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Contents

IAPH ANNOUNCEMENTS AND NEWS
President Wong Visits Tokyo Head Office • Mr. Haar Retires from Port of New Orleans ......................................................... 7
IPD Fund: Contribution Report • Summary of IAPH Attendance at LDC-11; Outline of Issues of Concerning Concern ......................................................... 8
Report on the Scientific Group on Dumping ......................................................... 10
Mr. Halpin Speaks on State of Preparations for Miami Conference ......................................................... 12
Viitos to Head Office • Report by Bursary Recipient ......................................................... 13

OPEN FORUM
Customs Co-operation Council and Data Interchange Standards ......................................................... 15
The Antwerp formula: a strong union between the public sector and the private sector ......................................................... 18
Dublin Port: £2,178 Million Contribution to Irish Economy ......................................................... 20

INTERNATIONAL MARITIME INFORMATION
WORLD PORT NEWS
ISO in brief • US Ratifies Pact on Plastic Refuse • MacGregor-Navire Offers Intelligent Systems ......................................................... 21
New Publications ......................................................... 22

The Americas
North Fraser Environment Memorandum Signed ......................................................... 22
Québec to Upgrade Solid Bulk Terminal • Cruise Shipping Helping Québec Travel Industry ......................................................... 23
Quebec Granite Shaping Skylines Around the World • Coalition on Grain Movement ‘88 Formed • Thunder Bay Opposes Diversion of Water ......................................................... 24
Empresa Nacional Portuaria (Honduras) in brief ......................................................... 25
Brunswick Now Part of Georgia Ports Authority ......................................................... 26
Equipment Identification System to Be Introduced • U.S. Gulf Ports Urged to Be Innovative ......................................................... 27
Houston’s Field Office Opened in Caracas • New Coal Unloader in Jacksonville ......................................................... 28
Jaxport Board Chairman, Officers for ‘89 Elected ......................................................... 29
Long Beach Tonnage Scores 7.2% Gain • First Trade Seminar Held at Port of Baltimore • Toyota Auto Terminal at Port of Baltimore ......................................................... 30
WWSS Seminar Examines All Aspects of Shipping ......................................................... 30
Oakland: Evaluation of Organization Structure • Seattle Needs More Container-terminal Acres ......................................................... 32
Neutral Chassis Pool Initiated at Charleston ......................................................... 33

Africa/Europe
Rouen, the Port for Food and Agriculture • Port of Rotterdam on Course for an Excellent Year • Rotterdam Port Tariffs Remain Unchanged ......................................................... 34
German Journalists Visit Port of Rotterdam ......................................................... 35
Dublin Needs More Space for Trade Growth • ABP: No Disadvantages in Port Privatization ......................................................... 36
Port of Southampton Feted 150th Anniversary ......................................................... 37
24-hour Service for Pilots Provided • PLA Announces Pilotage Requirements ......................................................... 38
• PLA Manager Given ‘Innovation’ Award ......................................................... 38

Asia/Oceania
State Governments Urged to Examine Ports • Wharf Expansion Work Starts at Gladstone • Gladstone: Record Cargo for 87/88 Financial Year ......................................................... 39
• Port of Fremantle Sets Container Traffic Records ......................................................... 39
$100 Million Expansion Plan for Johor Port • Port Klang System Tracks Containers • Promotion Program for Port of Penang • 18% Growth in Klang Container Performance ......................................................... 40
Further Reclamation Planned for Taranaki • Port of Wellington: New Pricing System ......................................................... 40
PSA: 3 Million TEUs Expected in 1988 • Japanese Shipbuilding: Recent Topics ......................................................... 43

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Tel: TOKYO (591) 4261
Cable: “IAPHCENTRAL TOKYO”
Telex: 2222516 IAPH J
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President Wong Visits Tokyo Head Office

On the afternoon of October 24, 1988, Mr. Wong Hung Khim, President of IAPH, visited the Head Office and was received by Secretary General Kusaka and his staff. Mr. Wong was visiting Japan on business in his capacity as Executive Director, Telecommunications Authority of Singapore.

To his surprise President Wong found that three visitors were already meeting with the Secretariat staff. They were Mr. Blaise Lionelli from the Port of Miami (as Mr. Carmen Lunetta’s representative), Mr. Gregory Halpin, Special Consultant for the IAPH Conference in Miami and Mr. A.J. Smith, IAPH European Representative from London. They were visiting Tokyo as guest speakers for the IAPH Japan Seminar, which had been organized by the IAPH Foundation for the following afternoon. (This seminar is separately featured later in this issue.)

In accordance with the agenda especially prepared by the Secretariat for this meeting, President Wong and the other members present spent the whole afternoon in discussions dealing with the various matters now being faced by the Association and the issues involved in the Miami Conference.

Mr. Haar Retires from Port of New Orleans

To Remain as IAPH DTF Chairman

Mr. Herbert R. Haar, Jr., has recently retired as Deputy Executive Port Director, the Port of New Orleans. In his letter dated October 14, 1988 to the Secretary General, Mr. Haar says, “I will retire from the Port of New Orleans today but will continue to work in the future on a two day per week schedule as a part-time employee. The Port of New Orleans has asked me to continue my work with IAPH. I am therefore happy to report that I will be in a position to continue my work with the Dredging Task Force.”

Secretary General Kusaka in his message sent to New Orleans expressed IAPH’s deep appreciation for the great contribution and service Mr. Haar has afforded our Association and the great understanding of the Port of New Orleans which has so consistently backed up Mr. Haar’s activities with IAPH.

Furthermore, the Secretary General, on behalf of all members of IAPH, records his gratitude to the Port of New Orleans for the new arrangement by which Mr. Haar’s knowledge and expertise will continue to be made available not only to IAPH but to all ports and harbors throughout the world.

The letter from Mr. Haar also contained the report entitled “Summary of IAPH Attendance at LDC-II (held in London in October 3-5, 1988) and Outline of Issues of Continuing Concern, which are reproduced in this issue together with the relevant IMO document. (See page 8)

In connection with Mr. Haar’s retirement, the Head Office has also received the following press release from the Port of New Orleans.

September 29, 1988
HAAR ANNOUNCES RETIREMENT

Herbert R. Haar, Jr., deputy executive port director with the Board of Commissioners of the Port of New Orleans, will retire October 14. He plans to work as a maritime consultant following retirement.

Haar joined the Port of New Orleans in 1971 and since that time has served in several executive capacities including associate port director for planning and engineering from 1971 to 1980, assistant executive port director from 1980 to 1986 and deputy executive port director since 1986.

Prior to his employment at the Port, Haar served for 28 years as an officer in the U.S. Army Corps of Engineers. His last assignment was as the district engineer of the New Orleans District of the Corps. He had previously served as the U.S. Army Engineer for Thailand, assistant engineer commissioner for urban development for the District of Columbia, Officer-in-Charge of the Nicaragua Canal Survey, and engineer advisor to the Peruvian Army. He has been recognized by Presidential citations from Presidents Nixon and Carter, received the Order of Ayacucho from the Peruvian Government, the meritorious public service award from the District of Columbia, the outstanding civilian service medal...
from the Department of the Army in 1984 and the American Association of Port Authorities' Important Service Award in 1985.

He is a native of Alexandria, Virginia and is a graduate of the Virginia Polytechnic Institute, the University of Illinois, and the U.S. Army War College.

Haar is a former president of the Metropolitan Safety Council of the New Orleans area, past chairman of the National Waterways Conference, past president of the Louisiana Post of the Society of American Military Engineers, former chairman of the Mid-America Ports Study, and Vice Chairman of the Gulf Intercoastal Canal Association. He has served since 1981 as the Chairman of the Dredging Task Force of the International Association of Ports and Harbors and is a Commissioner Emeritus of the Permanent International Association of Navigation Congresses. He also served as the staff project manager for the development of the Port of New Orleans' strategic plan in 1986 by Temple, Barker & Sloane, Inc.

IPD Fund: Contribution Report—US$53,000 Still Needed

The contributions from members to the Special Port Development Assistance Fund ("the Special Fund") as of November 10, 1988 are listed in the box (right). The amount received in contributions and the sum pledged in the on-going campaign totals US$17,395, leaving the amount of US$52,605 yet to be raised.

In late October, Mr. Wong Hung Khim, IAPH President, was visiting Tokyo on business. Mr. Wong set aside one afternoon out of his busy schedule for a meeting with the Head Office people. On that occasion President Wong, knowing that the growth in the total amount contributed in the months since the start of the campaign in June 1988 has been rather slow, decided to make his appeal once again to all IAPH members for their support of the project. Thus the letter dated October 24, 1988, jointly signed by President Wong and Secretary General Kusaka, was sent out to all members from the Head Office.

As indicated in the letter, 80% of the targeted amount has yet to be raised within the remaining period. In order to enable our Association to effectively and continuously implement two of the most important projects supported by the Fund, namely the "IAPH Bursary Scheme" and the "IAPH Award Scheme", all members’ continued support in helping us to achieve the targeted amount of US$70,000 is urgently required.

<table>
<thead>
<tr>
<th>Contributors</th>
<th>Amount (US$)</th>
</tr>
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<tbody>
<tr>
<td>Associated British Ports, UK</td>
<td>3,000</td>
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<tr>
<td>South Carolina State Ports Authority, USA</td>
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<tr>
<td>Cyprus Ports Authority, Cyprus</td>
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<td>Japan Port &amp; Harbor Association, Japan</td>
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<td>Puerto Autonomico de Barcelona, Spain</td>
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<td>Obayashi Corporation, Japan</td>
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<tr>
<td>Port of Copenhagen Authority, Denmark</td>
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<tr>
<td><strong>Total</strong></td>
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</tr>
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* Union of Autonomous Ports & Industrial & Maritime Chamber of Commerce

### Summary of IAPH Attendance at LDC-11; Outline of Issues of Continuing Concern

By Mr. Herbert R. Haar, Jr.
Chairman, IAPH
Dredging Task Force
Port of New Orleans, U.S.A.

#### I. IAPH Attendance at LDC-11

#### A. IAPH Submission to the Meeting

Herbert R. Haar, Jr., the then deputy executive port director of the Port of New Orleans and chairman of the IAPH Dredging Task Force, attended the Eleventh Meeting of Contracting Parties to the London Dumping Convention as the IAPH observer during October 3-5, 1988. Mr. Haar was accompanied by Joseph E. LeBlanc, Jr., of the law firm of Nesser, King & LeBlanc in New Orleans, Louisiana, who served as legal counsel for IAPH.

A written statement was distributed at the meeting which addressed a number of agenda items of concern to IAPH. A copy of the IAPH submission is attached to this Report. In prepared remarks presented at the meeting, the IAPH observer reaffirmed IAPH's position on these agenda items and IAPH's continuing interest in assisting Contracting Parties in addressing matters related to dredged material under the Convention.
B. Additional Agenda Items of Concern

1. In addition to the agenda items addressed in the IAPH written submission, a separate issue arose as to whether “agitation dredging” and “side-cast dredging” constituted “dumping” subject to regulation under the LDC. A copy of the Note by the Secretariat which raised this issue (LDC-11/12-1) is attached to this Report. IAPH was contacted by the Secretariat shortly before the meeting and was asked to comment upon these questions under this agenda item. The IAPH observer telexed this inquiry to representatives of the ports of Japan, Rotterdam, Amsterdam, and Nantes. These ports uniformly expressed the view that neither form of dredging should be regulated as “dumping.”

At the meeting, the IAPH observer advised that these methods of dredging, which are generally conducted in internal waters, are not within the intended scope of “dumping” as that term is used in the Convention. The IAPH observer explained that “agitation dredging” involves no collection or deposition of sediment or removal of sediment from the water. The sediment is simply stirred up and becomes part of the natural current - much the same fashion as occurs from many natural processes and normal ship movements. There is no “disposal” from a “vessel” that would constitute dumping under the Convention.

“Side-cast dredging” is simply a method of returning channel sediment to the littoral drift from which it originated. The material in the channel comes from the upstream side of the littoral drift and is naturally deposited on the downstream side to become part of natural sediments. The side-cast dredging is simply to place the material back into the littoral drift. There is no intent to dump or dispose, or removal of sediment beyond the immediate dredging area.

The United States, the USSR, and PIANC expressed agreement with the IAPH position on these methods of dredging. The Federal Republic of Germany agreed that agitation dredging and some forms of side-cast dredging would not constitute “dumping”, but expressed the view that side-cast dredging involving the discharge of sediment through a pipe should be regulated. The Meeting referred these questions to the Scientific Group for further study. It will be important for IAPH to continue to monitor this issue to support its view that neither of these two methods of operation should be regulated as “dumping”.

2. During the Scientific Group’s report there was discussion of another item of interest to IAPH - the problem posed by high concentrations of tributyltin (TBT) in the sediments of harbors, marinas and shipping channels. Tributyltin is used as an “anti-fouling” agent in paints that are applied to the hulls of recreational and some seagoing vessels. The Meeting requested the Scientific Group to continue its study of this question. One environmental group, IUCN, called for passage of a resolution by Contracting Parties recognizing the seriousness of the problem and the need for national governments to take steps to prohibit the use of TBT. In certain recent efforts to phase out TBT, copper compounds have been used as a replacement. Argentina reported a problem with the use of copper compounds as an anti-fouling agent when applied below the water line, although it was suggested that a safe application may be possible in dry dock. It was agreed that the Scientific Group would continue to study this issue.

3. Another item of concern to IAPH arose in connection with the resolution prepared by the Scientific Group to clarify the reference to “bioavailability” in the guidelines providing guidance for Annex III. The Federal Republic of Germany proposed a change in the guidance to mandate the use of test procedures for toxicity, persistence, bioavailability and bioaccumulation where chemical analysis shows the presence of substances whose biological effects are not well known or if there is a doubt as to the exact composition of properties of the waste. This was in lieu of a provision that it “may be” necessary to carry out such test procedures. In the discussion, there was general recognition that the Annex III provisions are “guidelines” only and are not legally binding. In order to avoid any contrary implication, the meeting decided to retain the existing language. The discussion highlighted the interest of certain environmentally-oriented delegations in imposing mandatory test requirements. This is contrary to IAPH’s consistent position that unnecessary testing should not be required.

4. Another issue that arose at the commencement of the Meeting was a proposal to adopt new rules regarding participation of nongovernmental organizations (“NGO’s”) as observers at proceedings under the LDC. IAPH participated in a working group to review the current procedures and proposals for change.

5. In general, the positions supported by IAPH at the Eleventh Meeting were approved by Contracting Parties. This included approval of the two resolutions proposed by the Scientific Group regarding the concept of “bioavailability” in the allocation guidelines and in the guidance for Annex III, and in Contracting Parties’ approval of continuing study of a number of subjects in which IAPH has an interest.

II. Future Issues of Continuing Concern

A. Future meetings of the Scientific Group will include a number of agenda items affecting dredged material that will require close review by IAPH. These include the following:

1. The further study to be conducted by the Scientific Group of “agitation dredging” and “side-cast dredging”.

2. The continuing study by the Scientific Group of alternatives to the blacklist/greylist approach for allocating substances to the Annexes, with particular concern for the growing effort to adopt numerical limits for classifying specific wastes to a “prohibition list” or to an “action list”. In the case of dredged material, it is essential that the application of numerical limits take into account the sequestering capabilities of marine sediments and the concept of “bioavailability”.

3. The continuing study of field verification of laboratory test data by Contracting Parties to determine the degree to which laboratory test results are accurate predictors of impacts from disposal at sea.

4. The interest of many Contracting Parties in developing a “common and holistic” approach to the disposal of all wastes, with particular emphasis upon a comparative assessment of impacts from disposal on land, at sea, and in wetland areas. IAPH must continue its support for an “equal consideration” of all disposal options, with use of the option that presents the least detriment to man and the environment. This approach is opposed by a number
of countries (notably the Nordic countries and the Federal Republic of Germany), which view disposal at sea as a "last alternative" even if the impact would be less than land-based alternatives.

5. In connection with the continuing controversy over disposal of radioactive waste at sea, IAPH must continue to follow the work of the International Atomic Agency (IAEA) in developing standards for the exclusion or exemption of low levels of radioactivity, in addition to the de minimis exception already recognized for materials (including dredged materials) containing only naturally occurring traces of radioactivity. Additional exceptions may be needed for anthropogenic levels of radioactivity in sediments near such sources as nuclear power plants and hospitals.

6. The continuing study by the Scientific Group of tributyltin compounds in sediments.

7. The study by the Scientific Group of developing a linkage between compliance monitoring and the impact hypothesis, i.e. monitoring should only be required for those constituents that may be expected to cause impacts in the marine environment. In the discussion of this issue at the meeting, the country of Nauru objected that this would result in a narrowing of monitoring requirements. This was in contrast to the general view that unnecessary monitoring should be avoided.

8. The list of substantive items recommended for inclusion in Provisional Agenda of the Twelfth Meeting of the Scientific Group on Dumping also includes a study of reports on innovative monitoring techniques, innovations in treatment technologies, innovations for mitigating the impact of dumping activities and a comparative assessment of land-based and sea disposal options. These subjects can be expected to include reports relating to the management and disposal of dredged material. These must be closely followed by IAPH to determine what impact they may have in the deliberations of the Scientific Group, particularly in terms of whether they may afford a basis for certain environmental groups or environmentally-oriented countries to insist upon greater conditions or restrictions upon dredged material disposal under the LDC.

9. The Action Plan presented to the Eleventh Consultative Meeting for future work also contained specific items relating to dredged material, including the continuing study of land-based disposal options and continuing review of research studies describing techniques and effects of capping experiments for dredged material containing Annex I substances. The Action Plan also includes review of de minimis levels established by IAEA below which material will not be regarded as radioactive under the LDC, review of the interpretation of the term "significant amounts" referred to in Annex II and continuing study of monitoring procedures, the criteria for allocating substances to the Annexes and review of the substances placed in the Annexes.

The need for IAPH to closely follow these issues was emphasized recently in a statement made to the new chairman of the Scientific Group by a representative of Greenpeace at the Eleventh Meeting of the Scientific Group. The Greenpeace observer stated that while their attention had recently been focused on obtaining a prohibition of the disposal of radioactive waste at sea and incineration at sea, now that these goals were at hand Greenpeace may turn its attention to dredged material. This may well portend an effort by Greenpeace to obtain greater restrictions upon the dumping of dredged material at sea - in much the same fashion as occurred at the Third Consultative Meeting in 1978 when the Annex I prohibitions were applied for the first time to dredged material. That action was taken prior to port involvement in the LDC, and it is essential that IAPH be vigilant to assure that this does not happen again.

---

REPORT ON THE SCIENTIFIC GROUP ON DUMPING

Matters related to the disposal at sea of dredged material

Submitted by the International Association of Ports and Harbors (IAPH)

1 Introduction

1.1 The International Association of Ports and Harbors (IAPH) appreciates the invitation extended it to attend this

Eleventh Consultative Meeting of Contracting Parties to the London Dumping Convention as an observer to participate in the discussion of matters relating to the disposal
of dredged material at sea. IAPH welcomes the opportunity to share its specialized knowledge in this area and to provide Contracting Parties with technical information developed by IAPH relating to dredged material disposal and the effect of the London Dumping Convention upon port operations.

1.2 A number of items included in the Reports of the Tenth and Eleventh Meetings of the Scientific Group on Dumping (LDC/SG.10/11 and LDC/SG.11/13) address subjects of continuing interest and concern to IAPH member ports.


2.1 At its Eleventh Meeting, the Scientific Group considered the report of the Ad Hoc Group of Experts on the Annexes to the London Dumping Convention. The Report addressed the need to develop alternatives to the blacklist/greylist approach to the regulation of substances considered for disposal at sea in order to improve operational procedures of the Convention.

2.2 IAPH endorses the efforts of Contracting Parties and the Scientific Group to improve the effectiveness of the Convention in regulating disposal at sea. In the ongoing study of this issue, IAPH supports a continuing recognition of the unique characteristics of marine sediments which distinguish them from chemical wastes and which have warranted the adoption of Special Guidelines for the regulation of dredged material. The IAPH observer further noted the differing views of delegations with regard to the use of numerical limits in waste management and addressed the need to make such limits waste-specific and to take into account the “bioavailability” of the materials concerned.

2.3 IAPH also supports the development of an approach to waste management that gives equal consideration to all disposal options and allows selection of the option of least detriment, which may include disposal at sea, in resolving issues relating to the disposal of dredged material.


3.1 At its Tenth Meeting, the Scientific Group proposed an amendment to Paragraph 2.3 of the Allocation Criteria to clarify the relationship between the terms “bioavailability” and “bioaccumulation potential”. (LDC/SG.10/11/2.2.2). The Scientific Group further agreed that the proposed interpretation of bioavailability should be included in the Guidance for Annex III. (LDC/SG.10/11/2.2.3).

3.2 IAPH supports the proposed clarification of these terms, which provides appropriate recognition of the need to take into account the characteristics of the waste matrix and the bioavailability of a waste as essential factors in assessing the impacts of a substance for disposal at sea. This concept is of particular importance in the evaluation of dredged material in view of the pollutant-sequestering characteristics of marine sediments and the unique ability of dredged material to isolate wastes from the marine biota.

4 Verification of Laboratory Test Data (LDC/SG 11/13/6)

4.1 The Report of the Eleventh Meeting of the Scientific Group notes the work of several Contracting Parties in seeking to obtain field verification of laboratory test data in evaluating substances for disposal at sea. IAPH wishes to express its support for the work of Contracting Parties in this area. IAPH believes that field verification is especially necessary in the case of dredged material to assure a realistic evaluation of impacts from such disposal.

4.2 IAPH also notes the summary presented by the United States delegation of the recently completed Field Verification Program by the U.S. Army Corps of Engineers involving a comparative assessment of the effects of highly contaminated dredged material placed in aquatic, upland and wetland disposal environments. (LDC/SG 11/13/6.5). It was shown that the effects of aquatic disposal were less persistent than either upland or wetland disposal. IAPH believes that such information is of particular importance in evaluating all disposal options and supports the view that, in many cases, disposal at sea may present the least detriment to man and the environment.

5 Conclusion

5.1 IAPH invites Contracting Parties to take note of the views expressed above in the deliberations under these Agenda items.

Statement of the IAPH Observer on “Side Cast Dredging” and “Agitation Dredging”

Thank you, Mr. Chairman.

IAPH has noted the question raised by the Secretariat in LDC 11/12/1 as to whether “Agitation Dredging” and “Side-Cast Dredging” are covered as “dumping” under the LDC. In IAPH’s view, these methods of dredging, which are generally conducted in internal waters, are not within the intended scope of “dumping”, as that term is used in the Convention.

“Agitation Dredging” involves no collection or deposition of sediment or removal of sediment from the water. The sediment is simply stirred up and becomes part of the natural current — in much the same fashion as occurs from many natural processes and normal ship movements. There is no disposal from a vessel that would constitute dumping under the Convention.

“Side-Cast Dredging” is simply a method of returning channel sediment to the littoral drift from which it originated. The material in the channel comes from the upstream side of the littoral drift and is naturally deposited on the downstream side to become part of the natural sediments. The “Side-Cast Dredging” is simply to place the material back into the littoral drift. There is no intent to dump or dispose or removal of sediments beyond the immediate dredging area.

For these reasons, IAPH does not believe that these two methods of operation constitute dumping under the LDC.

IAPH hopes that these views will be of assistance to Contracting Parties in the consideration of these issues.
Mr. Asada, President of the IAPH Foundation, welcomes participants

On the afternoon of October 25, 1988, the “IAPH Japan Seminar” was held in Kasumigaseki, Tokyo under the auspices of the IAPH Foundation* in cooperation with the IAPH Head Office. The seminar was aimed at the promotion of IAPH activities — and in particular the 16th IAPH Conference in Miami next year — among IAPH members and those in the maritime and transport businesses in Japan. Some 120 people participated in the 3-hour seminar and the reception which followed.

Following the opening remarks by Mr. Shizuo Asada, the current President of the IAPH Foundation, the first speaker was introduced. He was Mr. Blaise Lionelli from the Port of Miami. Originally Mr. Carmen Lunetta, Port Director of the Port of Miami and the Chairman of the forthcoming IAPH Conference, had been due to speak at the seminar. However, due to pressure of business in Miami Mr. Lunetta was unfortunately unable to attend it and Mr. Lionelli was dispatched to Tokyo in his place. Thus Mr. Lunetta’s video message was introduced to the audience at the beginning of Mr. Lionelli’s presentation on the subject “The Port of Miami — As Super Cruise Port”.

Mr. Halpin (right) promotes the Miami Conference (The lady next to him is an interpreter)

The first “IAPH Japan Seminar” attended by 120 people

The next speaker was Mr. Gregory Halpin, Special Consultant to the Organizing Committee for the 16th IAPH Conference. Mr. Halpin’s speech was as follows:

Good afternoon and konnichiwa!

We are going to do some very interesting business in Miami for the period April 22 — 28, 1989 for the 16th World Ports Conference of IAPH.

I have had the personal privilege of attending IAPH conferences since 1965, the second of which I attended here in Tokyo in 1967.

Therefore, I think I speak with experience when I say that Miami is ideally and uniquely sited to host this important Conference.

As Mr. Lionelli pointed out, Miami is a focal point not only for passengers from around the United States but for cargo coming from all over the world and being trans-shipped mostly into the Caribbean and Latin American areas. Therefore, Miami is truly an international connection point.

It is logical that the theme of the 16th IAPH World Ports Conference should be “The Ports — the Intercontinental Connection”.

To address that theme, we will have six major working sessions. At three of these sessions, we will outline major trade, maritime and transportation activities of the three IAPH regions of the world.

One will deal with Africa and Europe. Another will deal with the American Continent. The third will deal with the Pacific Area.

Those who attend the Conference and take part in these
sessions should get a very unusual and very complete view of the trade and maritime activities of these areas.

One of the working sessions will be developed by the Technical Committees of IAPH and will present a very new view and very unique views on the activities of these important committees.

One working session will be totally devoted to the very, very latest technology — electronic technology, satellite technology as it is applied to the maritime and port industry.

There will be demonstrations of the very latest cargo clearance, Customs clearance and security systems as well as everything that is being done today in electronic data transfer between ports, between ships and between shippers.

And finally, we have a panel that will respond to the needs of the ports of the world. And we know what their needs are, because we asked them what the most critical issues they face today are. And 134 ports from all around the world responded to the questionnaire.

And if you are interested in what they are interested in, we can tell you what the four major items that will be discussed in Miami are.

One — Ship Design and Its Impact on Ports; Two — Intermodal Transportation Systems; Three — Port Maintenance; Four — Port Finance.

In addition to all of this, we will have luncheon speakers. Names cannot be announced yet, because we want to hold off to the last minute to get the best.

We will also have major papers and major presentations including one on the Panama Canal and what is happening at that time — a critical time in the Panama Canal — given by the Panama Canal Commission’s Chairman.

And we will also address the issue of port labor.

Each of the panels and each of the presentations will have the very top and most important and key person in that particular field making his or her presentation.

We truly feel that the 16th IAPH World Conference will be the “Ports Summit” Conference.

In between the sessions, we have one large, magnificent Atlantic Ocean and beach right outside the meeting room door. But we will lock the door during the meeting!

We have the finest golf courses in America and we have devised a social program for delegates and their wives so that you will enjoy all the wonderful spectacles in Miami.

And I must get back to golf for a moment. Mr. Lunetta and Mr. Lionelli have guaranteed all participants low golf scores!

We feel that we are going to have the finest IAPH meeting ever — and that is a very proud boast.

We know that you are going to have warm and wonderful weather and even warmer and more wonderful hospitality. So we will see you in Miami!

The last speaker was Mr. A.J. Smith, IAPH European Representative from London. Mr. Smith spoke on the subjects “Contemporary Issues facing European Ports and “Some Reflections on IAPH as a World Organization”, which will be featured in a future issue of this journal.

Note: *The IAPH Foundation

The Foundation was established as a Japanese corporation in 1973 to help IAPH financially. Since IAPH succeeded in achieving financial independence effective from 1982, the Foundation, under the new Agreement, has been continuing its support and assistance to IAPH through its various undertakings, which include the publication of both the Japanese and Spanish versions of IAPH News and Announcements for the members in these areas, financial assistance for the IAPH Award Scheme and the dissemination of literature and material on ports from Japan to foreign countries and vice versa.

Visitors to Head Office

On the afternoon of October 17, Mr. Akira Seki, Manager, Ports, Railways & Telecoms Division, Asian Development Bank (ADB), visited the Head Office together with Dr. Yuzo Akatsuka, Mr. Seki’s predecessor at the ADB, who has recently become a professor of civil engineering at the University of Tokyo after serving the ADB for ten years. The visitors were met by Secretary General Kusaka and his staff, with whom they exchanged views and information on future cooperation between IAPH and the ADB.

Prior to his transfer to the current position, Mr. Seki served for nine years at the ADB first as a Project Engineer (Irrigation) and then as a Division Head and was involved in various development projects in the Indus Basin (Pakistan) and other member countries such as Nepal, Burma, Thailand, Laos, Malaysia, Indonesia and the Philippines.

On Wednesday, October 19, Mr. Stephen J. Matthews, Associate Editor, Containerisation International, U.K., the publisher of a journal with the same title, met Mr. R. Kondoh, Dy. Secretary General, at a Tokyo hotel to discuss and exchange views on the current situation of ports and trade in the region. He was visiting Japan to meet with officials of major ports, shipping companies, manufacturers and maritime industries in Japan.

Report by Bursary Recipient

By G.A. Talagala Commercial Assistant Commercial Division Sri Lank Ports Authority


I am very happy that I have had the opportunity of undergoing the training programme on Port Management and Operations conducted by the Port of Singapore Authority in Singapore. I must thank the Hon. Chairman and the management of the Sri Lanka Ports Authority for nominating me as a participant as well as recommending me to the International Association of Ports and Harbors (IAPH) for a bursary.

At the same time I must thank the Director and the management of IAPH for giving me the financial assistance to follow this course at my request. Further, it is my bounded duty to thank the Training Manager of the Port of Singapore Authority and his management for giving me assistance.
during my stay at Singapore.

Report:
The Training Programme started on 6th June at the Port of Singapore Authority Building at Keppel Road. The training group consisted of nineteen (19) participants from the following countries:

Singapore, Malaysia, Pakistan, Kuwait, Jordan, Fiji Islands, Solomon Islands, New Zealand, Australia, Hong Kong and Sri Lanka.

The participants were mostly from different fields in the Port Administrations of their respective countries.

The training programme was conducted in two different ways, involving lectures and field trips. In the classroom we were taught container handling, maritime trade and the role of ports, the principles and concepts of port planning, the legal aspects of port operations, pilotage and tug operations, container ships and yard operations, container freight operations, the role of customs in the port, transit and warehousing operations, the handling of port equipment, port security, computer applications in the port and the management aspects of ports. The lecturers were mostly senior officers from the P.S.A. They covered all aspects of port management and operations, giving examples from the P.S.A. which enabled us to gain an international view of port management. The course lived up to our expectations. A series of field trips was organized to familiarise the participants with cargo operations, warehouse procedures and other fields such as multi-fil warehouses, systems for handling dangerous cargo, security measures, customs procedures and the computer room. These visits were organized to cover all four ports: Tangang Paga Terminal, the Port of Pasipanggur, Jurong and Sambawang.

The Port of Singapore presented a classic example of a port which has grown to the extent that it not only handles domestic imports but also handles a large volume of transhipment traffic to South East Asia and to Australia. Now they have decided to improve the port facilities and to maintain a central distribution centre. All documentation has been computerized to expedite the operations. They are using their manpower to increase productivity. The stevedores who are recruited from Malaysia are supplied by private organizations. In the multi-fil warehouses, three to four floors are used for the storage of cargo and the remaining upper floors are rented out to private companies for factories and stores. They are owned by the P.S.A.

The other important factor is that the employees of the Port come under one trade union and no other union can be formed under the rules of the P.S.A. A collective agreement is signed every three years between the government and the union as a means of avoiding labour disputes. This factor is evidently really effective for maintaining good employer-employee relations and for the improvement of the Port.

As the participants were from different parts of the world it formed a unique forum whereby we were able to exchange our views on port performance and absorb a variety of useful information. Hence this training course should be effective for improving the quality of my work and for the advancement of my career. Colombo being a developing port in the South Asian region, such trained personnel will no doubt be an asset to it.

Recommendations:
Optimum Manpower Utilization:
The total manpower of the S.L.P.A. was 21,542 as at 31.12.1987. This number consisted of 318 executives, 7,379 non-labour grade employees and 13,845 labour grade employees. This staff is distributed among over 200 job categories. The strength and designation of a division or section are mainly based on historical factors. A series of development projects has been introduced by the Port during the past two years. In addition, several positive steps have been taken to develop the Port's human resources by providing various welfare facilities to the employees. However, it has been observed that there are areas which could be developed to enhance the optimum use of manpower resources in the Port of Sri Lanka. Some of these areas are:

1. Improving the existing recruitment/sections/placement procedure,
2. Remediing the lack of supervision,
3. The introduction of financial maintenance schemes,
4. Staff development,
5. Productivity and motivation, and
6. The fair distribution of work.

Computerization of the Port:
With the increased volume of work in the Port, especially in its operational and financial activities, it has experienced difficulty in ensuring the accuracy and efficiency of its work. Thus the decision had to be taken to computerize all possible areas of port activities. Since two 4,300 service mainframes have been installed by the Ports Authority, early action should be taken to computerize priority areas such as revenue collection, stock control, ship and yard planning, the receipt and delivery of cargo/containers, operational equipment, inventory control, personnel, administration, salaries, wages and final accounts to an extent comparable with some of the public sector institutions and in accordance with international needs. This would result in attracting more trade to the Port and would also assist in maintaining the efficiency and effectiveness of port services.

Minimizing non-operational time:
In the Port of Colombo, two shifts are opened round the clock for the operational personnel. The first shift is from 0730 hrs. to 1630 hrs. and the second shift lasts from 1630 hrs. to 0030 hrs., but can normally be extended till 0400 or 0630 hrs. at the request of shipping agents. Although the musterings of workers for gangs commences at 0740 hrs. in the morning and 1630 hrs. for the night shift, it takes about 45 minutes to commence the actual stevedoring and wharf operations in the Port. It takes too long to change shifts and this can be shown as unnecessary idle time for ships inside the Port. Even by the time the stevedoring/wharf operations have commenced it is true to say that they are affected by factors such as the breakdown of equipment and the shifting of cargo/containers on board. 1200 hrs. to 1300 hrs., but can normally be extended till 2100 hrs. The operations in the Port.

As the participants were from different parts of the world it formed a unique forum whereby we were able to exchange our views on port performance and absorb a variety of useful information. Hence this training course should be effective for improving the quality of my work and for the advancement of my career. Colombo being a developing port in the South Asian region, such trained personnel will no doubt be an asset to it.
The Customs Co-operation Council, at its Annual Meeting in June this year, passed a number of formal recommendations of considerable importance in the rapid development of international standards for electronic data interchange (EDI).

Full exploitation of this potent combination of computer technology with modern communication resources, already transforming operational relationships between certain ports and their shipowning and trading customers, depends on international agreement on common basic standards.

These standards, incorporated in appropriate software, open up easy external links regardless of hardware or operating system differences.

Standardisation activities in Europe and North America over the last decade have been brought together in the UN/Economic Commission for Europe Working Party for the Facilitation of International Trade in Geneva. This convergence has resulted in a set of basic EDI (UN/EDIFACT) standards, firstly for essential data elements and more recently for syntax rules. These provide the “words and grammar” for EDI developments. Further work is being done in Geneva and elsewhere on a great variety of messages, built up on potentially standard segment structures.

The CCC has examined the UN/EDIFACT data elements and syntax rules and decided that it would be in the interest of Customs, and those with whom they normally exchange data, to adopt these standards for all common EDI purposes.

This decision is embodied in formal Recommendations to the 102 countries in the CCC membership, and has been notified by the CCC Secretary General to IAPH Headquarters.

The CCC notification will be reported to the 1989 General Assembly in Miami, when IAPH reaction could range from formal acknowledgement to some similar, supporting Recommendations to the Association’s own membership.

The discussion at Miami on this CCC approach, together with the proposed special session on EDI, will provide an important opportunity for ports to consider how IAPH should represent their interests in the mounting and complex activity of international EDI standardisation.

It should be noted that the current “market” for practical application of EDIFACT standards is largely European. In the United States, the other main field for early EDI standards development, a wide variety of group “standards” are already in use. Many of these are not even compatible with ANSI X12 — the US EDI standards which have been brought into convergence within the central UN-sponsored EDIFACT solution to produce a global — i.e., Europe-North America — agreement.

IAPH members will bear in mind that EDIFACT has a number of different levels. There is very broad support, at almost every point consulted, for the basic EDIFACT standards for data elements and syntax rules. There is increasing conviction that this standards base should also include segment construction.

There is no similarly general agreement about standard messages. Here, there are difficulties of definition and some confusion as to the exact relationship between UN/EDIFACT Standard Messages processed, like the data
elements and syntax rules by the UN/ECE Working Party, and those produced by special interest groups and submitted for EDIFACT “testing” and approval. The approval system has the special, and clearly constricting characteristic that a message, once registered, will become the sole acceptable message for that particular application area, until subsequently replaced or modified — a process which could be extremely complex and time consuming.

It is at least possible that in understandable eagerness to reach international agreement on EDIFACT standards the front runners have got somewhat ahead of the broad field for eventual application. The EDIFACT data elements and syntax rules have been passed from the UN Working Party to the International Standards Institute, where they have become ISO standards through a special “fast route” procedures. While this has expedited elevation to the status of a fully international, as distinct from a European/US standard, it has heightened the probability that many potentially affected parties have had little or no real opportunity of appreciating the significance of these standards decisions or of effectively influencing them.

Many IAPH members already using computers may not be fully familiar with EDI principles or developments. Ports in Japan or elsewhere in developed economies outside Europe and North America may be making advanced use of EDI, but could have had little need, so far, to concern themselves with EDIFACT or international EDI standardisation policies.

It would be very helpful, therefore, for the IAPH Secretariat, the Executive and Facilitation Committees and, indeed, the General Assembly, if members could prepare themselves for Miami by looking at their own actual or potential interests in EDI, and be ready to give some account of their views on the policies IAPH should pursue in relation to standardisation in general and EDIFACT in particular.

IAPH members will note that the CCC decision on the basic EDIFACT standards will have considerable authority in port/trading communities. This decision, however, relates only to data elements and syntax rules at the moment, and while the IAPH may well wish to join the CCC in supporting and promoting these it will be particularly important for the Association’s representatives at future CCC meetings to have clear instructions on IAPH strategy for the much less clear-cut issues of standard message construction.

The CCC has also notified IAPH of a further Recommendation setting out the Council’s agreement with IATA on a set of airline/Custums standard messages. These are available in EDIFACT, but actual inter-airline and airline/Custums practice will continue to be based on their own non-EDIFACT CARGO-IMP standards.

IATA have undertaken to provide a “bridge” between CARGO-IMP and EDIFACT at some unspecified future date. This arrangement has an interesting parallel in a well-publicised US Customs decision to accept entry data in EDIFACT format, while retaining their own “private” EDI standards for the bulk of day-to-day operations.

The IATA agreement has no direct application for ports, but is the precedent on which the CCC has opened up discussion of standard messages with other transport modes, beginning with the maritime community. Representatives of IMO, the International Chamber of Shipping and IAPH (appointed by Mr. Suykens, as Chairman of the Facilitation Committee) are currently discussing possible messages with CCC experts and the result of their examination may be available, in draft, for consideration at the Miami Assembly.

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The Customs Co-operation Council,

DESIRING to facilitate the international exchange of data between Customs administrations and between Customs administrations and trade users,

CONSIDERING that it is desirable that internationally agreed and universally applicable data element names, data element descriptions and character representations should be used in such trade data exchange,

CONSIDERING that it is desirable that the same names, descriptions and representations should be used for data elements irrespective of the context in which trade data is being exchanged (e.g. between exporter and carrier, exporter and importer, importer and Customs, etc.),

NOTING that these standard data elements can be used with any method of data interchange, on paper documents as well as with other means of data communication, and can be selected for transmission one by one or used within a particular system of interchange rules, e.g. EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport),

CONSIDERING that the Directory has been accepted by the International Standards Organizations as an international standard, Sections 1, 2, 3, 4 and 9 of the Directory constituting International Standard ISO 7372,

RECOMMENDS that States and autonomous Customs territories, whether or not Members of the Council, and Customs or Economic Unions should use the data element names, descriptions and character representations contained in the United Nations Trade Data Elements Directory (UNTED) and future updated versions of this Directory in trade data exchange between Customs administrations and between Customs administrations and other trade users,

REQUESTS States and autonomous Customs territories, whether or not Members of the Council, and Customs or Economic Unions which accept this Recommendation to notify the Secretary General of their acceptance, of the date from which they will apply the Recommendation, and of the conditions of its application. The Secretary General will transmit this information to the Customs administrations of all Members. He will also transmit it to any Customs administrations of non-Members or any Customs or Economic Unions which have accepted this Recommendation.
Recommendation of the Customs Co-operation Council Concerning the Use of the EDIFACT Electronic Message Syntax Rules (21 June 1988)

The Customs Co-operation Council,

DESIRING to facilitate the international exchange of data between Customs administrations and between Customs administrations and trade users,

CONSIDERING that it is desirable that an internationally agreed and universally applicable set of rules for the structuring of such data should be used in such trade data exchange,

NOTING that the United Nations Economic Commission for Europe (UNECE) has developed a set of message syntax rules for use in electronic interchanges known as EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport),

AWARE that the EDIFACT message syntax rules can be used independently of the application area and that their widespread use in international trade will greatly facilitate the movement of cargo,

NOTING that EDIFACT has been accepted by the International Standards Organization as an international standard, ISO 9735,

RECOMMENDS that States and autonomous Customs territories, whether or not Members of the Council, and Customs or Economic Unions should apply the EDIFACT message syntax rules and future updated versions of these rules for the preparation of electronic messages to be interchanged between Customs administrations and between Customs administrations and other trade users,

REQUESTS States and autonomous Customs territories, whether or not Members of the Council, and Customs or Economic Unions which accept this Recommendation to notify the Secretary General of their acceptance, of the date from which they will apply the Recommendation, and of the conditions of its application. The Secretary General will transmit this information to the Customs administrations of all Members. He will also transmit it to any Customs administrations of non-Members or any Customs or Economic Unions which have accepted this Recommendation.

Recommendation of the Customs Co-operation Council Concerning the Use of the CCC/IATA Data Interchange Standards (21 June 1988)

The Customs Co-operation Council,

NOTING the high level of automation in the airline industry and the increasing number of Customs administrations which are introducing computer techniques,

NOTING the growing use of Electronic Data Interchange (EDI) in world trade and the benefits of a paperless trading environment,

AWARE that the interfacing of the automated systems of airlines and Customs administrations results in the reduction of the paper burden,

RECOGNIZING that the interfacing of the automated processing of cargo-related data can result in the rapid clearance of air consignments and have important benefits from the Customs control point of view,

HAVING REGARD to Annex J.1. of the International Convention on the simplification and harmonization of Customs procedures (18 May 1973) which requires, inter alia, computer applications implemented by Customs authorities to use internationally accepted standards,

DESIRING specifically to simplify and harmonize interface arrangements between airlines and Customs authorities particularly as regards the use of standard data elements, codes and message syntax,

RECOMMENDS that States and autonomous Customs territories, whether or not Members of the Council, and Customs or Economic Unions should use the standards set out in the CCC/IATA Data Interchange Standards Manual and future updated or revised versions in establishing interfaces between the automated systems of Customs and airlines,

REQUESTS States and autonomous Customs territories, whether or not Members of the Council, and Customs or Economic Unions which accept this Recommendation to notify the Secretary General of the date from which they will apply the Recommendation, and of the conditions of its application. The Secretary General will transmit this information to the Customs administrations of all Members. He will also transmit it to any Customs administrations of non-Members or any Customs or Economic Unions which have accepted this Recommendation.
The Antwerp formula: a strong union between the public sector and the private sector

By J.F. Willemsens

In several countries ports are administered and operated by the Port Authority, who also takes care of the loading and unloading, the warehousing, etc. of cargo. Some transport economists call them "total organization ports."

This is not the case in Antwerp. The Port Authority (i.e. the City of Antwerp) is owner and administrator of the port infrastructure and partly of the equipment (quay cranes, warehouses, locks, bridges, tugs), but does not intervene in the handling of goods and in certain auxiliary services that are entrusted to private companies. As a matter of fact the Antwerp Port Authority acts more as a landlord. Until World War II all port equipment was set up and operated by the Port Authority and leased to private companies (shipping agents). These companies rented the (equipped) berths on short term and thus could work without making important investments in the port.

Technical Revolution

After World War II port activities, have been influenced considerably by a technical revolution, affecting both the means of transportation and the cargo-handling and storage equipment.

In order to be able to cope with new demands of port users, the Antwerp Port Authority had to buy new lifting devices of high capacity and long reach. It also had to build new quays, sheds and warehouses, able to cope with specialized traffics like containers, ro-ro, fruit, fertilizers and neo-bulk cargo like iron and steel, forest products, etc. (1) Moreover, the growing need of surface by the vessels and sites for the goods was to be taken into consideration (see box about the evolution in the lay-out of the quay sites).

<table>
<thead>
<tr>
<th>Year</th>
<th>City cranes Number</th>
<th>City cranes %</th>
<th>Private cranes Number</th>
<th>Private cranes %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>325</td>
<td>100</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1960</td>
<td>363</td>
<td>92</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td>1970</td>
<td>306</td>
<td>63</td>
<td>181</td>
<td>37</td>
</tr>
<tr>
<td>1980</td>
<td>207</td>
<td>47</td>
<td>234</td>
<td>53</td>
</tr>
<tr>
<td>1988</td>
<td>175</td>
<td>38</td>
<td>287</td>
<td>62</td>
</tr>
</tbody>
</table>

This table reveals that since 1980 the number of privately owned quay cranes has become predominant. For more specialized handling equipment such as gantry cranes, loading bridges, sack loaders, and also for mobile equipment like mobile cranes, straddle-carriers, forklift trucks, etc. the share of private investment lies between 95 and 100%.

Successful Co-operation

This co-operation between the Port Authority — limiting its intervention almost entirely to the infrastructure — and private companies — having the responsibility of both the financing and the operating of the superstructure — produced and continues to produce excellent results.

The concessionaires being business-men, wanting their investments to be profitable, constantly make use of all their commercial relations and technical know-how to improve the productivity and output of their concessions.

On its side the Port Authority (with the help of the Central Authority) permanently makes the necessary efforts to expand the port and continues to determine the policy for the port as a whole. Permanent links exist between the Port Authority and the private sector, a.o. via a "Joint Consultative Council," composed of representatives of the Port Authority, the port-tied associations and the port labour unions defending the interests of the dockers and of the municipal port employees. This Council meets every month, discusses problems and projects interesting the port community and takes joint actions when needed.

Multiplying Effect

The Antwerp formula is a well balanced mixture of official and private interests and responsibilities, a marriage of politically controlled but commercially valorized activities, that have an enormous power to attract and satisfy port users from all over the world.

Another consequence of the formula is the simulating effect of public investments on private ones, both in the industrial and the port sectors.

Examples:

a) investments made by the Port Authority in the form of industrial sites in the port area brought about private investments that were ten times higher.

b) investments at the Delwaide Dock (put into service early 1983) amounted to 8,600 million B.F. of which 2,600 million B.F. were paid by the Port Authority (infrastructure) and the remaining 6,000 million B.F. by private companies (superstructure).

As can be seen, the multiplicatory effect of the public investments is considerable, entailing a lot of advantages for the national economy. Moreover, amongst private investors in the port, there are a lot of non-Belgian companies bringing with them foreign currencies as well as know-how and trading contacts.

Finally the fact is to be stressed that the mixed formula "public/private sector" applied in the port of Antwerp resulted in a supplementary added value which in 1985 amounted to 180,000 million B.F. for the port and to 25,000 million B.F. for activities indirectly generated by the port (suppliers of equipment and others) which makes 205,000 million B.F. in total. At least 75,000 million B.F. of this amount goes to the state treasury in the form of various...
Port of Antwerp — Lay-out of the quay sites — Evolution

Antwerp is known as the great specialist in Western Europe for general cargo traffic and iron and steel in particular. The specialization greatly influenced the quay concept since for the handling and (provisional) storage of general cargo and iron and steel products vast areas are required on the front quays as well as between or behind the warehouses or sheds.

In the sixties the front quays used for the handling of general cargo had a site depth of 40 metres (handling), the warehouses (storage) had a width of 60 m whereas the strip of land behind the warehouses (long term storage) was 50 m broad; in all 150 metres.

Gradually the depth of the quay site increased. The Coil Terminal for instance, built in the seventies has a site depth of 250 metres and the container terminals at the Churchill Dock of 370 metres. At the Delwaide Dock (1982) container terminals — which need enormous surface areas to reach their high level of productivity — reach quay depth of 700 metres and more.

The same phenomenon can be seen with the bulk cargo terminals (coal, ores). The one of ABT/Stocattra at the Delwaide Dock has a site depth of 800 metres.

Schematically seen the evolution was as follows:

1960

Conventional quay for general cargo
150m

1970

Coil Terminal
250m

1970

Container terminal (Churchill Dock)
370m

1982

Container terminal (Delwaide Dock)
700m

Contributions.

Structure of the Private Sector

In the structural field the port of Antwerp is characterized by

- a judicious division of tasks and an efficient cooperation between the authorities and the private sector;
- the influence of various external factors (world conjuncture, transport policy, bilateral maritime agreements, commercial distribution policy of multinationals, technical developments);
- the enormous diversity of port activities.

In order to face the challenges resulting from these structural characteristics the private port sector has been organized in a pyramidal way:

- first of all by grouping the private companies according to lines of business and entrusting the defence of their interests to professional associations,
- furthermore by creating ad hoc bodies which are working tools for specific common tasks,
- finally by founding a co-ordinating body which functions as meeting place and catalyst of the various branches of activities in the port and acts as a mouthpiece before the authorities.

Concessions Policy

For financial reasons this was quite impossible and so the Port Authority decided to continue modernizing and expanding the infrastructure but to give the new “naked” quays and sites in concession on a long term basis to private companies, which agree to take care of the superstructure, chosen in accordance with their specific needs. The length of the concession agreement depends on the importance of the private investments made by the concessionary (mostly 20 to 35 years).

In this way the financial involvement of the authority was relieved and the risk of the new investment was left to the private sector.

This policy of concessions gave rise to large integrated units which have set up vast terminals in the port. A striking example are the container terminals which necessitated considerable investments from the side of the private port companies. Indeed it concerns quay berths having a very large surface area per vessel and which are equipped with sophisticated and consequently expensive fixed and mobile engines.

Applying a policy of non-discrimination towards smaller companies, not able to invest large amounts of money in port equipment, the Antwerp Port Authority decided that at the existing, mostly conventional quays, the possibility of renting municipal port equipment by private companies should be maintained. In view of this, new equipment — mostly quay cranes and mobile cranes for conventional cargo, and bonded warehouses — was purchased by the Port Authority.

The authorities also proceeded to the acquisition of mobile equipment (= cranes) as well as floating engines (derrick + cranes) for the handling of heavy loads (up to 800 tons). These engines can be rented for short periods by private companies. (Hinterland)

(1) The term “neo-bulk” applies to goods which are normally considered as general cargo but shipped overseas as bulk to save money. This maritime transport system allows the shippers to offer reasonable freight prices.
Dublin Port: £2,178 Million Contribution to Irish Economy

By R.N. Hayes
Chief Executive
Dublin Port

It is difficult to overemphasise the importance of Dublin Port to the Irish economy. As an island economy Ireland must trade to greater effect than any other European nation to survive. At the heart of that trading is Dublin Port.

Few people not directly connected with the Port are likely to realise its importance to our economy. It was in order to give greater perspective to the role and importance of the Port that we commissioned this Economic Impact Study.

The study, carried out by a Graduate student, in association with the Department of Business Administration of University College Dublin is the first such project to be undertaken in Europe. While many such studies have been undertaken in the USA they have, in general, related to much larger ports.

There is no doubt that the Dublin Port study will assist European ports and, in association with the International Association of Ports and Harbors (IAPH), will also assist smaller ports worldwide to carry out similar exercises. This booklet contains a summary of the main findings of the Survey.

We would like to take this opportunity to thank everyone who contributed to making this scientific study possible.

Geographical Importance

Situated where the River Liffey enters Dublin Bay, Dublin Port is Ireland’s premier port. On the doorstep of the capital city and at the focal point of the national road and rail networks, the Port offers easy access to the wealthy and more heavily populated eastern region of the country. This area, in which more than 40% of the national population reside, is the natural hinterland of Dublin Port.

The modern Port, with its more than 9 kilometres of berthing and its skyline of crane jibs, is a sophisticated transport terminal serving as the interface between land and sea transport.

In an island economy heavily dependent on imports and exports, the Port industry is an essential and integral part of the national economic infrastructure.

In relation to the size of its economy Ireland is a most significant trading nation with a volume of exports and imports exceeding 110% of GNP. The corresponding figure for West Germany is 57%, the UK is 55% and Japan is 21%. In 1986 Ireland had the fourth highest dependence on foreign trade in the EC behind Luxembourg, Holland and Belgium. In 1987 Irish exports exceeded $10 billion for the first time and a significant part of this trade was handled at Dublin Port.

With the advent of the Unified Internal Market in 1992 the trading opportunities in Europe will become greater but Ireland’s exporters will need to strive harder to capitalise upon the advantages of belonging to a trading community of 320 million people.

As an island nation remote from the trading centre of Europe, Ireland must trade to greater effect than countries on mainland Europe. When the Channel Tunnel opens in 1993 we will be the only country in the European Community without a land link to Europe, being almost totally dependent for trade on our shipping routes and our ports.

In 1986 the value of external trade through Dublin Port was almost IR£6 billion, 51% of the total of all Irish seaports.

Economic Impact Study

The Study: Although Dublin Port is Ireland’s largest port, its economic importance has never been precisely defined. Late in 1986, in association with the Department of Business Administration of University College Dublin, a commerce graduate studying for his Master of Business Studies degree, Simon Behan, was assigned to the Planning Section of Dublin Port to assist in carrying out an Economic Impact Study of the port and its hinterland. The study was based on 1986 figures and was completed in March 1988.

Methodology: The Input-Output model of the Irish economy which was an integral part of the study was drawn up by Professor Eamonn Henry of the Economic and Social Research Institute. Dublin Port’s impact on the economy was measured in four areas: contribution to Gross National Product, employment, household income and Government taxes. Three impacts were measured, the direct, indirect and induced. These impacts were based on exports since only exports contribute to final demand as defined in the Input-Output model.

Contribution to Gross National Product: The study shows that Dublin Port contributed IR£2,178 million to the Irish economy in 1986, that is 13% of Gross National Product.

Employment: Employment generated by Dublin Port totalled 174,231 jobs.

Household Income: IR£1,244 million in household income was generated by Dublin Port.

Taxes: Dublin Port accounted for IR£715 million of Government income.

Facilities

Facilities: The Dublin Port land area is 350 hectares. Berthage measures 9 kilometres ranging in depth from 4.9 metres to 11 metres at low water. Vessels up to 30,000 tonnes deadweight can enter on any state of the tide.

There are three Lift-on Lift-off terminals, 5 Roll-on Roll-off ramps, a 40-hectare oil zone, as well as bulk terminals for handling coal, oil, ore, grain, molasses and acrylonitrile. General cargo facilities include 50,000 square metres of covered accommodation.

Dublin Port is also the country’s second largest passenger terminal with 900,000 passenger movements in 1986.

Capital Development: Dublin Port has always financed its own capital development and has not received subsidies or grant aid for this development from any source. Over the past twenty years in excess of IR£80 million out of total revenue of IR£370 million was spent on capital development.

The cost today of building Dublin Port from scratch would be in the order of IR£800 million.

Services: Services provided include cranes, towage, pilotage, warehousing, groupage, wagon haulage, stevedoring, customs and brokerage facilities, bunkering, graving docks for ship repair, fresh water supplies, weather information, agricultural and livestock inspection and equipment repairs.
ISO in brief

ISO is the specialized international agency for standardization; its current members are the national standards organizations of 91 countries.

The scope of ISO technical work covers all fields of standardization with the exception of electrical and electronic engineering which are the responsibility of the International Electrotechnical Commission (IEC). Together, ISO and IEC provide a system for international standardization as a whole—the world’s largest non-governmental system for voluntary industrial and technical collaboration at the international level.

The result of ISO technical work is published in the form of International Standards. There are, for example, ISO standards for sizes and accuracy of bearings, colour fastness of textiles, performance of lawn mowers, storage needs of cereals, ergonomic design of car interiors, testing of plastics, symbols for use on machinery control panels, for the safety of bicycles and for the interfacing of computer systems. This is to mention just a few of several thousand standards, aiming at rationalization, interchangeability, efficiency, safety and communication.

The 1988 ISO Catalogue lists 6,789 published International Standards. They are available as single documents, in handbook compilations for specific fields and, in many countries, on microfilm and microfiche.

ISO work is decentralized being carried out by 164 technical committees and 652 sub-committees which are organized and supported by technical secretariats in 31 countries. The Central Secretariat in Geneva assists in coordinating ISO operations, administers voting and approval procedures, and publishes the International Standards.

The people who develop International Standards are an estimated 20,000 engineers, scientists and administrators. They are nominated by ISO members to participate in the committee meetings and to represent the consolidated views and interests of industry, government, labour and individual consumers in the standards development process.

ISO is one of only 30 non-governmental international organizations having Category I consultative status with the U.N. Economic and Social Council. Some 440 international organizations are in liaison with ISO technical committees, including nearly all of the U.N. specialized agencies.

ISO coordinates the exchange of information on international and national standards, technical regulations and other standards-type documents, through an information network called ISONET which links the ISO Information Centre in Geneva with similar national centres in 60 countries.

US Ratifies Pact On Plastic Refuse

A recent international agreement, ratified by the U.S. Senate in September of 1987, should help alleviate some problems between marine life and plastic waste dumped at sea.

U.S. Secretary of Transportation, Mr. Jim Burnley, announced that under terms of the new agreement designed to prevent pollution of the seas, ships will be prohibited from disposing of plastic refuse into the ocean.

The ban is the result of legislation signed by President Reagan and applies to all U.S. flag vessels anywhere in the world and foreign flag vessels in U.S. waters. The law covers commercial, recreational and fishing vessels and provides for a civil penalty of up to $25,000 and criminal penalties of up to $50,000 and five years in jail.

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Plastic waste is seen as a particular menace since it does not decay as paper and most natural waste.

"This is a very important environmental action," Secretary Burnley said. "Plastic refuse, including plastic nets and ropes, is particularly harmful since marine life may swallow or become entangled in it and die," he said.

But environmental issues were not the only concerns of the order. Shippers, particularly on the more congested West Coast, have been complaining for some time about the amount of plastic refuse. It seems that many props are being damaged by hard plastic ropes and nets while plastic bags clog seawater intakes and evaporators, causing engine failure.

In addition to the regulation of plastics, severe restrictions were placed on disposal of non-plastic waste.

MacGregor-Navire Offers Intelligent Systems

MacGregor-Navire have now begun offering enhancements to their cargo access equipment which will lead the way to the cargo systems of the next century. These developments are identified by the name "Intelligent Cargo Systems."

The first of the concepts to be unveiled is the INTELLIGENT RAMP. The Intelligent Ramp is now available for fitting to existing tonnage or new buildings worldwide. The features of this system are:

- the ship is independent of shore facilities for weighing roll-on roll-off payload.
- the systems incorporated into the ramp can weigh vehicles and axles, count vehicles and log other data.
- there is no interruption of loading
or discharging; all measurements are made dynamically, i.e. vehicles simply drive over the ramp as usual.

- the system is self-contained and easy to install.
- the system is proven by many years of experience in harsh environments.
- remote data links to a loading computer or shore facility can be arranged.
- can be incorporated into a larger loading system which includes computer, draft sensors, tank gauging.
- worldwide support and service is available for the system.

The system is particularly attractive because it introduces no delays to the RoRo activity. Apart from its use in enhancing safety by checking weights, the system has commercial value in verifying declared weights.

The Intelligent Ramp puts the monitoring system under the control of the operator, that is, on the ship's doorstep.

As for the further development of Intelligent Cargo Systems, there are two main areas being considered which relate to virtually the whole product range of MacGregor-Navire:

- Payload monitoring
- System monitoring

Payload monitoring includes counting, weighing, analysing, informing and communicating. System monitoring includes recording and logging of system operation and behaviour. Consideration is also being given to more complex control systems, for example, active control of hatch covers to deal with hull deformation.

MacGregor-Navire believe that these developments underscore its commitment to excellence through innovation.

New Publications

Lloyd's Register:
New 'List of Shipowners'

Every year since 1876 Lloyd's Register has published a List of Shipowners. Originally incorporated in the famous Register of Ships, today it is a volume in itself — the most comprehensive published reference work on shipowners worldwide. It contains ownership details of more than 76,000 merchant ships of 100 gross tonnage and above which are extracted from LR's vast shipping information computer files.

Some 40,000 owners, managers and managing agents are listed — over seven times more than any other publication of this nature. Details shown include:

- Postal and Telecommunication Addresses
- Fleets, showing ship-name, ship type, date of build and gross tonnage for each ship
- A cross reference of all entries, indicating in which capacity the listed company is acting for each ship

The List of Shipowners 1988-89 is available from the Maritime Information Publishing Group, Lloyd's Register of Shipping, 71 Fenchurch Street, LONDON EC3M 4BS. Telex: 888379 LRLONG Fax: +01-488-4796 Tel: +01-709-9166

Shipping Statistics Yearbook by ISL

The Institute of Shipping Economics and Logistics, Bremen (ISL) has brought out an updated edition of its Shipping Statistics Yearbook. The ISL SHIPPING STATISTICS YEARBOOK 1988, prepared by an expert team of the Institute's Empirical Shipping Research Department, issues an in-depth analysis on key market areas of the shipping industry.

This statistical reference source informs completely on developments in shipping, seaborne trade, commodity markets, freight rates, shipbuilding and the port industry. The Yearbook already distributed in more than 50 countries worldwide is designed to particularly meet the information requirements of shipowners, shipbuilders/repairs, port authorities, brokers, banks, transportation consultants, universities and research institutes.

The SHIPPING STATISTICS YEARBOOK 1988 is introduced by an expert commentary on current trends in shipping-related markets.


The Americas

N. Fraser Environment Memorandum Signed

Fisheries and Oceans Minister Tom Siddon and Harbour Commission Chairman Irene Frith recently signed a unique new environmental management Memorandum of Understanding which will safeguard vital salmon habitat in the North Fraser Harbour. The MOU will create Canada's first habitat compensation bank.

The habitat bank, which will involve the creation of marshes and mudflats, has been designed to allow important urban and industrial development to proceed in predetermined areas of the harbour, without compromising the river's role as one of the world's great salmon nurseries. Banking under this MOU will take place on the north and middle arms of the Fraser River in Vancouver, Richmond, Burnaby and New Westminster.

The Harbour Commission habitat bank will establish new, productive fish habitat at several sites along the river. These new productive sites will represent a deposit in the habitat bank. When the bank is fully functional, a developer wanting to develop in moderately productive river shore marsh will be able to draw on the bank after paying the Harbour Commission an amount equal to twice the cost of creating the replacement marsh.

"This is a milestone for resource management in Canada," said Mr. Siddon.

"But it is important to understand that the habitat bank will only be a bank of last resort," Mr. Siddon noted. "It will be available to qualifying developers only in some areas of the river to replace unavoidable losses of habitat — and will only be accessed after preferred alternatives, such as redesign or relocation of a project, have been fully explored."

Mrs. Irene Frith, Chairman of the North Fraser Harbour Commission, said the management plan establishes a new level of environmental protection.

"The river is a vital centre of commerce, where industries such as forestry and fishing must live together," said Mrs.
Frith. “All users must respect the overriding need for effective resource management.”

Expertise in building habitat has already been acquired. Recently, a two-hectare, man-made marsh, including 16,000 transplanted aquatic plants, was completed by the Harbour Commission after approval from federal agencies to compensate for habitat loss as a result of the Bridgepoint Harbour Market Development, a $25 million project scheduled to open on the Richmond waterfront in the spring of 1989.

Other key features of the North Fraser environmental management plan include:

- Reliance on a foreshore classification system, designed by the Department of Fisheries and Oceans. The accompanying shoreline maps indicate which areas may be developed, and how.
- Development areas fall within three classifications ranging from prohibition, to development proceeding with little or no impairment.
- The classification system allows developers to know, up front, what will be required of them.
- Establishment of a cooperative management program between DFO and the Harbour Commission to clean up the river shoreline; to improve water quality; to step up policing of harbour activities which could damage the environment; to conduct habitat research and to improve communication between management agencies and interest groups.

**Québec to Upgrade Solid Bulk Terminal**

In order to increase handling speed and productivity at its Beauport solid bulk terminal, the Port of Québec will invest $10 million to purchase new handling and loading equipment. Under the terms of a long-term agreement between the port corporation and Cast, St. Lawrence Stevedoring will continue to operate the new facility following its completion in the spring of 1990.

“This investment will definitely have a positive effect on our region. By increasing its share of the mineral transshipment market and diversifying its revenue base, the Port will be in a favourable position to continue modernization of the entire maritime infrastructure,” said the Honorable Pierre Blais, Minister of State for Agriculture and Minister responsible for the Québec City region at a recent press conference.

The Port of Québec had mandated Acres International Ltd., a Toronto consulting firm, to evaluate market potential in bulk shipping and propose designs for a more efficient terminal.

The ensuing study indicated that increased demand for Brazilian iron ore at U.S. steel mills could favour the Port of Québec, where deep water facilities can accommodate large bulk carriers. However, Acres also reported that current handling equipment could neither meet projected demand nor compete against rival ports in the U.S.

These shortcomings will be corrected by the complete redevelopment of the bulk terminal, including construction of a 3,600 ft. conveyor system to move cargo from dockside to storage areas or directly from ship to ship. A ship loader and travelling stackers will also be installed.

These improvements will result in a state-of-the-art facility capable of simultaneously unloading and loading a wide range of products such as iron ore, coal, copper, quartz, gypsum and clinker. Overall loading/unloading capacity will be doubled from three to six million tonnes.

Time in port will also be significantly reduced for vessels calling at the terminal, a major advantage for shippers who must pay a $20,000-$25,000 daily chartering fee for a 100,000 tonne or more bulk carrier.

From an environmental standpoint, the upgrading project will reduce dust emissions by 50% through the use of receiving hoppers, which prevent particles from billowing upwards when cargo is dropped by grab buckets. The new conveyor system will largely replace the current fleet of bulldozers, a major source of dust emissions when used to move materials on the terminal site.

**Cruise Shipping Helping Québec Travel Industry**

The 75 to 100 cruise ship calls at the Port of Québec every year are helping to diversify Québec City’s tourist industry by extending the season and attracting first-time visitors from distant regions of the United States. Passengers generally express satisfaction with their experience and when they return home, become excellent ambassadors promoting Québec as a travel destination.

These are the principal conclusions of an economic impact study on cruise shipping carried out by the Port of Québec Corporation following a survey taken in September 1987 on board the Royal Viking Sky, Canada Star and Ocean Princess, vessels with varying lengths of stay in port and catering to clients of different income levels. A total of 278 passengers on board the ships completed a questionnaire concerning spending habits, an appreciation of their stay and welcome received on shore, and future travel recommendations.

“In contrast with other segments of the Québec City tourist industry, forty percent of cruise ship passengers came from the Western U.S. while 60% of those who participated in the survey were first-time visitors,” stated Mr. Ross Gaudreault, General Manager and Chief Executive Officer of the Port of Québec Corporation, at a press conference held on board Royal Cruise Lines luxurious Crown Odyssey.

The study determined that cruise ships generate on economic impact of $2.2 million in the region. Seventy jobs are created as passengers purchase goods and services such as souvenirs, meals and guided shore excursions. Pilotage, maintenance, supplies and communications services are in turn required by the vessels.

While most passengers were happy with the welcome they received in port, 65% of participants said their stay in Québec City was too short, even though more than half of those questioned were on 24-hour calls.

The Port of Québec Corporation modified its berthing tariff schedule this year to encourage the cruise companies to keep their ships docked for longer periods of time. A special brochure highlighting attractions near the port was published in collaboration with the Québec Urban Community’s tourist bureau and distributed to passengers.

“We will evaluate these initiatives at the end of the cruise season and determine what additional measures may be taken to promote longer calls,” commented Mr. Gaudreault.

The study pointed out that the eco-

PORTS AND HARBORS December 1988 23
Economic impact of cruise shipping would be greatly enhanced if more vessels made the Port of Québec their home-base, as opposed to a destination port. An initial step in this direction was made in 1988 when Blue Aegean Sea Line selected Québec as the home port for its 209-passenger Iliiria.

"To develop Québec as a homebase, we will continue to work with local authorities through the promotion of new travel packages and improved air connections with major North American cities," said Mr. Gaudreault.

As a final note, the economic impact study highlighted the fact that cruise ships in themselves are a tourist attraction, drawing visitors to see these luxury vessels docked in the picture-postcard setting of downtown Québec City.

Québec Granite Shaping Skylines Around World

One of the most decorative elements in nature's landscape is an increasingly common sight at the Port of Québec: granite quarried in the region and exported for prestigious construction projects.

The Québec granite industry has been rapidly expanding. Architects have rediscovered the beauty and durability of granite, which is far more resistant to acid rain and abrasion than concrete.

Granite rock formations cover three-quarters of Québec's territory. The resource is virtually inexhaustible and extremely varied; more than thirty quarries offer at least as many choices of colour for facing material on buildings, interior decoration, paving and urban landscaping.

The availability of vast deposits of granite allows Québec manufacturers to market an ever-widening range of colours, a distinct advantage in an intensely competitive international market.

Once a cottage industry, granite is now big business in Québec, marked by multi-million dollar investments and new technology. Using extraction techniques such as flame cutting, which combines oil and compressed air to produce a rock-slicing temperature of 2,700°C, granite producers of Québec can market sound blocks as large as 12 cubic meters (30 tonnes).

Processing plant are likewise undergoing expansion. This growth has been accompanied by the introduction of advanced technology including gang saws capable of making 120 simultaneous cuts, large programmable diamond saws and high-output, automatic polishing equipment.

Granite can now compete with aluminum and glass as a facing material, while offering the additional advantages of greater resistance to environmental stress and lower maintenance costs.

Québec granite is indeed shaping the world's skylines. It has been used in many high profile construction projects including the IBM and Philip Morris Buildings in New York City, the LTV Center in Dallas, the Museum and Independence Monument of Algiers. Eighty percent of total granite production in the province, both rough and processed, is exported.

As the industry's list of international clients gets longer, transportation will play a major role in the marketing of granite. The proximity of the Port of Québec to extraction and production sites such as Rivière-a-Pierre, one of the largest quarries in the world, is further indication of the growth potential for granite traffic in years to come.

Coalition on Grain Movement '88 Formed

Triggered by the depressed Prairie drought and coupled with federal government subsidies to western rail transportation for grain, the Great Lakes/Seaway System is facing a crisis.

Communities along the System are facing major layoffs and ports, shipping and grain handling companies, and organizations fear for their future.

Harbour Commissioners met with members of City Council throughout the summer months to apprise them of the seriousness of the situation.

Thunder Bay Harbour Commission Chairman Donald Caddo, and Past-Chairman Jim Simpson, met in Montreal with a coalition of various interest groups from throughout the Great Lakes/Seaway System, to discuss the status of the grain situation.

To this end, the Coalition on Grain Movement '88 was formed and has prepared and presented to Mr. Benoit Bouchard, Minister of Transport, and Mr. Charlie Mayer, Minister responsible for Grains and Oilsseeds, a brief which sets out the current context of the crisis in the eastern grain movement, details the effects of the anticipated reduced volumes of grain, and suggests an "offset" program that proposes interim solutions to ensure the short-term survival of the eastern route.

The coalition is trusting that government officials are exploring alternatives for the survival of the Seaway System and should the export crop be as low as expected.

Thunder Bay Opposes Diversion of Water

The Board of Commissioners of the Thunder Bay Harbour Commission has taken a strong position opposing any proposal to divert water from the Great Lakes for any purpose whatsoever.

The Commissioners have respectfully requested that the Secretary of State for External Affairs protect Canadian interests from the diversion of water to the Mississippi River System. Any diversion will reduce, even further, the water levels in the Great Lakes/Seaway System and will set a precedent for future real or perceived needs.

The International Association of Great Lakes Ports and the Port of Duluth have also come out in opposition to water diversion.

Low water levels were a major concern to Seaway navigation earlier in the year and continue to cause problems for the Mississippi waterway.

Any depletion of the Great Lakes waters will adversely affect safe navigation for the carriage of agricultural, mineral and manufactured cargoes through the Great Lakes/Seaway ports. The Great Lakes serve some 90 million Canadian and U.S. citizens and their employment, recreational and environmental needs.

State of Hawaii Plans New Boat Harbors

By Toni Snellback

The State of Hawaii is looking for private developers who may be interested in building new boat harbors.

For the small recreational boat operator, the waiting time for a berth in

(Continued on Page 26, Col. 1)
Empresa Nacional Portuaria
in brief

(The translation from the original Spanish version was arranged by courtesy of the LAPH Foundation.)

HONDURAS, CENTRAL AMERICA: EMPRESA NACIONAL PORTUARIA (ENP) is an institution established in 1965 with the aim of contributing to the economic development of Honduras by providing efficient and adequate facilities in the country’s seaports, namely:

NORTH: Tela, La Ceiba, Castilla, Cortés and Roatán ports.
SOUTH: San Lorenzo.

PUERTO CORTÉS: It is considered to be the foremost port in the country and in Central America as far as its port facilities are concerned. It has been aptly named the Port Capital of Honduras. Situated on the Atlantic Coast, 15°48’ N — 87°57’ W, it is the natural transport and trading center of Honduras.

It features five (5) quays with a 1,232 m. mooring length, the quays being 7.5 to 12.8 m deep.

There are four (4) merchandise warehouses covering a surface area of 18,000 sq. m. The total open surface area is 300,000 sq. m. This includes 155,500 sq. m. for containers, trailers and chassis, the rest being used for outdoor merchandise stowage.

There are facilities for the warehousing of liquids, foodstuffs and chemical products.

PUERTO CORTÉS is considered to be the backbone of the Honduran economy.

Types of Vessels Arriving at This Port:

Container vessels, LASH ships, Ro-Ro vessels, general cargo ships, passenger cruisers, coastal navigation boats, bulk carriers, timber ships.

Empresa Nacional Portuaria has built a Container Terminal in Puerto Cortés so as to improve the speed, safety and efficiency of its operations, to benefit both users and the Empresa. Due consideration has been given both to the constant technological changes taking place and to modern cargo handling methods.

Facilities

Puerto Cortés Container Terminal operates in a 75,000 sq. m. surface area, where Pier #5, with a length of 352.4 m., is situated. It has its own administration building and enough space for the handling of containers, trailers and chassis, and for parking.

For Ro-Ro ships there are two moorings, each 30 feet deep and respectively 9.15 and 10 m. in length. The Container Terminal has the following specialized equipment for container, trailer and chassis handling:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Capacity (metric tons)</th>
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<tbody>
<tr>
<td>1</td>
<td>P &amp; H Crane</td>
<td>300</td>
</tr>
<tr>
<td>1</td>
<td>Paceco Crane</td>
<td>45</td>
</tr>
<tr>
<td>4</td>
<td>Straddle carrier</td>
<td>30</td>
</tr>
<tr>
<td>1</td>
<td>Front straddle carrier</td>
<td>30</td>
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<tr>
<td>15</td>
<td>Tractor-truck</td>
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<tr>
<td>24</td>
<td>Chassis</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Fixed weighing scales</td>
<td>60</td>
</tr>
<tr>
<td>1</td>
<td>Electric generator</td>
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</tr>
</tbody>
</table>

There is, furthermore, an exclusive repair and maintenance workshop to serve Terminal equipment, four railroad tracks and forty 440 V 60 Hz sockets for containers and trailers which handle refrigerated loads.

The Container Terminal has a vertical stowage capacity of 2,000 TEUs (twenty-foot-equivalent units) and can handle 75,000 units a year, with an average 10-day stay per unit.

Trailer container transport into the country features two possible ways: railroad, specially for banana fruit containers, and tractor-truck for chassis, containers and trailers in general.

The law on weights and measures in Honduras regulates the weight and length of containers and trailers in transit in the country.

The trade law stipulates the procedures to be followed for eventual claims and damage assessments concerning containers, trailers and their loads.

The Terminal serves Lo-Lo ships, to be loaded and unloaded (lift-on/off) by gate cranes, and Ro-Ro ships, in which items (tractor-trucks with trailers) “roll on/off” the ship.

Some of the advantages of a port service featuring a container terminal are as follows:

- The ship’s length of stay is reduced.
- The handled tonnage performance is improved.
- The cost per handled ton is reduced.
- Load control and safety are substantially improved.
- Operating and administration personnel qualifications are improved.

In 1985, the Empresa acquired a dredger for refilling and dredging as well as to reclaim land from the sea in Puerto Cortés. The main objective of the operation was to increase the surface area for the container terminal. In 1986, 25 ha. were dredged. Now this reclaimed land is being protected from the sea.
state-owned facilities is discouraging. At Ala Wai Boat Harbor there are 1,200 people on the waiting list — about double the number of spaces available in that entire area. On Maui, the wait is approximately 10 years at Lahaina and six years at Maalaea.

In keeping with the Director's push to provide more public facilities, a consultant has been hired to survey our statutes and regulations, recommend sites for potential development, find space-saving solutions used in other states, and discover ways to provide more facilities for Hawaii's boaters.

Because the Legislature must approve the development of submerged land, the Harbors Division has submitted bills over the past couple of years to allow development at Keahi Lagoon's Central Triangle and at Pier 60.

DOT is counting on private sector participation in the development of Keahi Lagoon. New facilities are planned to complement and enhance shoreline improvements.

A campaign was launched to clean up the area and remove derelict and abandoned boats.

Two proposed private marinas will provide 1,000 new boat slips for recreational boaters. At Pier 60, next to La Mariana, plans call for a new private 200-slip marina with boat launching and harbor facilities.

Another private 800-slip marina is planned along Lagoon Drive. It will have boat launching ramps, a fuel dock, harbor service facilities, a ferry transit landing and adjacent marine commercial facilities.

The development of the triangle portion will require filling the triangle and constructing a bridge across to Lagoon Drive.

Conceptual plans for the triangle include a commercial maritime center, an ocean sports complex, a marina, a commercial/industrial park, a landscaped park and a shoreline greenbelt bordering the entire development.

The demand for small boat harbor space will not diminish, but as more private areas are developed and made available to those who can afford them, pressure on state-owned facilities will be reduced and the waiting time will be shortened for those who can’t afford private space.

Brunswick Now Part of Georgia Ports Authority

The Brunswick Ports Authority operations officially became a part of the Georgia Ports Authority statewide program when the directors of both organizations met in June to finalize the acquisition procedures.

The Georgia Ports Authority has been operating the Brunswick Authority as a subsidiary since July 1 of last year until the necessary legislation could be finalized. The transaction will yield $7.2 million in revenue over a 20-year period.

The transition ended when GPA Chairman William O. Faulkner, Jr., signed a $4.5 million promissory note. Along with the 20-year note, Mr. Faulkner presented BPA Chairman John Tuten with a check for $29,797, the first of 240 payments for the purchase.

Gov. Joe Frank Harris praised the recent action, "For the past 43 years,
the citizens of our state have reaped a bountiful harvest of international commerce through the joint accomplishments of the Brunswick and Georgia Ports Authorities. "The consolidation of these two vital operations will result in considerable cost savings and will greatly enhance the marketing and planning efforts of our state's port program."

The purchase includes the Brunswick Authority's Lanier Dock property and two-thirds of the 1,200-acre development site of Andrews Island.

The acquisition brings together under one governmental entity coordinating marketing and planning efforts and will bring to the Port harbor development planning that will assure statewide support for funding of harbor improvements and landside facilities in the future.

Gov. Harris praised the action, saying, "The consolidation of these two vital operations will result in considerable cost savings and will greatly enhance the marketing and planning efforts of our state's port program."

The Georgia Ports Authority has invested $70 million in the Ports of Brunswick over the past nine years, bringing its total investment in Brunswick to $80 million. This total does not reflect the GPA's current construction of a $6.8 million additional berth on Colonel's Island.

(Georgia AnchorAge)

**Equipment Identification System to Be Introduced**

American President Companies announced that it will begin phasing in an automated equipment identification (AEI) system. The system, the first of its kind to be introduced in the container transportation industry, involves installation of microchip transponders on the company's containers, chassis, trucks and rail cars. These transponders, or "tags," will be electronically read by scanning devices as the equipment moves through APC's port and inland terminals. The information will then be conveyed to a "host" computer and ultimately become part of APC's worldwide equipment management database.

Mr. Eugene K. Pentimonti, vice president, engineering and technical services for American President Lines, APC's ocean shipping subsidiary, said the technology will help APC and other transportation companies that adopt it to improve customer service through better equipment control and access to timelier, more accurate and reliable information.

"AEI technology will enable us to plan asset utilization more efficiently, in order to ensure that our customers have the right equipment in the right place at the right time," Mr. Pentimonti said. He added that the technology would help APC control operating costs as the volume of cargo handled by the company continues to grow, and that AEI could provide other forms of internal operating efficiency -- such as automatic monitoring of preventive maintenance schedules and equipment licensing requirements.

In the initial phase, the electronic tags will be affixed on the following equipment: 10,500 containers, 9,700 chassis, 250 trucks that dray APC containers and 240 double-stack rail cars. (In all, the APC equipment fleet includes more than 110,000 containers and chassis.) Each tag is programmed with unique equipment identification information prior to installation.

APC selected technology developed by Amtech Corp., of Dallas, for its AEI program, after testing the equipment over the past two years. The Amtech system conforms to standards adopted by the Cargo Handling Cooperative Program (CHCP), a group formed in 1983 by the U.S. Department of Transportation Maritime Administration and three U.S.-flag ocean carriers to identify opportunities for productivity and quality improvement in container terminal operations. Representatives of the CHCP attended meetings in Hamburg, West Germany, in October in an effort to obtain International Standardization Organization technical committee approval to adopt the technology as a worldwide standard.

AEI equipment and computers will initially be installed at two of APC's U.S. West Coast port facilities - Seattle and Los Angeles (San Pedro) -- and at Union Pacific Railroad facilities in Seattle, Portland and Los Angeles.

Mr. Pentimonti said the installation of tags, readers and other AEI equipment would begin in late November. The initial phase-in is scheduled for completion in mid-1989. If the phase-in is successful, the company will consider expanding its use of AEI to all major water ports and inland rail terminals, and installing tags on additional equipment and assets.

**U.S. Gulf Ports Urged To Be Innovative**

U.S. Gulf ports must be flexible, innovative and competitive in order to survive and prosper, says Capt. John Scardasis, vice president, West Gulf Division, Lykes Bros. Steamship Co. Inc.

Mr. Scardasis, who is also a director of the Houston World Trade Association, was the keynote speaker at a Port Operations Seminar held recently in Houston. His topic was the relationship between port authorities and their users.

The seminar, co-sponsored by the Port of Houston Authority, was held at the Houston international Seamen's Center at the Port of Houston Turning Basin Terminal. Other cosponsors were Houston Community College and the U.S. Department of Transportation's Maritime Administration (MARAD).

**ABILITY TO ADAPT:** "Port authorities must be innovative ... they must keep an eye on industry trends and adapt accordingly," Mr. Scardasis said. "An excellent example is the Omniport development that is now under construction on the Houston Ship Channel."

Mr. Scardasis was referring to the automated facility being built at Jacintoport Terminal to handle bagged and boxed agricultural goods. The site for the facility is being leased from the Port Authority by Houston Transmodal Owning Co.

"Another example is the expansion at Barbours Cut Container Terminal. It is anticipated that each new berth at Barbours Cut will result in a 15 percent increase in terminal capacity," he said.

**DIVERSE CARGOES:** As for flexibility, Mr. Scardasis stressed the importance of attracting diverse cargoes to the port. "It is crucial that a large port not become one-dimensional," he explained.

In the area of competition, Mr. Scardasis urged the development of tariff rates that will permit and en-
New Coal Unloader in Jacksonville

A newly constructed ship unloader weighing 1,307 tons was recently floated into place directly from the delivering ship onto the unloading pier of the St. Johns River Coal Terminal in Jacksonville, Florida.

This grab unloader has a rated capacity of 1,500 tons per hour and features state-of-the-art dust suppression and collection in order to provide maximum environmental protection.

It was contracted from Toyomenka Inc. according to the specifications of Soros Associates, New York, to be fabricated by Bardella S.A. in Brazil to the design of Mitsubishi Heavy Industries of Japan.

The coal terminal was engineered by Soros Associates for a joint venture of the Jacksonville Electric Authority and the Florida Power and Light Company.

PORTS AND HARBORS December 1988
Long Beach Tonnage Scores 7.2% Gain

The Port of Long Beach enjoyed its biggest year in history during fiscal 1987-88 and remained the busiest of all West Coast ports for the eighth consecutive year. Most exciting news in just released tonnage statistics was in the area of exports.

Exports of general cargo carried in containers from the Port of Long Beach last year soared by 2,146,832 metric revenue tons for a dramatic 42.7 percent increase during the 12 months ended June 30. This export tonnage turnaround closely with remarks made last month at Long Beach Harbor by President Reagan, who noted that "merchandise exports are up more than 40 percent in the last two years...we have seen an unparalleled boom in exports, a boom that...can be said to have started right here at the Port of Long Beach."

Total tonnage handled via Long Beach, inbound and outbound, reached a record 63,596,753 mrt's, a 7.2 percent gain over the year previous. Total imports increased by 6.6 percent, while exports of all commodities gained 8.7 percent.

By category, inbound general cargo showed little change, but outbound goods rose 25.3 percent. Dry bulk imports increased 6 percent, while outbound dry bulk products registered a slight drop. Bulk petroleum imports rose by 15.4 percent, exports gained by 1.4 percent.

Containerized cargo handled rose an average 10.7 percent last year, with imports gaining only 2.3 percent compared to the record 42.7 percent increase in exports. This upsurge in the overseas sale of American goods has already begun reducing the U.S. trade deficit, as well as substantially adding to employment both locally and nationally.

Ship calls at Long Beach also reached all-time highs, with 3,615 vessels using the 65 Port berths last year, up 25 percent over the 2,879 ships in 1986-87. Vessels anchoring in the Long Beach harbor reached 1,868, up 39.7 percent. Most of these calls were for fuel, water, supplies and repairs.

In announcing the fiscal figures, Mr. Joseph F. Prevratil, Executive Director of the Port, noted "The Port of Long Beach is now operating at near capacity. However, the challenge posed by the ever-growing flow of transpacific cargo traffic is being met by the Port of Long Beach in a number of ways. Construction has started on a $150-million, 147-acre expansion of container cargo facilities on Pier J. The old Ford assembly plant site and Procter & Gamble property are being converted to cargo areas and an ongoing land acquisition program in the North Harbor assures that Long Beach will remain a leader among West Coast ports."

Harbor Commission President George F. Talin, Sr., added, "Recent Commission approval of permits for on-dock rail facilities is a vital first step in our determination to create a central rail corridor linking the harbor area with all parts of the country. This badly needed project will further accelerate our ability to respond to the needs of the nation, while at the same time protecting the well-being of our citizens."

First Trade Seminar Held at Port of Baltimore

By Andrea Kehoe

The Port of Baltimore's first annual trade seminar -- "Maryland, the BRIDGE to Changing International Markets" -- was held recently at the Omni International Hotel. The day-long conference, which was hosted by the Maryland Port Administration, explored critical issues confronting the shipping community.

Governor William Donald Schaefer welcomed the participants and praised the state's ability to move cargo quickly and efficiently.

"If Maryland isn't your bridge to international markets already, it should be -- and one day soon it will be," he said.

Panel discussions by executives in the transportation industry addressed distribution methods and strategies, changes in equipment, and the growing role of labor.

"We had a great cross-section of shipping executives and labor leaders who will play major roles in the industry into the 1990's and the 21st century," said Mr. Thomas E. Huesman, manager of Maryland Port Administration's steamship line and intermodal sales.

Mr. Edwin F. Hale, president of Hale Container Line/Port East Transfer, sat on the panel that discussed distribution changes.

"Within the next four months the steamship industry will continue to change radically," he predicted, pointing to the trend toward consolidation of shipping lines and port calls.

Mr. Hale praised the MPA's initiation of such a conference, saying, "Baltimore is our largest port in terms of jobs and gross revenue."

Another participant in the seminar was Mr. Gordon H. Kuhn, vice president of marketing for Conrail. Mr. Kuhn addressed the increased use of double-stacking equipment, which he said alters the economics of handling containers and presents clearance problems at ports that maintain restrictions on such equipment.

"It's a very competitive transportation environment," he said. "We need to figure out ways to be more efficient and utilize equipment better and get costs down. Equipment utilization is very important in the transportation industry."

Toyota Auto Terminal

At Port of Baltimore

Governor William Donald Schaefer and the President of Toyota Motor Sales, U.S.A., Inc., Mr. Yukiyasu Togo, officially opened a new, 45-acre auto terminal at dedication ceremonies at the Port of Baltimore.

The state-of-the-art terminal was developed and built by the Maryland Port Administration for Toyota, which has been importing vehicles on 26 acres at the Dundalk Marine Terminal. Toyota has signed a 15-year lease to use the new facility, located in the Fairfield area of Baltimore on the western shore of the Patapsco River.

The terminal is immediately adjacent to Interstate 895 (The Baltimore Harbor Tunnel Thruway) and is served by the CSX rail network.

"This is an example of how the Maryland Port Administration responds to the needs of its customers so their business can continue to grow," said Governor Schaefer. "The new terminal will keep jobs at the Port for many years to come," he added.

"Our partnership began more than 18 years ago when Toyota Motor Sales
began operations at this Port,” said Mr. Togo. “Today we celebrate a major achievement of our partnership—the completion and opening of this facility. Of course, it took the dedication and professionalism of many to make the idea a reality. But I particularly want to recognize the Maryland Port Administration and the state of Maryland for cooperating to get the job done,” he said.

“Toyota needed more space to continue to operate in our Port, so we worked with the company to build a facility that will serve their needs now, with room to expand,” said Mr. David A. Wagner, the Executive Director of the Maryland Port Administration.

The concrete pier at the new terminal is 840 feet long and ranges in width from 50 to 114 feet wide. Three white masonry block buildings on the site will house a car wash and body shop and provide a place where the vehicles will get their port installed options, such as air conditioning, and quality assurance checks before the vehicles are sent to dealers.

About 280 people currently work at Mid-Atlantic Toyota’s processing center, operated by Crown Port Services, Inc. at the Dundalk Marine Terminal. Many of those employees will be transferred to the new terminal. Crown Port Services’ operations at Dundalk will continue processing other foreign-made cars and trucks. The opening of the new auto terminal is expected to provide additional jobs.

“Automobiles are among the most labor-intensive types of cargo that come through the Port,” said Mr. Wagner. “Aside from being unloaded from the ships, certain options are installed at the Port.”

“We’re excited about the opening of the new Toyota terminal,” said Mr. J.P. (Jack) Brown, President of Mid-Atlantic Toyota. “The larger processing center will allow our company to better serve our more than 100 dealers in Maryland, Pennsylvania, Delaware, Virginia, West Virginia, and the District of Columbia,” he added.

The site of the new Toyota facility was formerly Maryland Shipbuilding and Drydock, which closed several years ago. The Maryland Port Administration purchased the land from the Fruehauf Corporation of Detroit for $8 million, and spent $15 million preparing the site, expanding the pier and constructing the buildings to Toyota’s specifications.

Money for the project came from the state’s Transportation Trust Fund. The state will be reimbursed for most of the cost by the lease payments from Toyota.

With the completion of the Toyota terminal, the Fairfield section of the Port becomes the center of Baltimore’s automobile import business. The Maryland Port Administration owns 150 acres next to the new auto facility, and work is underway to prepare 50 acres of that site for auto storage. The agency is now talking with other auto importers who may be interested in using the adjacent land. Also in the Fairfield area, Hobelmann Port Services operates the 42-acre Atlantic and the 41-acre Chesapeake auto import terminals.

Auto imports at the Port of Baltimore have grown steadily since 1983, with record numbers the past three years at the combined public and privately operated auto terminals. During the first six months of 1988, more than 201,600 vehicles were imported through the Port.

Toyota brings more vehicles into Baltimore than any other auto importer. About 90,000 Toyotas come through the Port of Baltimore annually.

WWS Seminar Examines All Aspects of Shipping

All aspects of ocean cargo transportation were thoroughly examined during the recent four day conference sponsored by WWS/World Wide Shipping, the official magazine of ICHCA-USA and ICHCA-Canada. Held at the Downtown Athletic Club in lower Manhattan, the conference attracted a large audience of shippers, import/export executives, freight forwarders, customs brokers, steamship executives, stevedores, representatives of waterfront labor, and government officials concerned with ocean transportation.

The conference featured several panels that examined a wide range of subjects that included: “Global Trends & Policies for Major and Mid-Size Container Facilities and Breakbulk Terminals,” “Development and Operation of an Intermodal Terminal,” “Port Industrial Development,” the “Regulatory Outlook for 1988-89,” “Non-Intermodal Services,” and the “Growing Volume of International Sea-Air Intermodal Traffic.” Featured speakers included Mr. William von Rabb, Commissioner, U.S. Customs Service and Dr. Guenter Boldt, Member of the Executive Committee of the Bremen/Bremerhaven Port Authority Operating Company.

Cargo Expediting System

The conference started with an address by The Port Authority of New York and New Jersey’s former Port Department Director, Mr. James J. Kirk. This was Mr. Kirk’s final appearance before the international shipping community prior to his retirement. He noted that the bi-state agency was responding to technological changes in the industry in such areas as the increased computerization of essential shipping data, channel dredging and terminal accommodations for larger ships, the movement from breakbulk to palletization, and the new application of containers to the movement of certain commodities.

“We are also focusing energies on growth commodities such as automobiles,” Mr. Kirk explained, calling attention to the new $31 million auto marine terminal presently under construction by the Port Authority. He stated that the Port Authority’s five-year, half-billion dollar Capital Improvement Program is now underway, and he predicted that 1988 would be a year of achievements for the Port of New York and New Jersey ... a year in which many of the bi-state agency’s plans will be translated into operational realities.

Mr. Kirk hailed the port’s new automated cargo expediting system called “ACES” (see VIA, August 1988, page 28), citing the project as a prime example of a strong cooperative effort among a wide representation of the transportation and shipping communities.

Mr. Wieger W. Koornstra, President of Atlantic Container Line, Inc., addressed important elements in the strategic planning process and the necessity to “keep the box” (container) moving. He noted that the service as well as the pricing offered by the ocean carrier has evolved from port-to-port onto point-to-point.

Carriers, he stated, are now making
efforts to fully control not only the box routing but its cargo from floor-to-floor delivery. He pointed out that this requires a comprehensive electronic data process encompassing many details and, in particular, automated customs as well as terminal release. "The carriers, or at least some of them," he stated, "are concentrating on extending their service beyond ocean ports by creating inland intermodal centers.

This development needs to be seen in order to strengthen the control of the total cargo movement and provide an increased level of service for logistics-oriented shippers. We are equally being made aware of even further rationalization between shipyard lines which ultimately will also have its effect on port authority policies as well as container facilities and their operators."

**Latin-America Trade**

Mr. John Ricklefs, Ph.D., Vice President of Frederic R. Harris, Inc., Manhattan-based consulting engineers, presented his views on the current state of U.S.-Latin American trade and port development policy in South America. Mr. Ricklefs pointed out that in spite of many inefficiencies, an outward-oriented economy has begun to grow in Latin America. This, he said, was evident in some countries more than others. It is upon the success of these new forces that U.S. port strategy depends.

He stated, adding, "Just as the United States has in the past played a role in formation of the Latin American economy, so can U.S. policy now go a long way toward making or breaking this new trade economy. In my view, it is our policy that will spell success or failure. For example, current events in Panama are representative of this struggle between the forces of the old, inward-looking economy and those of the new trade-based economy. Aside from the outward form the struggle takes, that's what is going on there."

Mr. Frank Vannelli, Director of Marketing for the Port of Montreal, believes that ports should be bringing their partners in the industry (government and labor) towards a system-wide approach of intermodal service and pricing. He said that ports cannot do it alone, and he observed, "In the area of pricing, where revenues for non-operating ports often amount to a very small percentage of the total cost of transportation, there is no doubt that port authorities are dependent on the pricing policies of partners such as the railways, pilotage authorities and others. Longshoremen's demands as well as government cost-recovery initiatives can also have a major impact on a port's future."

**Trends and Policies**

Mr. Ben Murphy, Executive Port Director of the Port of Palm Beach, tackled the subject "Trends and Policies - do we really have any?" In his view, today's maritime industry is adrift and trying to decide what course correction will lead it to calm waters and clear weather, "enabling us to see over the horizon and allowing us to safely chart our course towards a successful future."

Mr. Murphy states there is much confusion in the industry caused by numerous factors: regulations, deregulation, antitrust immunity, service contracts, intermodalism, the load-center concept, to name just a few. Stressing the need for flexibility, he explained how it had been a key factor in making the Port of Palm Beach competitive.

While optimistic about the future of the maritime industry based on his belief in professionalism within the industry and the exercise of "good old American know-how," Mr. Murphy stated: "Whether we have trends, good or bad, whether we have policies, good or bad or none, ships will still arrive, discharge, load and depart in a timely manner. Marketing, port promotion, planning, capital improvements will still go on. The fierce competition between ports will become more fierce and more cutthroat."

Mr. Cameron F. Koblish, Managing Consultant of Cresap, a Towers Perrin Company, took on the subject of "Global Trends and Policies for Break-bulk Terminals." He stated that while the overall objectives in planning break-bulk and container facilities are the same, the difficulties facing breakbulk planners are somewhat different. According to Mr. Koblish, "Sometimes the efforts to improve the competitive position of breakbulk terminals are unsuccessful because, despite costly capital improvements, operating costs are still uncompetitive and the wrong market is being pursued. Sometimes investments are made in the wrong places. There may be a bias toward certain capital items such as cranes which may be meaningless competitively. As in other industries, unless fundamental changes can be made to basic terminal cost structures and service levels, long-term market success is unlikely." He then added, "Interestingly, some of the ports that have not done well in the container business have become competitive breakbulk ports by hitting the right market and reducing operating costs."

**Membership in Associations**

No topic discussed at the conference attracted as much divergent opinion as that dealing with the pros and cons of membership in shippers' associations. Among those strongly advocating such membership was Mr. Harold B. Sachs, Executive Director, Fashion Accessories Shippers Association, Inc. While admitting that membership in such associations may not be essential for large shippers who can achieve the same rate and service commitments, Mr. Sachs recommended membership for the vast majority of small and medium shippers, stating that the economy of scale is the most compelling argument for joining. As to the reluctance of steamship conferences to deal with shippers' associations, Mr. Sachs believes that this reflects concern that the association is an ad hoc group with an undefined membership and unstrained marketing practices.

Mr. Sachs stated, "The reluctance of carriers to deal with shippers' associations only underscores their value as an economic unit for consolidating and focusing a shipper's volume. Declining to join a shipper's association because of conference antipathy is similar in economic terms to the attitude of an employee who declines to join a labor union because he or she is aware that the boss does not like to deal with unions. Shippers must understand and accept the fact that their purpose is to represent their members and, therefore, conferences and carriers may occasionally decline to love them."

Noting that Department of Justice pronouncements have indicated that antitrust concerns about shippers' associations have for the most part dwindled, Mr. Sachs took a strong stand on the importance of keeping shippers'
In contrast to the arguments favoring shippers’ associations, Mr. Harold Brauner, President of the New York Foreign Freight Forwarders & Brokers Association, Inc., saw little if any justification for support of such groups. Pointing out that many exporters, particularly the smaller ones, do not use shippers’ associations, he noted that such a group may not be readily available, or the commodity being shipped may not be served by the association. Brauner also contended that the danger exists that some shippers are obtaining lower rates by the use of shippers’ associations while others cannot. He viewed this as a type of discrimination between shippers which Congress had never anticipated.

Mr. Brauner stated: “We would also note that Congress declared in favor of the ‘common carriage’ system of ocean transportation. The Federal Maritime Commission has itself acknowledged that Congress has expected the agency to preserve the common carriage system underlying the 1984 Act. We are not certain, however, that the extensive use of shippers’ associations will fulfill the legislative objective.”

(Via Port of New York-New Jersey)

Oakland: Evaluation of Organization Structure

Kibel, Green, Inc., headquartered in Santa Monica, professional management consultants, was selected by the Oakland Board of Port Commissioners to evaluate the Port’s organizational structure.

Within the next 45-60 days it will evaluate current Port operations and make recommendations to the Board for an organizational structure that will position the Port to maximize its growth potential.

The firm was recommended by an ad hoc committee of the Board of Port Commissioners headed by Commissioner Ronald W. Brady and including Commissioners Patricia Pineda and Thomas Sweeney.

“The issues facing future seaport and airport expansion are complex and extensive, requiring full professional management attention,” said Board President Douglas J. Higgins.

“Complementary real estate development on other Port property is equally complex,” he said. “Such development should include specific strategic industries that stimulate companion and supporting business growth. Oakland’s airport and seaport could directly benefit from such stimulation.”

“The bioscience industry, which was the subject of a recent Holy Names College Symposium and a previous study done for the Port, is an example of this kind of industry,” said Commissioner R. Zachary Wasserman. “The specific opportunities and the benefits and costs of the bioscience industry and other strategic industries will be carefully evaluated by both the consultant and Port staff.”

The consultants will be examining these and related issues. The report is expected to be submitted by November 30.

Seattle Needs More Container-terminal Acres

By Bruce Johnson

In 1987, one million containers moved over the Port of Seattle’s docks. By the year 2000, experts predict that number could escalate to nearly two million.

“From everything we can see now, we probably will need 150 to 200 more container-terminal acres on a phased basis between now and the end of the century,” said Ms. Lynn Taylor, Port director of Harbor Development and Relations. That would represent more than a 54-percent increase in the Port’s present inventory of 330 container-terminal acres.

The move into a new phase of container-terminal development to accommodate projected growth in transpacific shipping grew out of the Port’s recent update of its Harbor Development Strategy. The update included a revised container forecast projecting higher container volumes by the year 2000 than originally expected. This led the Port Commission to take the next steps toward expanding container-terminal capacity through both development of new terminals and improving utilization of existing terminals.

Specifically, the plans call for these "immediate actions."

Southeast Harbor

• Proceed with purchases and development of property so the Port’s newly completed Terminal 30 container terminal can be expanded to the north.
• Proceed with negotiations to vacate all or part of East Marginal Way so that an on-dock intermodal rail facility, if desired by steamship line tenants, could be developed at Terminals 25 and 30.
• Negotiate the purchase of Pier 27 property so that Terminals 25 and 30 can be bridged to provide an additional container-handling area.
• Negotiate a limited-lease extension

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at Terminal 25 South, subject to cancellation, to maintain the Port’s flexibility in development.

**Harbor Island**
- Proceed with Terminal 18 South container-storage expansion, excluding apron extension.
- Proceed with vacation/purchase and development of Terminal 18 tank farms and half of 11th Avenue so that Terminal 18 can be expanded.

**Southwest Harbor**
- Proceed with development of Port property formerly leased to Lockheed Shipbuilding Company so that Terminal 5 next door can be expanded.
- If no shipyard activity can be re-established at the site, explore purchase and development of Lockheed property to the north of Terminal 5.

**North Harbor**
- Continue a feasibility evaluation of Terminal 91 as a container terminal by doing studies of noise, lighting and the north-yard, auto-import operation. This evaluation will determine whether a container terminal — large or small — would be feasible at Terminal 91, considering operational and community environment factors.

**Other**
In addition, the plans call for Port staff to:
- Proceed with an assessment of how effectively Port property on the Duwamish Waterway can accommodate breakbulk cargo and other water-dependent uses which would be relocated from the outer harbor.
- The City of Seattle’s recent decision to proceed with building a new, low-level drawbridge across the Duwamish will increase the opportunities for expanded handling of noncontainerized cargo on the Waterway. Ms. Taylor noted that this would open up additional space for container handling at existing and future outer-harbor terminals.
- Proceed with a productivity-improvement demonstration project aimed at getting greater use out of existing container-terminal space.

It is estimated that the average annual capacity of all the Port’s container terminals amounts to about 3,020 TEUs (containers in 20-foot-equivalent units) per acre. The intent of the productivity demonstration projects is to increase that per-acre annualized throughput so as to avoid unnecessary acquisition and development of land for new container terminals.

The productivity demonstration project will be undertaken with the cooperation of both industry and labor representatives. “As far as we know, this will be the first such project in the country,” Ms. Taylor said. “We all realize that, while it is extremely important to explore possible ways to increase terminal utilization, right now we are among the best in terms of getting the most effective usage of our facilities. So we know there will be no easy solutions. Nevertheless, it remains a high priority.”

The project will examine a variety of ways suggested for increasing the number of containers flowing through each acre of a facility involved in the experiments.
- Review container-terminal pricing policies relative to encouraging increased utilization.
- The Duwamish assessment are just as vital as the Port’s new effort to acquire additional acreage for container-terminal development. She noted that the cost of acquiring and developing properties for new container terminals is estimated to average about $1 million per acre.

This projected cost of terminal development also encouraged the Port to review its container-terminal pricing policies. “The objective in this assessment will be to see if we can provide more incentives to increase terminal utilization,” she said. “In other words, move more boxes.”

Depending on future economic conditions and Port market share of West Coast containerized shipping, the Port’s containerized cargo traffic is expected to escalate by the year 2000 to between 1.3 million and 1.95 million TEUs.

“It is important for the Port to take appropriate steps now to start negotiating for property acquisitions and street vacations and addressing other issues, such as soil contamination at several prospective Port expansion sites,” she said.

“We can put on the brakes at any time if the shipping growth curve slows and the Port is in danger of overdeveloping. But it’s really hard to play catch up if that traffic growth curve exceeds the Port’s ability to bring on stream additional acreage.”

**Neutral Chassis Pool Initiated at Charleston**

The Port of Charleston has initiated a neutral chassis pool as a service to its 70 steamship line customers.

The Port chose Intermodal Services, Inc., in conjunction with Flexi-Van to operate the pool.

“Charleston is a service port. The chassis pool will provide an economical and efficient working environment for all Charleston’s lines of every size,” said Mr. L. Duane Grantham, director of marketing and sales for the South Carolina State Ports Authority.

Mr. Grantham named specific advantages to the lines which the Port included in its chassis pool plan:
- it provides fixed daily cost for easy accounting.
- it removes responsibility for

(Continued on Page 35, Col. 3)
Port of Rotterdam on Course for an Excellent Year

Things are going well in the port of Rotterdam. The economy is looking up and Rotterdam is playing its part. In comparison with the first three quarters of last year, the volume handled in the port is up almost 10 million tonnes (5.2%). The high figures recorded at the beginning of 1988 were thus no anomaly, as the Rotterdam Municipal Port Management's goods handling figures for the third quarter prove. It is expected that this trend will continue in the fourth quarter.

Port Charges

Tariffs for port charges have been adjusted here and there. Liner and tramp shipping will be somewhat cheaper. This is due to the abolition of the special tariff charged to compensate for the unloading and/or loading of containers on to and off partly full container vessels. The tariff for full container vessels will, however, be maintained. Full container vessels, which require a relatively large amount of loading and unloading (feeders), and which at the moment pay a proportionally favourable port charges tariff, will pay 2% more next year.

Container/ro-ro ships will pay considerably lower port charges in 1989. The laying up tariff (demurrage charges) for equipment operating offshore will be lowered from 0.34 cents to 0.25 cents per m³.

The special reduction for so-called Segregated Ballast Tanks for crude oil conditions now exist to offer industrialists the opportunity of establishing new production and distribution units, and to bring them together in a specialised agricultural and food processing terminal. This is one of the keynote elements of the Port of Rouen's development plan.

As Europe's number one cereals exporting port, Rouen handles 7-9 million tonnes a year. Situated in the heart of Europe's most important wheat producing area, Rouen has been chosen by the European Economic Community as the only port of reference for cereals traffic.

The place it holds for cereals is due to its extensive port installations for this kind of traffic. (Rouen Port)

Rotterdam Port Tariffs Remain Unchanged

The tariffs for port charges, wharfage and harbour charges to be applied by the Rotterdam Municipal Port Management in 1989 will remain, on balance, the same as those for 1988. Rotterdam city council is in agreement with the proposals. These are the tariffs which are charged directly to the ship owners. The port charges and wharfage remain unchanged for the third year in succession; the harbour charges have now been the same for no less than four consecutive years. Although the port charges have been adjusted here and there, increases and reductions will cancel each other out. As far as wharfage and harbour charges are concerned, there will be no changes.

Port Charges

Tariffs for the port charges have been adjusted here and there. Liner and tramp shipping will be somewhat cheaper. This is due to the abolition of the special tariff charged to compensate for the unloading and/or loading of containers on to and off partly full container vessels. The tariff for full container vessels will, however, be maintained. Full container vessels, which require a relatively large amount of loading and unloading (feeders), and which at the moment pay a proportionally favourable port charges tariff, will pay 2% more next year. Container/ro-ro ships will pay considerably lower port charges in 1989.

The laying up tariff (demurrage charges) for equipment operating offshore will be lowered from 0.34 cents to 0.25 cents per m³.

The special reduction for so-called Segregated Ballast Tanks for crude oil

Rotterdam, the Port for Food and Agriculture

The Port of Rouen can truly claim to be France's gateway for food and agriculture. Over half the port of Rouen's traffic is linked to agriculture. Whether it is cereals, flour, sugar, fertilizers or smaller-tonnage items such as malt, rapeseed or sunflower seeds, the quantities transported give Rouen a keynote role in the French economy.

The port handles 49% of cereals, 38% of flour, 40% of all sugar and 36% of fertilizers.

It is not by chance that Rouen is the top French port for food and agricultural products and for food processing.

The immediate proximity to the cereal and sugar beet producing areas enable transport costs to the port to be kept to a minimum. Rouen is also one of the main areas for the specialised food processing plants belonging to the major national and international groups.

The existence of a complete and extensive network of land communications — roads and motorways — and broad-banked waterways fosters the rapid transport of merchandise to the port which guarantees competitive tariffs.

Among Rouen's main trump cards is the possibility offered by the port's installations to enable docking of seagoing vessels of up to 40,000 deadweight tonnes capacity fully loaded and up to 140,000 dwt when loaded partially.

The Port of Rouen can not only handle all the types of cargo available on the market but also offers the possibility of loading on regular routes enabling flexible and permanent links to a large number of countries which import French agricultural produce.

These arguments have been sufficiently attractive to win the confidence of companies which have not hesitated in investing massively in the Rouen port complex.

Such advantages can be put to further use with the coming of the European Community's Single European Market of 1992.

The Port of Rouen considers that
German Journalists Visit Port of Rotterdam

"In 1987 the port of Rotterdam went through a particularly difficult spring. During this period sectors of the port were faced with strikes. At a certain point, these threatened to damage Rotterdam's reputation as a reliable, fast, flexible and reasonably priced port. We are delighted that this conflict is now a thing of the past and, above all, of general cargo and containers."

This was the message given at the end of May to a group of ten German journalists from German trade and transport journals by Mr. Foeke Kuiper, chairman of the Port Promotion Council.

The council organized a two-day seminar on new developments in the port of Rotterdam for the journalists. The symposium included lectures and discussions, and visits to the port and port companies.

In addition to Mr. Foeke Kuiper of the Port Promotion Council, who spoke on "Rotterdam, the logistics centre of Europe," Mr. André van der Louw (former mayor of Rotterdam) addressed the visitors in his capacity as chairman of the Rijnmond Platform for Information Science and Technology (PIT), taking as his subject "Social security in relation to the developments in information science and technology".

Mr. S.J.R. de Monchy, deputy chairman of the Rotterdam Chamber of Commerce, who has prepared a paper for the German journalists on "The position of Rotterdam as a commercial centre," was unable to attend, so the paper was presented by Mr. Cees Vrijdag, deputy secretary of the Chamber.

The journalists visited the Traffic Centre City of the new Traffic Control System for shipping, the Rotterdam Fruit Terminal (RFT) in the Merwehaven, the grain storage and transhipment company Graan Elevator Maatschappij (GEM), and the Association of Grain Dealers' quality control laboratory for agricultural products. To round off these visits, the journalists were given a boat trip around the port.

Here are some of the main points of the speeches made by Mr. Foeke Kuiper and Mr. André van der Louw.

More tonnage with fewer personnel

In his speech, council chairman Kuiper who is also the director of the port employers' association SVZ outlined the background to last year's labour unrest. "The basis of this conflict, which is not specific to Rotterdam but is also occurring in other modern ports, can be easily explained. In the era of the container and other unitised cargo (non-bulk), more tonnage can be handled by fewer people." Mr. Kuiper pointed out to the journalists that the Rotterdam cargo handling companies have invested tens of millions of guilders in developing their terminals over the past ten years. Since the early nineteen seventies, the port of Rotterdam has undergone a major restructuring. Parallel to this there was a loss of jobs in the non-bulk sector of around 30%. At the moment, about 4,000 people are still employed in this sector.

"We don't operate the American 'hire-and-fire' system here, however. Dock workers are not just kicked out on to the street without warning," said Mr. Kuiper. "On the contrary, we drew up social plans in cooperation with the works councils and trades unions, particularly for workers aged 55 or over. These measures have already cost the private sector port companies in Rotterdam 100 million guilders."

According to Mr. Kuiper, the old-style docker who laboriously shifts crates and boxes no longer exists. "Today and in the future we will be looking for the qualified, skilled man, who can operate the modern computer-controlled handling equipment as effectively as his grandfather worked with the good old handtruck."

A future with little labour unrest

In his speech Mr. André van der Louw, chairman of the PIT, summed up the most important measures taken to reduce the number of employees without compulsory redundancies: 10% and 5% reductions in working hours, in both cases with full restaffing, voluntary early retirement, and voluntary transfers to other sectors in the port.

"Containerisation is already far advanced," said Mr. Van der Louw, "which means that an end to the loss of jobs it causes is in sight, and the rate of the process is slowing down. The worst is over. This justifies the expectation that the general cargo sector can look forward to a future with very little labour unrest. I am strengthened in this view by the recent developments in the port itself, which are evidence of an improved social climate."

One of these developments was the formation of the Rijnmond Platform for Information Science and Technology (PIT) in 1986. "It is a forum in which representatives of the employers and employees in the port, industry and the service sector discuss the macroeconomic developments that affect the port and their environment with representatives of the local, provincial and national authorities. One of the main concerns behind the formation of the PIT is the increasing pressure on the port of Rotterdam's competitive position." The port is faced with the task of modifying its function: it must change from a transit port pure and simple to a logistics centre. "As the active participation of employers and employees in the Platform clearly show," said Mr. Van der Louw, "all the parties have recognised their common interest in finding an answer to this new challenge."
Dublin Needs More Space for Trade Growth

“Dublin Port needs to reclaim 21 hectares of land to cater for extra trade expected as a result of increased exports, as our home market expands and as Europe becomes a single market.” This was stated by Mr. Bob Hayes, Chief Executive, Dublin Port at a recent news conference.

By the year 2000 the level of unitised traffic through the Port is expected to almost double from the present 4 million tonnes to 7 million tonnes. This requires purpose built terminals to facilitate loading and unloading and to achieve quick turn round of vessels.

While the throughput of containers varies from port to port, the space requirement averages at 1 hectare per 100,000 tonnes per annum. On the basis of the expected growth in trade, this would put the space requirement of Dublin Port at 30 additional hectares by the year 2000. It could take until then to reclaim this 21 hectares if the traditional method of reclamation by selected dry fill tipping is used. After that it will be necessary to develop the on-shore facilities for container and trailer operation.

The older quays and general cargo berths are unsuited to the new technology because container operations require extensive space for marshalling and storage.

“It is only by reclaiming the 21 hectares described in the Harbour Works Order that the Port can lay the groundwork to meet the requirements of our exporters in the year 2000,” Mr. Hayes said.

Over the last 20 years Dublin Port has invested IR£80 million at 1987 prices out of its own resources in capital development. The greater part of this was invested in new purpose built facilities to handle unitised traffic.

Because of the small size of the Irish home market, Ireland is highly dependent on exports to sustain employment. It has been shown that for every 100,000 tonnes of exports through Dublin Port, 7,500 jobs are guaranteed in the economy.

“Irish employment depends on our capabilities to deliver our growing exports on time to our overseas markets. Dublin Port wants to ensure that it can deliver on its role of serving Irish Exporters,” Mr. Hayes said.

Asked by a reporter did he have definite customers for the new container terminal, Mr. Hayes pointed out that the Board believes in planning ahead. “In the 60s and 70s we laid the groundwork for new container and Ro-Ro terminals and ramps even though at the time there was no definite customer. When the operating companies requested the facilities they were available — just in time.”

(Port Times)

ABP: No Disadvantages In Port Privatisation

“If there are any disadvantages in privatisation, I have not yet discovered them,” stated Sir Keith Stuart, Chairman of Associated British Ports Holdings PLC, speaking to delegates at the International Ports Congress held in Ghent.

During his address, Sir Keith Stuart presented a case history of privatisation.
in practice through the experience of Associated British Ports.

Illustrating the successful return to the private sector of one of Britain's state-owned enterprises, Sir Keith Stuart asked delegates to consider for themselves the relevance of privatisation to state-owned ports in their countries.

Prior to privatisation, the image of the ports industry as a whole in the UK was generally poor.

"Although financial performance had been good, and although we had achieved much by way of modernisation, the image of the industry within the City and general public opinion was dominated by other features.

"There was no appreciation of the underlying asset value in the Company because, under state control, we had been prevented from fully exploiting those assets," said Sir Keith Stuart.

A successful private sector flotation has allowed the Company to begin exploiting the true potential of its many assets. Since privatisation, profitability has progressed and business has grown, not only in relation to port operations.

"The port side of the business has seen plenty of expansion, and this has encouraged us to invest quite heavily in new facilities for customers in a variety of our ports.

"Perhaps the real excitement has come in the area of property development. Effectively debarred, in pre-privatisation days, from redeveloping any land not required for port operations, privatisation freed Associated British Ports Holdings from such restrictions and the Company is now a major player in UK property development."

Results in 1987 and for the first half of 1988 clearly demonstrate that Associated British Ports Holdings is now a substantial property company in its own right, as well as an expanding port business. For the year 1982, the last before privatisation, the British Transport Docks Board — ABP's predecessor, produced a profit of £5.5 million. Profits in 1987 had risen to £38 million and profits in the first half of 1988 were over £21 million.

The strength of ABPH's post-privatisation performance has been reflected in the Stock Market confidence in the company. Total market capitalisation has risen from £45 million to over £400 million.

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Port of Southampton Feltes 150th Anniversary

On 12th October 1988, Associated British Ports celebrated the 150th Anniversary of the laying of the Southampton Docks Foundation Stone.

To mark the occasion, Sir Keith Stuart, the Chairman of ABP presented an inscribed crystal chalice to the Mayor of Southampton, Councillor Mrs. Bear.

Addressing guests at the port's commemorative anniversary luncheon, Sir Keith said: "Southampton has a long and fascinating history. The port has seen hard times as well as good, but it has adapted to change with great success, and now handles more cargo than ever before in its history. We value our long relationship with the city and people of Southampton. Apart from the fact that, when and where the stone was laid, Southampton has a very strong trading position, we can achieve further growth and prosperity."

An exhibition, an illustrated commemorative publication and a television documentary have been produced in recent months to mark the anniversary as well as the growth and development of Southampton Docks from 1838, when the efforts of the newly formed dock company were realised.

The London & South West Railway took control in 1892 and provided much needed capital. The Southern Railway completed major new works during its period as owner and, following the nationalisation of the railways, docks and inland waterways, the British Transport Docks Board made further investments. Under the privatised ABP, the port has seen dramatic changes and rapid increases in productivity. Although passenger ships still call in significant numbers, the new growth in business has been in bulk cargo and unit loads.

Southampton’s Port Director, Mr. Dennis Nodding stated: "As we celebrate the Port’s 150th Anniversary, Southampton has achieved a successful year of growth and additional regular business."

In addition to reaching agreement with P & OCL and Ben Line to run Southampton Container Terminals Ltd., Hoegh Uglard Auto Liners has concentrated its ro-ro services on the port and SEAT now uses Southampton as the sole point of entry for its U.K. imports. Other new business includes a major contract to handle the import of Canary Islands produce, and, next year, regular shipments of construction aggregate will be discharged to a purpose-built processing and storage facility."

In 1836, the Southampton Dock Company was formed. In May of that year, an Act of Parliament authorising the newly formed company to construct a dock was passed, the authorised capital being £350,000. This led to the purchase of 216 acres of mudflats for £5,000 and construction of the first dock, the Outer Dock.

The Foundation Stone was laid on 12th October 1838, in a ceremony performed by Sir Lucius Curtis, Bart, the Right Worshipful Grand Master of Hampshire.

A brass plate bearing the names of the chairman and principal officers of the newly formed dock company, together with a glass bottle containing gold, silver and copper coins of the period, were deposited in a cavity at the top of the stone.

The new dock received its first ship in 1842 and nine years later a second dock — the Inner Dock — was opened to shipping. This was subsequently deepened and widened in 1859 and a series of graving docks were built for ship repair.

With the opening by Queen Victoria of the Empress Dock in 1890, vessels of the deepest draught could enter and leave the port at any state of the tide.

Even then, Southampton could offer facilities that could not be matched elsewhere in the country. Great activity and increased trade accompanied the construction of the dock complex and this led to a dramatic growth in the town itself. The population increased from 8,000 in 1800 to almost 105,000 in 1900.

The Southampton Dock Company later began to run into financial difficulty and the docks were eventually purchased by the London & South Western Railway Company in 1892.

Development of the docks continued through the first decade of this century and, in 1911, the Ocean Dock was completed to accommodate the great trans-Atlantic liners which had transferred from Liverpool.

The docks passed to the Southern
Railway Company following the grouping of the railways in 1923. The construction of the Western Docks commenced in 1927 and was completed in 1934.

During World War II, Southampton played an important role in the assembly, dispatch and supply of Allied Invasion Force equipment.

In 1947, in common with all other railway-owned docks, Southampton's docks were nationalised and came under the control of the British Transport Commission and later the British Transport Docks Board.

In recent years, the construction of the container port has been the largest extension of port facilities, again a progression westwards from existing terminals.

Associated British Ports became the port authority for Southampton in 1982 following the privatisation of the BTDB under the Transport Act of 1981.

24-hour Service for Pilots Provided

In its first two weeks of operation Estuary Services Ltd., the newly created boarding and landing service for pilots, has effectcd 557 pilotage support operations in the Thames Estuary. Operating out of Ramsgate and Sheerness the company, set up jointly by the Port of London Authority (PLA) and the Medway Port Authority (MPA), has taken over the service previously operated by Trinity House. It provides a 24-hour service for pilots meeting vessels bound for London and the Medway from the near continent and the South at the NE Spit and Harwich/Garrison Point approaches of the Thames Estuary.

Estuary Services Ltd. (ESL) officially came into being at 00.01 on 1st October when responsibility for pilotage in the Thames and Medway harbour limit areas passed from Trinity House to PLA and MPA being designated Competent Harbour Authorities under the Pilotage Act 1987. Forty people are now employed by ESL, of which twenty-four are sea-going personnel.

ESL operate a fleet of ten launches, five of which are stationed at Ramsgate, the operational centre, and five at Sheerness, although there is flexibility should workloads at either station require additional launches. Each station maintains two duty boats with two held in readiness as immediate back-up, with the fifth kept in reserve. There are workshop and service facilities available at Ramsgate and Sheerness. A planning application has been submitted to extend the station at Ramsgate.

The company is run on a day-to-day basis by the Operations Manager from Ramsgate. The Pilotage Managers of PLA and MPA are represented on the Board of ESL whose Chairmanship alternates on a yearly basis between the Chief Executives of PLA's River Division and the MPA.

PLA Announces Pilotage Requirements

As a competent harbour authority under the Pilotage Act 1987 the Port of London Authority intend to direct that on and after 1st October 1988 all ships of 50 metres or more in length overall navigating on the River Thames between London Bridge and the port's seaward limit will require pilotage. The pilotage requirement can either be met by an authorised pilot or the vessel's recognised master or first mate while possessing a pilotage exemption certificate granted by the PLA in respect of the area and ship.

To avoid unnecessary delay to their shipowners and masters must give 24 hours notice of the provisional requirement of a pilot to the PLA's Thames Navigation Service. To comply with the compulsory procedure an order for a pilot must relate to the time that the pilot is required at either the N E Spit, Sunk, Warsps or Gravesend boarding points, whether inward or outward bound. Other details required include the ships length overall, draught and destination.

Confirmation of the provisional order must be given to the Thames Navigation Service not later than 8 hours in advance for inward voyages and 4 hours for outward voyages. Failure to provide all the proper information may incur a surcharge. Those ships claiming exemption from compulsory pilotage must notify the Thames Navigation Service 24 hours in advance.

The new centre for all initial pilotage orders at PLA's Thames Navigation Service Gravesend will operate 24 hours a day and is equipped with VHF radio, telephones, telex and facsimile equipment to facilitate ease of communication with the service. The adjacent Gravesend Pilotage Station also operates 24 hours a day and is the administration and control centre for the Port of London Pilotage Service. It is able to provide advice to all shipowners and agents on all aspects of the Port's pilotage arrangements.

The PLA will shortly issue a booklet giving full details of its pilotage requirements and rates.

PLA Manager Given 'Innovation' Award

A surprise award was scooped by the Port of London Authority's Marine Service Manager Captain Derek Roberts at his recent Awards Ceremony in London sponsored by the London Illustrated News. Captain Roberts won the top award in the category 'Innovation for London,' for the designing of static driftwood collectors now being used on the River Thames. He was presented with a silver and marble statuette at the Gala ceremony at the Waldorf Hotel in London.

"I thought of the idea, when recalling debris collecting between the hulls of vessels and the pontoons in London's Royal Decks, when they were operational," revealed Captain Roberts. "It was then I realised that the tide could do our work for us."

There are currently four static driftwood collectors in operation in the Blackfriars area of the River Thames, with more on order. The collectors are twin-hulled vessels with collection baskets placed between the hulls, which are moored to buoys in the river and carefully positioned on the outside of bends at strategic points. The tide pushes the refuse between the hulls and any debris is trapped in the baskets, which are emptied on a daily basis. The collectors are moored so that they swing with the tide thus always retaining the collected debris.

Each collector is to be sponsored by a company and will bear their logo on the side of the vessel. Sponsors will include Chelsea Harbour, London Docklands Development Corporation (Surrey Docks), Regalian plc and Rosehaugh plc.
State Gov'ts Urged To Examine Ports

Transport and Communications Minister Ralph Willis called on State Governments to critically examine the operations of their respective port authorities.

Mr. Willis told the biennial conference of the Australian Association of Port and Marine Authorities in Melbourne that overhaul of port management and administrative practices was vital to Australian waterfront reform.

He said State Governments had legislative oversight of port authorities’ composition and operations and he urged the States to follow the Federal Government’s example in initiating reform of their business enterprises.

The relationship between State Governments and their port and marine authorities was similar to that between the Federal Government and its Government Business Enterprises (GBEs).

The Federal Government had initiated fundamental reform of its GBEs starting with a reform package for enterprises within the Transport and Communications portfolio, as announced in the May statement.

“The package shifts emphasis away from detailed supervision and direct controls of management decision-making to planning and accountability for bottom-line results,” Mr. Willis said.

“This includes a clear definition of the respective responsibilities of the Government, as shareholder on behalf of the public, and of enterprise boards and management.

“The focus is on a more commercially-oriented approach with only essential portfolio Ministerial oversight.

“As regards the efficiency of port authorities, I am strongly of the view that the maximisation of efficiency will be best achieved by commercialising their operations. Government port authorities should be put on a more business-like basis as far as is possible whilst remaining in public ownership.”

Mr. Willis said the preliminary report on the waterfront by the Inter-State Commission had identified port reform as a key issue to be addressed.

Areas identified by the commission where port authorities could improve their operations included:

- More commercial orientation in operating and pricing, subject to mechanisms to prevent abuse of monopoly power;
- Updating of State legislation to clearly express port authorities’ objectives and to improve accounting standards; and
- Co-ordination of port activities with road and rail authorities.

Mr. Willis said he would be taking up the need for reform of port authorities with his State counterparts in the near future.

Wharf Expansion Work Starts at Gladstone

A project involving increasing the length of the present Clinton Wharf to provide berthing for two vessels simultaneously, will increase the throughput capacity of the Clinton Facility from 14.5 million tonnes to 20 million tonnes per annum.

Creating this extra capacity is in keeping with a series of projects initiated by the Port Authority during the past few years in line with Gladstone’s world class reputation for forward-thinking development.

At present, once a vessel has completed loading, it remains berthed until the tide has reached a height to allow departure. The extra berth will allow a second vessel to commence loading coal while the first is awaiting sailing.

It is expected construction will be finalised by the end of 1989.

Gladstone: Record Cargo For 87/88 Financial Year

Another record cargo figure of 28.14 million tonnes was recorded by Gladstone Port Authority for 1987/88 financial year, being the third consecutive year that a record throughput has been achieved.

The percentage increase in total throughput was 4.7% over last year’s figure of 26.8 million tonnes.

This is the first occasion on which the annual tonnage of exports only has exceeded 20 million tonnes.

Coal exports of 16.6 million tonnes showed the most dramatic increase, being 10.7% above the previous year.

It is significant to note that coal exports from Gladstone have increased by 36% over the past five years.

A notable decrease in coal exports to Europe during the year is mainly due to reductions in thermal coals to the Continent. However, coking coal is still in high demand for steel industry production in Europe.

The slack in steaming coal exports to Europe was taken up by increased demand for this coal to Japan and South East Asia.

The cargoes were handled by 560 vessels, the gross registered tonnage of which was 21.09 million tonnes compared with 19.7 million tonnes last year.

Fremantle: Container Traffic Records Set

For the fourth successive year, preliminary figures show the number of containers handled in the Port of Fremantle exceeded 100,000 TEUs and this year a new record has been set at over 113,000 again confirming Fremantle’s position as Australia’s third major container port.

The total number of full containers increased by 7,200 units or 8% on last year’s figures and despite a decline of 1,100 in the number of empty units, the net result was a very healthy 6% increase in container traffic.

Overseas containers carrying cargo totalled 79,400 TEUs an increase of 7,000 units or 8%, whilst the Australian Coastal component increased by 1,500 (11%) to 14,900 TEUs.

Cargo carried in containers increased from 1,138,000 to 1,245,000 tonnes, a net increase of over 107,000 tonnes.

Other shipping and trade statistics recorded for the year included increases in many areas.

Although there was a slight reduction in the total number of ships entering the port from 1681 to 1627, the gross registered tonnage was up 425,000 to 21,343,000 tonnes due mainly to the large tankers and bulk carriers shipping the increased trade of petroleum, alumina and fertilizers through the Outer Harbour.

Total Port trade this year exceeded 16 million mass tonnes, the highest recorded since 1979-80.
$100 Million Expansion Plan for Johor Port

A major port expansion programme, which is expected to cost about $100 million, has been planned to give Johor Port additional cargo handling capacity.

The chairman of the Johor Port Authority, Mr. Dato Suleiman Mohammed Noor said the expansion is necessary because of increasing volume of cargo handled by the port.

The port, which in 1987 handled 6.02 million tonnes of cargo, will be handling about 7.82 million tonnes later this year. Shipping traffic has similarly gone up, from 2,577 to about 3,350 arrivals.

By the end of 1990 Johor Port will be handling about 10 million tonnes of cargo and a greater mix of cargo than it is presently handling. The demand for facilities is also expected to soar in view of the rapid pace of industrialisation in the state of Johor, notably at Pasir Gudang industrial area and Johor Port Free Trade Zone.

A major source of traffic as a result of industrialisation is expected to be containerised traffic. The port has therefore incorporated into its plans and expansion of its container handling facilities.

The chairman said the port authority has sought the approval form the Ministry of Transport for the construction of two more multi-purpose berths.

Meanwhile, in response to rising demand for dangerous cargo and vegetable cargo handling facilities, the port has commenced the construction of two jetties.

Every care will be taken to ensure that there is no disruption to shipping and cargo handling while the construction work is on progress. Priority will be given to shipping operations and construction work will cease when vessels berth at the respective jetties.

18% Growth in Kelang Container Performance

The first half of the Terminal's performance has exceeded expectation in terms of ship calls and throughputs. It is anticipated that the overall growth in 1988 would be in the region of 18 percent.

The terminal expects to handle 310,000 TEUs for 1988. For the first half of the year, the Terminal handled 151,113 TEUs as compared to 127,555 units for the same period last year, which represents an increase of 18.5 percent.

Main line vessels accounted for 103,230 TEUs (68.3 percent), feeder vessels accounted for 42,883 (28.4 percent) and 5,000 TEUs (33 percent) were contributions from conventional vessels.

Vessels Calling KCT

A total of 704 vessels called at KCT. There were 438 mainline vessels and 266 vessels plying the feeder services.

The Terminal was able to maintain an average vessel productivity of 27.4 containers per hour.

The average turnaround time of vessels was 9.3 hours.

KCT Depot

The depot had its fair share of packing and unpacking activities. It handled a total of 24,465 TEUs comprising 15,147 units consolidated as LCL exports and 9,316 TEUs unpacked as LCL.

20% Growth in Penang Container Performance

Penang Port Commission (P.P.C.) has embarked on a port promotion programme in its move to make Penang Port a major regional transhipment centre for North Sumatra, South Thailand, Burma and Bangladesh.

Towards this end, the Commission formed a high-level Port Promotion Committee in December '87.
The demand for containers is high from both importers and exporters given the economic recovery and KCT marketing efforts. KCT can expect to handle more containers in the coming months or the year.

Intermodal Traffic
The movement of containers by the block train service to Penang and back is now well established.

More clients are using the North-bound block train currently with an average of 450 TEUs a month.

However, the return journey from Penang has yet to gain popularity from exporters in the North.

Further Reclamation Planned for Taranaki

The Taranaki Harbours Board is currently seeking the necessary planning approvals to proceed with a reclamation east of Ngamotu Beach. In an open letter to the community and at a public meeting held in New Plymouth on 25 May 1988 the Board stated that the catalyst for this proposal had been an approach from a consortium of New Zealand business interests who were bidding for the contract to construct the Topside modules required for the proposed MAUI B offshore drilling platform.

This, coupled with an increasing need for further adequate berthing facilities for the offshore rig servicing industry, meant that the time was right to seek a reclamation authority. Commercial considerations would prevent the Board proceeding with the development if the consortium was not successful with its tender of if other proven needs for the facility could not be identified.

There are some understandable concerns that port development may deny the public use of the popular Ngamotu Beach or limit recreational use of the water within the harbour.

The Board recognises the public concern and the importance of both the beach and the harbour for recreational enjoyment. The Taranaki Harbours Board has therefore reaffirmed its policy and commitment to retain the beach as long as possible. Its policy also gives the assurance that no major development will take place without full and adequate public participation.

Port of Wellington: New Pricing System

The Wellington Harbour Board is looking long and hard at the way it charges for its services.

The present charging system is rigid and unnecessarily complicated. As a result, charges do not always fairly reflect the services provided.

In the past harbour boards have had a commercial advantage in using bylaws to set their charges. Passing of the Port Companies Act in April 1988 means New Zealand ports will no longer be able to do this.

The Wellington Harbour Board could replace its bylaw charges simply by setting equivalent port company charges. This does not, however, fit with the Board's commercial philosophy.

The Board believes its new pricing system should:
- place more emphasis on charging for value delivered and less on the cost of delivery;
- provide benefits to large volume users, regular users and larger ships;
- provide more flat-rate charges and exclude unexpected extras such as overtime costs;
- ensure that charges are more predictable, irrespective of problems such as those caused by bad weather, work stoppages and the like.

The Wellington Harbour Board intends the new charging system to be in place by October 1, 1988 as part of the process of setting up a port company. A draft tariff should be published in July and circulated to users.

In the meantime the Board has invited Port users to comment on the pricing proposals. A discussion paper has been sent to 28 principal port users for comment and there have also been many meetings.

There has been widespread support for the process. However, given that there has been no change in the Board's pricing system for a long time, there have naturally been different points of view.

A pricing structure based on the Model Port Tariff prepared by the United Nations Economic and Social Committee for Asia and the Pacific (ESCAP) is most likely to find general agreement. This structure has been adopted by Colombo, Port Kelang (Malaysia) and Bangkok. The Port of Melbourne is also expected to adopt it.

The Wellington Harbour Board is studying the model tariff and may adopt it. However, before action is taken, a detailed proposal will be circulated to users for comment.

Given the general principles outlined above some detail of possible changes can be mentioned.

The Board, for instance, is considering simplifying all ships' charges to a single Ship Service Fee, which would include charges for tugs, telephones, water, gangways and garbage.

Such charges are at present itemised as part of a complex charging system, developed partly in response to pressure on ships agents by overseas principals to control and account for each element of cost.

The result is often the opposite. The mass of detail overwhelms the control mechanism resulting in a cost-plus mentality. The Board believes accountability for variations in cost should fall where it can be best controlled — in the Port Company.

The aim is to make charges more equitable. For instance, tug hire exceeding one hour is usually due to bad weather. Extended ship visits are often due to labour problems. The planned charge would mean such examples of bad luck would not fall on individual users.

The cost of credit to users and of bad debts makes up a large part of Port costs.

The Board believes that costs can be reduced if debts levels are lower.
Port Klang, Malaysia's premier port. By design and location.
Strategically sited close to the heart of Malaysia, 40 km from
Kuala Lumpur, and minutes from the heavy industrial zones within
the Klang Valley.

The fact is: Port Klang is totally equipped to handle a diversity
of cargo for international lines. Poised to deliver the edge in turnaround time with the most
advanced material handling machinery.

Freight To The Heart
Efficient and smooth container traffic control.
A full-fledged dry bulk terminal.

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This could be achieved by simplifying charges and offering a predictable charge for each ship call. The charges should preferably be available in advance and certainly within seven days of sailing. A discount could be offered for accounts paid within a further seven days.

As a result the Port Company’s cash flow would improve, and the cost of its working capital be reduced. Prices would therefore be lower.

The port company to be formed later this year will provide the services and facilities necessary to ensure the Port of Wellington plays an effective role in the transport chain and to satisfy the needs of Port users.

The Wellington Harbour Board believes the charges for use of these services and facilities should be simple, equitable and competitive. (Beacon)

**PSA: 3 Million TEUs Expected in 1988**

By Peter Tan

PSA’s ninth container berth and the first two 4th-generation quay cranes were commissioned on July 20 by Dr. Yeo Ning Hong, Minister for Communications & Information, and Second Minister for Defence (Policy).

In his address, Dr. Yeo highlighted that 1987 had been another good year for the Port of Singapore. Shipping tonnage rose by 6% to reach 343 million gross registered tons. This performance enabled Singapore to remain as the world’s busiest port.

Over the past 15 years, the growth of Singapore’s container traffic has been phenomenal, rising by about 24% a year from 127,000 TEUs in 1973 to 2.63 million TEUs in 1987. The volume of containers is expected to surpass the 3 million TEU mark by the end of this year. The high growth rates propelled Singapore’s ranking among the world’s leading container ports from eighth position in 1979 to fourth position last year.

The construction of the ninth container berth is another milestone in the development of Tanjong Pagar Terminal. This $30 million project involves the conversion of two conventional berths at Keppel Wharves into a 360-metre container berth. PSA now has nine main container berths and one feeder berth to cater to the increasing container traffic passing through Singapore.

The two new 4th-generation cranes commissioned were the first of their kind to be acquired by PSA. The new cranes, each costing $5.4 million, are state-of-the-art equipment. They have an outreach of 47 metres and would enable PSA to work the post-Panamax ships that stack containers 16-across and 5-high on deck. These cranes are also much faster and easier to handle. They are equipped with a computer-aided operations system which automates the repetitive functions of the crane cycle. This is expected to raise crane productivity by about 20%. Another eight units have been purchased by PSA and will be delivered by February 1989.

The Minister highlighted that productivity improvements at the port benefited port users in terms of better and faster service at lower cost. Over the years, PSA has been passing gains from productivity increase back to users through tariff rebates. Since October 1984, PSA has granted tariff reductions amounting to some $400 million.

Dr. Yeo announced that PSA would be granting more tariff rebates from August 1 this year. PSA would compute the first day’s charge for composite port dues for vessels engaged in non-cargo activities based on 24 hours instead of calendar day.

There would also be tariff reductions for wharfage and labour charges on bunkering fuel, dockage charges at Tanjong Pagar Terminal during off-peak periods and electricity supply at the reefer yard. These rebates would save port users $6.5 million a year.

He disclosed that in the next two to three years, PSA plans to spend another $200 million to further increase the capacity at Tanjong Pagar Terminal. This would include the conversion of another conventional berth at Keppel Wharves into a container feeder berth, expanding the size of the container stacking yard, purchasing additional container handling equipment and upgrading the facilities at the gates.

With improved planning and greater application of information technology, these new facilities would increase Tanjong Pagar Terminal’s capacity to meet the anticipated traffic up to 1992. PSA’s additional requirements for container facilities beyond 1992 would be met by the terminal at Pulau Brani which will be built at an estimated cost of $1.13 billion. The seven container berths at Brani Terminal together with those at Tanjong Pagar Terminal will be adequate to meet Singapore’s traffic growth for the next two decades. Work on the new terminal will begin next year and the first berth is expected to be ready by 1992.

With these facilities, port users can look forward to even higher levels of service and productivity in the port and Singapore will be able to maintain its position as a leading world port in the next century. (PSA News)

**Japanese Shipbuilding: Recent Topics**

Report by R. Kondo, IAPH

A: Super High-Tech Ship Looks Toward the 21st Century

On October 14, 1988, at the 80m x 80m testing pool located at the premises of the Shipbuilding Technologies Research Institute, Ministry of Transport, a demonstration of a 1/50 scale-model ship was carried out in the presence of Mr. Shintaro Ishihara, Transport Minister, and officials of the Ministry and the shipbuilding industry. The model ship performed the simulated operations of berth-leaving and berthing and — most interestingly — a series of evasive maneuvers with regard to other ships which might come across its course. The press described it as a “Super High-Tech Ship aimed at the 21st Century”.

It was the culmination of a 5-year research project named “Advanced Automatic Navigation System for Highly Dependable Intelligent Ship” which has been conducted by the Japan Shipbuilding Research Association and sponsored by the Japan Shipbuilding Foundation since 1983. The Advanced Automatic Navigation System is intended to automate every single facet of ship operations by means of AI computer systems and to explore the possibility of creating a new market for the shipbuilding as well as shipping industry as the next century approaches. Along with the model-ship demonstration, there was a demonstration of multi CRT-screen display simulation of the Advanced Automatic Navigation System.
Roughly speaking, the “Advanced Automatic Navigation System” is composed of a number of component systems, including both a land-based support system and an on-board comprehensive ship control, which system is basically divided into the “optimum automatic navigation system” and “automatic entry and departure system”.

According to the Japan Shipbuilding Research Association, some of such sub-systems thus developed have proved viable, while some have been found to be feasible. As to the former category, further testing by an actual ship is being planned.

Hereunder are the component systems and a rough description of them:

<table>
<thead>
<tr>
<th>System name</th>
<th>Rough description</th>
<th>Note*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comprehensive ship control system (Captaincy Expertise System)</td>
<td>Management of ship data, on-board LAN system management (via INMARSAT)</td>
<td>A/F</td>
</tr>
<tr>
<td>2. Data transmission system</td>
<td>Wave movement assessment system based on the algorithm for wave movement surveillance and felt by the ship, as well as regional weather reports</td>
<td>F</td>
</tr>
<tr>
<td>3. Optimum ocean navigation route planning system</td>
<td>Sub-systems: hold surveillance program, response assessment program, automatic ballast distribution program, automatic ballasting sequence program, hold level sensors punching sensors</td>
<td>A</td>
</tr>
<tr>
<td>4. Oceanographic and meteorological data evaluation system</td>
<td>Multi-ship encountering simulation logics, course &amp; maneuver prediction for own-ship and other ships, incorporation of evasive actions legally required and supplemented by the experts’ experiences</td>
<td>A</td>
</tr>
<tr>
<td>5. Ship status and position surveillance and evaluation system</td>
<td>Digital charts, radar and sonner surveillance, high precision plotting of ship position, surveillance of underwater obstacles, automatic assessment of risk</td>
<td>A/F</td>
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<tr>
<td>6. Collision prevention system</td>
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<td>7. Grounding prevention system</td>
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<td>8. Harbour navigation guidance system</td>
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<tr>
<td>9. Harbour navigation guidance support system</td>
<td></td>
<td></td>
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<tr>
<td>10. Automatic berthing and unberthing system</td>
<td></td>
<td></td>
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<tr>
<td>11. Automatic mooring system</td>
<td></td>
<td></td>
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<tr>
<td>12. Automatic mooring system</td>
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<tr>
<td>13. Automatic dry cargo lashing and surveillance system</td>
<td>On-deck containers: collective lashing/tightening system, Cars: automatic lashing belt tightening system, boxed cargoes: automatic lashing/tightening system coal: gas and heat detection system grains: wet- and heat-damage detection system</td>
<td>F/A</td>
</tr>
<tr>
<td>14. Automatic dry-bulk cargo handling system</td>
<td></td>
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<tr>
<td>15. Automatic liquid-bulk cargo handling system</td>
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</table>

*: As rated by the author based upon the description given in the document. A: Affirmative, A/F: Affirmative and feasible, F: Feasible

B: Techno-Super Liner '93

In a bulletin issued in August 1988 by the Bureau of Marine Engineering and Safety, Ministry of Transport, an outline of “Techno-Super-Liner '93” project was introduced. The projects aims to develop a high-speed freighter (50 knots with a 1,000-ton of payload) to serve coastal zones, remote islands and even neighbouring countries at an intended cost of 1/10 that of air-freight. The figure 93 as employed in the project’s name signifies that 1993 is the target year for a 1/5 scale-model to be conducted and, further, that the target velocity of the craft is 93 kph.

The bulletin, noting that water resistance at speeds exceeding 25 knots makes high-speed operation prohibitively uneconomical as far as the current hull shape is concerned, and further that the use of existing high-speed craft such as hydrofoil, jetfoil, and hovercraft is more or less confined to passenger transport, stresses the following items as requiring study and development:

1. a hull which can survive such speeds and loads
2. a new light-weight material
3. a high-performance water-jet propulsion system
4. a system for stabilizing and controlling the craft’s position

The bulletin proclaims that the Techno-Super-Liner 93, if it becomes a reality, will contribute not only to the development and improvement of domestic passenger and commodity transport but also to that of neighbouring countries as it can serve such countries within no more than two days. It further predicts that such craft may link Japan with the U.S. West Coast ports within 4 days.
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**YO System:** Yard Operation Computer System
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**DTS:** Data Transmission System (Radio)
**TAS:** Transtainer® Automatic Steering System
**TOS:** Transtainer® Operation Supervising System
**POS:** Portainer® Operation Supervising System

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