ocean-going ships	0.220m	+ 4.76%
	(b) Number of passengers embarked and disembarked by river trade ships	10.007m	+ 8.21%
6	Total net registered tonnage of ships:	164.395m	+ 1.94%
	(a) Net registered tonnage of Ocean-going ships entered and cleared	136.928m	+ 0.84%
	(b) Net registered tonnage of river trade ships entered and cleared	27.467m	+ 7.82%

Sister ties slated between Pusan and Rotterdam ports

A sister tie will be signed late this year between the ports of Pusan and Rotterdam.

A KMPA official said that, after attending the 14th biennial conference of the International Association of Ports and Harbors held in Hamburg, Cheung Yeun-Sei administrator of the Korea Maritime and Port Administration called on A. Peper, mayor of the City of Rotterdam. At that time they agreed to have Pusan and Rotterdam conclude a sister tie within this year and to conduct port technology training courses at Rotterdam for Korean trainees.

The Pusan-Rotterdam sister tie will bring to 9 the number of ties Korean ports have signed with the ports of foreign countries.

The first sister tie was made in 1977 when Inchon port signed with the port of Le Havre in France.

Foreign ports with which domestic ports have concluded sister ties are Southampton, Le Havre, Jidda, Olympia, Seattle, Portland, Oakland, and New Orleans.

(Korean Maritime News)

Pusan international passenger terminal to be expanded

The Korea Maritime and Port Administration plans to expand the international passenger terminal of Pusan port and also to deepen the seabed of the terminal to 11.5 meters, construction will start in 1986 with the target for completion set in 1988.

The government maritime agency estimated that a total of 7,400 million won will be required for the project.

KMPA said that the Pusan passenger terminal, which is capable of accommodating a 10,000 grt ship, is being utilized to full capacity as the two car ferry ships being operated on the Pusan-Shimonoseki (Japan) route have been calling at the terminal every other day.

Also, since 1982 an increasing number of large, luxury foreign passenger ships have been making their calls at Pusan port but, as the current terminal facilities are inappropriate and insufficient to have them berth, such ships have been obliged to berth at other cargo vessel terminals.

Furthermore, the planned inauguration of another international car ferry service between Pusan and Osaka, Japan, late this year, which will operate 9,000 ton vessels, makes it urgent to expand the passenger terminal.

To accommodate this passenger demand, KMPA plans to construct a berth for 50,000 ton ships and another berth for 8,000 ton vessels by 1988, with construction work beginning in early 1986. KMPA also said that 60 million won has been set aside to complete the drawing work for the project this year.

With the opening of the Pusan-Osaka service this year and the hosting in Seoul of the Asian Games in 1986 and the Olympics in 1988, it is expected that there will be great increases in the number of seaborne passengers to and from Korean in the future. *(Korean Maritime News)*

Inchon port to open another pier from October

Pier No. 8 of the Inchon port will be put into operation from October this year.

The Korea Maritime and Port Administration said that the construction will be completed in late September after four years of work.

The 820-meter-long pier, where 35 billion won has been invested, will be able to accomodate three 50,000-ton class bulk carriers simultaneously.

It will be equipped with three scrap iron cranes and two other bulk cargo cranes capable of handling 2,470,000 tons a year. There is also a cargo shed with a storage capacity of 48,000 tons and a 80,000-square-meter cargo yard.

To manage the pier, KMPA has expanded the organization of the Inchon Pier Management Association.

(Korean Maritime News)

Completion of Berth C13 & back-up yard: Port of Singapore

Development at Tanjong Pagar Container Terminal (TPCT) is entering its third phase with the scheduled completion of Berth C13 (former Berth 43) and the back-up yard by September 1985. Together with Berth C14, which became operational in August 1983, TPCT can now boast of 9 container berths, establishing it as one of the world's leading container ports.

C13 and C14 with a total length of 555 metres will have a draft of 12.4 m and are able to accommodate one third-generation container vessels and one second generation/feeder vessel. These berths will be supported by a back-up area of 22.0 hectares with 6,608 TEU ground slots for the stacking of containers.

Bunkering facilities for the supply of marine diesel oil, fuel oil and water are also available. *(PSA News)*

UNDP/UNCTAD TRAINMAR course on container terminal operations: Port of Penang

The UNDP/UNCTAD TRAINMAR (Training in Maritime Field) Centre in Penang Port Commission recently conducted its first course on container terminal operations for supervisors.

Developed in Manila, the course on "Management of Container Terminal Operations" was adapted by the local team of UNCTAD/TRAINMAR trained course developers to suit port operations in Penang.

The 11-module course is designed to train and expose participants to all aspects of container operations.

A simulated terminal, complete with model ships, terminal equipment and containers was set up to enable the participants to learn to operate the terminal and to put into practice the skills learnt in the classroom. At the same time, instructors pose problems which usually arise in the real situation to test the participants' decision-making capabilities. Micro-computer games were introduced to participants to test their problem solving skills in ship loading and container yard stacking plans.

A total of 14 participants from the Port Authorities of Klang and Johore, Penang Port Commission and the haulage companies attended the three-week course. *(Berita)*

Statistical report : Qatari ports

The total number of vessels called at Doha and Ummsaid Ports for discharging and loading during the first half of 1985 was 291 as against 282 vessels called during the same period of 1984.

The import through the two Qatari Ports has slightly increased during first half of 1985, from 690,041 tons to 720,765 tons.

A fair increase in container traffic by sea is noted during the period under review – 2,162 TEUs were imported during first half of 1985, whereas 1,860 TEUs during the same period of 1984 i.e.; 16%. When comparing the containerised cargo carried by conventional vessels and feeders, the increase is observed in the feeder service – 1,659 TEUs were carried by feeders during first half of 1985 as against 1,155 TEUs during the same period of 1984 i.e.; 44% more.

(Qatar National Navigation & Transport Co. Ltd.)

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