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The Cover: Port of Spain, Trinidad. Photo shows a container berth at Berth 6A under construction for the Port Authority of Trinidad and Tobago. See also story on page 39.

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Notes for the Guidance of Port Authorities for Control of Dangerous Goods

Mr. A.J. Smith, IAPH Liaison Officer with IMCO, sent Secretary-General the notes for the guidance of port authorities on the conveyance and handling of dangerous goods in harbour areas, which was prepared by the British Ports Association. According to his information, the notes were circulated to British Ports with the recommedation that (a) they be used as the basis for appropriate training programmes, and (b) that steps be taken to secure the voluntary compliance of port users and customers with the procedures outlined in them.

Also, recommended by Mr. Smith were that the members of this Association be knwon with the notes so that their comments be given to the IMCO Sub-Committee on the Carriage of Dangerous Goods, especially to the meeting on the "Safe Practices of Dangerous Goods in Ports" which was to take place in this September by the Committee.

Since the Notes are considered undoubtedly to be very informative reference to many of our members, the full text of the notes are reproduced hereunder for their reference and commenting to the IMCO through the office of our Liaison Officer with IMCO, Mr. A.J. Smith. (DSG)

BRITISH PORTS ASSOCIATION

Notes for the Guidance of Port Authorities on the Conveyance and Handling of Dangerous Goods in Harbour Areas Part I – General

1. Introduction

1.1 There can be no substitute for the strict observance by all involved of established and effective practices and procedures relating to the carriage, handling and storage of dangerous goods within the harbour area if the safety of that area, the people within it and its environment are to be assured and maintained.

1.2 The Notes which follow have evolved from detailed examination and consideration of practices and procedures for the control of dangerous goods operated throughout the international port community. The effectiveness of these practices and procedures has been established. Consideration of their application by vigilant personnel in évery port through which dangerous goods are conveyed should be regarded as a matter of urgency and training programmes based on these are recommended.

1.3 Whilst the base for these Notes is the International Maritime Dangerous Goods (I.M.D.G.) Code, due regard has been paid to the provisions of the volume "Carriage of

Dangerous Goods in Ships-The Blue Book", issued by the Department of Trade in the context of United Kingdom legislation on this subject. These Notes should also be regarded as complementary and subject to the provisions of the regulations set out in the Conveyance in Harbours of Military Explosives Regulations, 1969 (Statutory Instrument 1969 No. 18), as from time to time amended, so far as harbours within the United Kingdom are concerned.

1.4 Although particular reference is made within the Notes to Fire Precautions (Note 9) it would be prudent for each harbour authority to ensure that appropriate procedures are evolved and published to deal with all forms of emergency situations which may arise from the presence or handling of dangerous goods within the port.

2. Definitions

For the purposes of these Notes the following definitions have been adopted:-

"Berth" includes any berth, dock, pier, jetty, quay, wharf, mooring, anchorage, offshore terminal or any other place or premises within the harbour.

"Berth Operator" means the operator of the berth or the installation owner or the harbour authority as appropriate. "Bulk Dangerous Goods" means any cargo covered by the International Maritime Consultative Organisation Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, the I.M.C.O. Code for the Construction and Equipment of Ships Carrying Liquefied Gas in Bulk, petroleum spirit, or cargoes with similar hazards carried in a tank forming an integral part of, or being a permanent fitting to a vessel's structure, or appropriate bulk solids.

"Certificate of Fitness", means a certificate issued by a competent national authority in accordance with the relevant Intergovernmental Maritime Consultative Organisation (I.M.C.O.) Code, for the construction and equipment of that type of vessel certifying that the construction and equipment of the said ship are such that specified dangerous substances may be carried in that ship.

"Competent Person" means a person possessing such qualifications, training and experience as satisfy the Harbour Authority that he is competent to certify that any vessel, or any part thereof, carrying, or having carried, dangerous goods, is free from a dangerous concentration of flammable gas or noxious vapour or explosive material.

"Dangerous Goods" means any cargo defined as "Packaged Dangerous Goods" or "Bulk Dangerous Goods" in this paragraph, and as classified in the I.M.D.G. Code.

"Dumb Barge" means any craft without the means of self-propulsion.

"Explosive" includes gunpowder, nitro-glycerine, dynamite, guncotton, blasting powder, fulminate of mercury or of other metals, coloured fires, and every other substance whether similar to those abovementioned or not, used or manufactured with a view to producing a practical effect by explosion or a pyrotechnic effect and includes fog signals, fireworks, fuses, rockets, percussion caps, detonators, cartridges, ammunition of all descriptions, and every adaptation or preparation of an explosive as above defined.

"Flammable liquid" means any liquid with a flashpoint at or below $61^{\circ}C/141^{\circ}F$, as determined by the Closed Cup method of test.

"Flexible Pipe" means a flexible shore-to-ship connecting pipe or an articulated pipeline assembly either of which is provided for the purpose of transferring liquid between a vessel and a shore pipeline or pipelines.

"Freight Container" means an article of transport equipment that is of a permanent character and accordingly strong enough to be suitable for repeated use; specially designed to facilitate the transport of goods; by one or more modes of transport without intermediate reloading; designed to be secured and/or readily handled, having fittings for these purposes. The term "freight container" includes neither vehicles nor packaging, however, containers when carried on chassis are included.

"Gas" means vapours and their mixtures with air.

"Harbour" means those parts of the Harbour within the jurisdiction of the Harbour Authority and including ajacent berths where a dangerous occurrence would jeopardise the safety of the rest of the harbour area.

"Harbour Authority" means any persons in whom are vested under the Harbours Act, 1964, by another Act, or by an order or other instrument (except a provisional order) made under another Act, or by a provisional order, powers or duties of improving, maintaining or managing a harbour.

"Harbour Master" means the Harbour Master, Dock Master or other officer duly appointed by the Harbour Authority to act in such capacity or any person having authority so to act.

"Hovercraft" has the same meaning as in the Hovercraft Act, 1968.

"I.M.D.G. Code" is the Intergovernmental Maritime Consultative Organisation's (I.M.C.O.) Dangerous Goods Code, as amended from time to time.

"Inflammable" is synonymous with "flammable".

"Liquefied Gas" means any gas or any mixture consisting predominantly of one or several flammable or toxic gases, maintained in liquid form by compression or refrigeration or a combination of compression and refrigeration.

"Loading and Discharging" includes the actual operations of loading and discharging, transfer within a ship, transhipment between two ships and any acts of ullaging, sounding or sampling, whether or not carried out in connection with such operations.

"Master" includes any person, other than a pilot, having the charge of a vessel, and in reference to any boat belonging to a vessel means the Master of the vessel.

"Naked Lights" means open flames and fires, exposed incandescent material and any other unconfined source of ignition and includes electrical and other equipment liable to cause sparking and unprotected light bulbs.

"Owner" when used in relation to goods means and includes any consignor, consignee, shipper or agent for the sale, receipt, custody, loading or unloading of the same, as well as the owner thereof; when used in relation to a ship includes any part owner, broker, charterer, agent or mortgagee in possession thereof, and when used in relation to a vehicle means and includes any part owner or agent or person having charge of a vehicle for the time being.

"Packaged Dangerous Goods" means any substance, carried in a receptacle, freight container or portable tank, having properties coming under the classes listed in paragraph 20 below. The term includes empty receptacles which have been previously used for the carriage of dangerous goods unless such receptacles have been cleaned and dried or, when the nature of the former contents permits with safety, have been adequately closed, or in the case of radioactive substances have been both cleaned and adequately closed, but should not include ships stores and equipment.

"Pipeline" means all shore-to-ship connecting pipes, connections, valves and other ancillary plant, apparatus and appliances and provided or used for or in connection with the loading or discharging of liquid but does not include any part of the ship's pipes, apparatus or equipment other than the termination of those parts of the ship's pipes, to which the flexible pipe is connected, and shut-off valves fitted on the ship which are operated from the shore.

"Receptacle" includes portable tank or tank container or package used for the transport of dangerous goods.

"Petroleum Spirit" means such petroleum as when tested in the manner set forth in Part II of the Second Schedule to the Petroleum (Consolidation) Act 1928, gives off flammable vapour at a temperature of less than 23°C/73°F. "Vehicle" means any rail or road vehicle permanently attached to an underframe and wheels or chassis and wheels and includes any trailer or semi-trailer whether or not attached to a prime mover.

"Vessel" includes any ship, boat and any other description of vessel used in navigation.

3. Notice

3.1 The Harbour Master should be notified of the quantity, packaging and correct technical names of the dangerous goods (U.N. numbers where available), and their classification by the Master or owner of the vessel in which they are carried as early as practicable before the vessel or vehicle as the case may be enters the harbour area. Where the dangerous goods are carried by vehicle, the owner of the goods should fulfil the notification requirements. In normal circumstances a 48 hour notice period is considered to be reasonable.

3.2 The master of a vessel should not load or discharge any dangerous goods or in the case of a vessel carrying bulk dangerous goods load or discharge ballast water or slops or clean or ventilate tanks or pump bilges into which dangerous goods have leaked, until he has given the Harbour Master information on the nature and quantity of such dangerous goods and the time and place where such operations are to be carried out, and the approval of the Harbour Master obtained.

4. Signals

4.1 The Master of every ship in the Harbour which has any dangerous goods on board or which having discharged dangerous goods has not been rendered free from flammable vapour to the satisfaction of the Harbour Master should ensure that the ship displays at all times whether moored, anchored or under way, Flag 'B' of the International Code of Signals by day and by night a red light so constructed as to give a clear uniform and unbroken light visible in conditions of normal visibility all round the horizon for a distance of at least three nautical miles.

4.2 The said flag and light should be displayed in such a position as may best ensure the visibility of the flag and light. The said light should be displayed above any other light which the ship may show.

4.3 Provided that in the case of a vessel which cannot comply with the foregoing, the Master of such vessel should display in a conspicuous position above the deck, by day, a Flag 'B' of the International Code of Signals made of metal of agreed dimensions and by night an all round red light.

5. V.H.F.

All vessels carrying dangerous goods within the harbour should be fitted with V.H.F. radio which should be switched on the port operational frequencies.

6. Berthing

6.1 The master of every vessel having dangerous goods on board should anchor, moor or berth his vessel only at such places and at such times as the Harbour Master directs and should not move his vessel except by permission or by order of the Harbour Master except in emergencies affecting the safety of his vessel.

6.2 No vessel ought to approach alongside a vessel bearing the flag or light referred to in paragraph 4 without the permission both of the Master of that vessel and the Harbour Master.

6.3 The Master of every vessel having dangerous goods on board should, at all times while it is berthed in the Harbour unless exempted by the Harbour Master:—

- (i) Provide and have available for immediate use adequate towing wires at bow and stern properly turned up and secured to mooring bits and having the towing eyes passed outboard and maintained at about water level;
- (ii) ensure that suitable arrangements are made to secure the quick release of the vessel in an emergency;
- (iii) ensure that the vessel is at all times secured with moorings of sufficient strength and number for the size of the vessel and local conditions;
- (iv) maintain such boiler fires or other machinery as may be necessary for the mobility and safety of the vessel and the handling of cargo and ballast. Such boiler fires should be kept under supervision and funnel uptakes and boiler tubes should not be blown without the permission of the Harbour Master; and
- (v) ensure that adequate fenders are maintained between the vessel and the berth.

7. Supervision

The Master should ensure that a responsible officer of the vessel supervises the loading into and discharge from any vessel of any dangerous goods and that the officer is aware of the risks involved and the steps to be taken in an emergency. The Master should obtain from the Harbour Master or berth operator the location of the nearest means of summoning the emergency services, ensure that the officer concerned is aware of this and ensure that such means are operable before beginning loading/discharge.

8. Intoxicated Persons

No person under the influence of drink or drugs to such an extent that his actions are not under proper control should be allowed to be in charge of operations involving the handling of any dangerous goods, to handle dangerous goods, or to approach the berth or board a vessel where dangerous goods are present.

9. Fire Precautions

9.1 The Master of any vessel which is carrying or into which or from which dangerous goods are being loaded or discharged and the berth operator should ensure that (a) smoking is only permitted in designated places, (b) conspicuous notices prohibiting smoking are exhibited in places where smoking would constitute a hazard.

9.2 The Master and berth operator should take precautions for the prevention of accident by fire or explosion; fire fighting appliances should be available for immediate use on the ship. The berth operator should notify the Master of shore fire fighting arrangements.

9.3 No person should smoke or have about his person any match or means of creating ignition at any place where a notice prohibiting smoking is exhibited.

9.4 The berth operator should ensure that:-

- (i) adequate and properly tested fire-fighting facilities appropriate to the cargo are available for immediate use in the vicinity of any vessel carrying, loading or discharging dangerous goods or at any place where dangerous goods are deposited;
- (ii) ready access by the emergency services to such vessel or place is at all times available;
- (iii) audible alarms for emergency use are installed in the vicinity of the vessel or means of rapid communication with the emergency services is available.

10. Use of Tools

The Master of the vessel or berth operator as the case may be, should ensure that where there is the possibility of flammable vapours being ignited in the vicinity:-

- (i) care should be exercised to avoid causing a spark when using tools;
- (ii) no hammering or chipping or other work capable of causing ignition should be carried out.

11. Repair Work

11.1 Other than in the engine room and except as permitted in an emergency in accordance with the provisions of the following paragraph, repairs involving the use of hot rivets, welding, burning, power tools or implements liable to cause a spark or any operation creating a risk of fire should not be carried out on any vessel carrying explosives, flammable liquids in bulk or flammable liquefied gas in bulk, nor in any compartment or tank in which or adjacent to which other dangerous goods are stowed, or which has not been freed of flammable gas or residue which might give rise to danger.

11.2 In an emergency if the Harbour Master considers that repairs are essential in the interests of safety, he should be able to authorise repair work to be carried out. Such authority should be displayed on the gangway or any place or means where persons embark or disembark from the vessel during the time the work is being done.

11.3 A vessel which has dangerous goods on board as cargo

should not be permitted to enter a dry dock unless the permission of the Harbour Master has been obtained to do so. Such permission should be granted subject to compliance with specified conditions.

12. Shore Electricity

Where electric power is supplied from shore to a vessel carrying dangerous goods, the person responsible for such supply should ensure that the cable connecting fittings and switch gear meet the following requirements:-

- (i) compliance with the appropriate International Electro-technical Commission regulations;
- (ii) that all electrical equipment is so constructed and installed that there is no danger of injury to any person handling it in the proper manner;
- (iii) that all conductors are adequately electrically insulated and protected against physical damage and chafing;
- (iv) that each separate electrical circuit is protected against short-circuit;
- (v) that each overload protective device is permanently marked with its rated current carrying capacity;
- (vi) that no cable is suspended in an overhead position where it may be liable to damage from vehicles, cranes or other mobile equipment;
- (vii) that the switching arrangements for the connection of the shore supply to the ship's equipment are such as to prevent inadvertent connection to any circuit which might give rise to danger.

13. Lighting

13.1 No naked light or other lighting equipment which does not comply with the requirements of a Classification Society should be used on a vessel or craft carrying explosive or flammable cargo or a berth where such cargo is present or on a vessel where gases are present.

13.2 The loading or discharging of dangerous goods or ballast water, and the rigging and disconnecting of pipelines ought not to be permitted unless the Master and Harbour Master are satisfied that safe illumination is provided.

14. Weather Precautions

Subject to the direction of the Harbour Master, the Master should not permit the loading or discharging of dangerous goods in weather conditions which are likely to give rise to any exceptional hazard.

15. Untoward Incidents

15.1 Any person having charge of dangerous goods should in the event of an accidental escape of dangerous goods immediately report the incident to the emergency services and to the Harbour Master.

15.2 The Master of a vessel carrying dangerous goods should inform the Harbour Master immediately of any untoward incident relevant to such goods on his vessel which occurs during the period that the vessel is within the Harbour and which threatened or could have threatened safety.

16. Hovercraft

No dangerous goods should be carried in a hovercraft except with the written permission of the Harbour Master.

17. Facilities for Inspection

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The owner of any dangerous goods or the Master of any vessel having dangerous goods on board should when so required and where practicable:—

- (i) by the Harbour Master or by any police officer show to such Harbour Master or officer all such dangerous goods under his control or upon his vessel or, in the case of freight containers make known their position and afford every reasonable facility to enable such Harbour Master or officer to inspect and examine such dangerous goods; and to ascertain whether these Notes are being duly observed;
- (ii) by an emergency services officer afford every reasonable facility to enable such officer to ascertain whether any provisions relating to fire precautions are being observed.

18. Control of Vessels

The Master of a vessel having dangerous goods on board should ensure that at all times there is a sufficient crew on board to maintain a proper watch and to man any appliances which may be required to deal with any emergency situation.

19. Power to Remove

The Harbour Authority should be able to order the removal of any dangerous goods from their premises or remove such goods and recover from the owner the costs of such removal and of the placing or storing of such goods elsewhere.

Part II Packaged Dangerous goods

20. Classification

For the purpose of these Notes, dangerous goods are classified in accordance with the I.M.D.G. Code as follows:-

- Class 1 Explosives
- Class 2 Gases: Compressed, liquefied or dissolved under pressure
- Class 3.1 Flammable liquids (low flashpoint group)
- Class 3.2 Flammable liquids (intermediate flashpoint group)
- Class 3.3 Flammable liquids (high flashpoint group)
- Class 4.1 Flammable solids
- Class 4.2 Substances liable to spontaneous combustion
- Class 4.3 Substances which, in contact with water, emit flammable gases
- Class 5.1 Oxidising substances
- Class 5.2 Organic peroxides
- Class 6.1 Toxic substances
- Class 6.2 Infectious substances
- Class 7 Radioactive substances
- Class 8 Corrosives
- Class 9 Miscellaneous dangerous substances

21. Packaging

The owner of dangerous goods contained in receptacles brought within the harbour area should ensure that such goods are packed in a manner adequate to withstand the ordinary risks of handling and conveyance through the harbour and transport by sea, having regard to the nature of the goods. Such packaging should be well made, in good condition and of such character that any interior surface within which the contents may come into contact is not dangerously a affected by the substance being conveyed, and so closed as to prevent any accidental escape of the contents. Compliance with the recommendations on packaging of the I.M.D.G. Code should be regarded as the minimum standard.

22. Marking and Labelling

Before any dangerous goods are brought within the harbour, the owner of such dangerous goods should ensure that the external surface of the packages should be marked to show the identity of the dangerous goods with the correct technical name and the nature of the danger to which the goods give rise. Compliance with the marking recommendations of the I.M.D.G. Code should be regarded as the minimum acceptable standard. (see Appendix A).

23. Loading and Discharging

23.1 The Master of a vessel loading or discharging dangerous goods within the harbour should ensure that information on the quantity, correct technical names, classifications and stowages of such goods, in the vessel is in the possession of the duty officer of the vessel and is available for the use of the emergency services.

23.2 No goods should be lifted into or from a vessel over any dangerous goods stowed on deck unless the dangerous goods are packed in freight containers, without the permission of the Harbour Master.

23.3 Should anything occur during the loading or discharging of dangerous goods which might affect the safety of personnel the person having charge of such goods should immediately cause the operation to be stopped and not resumed until adequate safety measures have been taken.

24. Portable Electrical Equipment

No portable electrical equipment or lamp on a wandering electrical lead should be used in any cargo space containing packaged flammable liquids or gases without the permission of the Harbour Master and unless the atmosphere has been tested and shown to be suitable for such use by tests with a combustible gas indicator. An exception could be made as regards to the proper use of signal or any portable artificial lighting and battery-operated hand-lamps of type approved for use in a flammable atmosphere.

25. General Handling Precautions

25.1 Any person engaged in the conveyance and handling of any dangerous goods should exercise care to ensure as far as practicable that no receptacle containing dangerous goods is damaged, that no dangerous goods are allowed to escape from a receptacle and that such goods do not cause injury to the health of any person.

25.2 A person should not, without reasonable cause, remove or wilfully deface any label, warning sign or mark attached to or displayed on a receptacle, vehicle or freight containers.

25.3 A person should not, without reasonable cause, open or otherwise interfere with any receptacle, vehicle, or freight container containing dangerous goods so as to render possible the escape of any of the contents (opening a freight container or vehicle to examine the contents is considered a "reasonable cause").

25.4 Whilst dangerous goods are being handled the person in charge of such operations should take precautions to prevent unauthorised persons having access to such dangerous goods, should abstain from any act which could lead to a fire or explosion, and should use every reasonable endeavour to prevent any other person from committing any such act.

25.5 A person should not leave a vehicle loaded with dangerous goods within the harbour unless the permission of the Harbour Master has been obtained and unless the name, telephone number and address of the person to be contacted in the event of an incident occurring to the vehicle or its load are prominently displayed on the vehicle or are known to the Harbour Master.

25.6 A person in charge of dangerous goods should take precautions to ensure that they are secured against theft or wrongful removal.

25.7 Where dangerous goods are to be temporarily deposited on harbour premises, they should be segregated so as to minimise the possibility of incompatible substances reacting together (see Section 4.4 of the I.M.D.G. Code). Due regard should also be paid to any special recommendations or requirements which may be applicable, e.g. shade from direct heat, stow upright etc.

25.8 When dangerous goods are being despatched by the owner of the vehicle by land vehicles, care should be taken to ensure that applicable regulations are complied with and that drivers or others are informed as to the nature of the goods they are carrying.

26. Dangerous goods in Freight Containers and Vehicles

26.1 The consignor of a freight container or vehicle containing dangerous goods to be loaded into a vessel in the harbour should ensure that the container or vehicle used for the carriage of dangerous goods is of adequate strength to resist the possible stress imposed by the condition of service in which it is employed and is adequately maintained. They should be approved in accordance with either the International Convention for Safe containers (C.S.C.), 1972, when applicable, or by a certification or approval system of a competent authority or a certification authority acting on its behalf.

26.2 The selection, packing and segregation of dangerous goods within a freight container or vehicle should comply in every respect with sub-sections 12.2, 12.3 and 12.4 of section 12-Freight Container Traffic-of the International Maritime Dangerous Goods Code.

Class 1–Explosives

27. Interpretation

"Hazard Division" and "Compatibility Group" are those referred to in the I.M.D.G. Code.

28. Safety Ammunition, Fireworks, Safety and Signalling Explosives Etc.

28.1 Paragraphs 29 to 34.2 below should not apply to explosives of I.M.D.G. Code division 1.4.2, or manufactured fireworks of I.M.D.G. Code division 1.3 Compatibility Group G.

28.2 Explosives carried by a vessel or a hovercraft for safety or signalling purposes should be kept and conveyed in that vessel in a safe and suitable manner and precautions should be taken to prevent access by authorised persons to such explosives. They should not be stored with or near any explosives carried as cargo.

28.3 No rocket distress signal, rocket sound signal or rocket should be used in the Harbour except in the case of distress.

29. Explosives to be Used in Harbour Works

Up to 1,000kg. in gross weight of explosives may be conveyed within the Harbour for immediate use therein for the purposes of harbour works or wreck dispersal provided that:--

- (i) the consent in writing of the Harbour Master has first been obtained;
- (ii) the explosives are conveyed, stored and used in accordance with any conditions which may have been attached to such consent.

30. Authorised Explosives

No vessel having on board any explosive for which a licence would be required under section 40(9) of, or under any Order in Council made under section 43 of, the Explosives Act 1875, for its importation into the United Kingdom should enter the Harbour:-

- (i) where any such explosive is to be unloaded (whether into another vessel or otherwise) within the Harbour, until the Harbour Master has been satisfied (by production of the importation licence or by some other means) that the importation into the United Kingdom of such explosive is duly authorised and he has notified the Master of the vessel accordingly; or
- (ii) where such explosive is not to be unloaded within the Harbour, except with the written approval of the Harbour Master and subject to such conditions as he may impose.

31. Repairs

No repair work should be carried out in any part of a vessel in which explosives other than those referred to in paragraph 28 above are stowed unless the following conditions are complied with:-

- (i) a certificate signed by the Master shall be given to the Harbour Master declaring that the places on or near which the repair work is to be done have been cleared of explosives;
- (ii) before the work is begun the Harbour Master shall endorse the certificate giving his written approval for the work to be done;
- (iii) the certificate shall be displayed on the gangway or any place or means where persons embark or disembark from the vessel during the time the work is being done.

32. Loading and Discharging

32.1 No explosive should be loaded or discharged on any berth until the vessel or vehicle by which it is to be removed therefrom shall be at the place in readiness to receive it, except by permission of the Harbour Master. When the loading or discharging of explosives has been commenced, such loading or discharging should proceed with due diligence.

32.2 The berth, hold, all adjacent gangways and decks of any vessel and the floor of any vehicle should be carefully cleaned before any explosive is placed thereon.

32.3 The loading into any vessel and discharging from any vessel of any explosives should not be carried out at any time between sunset and sunrise unless the consent of the Harbour Master has first been obtained.

32.4 When at or near a place where explosives are being loaded or discharged no person should wear shoes or boots with metal nails, heels or tips of any kind unless such boots

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are covered by leather, rubber, felt or any other nonmetallic materials.

32.5 Radio waves using continuous or keyed carrier wave should not be transmitted from a vessel loading or discharging explosives unless the output used for transmission does not exceed 50 watts. Metric wave radar transmitters should not be used. Centimetric radar transmitters should not be used if any part of the aerial system is within 30 meters of explosives. If, in an emergency it is necessary to use any of these systems, loading and discharging of explosives shall cease during actual transmission.

33. Carriage of Passengers

No explosive should be on board any vessel whilst it is carrying passengers.

34. Security of Explosives

Every harbour authority through whose area of jurisdiction explosives are conveyed should request the appointment by the civil or port police authority, as appropriate of an explosives security officer, who should be responsible for ensuring that adequate precautions are taken for safeguarding explosives against theft or wrongful use. Any person having charge of explosives should comply with such instructions of the explosives security officer as may be necessary to ensure the safeguarding of explosives.

35. Records of Movement of Explosives

35.1 The Harbour Authority should maintain a record of the quantity of explosives handled within the Harbour area distinguishing Division 1 mass explosion risk (Div.1.1) from other Divisions.

35.2 Any person in charge of explosives who transfers that charge to another person should obtain a receipt distinguishing the respective division and their quantity the number of packages and remarks on the packages, and should retain such record for a period of 3 months.

Class 7–Radioactive Substances

36. Compliance with I.A.E.A. Regulations

In addition to the general advise given in Part I and Part II of these Notes, radioactive substances should not be brought into the harbour area unless they are in complete conformity with the International Atomic Energy Agency's Regulations for the Safe Transport of Radioactive Materials, as currently existing.

Part III — Bulk Dangerous Goods

37. General

Except for the purpose of transhipment, a vessel carrying dangerous goods should not lie within 30 meters of another vessel unless authorised by the Harbour Master.

38. Cargo Information

The Master of any vessel carrying dangerous goods in bulk should have immediately available the following information in respect of each product carried:—

- (i) a full description of the physical and chemical properties including reactivity, necessary for the safe containment of the cargo;
- (ii) action to be taken in the event of spills or leaks;
- (iii) counter measures against accidental personnel contact;
- (iv) fire-fighting procedures and fire-fighting media.

39. Certificate of Fitness

39.1 The owner or master of any vessel carrying dangerous goods in bulk should not except with the approval of the Harbour Master cause or permit that vessel to enter any harbour in Great Britain unless he possesses a certificate of fitness relating to these goods and that vessel.

39.2 The owner or master of any vessel should not cause or permit dangerous goods to be loaded in bulk into that vessel unless he has the approval of the harbour authority. 39.3 The master or owner of any vessel carrying dangerous goods in bulk should ensure that any conditions to which the certificate of fitness in respect of that vessel is subject are complied with.

39.4 The owner or master of any vessel to which paragraphs 39.1, 39.2 and 39.3 are applicable should notify the Harbour Master at least 48 hours before the vessel enters the Harbour of the nature and quantity of the dangerous goods on board, the name and port of registration of the vessel and whether a certificate of fitness is in force for that vessel for the dangerous goods in question, and such notification should, except in the case of a voyage of less than 48 hours duration, be in writing, provided that, in the case of a voyage of less than 48 hours duration such notification should be given as soon as is reasonably practicable before the vessel enters harbour.

40. Testing of Controls and Systems

The Master and berth operator or their representatives as the case may be should ensure that cargo handling controls, emergency shutdown and alarm systems are tested and found to be satisfactory before cargo handling operations begin.

41. Overflow Control

For those cargoes indicated in Appendix B the cargo tank overflow equipment should satisfy the requirements of the I.M.C.O. Recommended Code for the Construction and Equipment of ships carrying Dangerous Liquids in Bulk.

42. Warning Notices

Before loading or discharging liquefied flammable or toxic gas at any berth in the Harbour, the berth operator should ensure that appropriate warning notices are placed at all entrances and approaches to that berth.

43. Fire Fighting Precautions

Except with regard to dumb barges, an adequate number of deck fire hoses on board a vessel carrying dangerous goods should be uncoiled and connected to the fire main and the fire pump should be ready for immediate operation. Pressure on the main should be maintained by a pump on board where practicable or otherwise by supply from the shore.

44. Protective Clothing

The Master and berth operator as appropriate should ensure that members of vessel's crew and others concerned with the handling of bulk dangerous goods which may be harmful to inhalation ingestion or contact with the skin together with any persons having official business on the vessel are made aware of the hazards associated with the cargo being handled and are instructed to act with care and wear such protective clothing as may be required to ensure protection against such risk.

45. Portable Electrical Equipment

No portable electrical equipment or lamp on a wandering electrical lead which has not been approved as intrinsically safe, should be used in:-

- (i) any tank containing flammable liquid or having contained flammable liquid but not gas free;
- (ii) any cofferdam adjoining such cargo tanks;
- (iii) any cargo pump room unless totally free of flammable vapour;
- (iv) any enclosed space immediately above a cargo tank crown containing flammable liquid but not gas free (for example between decks);
- (v) any enclosed space other than a cofferdam adjacent to or below the top of such cargo tanks;
- (vi) anywhere over the cargo deck of a vessel carrying flammable liquid or having carried flammable liquid but not gas free.

46. Compatibility of Materials

The Master of a vessel and the installation owner as appropriate should ensure that the materials of any tank, pipe, valve or other apparatus with which a dangerous substance may come into contact are of such a nature that no hazard may be caused thereby weakening, chemical reaction or other cause. Similarly the berth operator should ensure the proper segregation of incompatible dangerous goods on the berth.

47. Safety Check

47.1 A safety check list approved by the Harbour Master, showing the main safety precautions to be taken before the loading or discharging of dangerous goods in bulk should be provided by the berth operator and should be signed by the Master and the berth operator before such operations begin. The check list should be available for inspection throughout the operation.

48.2 The berth operator should provide the Master with a written notice of signals to be used in an emergency and telephone numbers of day/night emergency services.

48. Pumping

Before dangerous goods are pumped into or out of any vessel from or into a shore installation the Master of that vessel or his representative and the berth operator should agree on the maximum loading and discharging rates taking into account the arrangement and capacity of the vessel's cargo lines and the vapour-venting system and the maximum allowable pressure in the vessel and shore hoses and associated pipe-work. The Master and operator of the shore installation should make frequent checks to ensure that the agreed back pressures and loading discharging rates are not exceeded. Account should also be taken of the possible pressure increases due to emergency shut-down procedures.

49. Pipelines

49.1 No equipment should be used for any substance other than for which it has been designed, having regard to the temperature of the product.

49.2 Any pipeline liable to damage by impact should be suitably protected.

49.3 The area in the vicinity of the termination of a fixed pipeline on a berth should be well ventilated. A pipeline should not terminate in a well.

49.4 The Master and berth operator should ensure that all

pipelines and hoses whilst rigged for loading or discharging bulk dangerous goods are adequately earthed and kept constantly under supervision, that adequate precautions are taken to prevent a short circuit and in particular that:—

- (i) all pipelines and hoses are non-conductive of electricity or, if conductive of electricity, include an insulation flange or length of non-conductive hose;
- (ii) all metal parts on that side of any insulating flange or length of non-conductive hose which is away from the vessel are earthed to the berth earthing system and that those on the other side are earthed via the vessel; and
- (iii) other metallic connections between the berth and the vessel should be protected or arranged to ensure there is no possibility of incendive sparking where flammable atmospheres may be present during the period of loading or unloading the vessel.

50. Flexible Pipes

50.1 A flexible pipe should, before being used for the first time for the loading or discharging of bulk dangerous goods and subsequently at such intervals as the Harbour Authority requires be subject to a specified pressure test.

50.2 Before being put into use on any day, a flexible pipe should be visually inspected by a competent person for signs of deterioration.

51. Prevention of Leakage

51.1 While at a berth all scuppers should be kept closed except so far as is necessary to allow water only to be drained off. The Master should arrange for scuppers to be inspected periodically during loading and discharging to ensure they are kept closed.

51.2 The berth operator should ensure that all drain-holes and pipes, and all other drains of any kind where by dangerous substances might in the case of accident escape into the Harbour are closed, before loading or discharging commences and are kept closed during the whole period of loading or discharging.

51.3 All reasonable care should be taken to ensure that all pipes and associated equipment on the shore and on the vessel are free from leakage and kept constantly under close supervision during loading and discharging.

52. Communications

The berth operator should ensure that direct communication by telephone or radio has been established between any berth used for the loading or discharging of bulk dangerous goods and the storage installation from or into which such goods are being transferred. Any earphone, microphone or other apparatus so used should be of a type which will not cause ignition of flammable gas.

53. Loading and Discharging

53.1 When access into or through accommodation spaces on a vessel is necessary, doors should be opened only momentarily. Subject to that, the following precautions should be observed:—

- (i) all external doors, ports and similar openings in the amidships accommodation should be kept closed; and
- (ii) all external doors, ports and similar openings leading from the main cargo deck to the after

accommodation or to machinery spaces (other than the pumproom) should be kept closed. All doors, ports and similar openings in the after accommodation at any deck levels which over-look the main cargo deck should also be kept closed.

53.2 Precautions should be taken to prevent flammable or toxic vapour from entering accommodation and machinery spaces on a vessel during the loading or discharging of flammable or toxic liquids or the loading of any bulk cargo into tanks which have previously contained flammable or toxic liquids and which have not been freed of flammable or toxic vapour or while ballasting, freeing of flammable or toxic vapour or tank-cleaning after the discharge of flammable or toxic liquids.

53.3 Natural ventilators should be trimmed to prevent flammable or toxic vapour entering accommodation spaces. If trimming is not effective, the ventilators should be covered or closed. All mechanical ventilation or airconditioning units serving enclosed spaces other than pumprooms should be stopped if there is a risk of flammable or toxic vapour being drawn in. Where possible mechanical ventilation serving accommodation spaces should be placed on recirculation to avoid drawing in air from external sources. Ventilation systems servicing pumprooms should be operated throughout all cargo and ballast handling and before and during entry to the pumprooms.

53.4 Any additional precautions which may be necessary under special circumstances to prevent entry of flammable or toxic vapour into enclosed spaces should also be taken when directed by the Harbour Master.

53.5 Except for vents designed to prevent excess pressure or vacuum within a vessel's tanks, all openings from cargo tanks should, except with the permission of the Harbour Master, be kept closed during the loading or discharging of flammable or toxic liquids or ballast water except that ullage plugs or sighting ports not situated in enclosed or partially enclosed spaces could be removed for ullaging, sounding or sampling. Such ullage plugs or sight ports should be closed immediately this has been done, unless they are adequately protected by strong non-corroding wire gauze which should be kept clean and free from obstruction; the gauze should be of a construction such that adequate flame arrestment is provided or other equivalent flame-proof device. Ullage plugs or sighting ports situated in enclosed or partially enclosed spaces could be removed for ullaging sounding or sampling, but such ullage plugs or sighting ports should be closed immediately this has been done.

53.6 If any incident occurs which could affect the safety of that operation, loading or discharging, as the case may be, should immediately be suspended until adequate safety measures have been taken.

53.7 Should an incident occur during the loading or discharging of dangerous goods or ballast water which necessitates a repair to the plant, pipes or connections or which interferes in any way with the uninterrupted flow of the dangerous goods or ballast water, such operations should be stopped and not resumed until adequate safety measures have been taken.

54. Gas Freeing and Tank Cleaning

No gas-freeing or tank cleaning on any liquefied flammable or toxic gas vessel or flammable or toxic liquid vessel should be carried out within the Harbour without the permission of the Harbour Master.

55. Ship's Stores

During loading or discharging of dangerous goods in bulk or ballast water into or from a vessel's tank, gas freeing or tank cleaning, ships stores should not be worked other than by hand. The use of lifting gear should be allowed only at the Harbour Master's discretion.

56. Cooking Equipment

Cooking Equipment (which term includes such things as electric toasters and coffee percolators) other than fixed cooking equipment heated by steam or immersed electric elements should be permitted provided that the Master and Harbour Master jointly agree that no hazard exists.

57. Entry into Spaces

57.1 No person should enter a cargo tank, hold space, void space, cargo-handling space or other enclosed space where gas may accumulate unless the gas content of the atmosphere in that space has been determined by means of fixed or portable equipment to ensure that sufficient oxygen is present and the level of toxicity or other contamination is such that the atmosphere is otherwise fit to breathe; provided that a person wearing breathing apparatus and other necessary protective equipment could enter a space under the supervision of a responsible officer.

57.2 Any person entering a space containing, or which has contained flammable vapour should not introduce a potential source of ignition unless the space has been tested and certified free of a hazardous concentration of vapour, and is maintained in that condition.

58. Completion of Operations

58.1 After every operation of loading or discharging of dangerous goods in bulk has been completed the valves of the tanks should be shut down and every pipeline and the vessel's loading or discharging pipes, as the case may be, should be disconnected, and blanked off.

58.2 As soon as practicable after a vessel has completed loading or discharging of dangerous goods in bulk and any necessary voyage requirements, including ballasting, storing and bunkering, the vessel should then sail unless the Harbour Master has directed other wise or unless permission to remain in the Harbour has been obtained from the Harbour Master.

59. Liquefied Gases, Unstable Liquefied Gas

No liquefied gas which is chemically unstable should be conveyed within the Harbour unless it is adequately inhibited and its temperature is controlled so as to prevent the occurrence of any dangerous reaction. Vessels should be provided with a certificate stating the name and amount of inhibitor added, the date the inhibitor was added, the expected duration of its effectiveness and any temperature limitations affecting it.

60. Repair Work

Where permitted repair work other than in the engine room is carried out on board a liquefied flammable gas vessel, any pipeline used for the loading and discharging of liquefied flammable gas should be disconnected, and the vessel's loading and discharging pipes should remain securely blank-flanged.

61. Compartments to be Kept Closed

Any compartment in which a tank for containing liquefied flammable or toxic gas is permanently fitted in a liquefied flammable or toxic gas vessel should be kept securely closed during the whole time the vessel is within the Harbour.

62. Protective Equipment

The berth operator should provide sufficient selfcontained breathing apparatus and protective clothing for personnel working at the berth.

63. Safety Relief Valves

63.1 There should be incorporated in every pipeline used for the loading or discharging of liquefied flammable or toxic gas one or more safety relief valves of adequate capacity so loaded as to prevent pressure in the pipeline from rising above the designed maximum working pressure. Provision should be made for every safety relief valve to discharge to a safe place.

63.2 Apparatus should be provided at each end of each flexible pipe used for the loading and discharging of liquefied gas to prevent the admission of air into such pipe and all such apparatus should be closed before the flexible pipe is disconnected and kept closed save only for the purpose of purging until it is reconnected.

64. Loading and Discharging

64.1 A liquefied flammable or toxic gas vessel should be loaded or discharged by means of:--

- (i) Steam from her own boilers or power generated on board by electrical plant or internal combustion engines designed, constructed, installed, placed and maintained in each case in accordance with the requirements of a Classification Society approved by the Secretary of State; or
- (ii) steam or electric power supplied from the shore and connected by equipment approved by the Harbour Master; or
- (iii) pressure provided by a suitable inert gas supplied from the shore or stored on the vessel, in which case the design and construction of the tanks should be adequate for the pressures involved; or
- (iv) any other means approved by a competent authority, and with the approval of the Harbour Master.

64.2 Wherever possible, loading and discharging of a liquified flammable or toxic gas vessel's tanks should be carried out by the use of a closed circuit using a vapourline for the return of flammable or toxic gas to the tank from which the liquefied flammable or toxic gas is being taken. No vapour should be discharged to the atmosphere except in the case of the operation of a safety valve for the release of an accidental increase in pressure and during the venting of inert gases from a vessel's tank.

64.3 The Harbour Master should satisfy himself that all pressure gauges on a vessel carrying liquefied gas are functioning and that all relief valves discharge to a safe place.

64.4 During the operation of loading or discharging liquefied gas the Master or the berth operator as the case may be should arrange for the gauges fitted on the vessel's tanks and the shore tanks to be carefully watched to ensure that no tank is overfilled.

64.5 Liquefied flammable gas should not be loaded into, or discharged from a vessel carrying liquefied flammable gas, (Continued on page 17)

Appendix A

IMCO — International Dangerous Goods Markings



 $^\dagger\,$ Placards for vehicles \div should not be less than 150 mm x 150 mm.

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The International Convention for the Safety of Life at Sea, 1960, which came into force on 26 May 1965, emphasizes the need to adopt a uniform system of distinctive labels for dangerous goods for international transport.

The International Maritime Dangerous Goods Code, compiled by IMCO and based on the classification system required by the 1960 Safety Convention, was recommended as a basis for national Regulations by the Fourth IMCO Assembly (15 to 29 September 1965). This classification system is identical to that established by the United Nations in 1956, and for which an internationally agreed labelling scheme exists.

The United Nations labelling scheme has been incorporated in the International Maritime Dangerous Goods Code. A facsimile of each label is shown in this brochure, the warning text being optional in any of the four official languages of the Organization. The labels for use on packages should be 100 mm x 100 mm, and for use on freight containers they should not be less than 150 mm x 150 mm; they should be gummed on the underside and resistant to moisture. For certain substances subsidiary risk labels are prescribed; in such cases no Class number should appear on these labels. Detailed provisions regarding marking and labelling are contained in the International Maritime Dangerous Goods Code.

(Continued from page 15)

between sunset and sunrise except with the approval of the Harbour Master.

65. Low Temperature Liquefied Gas

65.1 No loading or discharging of liquefied gas at a low temperature should commence until the officer is charge of such loading or discharge has ensured that:-

- (i) suitable liquid and vapour lines are provided;
- (ii) all tanks and pipelines have been gradually and evenly cooled to prevent thermal stress; and
- (iii) all automatic controls, gas detectors and temperature indicators are in working order.

65.2 Adequate arrangements should be made for the removal of any vapours and condensate which may form in a pipeline, when the pipeline is being cooled.

65.3 The Master should ensure that if there be any excess pressure in the tanks, the tanks and if necessary the surrounding decks are cooled by whatever means are available, including the use of water spray.

65.4 Where the loading or discharging of gases involves handling equipment which is at a low temperature, the officer in charge of such loading or discharge should ensure that all persons involved in the handling or operating such equipment wear protective clothing sufficient to prevent accidental frostbite.

66. Completion of Operations

66.1 All pipelines used for the loading or discharging of liquefied gas should be maintained under a positive pressure after disconnection from the loading or discharging vessel, and arrangements should be provided to maintain sufficient pressure to ensure that no air is allowed to enter such tank. 66.2 As soon as practicable after a vessel has completed loading or discharging of liquefied gas and any necessary voyage requirements, including ballasting, storing and bunkering, the vessel should then sail unless the Harbour Master has directed other wise or unless permission to remain in the Harbour has been obtained from the Harbour Master.

Appendix B.

British Ports Association

Notes for the Guidance of Port Authorities on the Conveyance and Handling of Dangerous Goods in Harbour Areas

Overflow Control

Cargo tank overflow equipment which satisfies the requirements of the IMCO Recommended Code for the Construction and Equipment of Ships carrying Dangerous Liquids in Bulk should be fitted when a vessels carries any of the following cargoes:

Acrylonitrile	Ethyl Ether
Allyl Alcohol	Insopropylamine
Allyl Chloride	Mesityl Oxide
Aniline	Mono-Nitrobenzene
Benzyl Chloride	MF Anti-knock Compounds
Carbolic Oil	Nitric Acid, 70% and over
Carbon Disulphide	(O and P) Nitrotoluene
Chloroethanol-2	Oleum
Chlorohydrins, Crude	Phenol
Chloro Sulfonic Acid	Phosphorus
Dichloropropene	Propylamine
Diisopropylamine	Toluene Diisocyanate

1–4 Dioxane Epichlorohydrin Vinyl Ethyl Ether

Notes of the Secretariat

Two IMCO publications are available.

- 1. International Maritime Dangerous Goods Code Supplement 1974-5 (English £3.40, French £3.90, per copy including packing and postage)
- 2. Facsimile of labels for the carriage of dangerous goods (£0.87 per copy including packing and postage, English, French, Russian and Spanish versions are available.)

Write and remit to: IMCO Secretariat, Publications Section 101-104, Piccadilly, London W1V OAE, England

Report on UNCTAD/SIDA Training Courses in Port Management

Mr. E. Williamson, Chief, Ports Section, Shipping Division of UNCTAD sent in IAPH a copy of the Report on the first four English-speaking UNCTAD/SIDA Training Courses in Port Management 1972-1976. Mr. Williamson advises in his letter to Dr. Sato, Secretary General, that a limited number of copies are available from UNCTAD's Shipping Division (Palais des Nations, CH-1211 Geneve 10).

For the reference of the readers, we reproduce the contents of the report and the preface as follows. (TKD)

PREFACE

Since 1972, UNCTAD has conducted five port management training courses for senior port managers from developing countries, of which four have been conducted in the English language. Now that the first series of courses in the English language have been completed, it was considered useful to put on record an account of the background and development of the courses over this period. The objectives for doing so are:—

- i) To provide a reference document which contains a continuous record from the time the idea for the first course was conceived, through its development and subsequent modifications, until the latest course was completed.
- ii) To disseminate the results of UNCTAD's experience to governments, port authorities and other interested parties who are conducting or proposing to conduct similar courses of this nature.

The report is sub-divided into two parts. First, there is the substantive report in which the planning and design of the programme, the selection of participants and the subsequent modifications in the programme, are discussed. The second part consists of a number of appendices providing sample copies of the principal documents mentioned in the text. With the exception of Appendix J, these appendices relate to the fifth, and latest, training course. These documents are reproduced here in the belief that they could assist others who may be planning to conduct management training courses.

Report on the First Four English-speaking UNCTAD/SIDA Training Courses in Port Management

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1977 Calendar of UNCTAD Meetings in Geneva

Mr. Sven Ullman, General Manager of Port of Gothenburg, who concurrently is IAPH Liaison Officer with UNCTAD, sent in the 1977 Calendar of UNCTAD Meetings in Geneva to the IAPH Head Office, Tokyo, which we reproduce as follows for the benefits of the Association members and readers. (TKD)

Preparatory Meeting on Copper, second meeting	9-13 May
Preparatory Meeting on Jute and Jute	23-27 May
Products, fourth meeting	(10 June
Preparatory Meeting on Tropical Timber	0-10 Julie
Preparatory Meeting on Manganese	13-1 / June
Preparatory Meeting on Cotton	20-24 June
Preparatory Meeting on Vegetable Oils and Oilseeds	27 June-1 July
Special Committee on Preferences, eighth session	27 June-1 July
Committee on Manufactures, eight session	4-8 July
Ad hoc Intergovernmental Committee	11-15 July
for the Integrated Programme for	
Commodities, third session	
Intergovernmental Group of Experts on an International Code of Conduct on	25-29 July
Transfer of Technology, third session	
Preparatory Meeting on Bananas	22-26 August or
	31 October-
	4 November
Trade and Development Board,	30 August-
seventeenth session	16 September
Preparatory Meeting on Tea	19-23 September
Preparatory Meeting on Bauxite	10-14 October
Intergovernmental Group of Experts on an International Code of Conduct on Transfer of Technology, fourth session	17-28 October
Preparatory Meeting on Iron Ore	24-28 October
Committee on Invisibles and Financing	31 October-
related to Trade, eight session	11 November
Intergovernmental Preparatory Group	14-25 November

18-32	Preparatory Meeting on Phosphates
33-58	Preparatory Meeting on Meat
59-65	Trade and Development Board, ninth
66-85	special (ministerial) session
	Committee on Transiton alementh as

on a Convention on International Multimodal Transport, fourth session Ad hoc Intergovernmental Committee

for the Integrated Programme for

Commodities, fourth session

special (ministerial) session Committee on Tungsten, eleventh session To be determined (In addition, other commodity conferences, expert groups and working parties may be convened as required)

28 November-

5-9 December 12-16 December

To be determined

2 December

SEATEC 77 held in Singapore

ESCAP and IAPH extended co-sponsorship to the SEATEC 77 Seminar which was held in Singapore from March 1 to 5, 1977 attended by 167 participants from 28 nations. According to the reports by the Organizer, the seminar was a success in achieving objective of creating greater understanding between all parties concerned with the dredging and construction of port for developing countries.

IAPH sent to the SEATEC 77 the following good-will message: "On behalf of the International Association of Ports and Harbors, we extend to SEATEC 77 our sincere wishes for the fruitful outcome of its deliberations, while we regret we cannot be with you at the seminar to deliver this message in person to the delegates. The SEATEC, through this seminar on the dredging and construction of ports for developing countries has now formulated an active program to promote and encourage the flow of cooperation between developed and developing ports of the world. This program, we believe, will efficiently supplement the efforts both of IAPH and UNESCAP, who co-sponsor the seminar, towards the same goal. For those of delegates who may not aware of the next conference of IAPH, may we take this opportunity to extend our cordial invitation to the tenth biennial conference to be held in Houston, Texas, U.S.A., April 24-30, 1977. The International Association of Ports and Harbors presents to SEATEC 77 seminar now being convened at Singapore its hopes for a very successful session. Howe Yoon Chong, President and Hajime Sato, Secretary-General, IAPH.

Names of authors of papers which were presented at the seminar are as follows:

- The demand for port facilities-Determination and responses

Mr. Eric Pollock, Marketing Manager and Economist, B.T.D.B.

 Roles of consulting engineer and of national government in planning and implementation of port development

Dr. Yuzo Akatsuka, Director, Engineering, Overseas Coastal Area Development Institute of Japan

 Construction of ports in developing countries: The consulting engineer's contribution—A subject appraisal

Mr. P.G.R. Barlow, Coode & Partners, U.K.

 Economic appraisal of port projects and tariff structure for services and facilities—Identification of revenue centres relatable to cost centres

Mr. V.R. Mehta, Director (Ports), Ministry of Shipping & Transport, India

- Contract specification and placement

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Dr. S.K. Battachrya,, Chief Hydraulic Engineer, Calcutta Port Trust, India

- Sociological aspects of port development in developing countries
 - Mr. Kenneth Milburn, Chief Technical Adviser, International Labour Organization, Manila
- Job creation and training in developing countries
 - Mr. Simon Feldman, Dy. Director, Technical Assistance, World ORT Union, Geneve, Switzerland
- Hydraulic research-Expensive luxury or useful investment?
 - Mr. C. Veeningen, Delft Hydraulics Laboratory, The Netherlands
- Site investigations for port and harbour works
 - Mr. E. Loewy, L. Summers, N.A. Trenter, Sir William Halcrow & Partners, London, U.K.
- Directional methods of forecasting wind—Generated sea waves

Dr. E. Serrano, SENER Consulting Engineers, Spain

- Dredging, a tool for port development-Its use and misuse
- Mr. F.C.H. Neervoort, NIRWA, The Netherlands Ecological and environmental aspects of dredging and
 - port construction Mr. N.J. Ferguson, Soros-Longworth & McKenzie, Australia
- The ecological impact of dredging operations

Dr. C. Rees, Senior Ecologist, Atkings Research & Development, England

- Application of dredging technique for environmental protection
 - Mr. E. Sato, Chief of Mechanical Engineering Dept., Toa Harbour Works Co., Ltd., Japan

- Operational aspects of dredging fleets

- Dr. J.G. Th. Linseen, Executive Secretary, International Association of Dredging Companies
- Defining an assistance strategy for developing countries: ESCAP and regional dredging problems
- Mr. Jan Sisselaar, Regional Port Adviser, ESCAP – Case Histories:
 - Dredgers in full swing in the jungle wilderness
 Mr. Wataru Abe, Daito Kogyo Co., Ltd., Japan
 - The use of permeable fabric membrane in a simple coastal defence structure designed to cope with rapidly falling sea-floor level

- Problems associated with the development of new ports in Jamaica
 - Mr. C.J. Evans, Senior Partner, Wallace Evans & Partners, U.K.
- Reclamation as a means of creating new ports

Mr. T. Sumida, Mitsubishi Heavy Industries Co., Ltd., Japan

- Panel Discussion: The evaluation and selection of equipment and methods available for dredging in developing countries
 - Ir. J. de Koning, Ballast Nedam Group

Dr. S.K. Battacharya, Calcutta Port Trust

Ir. C. de Groot, I.H.C. Group, Singapore

Mr. T. Sumida, Mitsubishi Heavy Industries Co., Ltd., Japan

Mr. A. Vijiaratnam, Director, Engineering Services, Port of Singapore Authority, in his concluding paper, stated that the Seminar was most educational and the topics presented by the Authors had been varied in content. I am glad to note that the participants took an active part in the discussions which, I must say, is most important for the success of a seminar. In effect, delegates had the opportunity to examine various facets in the area of dredging and port development works and to express their views. (rin)

ILO Dock Labour Seminar for Latin America

Mr. A.A. Shaheed, Chief, Sectoral Activities Department, ILO communicated with Secretary General Dr. Sato on March 7, 1977 informing that the Dock Labour Seminar for Latin America which was supposed to take place in Lima at the end of March, 1976, and has been postponed, will be held in Santa Marta, Colombia, from 2 to 4 May, 1977.

Originally Mr. Armando Waterland, District Sales Manager to South America, Port of Houston Authority, had been assigned to take part in the Seminar, representing IAPH, thanks to Mr. Altvater's good arrangement. Dr. Sato is now asking Mr. Altvater if Mr. Waterland's attendance to the Seminar in Santa Marta will be still possible in the hope that IAPH be represented at the ILO Seminar as originally planned.

The ILO's Press Release on the Seminar follows: (TKD)

NEW CARGO HANDLING METHODS CREATE NEW LABOUR PROBLEMS IN LATIN AMERICAN PORTS

GENEVA (ILO News)—New methods in cargo handling, and the resulting redundancy and retraining problems, will be discussed in Santa Marta (Colombia), from 2 to 14 May 1977, at a Seminar on Dock Labour for Latin America called by the International Labour Office.

The transport industry throughout the world is undergoing important changes. Modern techniques, which are also being gradually introduced in Latin American ports, aim at increasing the speed with which goods are transferred from one place to another and with less risk of damage or pilfering. These techniques include containerisation, roll-on roll-off, palletisation and other more sophisticated methods. Such systems, while sharply reducing the handling costs, can affect the employment opportunities and conditions of work of transport workers and particularly of dockworkers.

The ILO seminar is bringing together Latin American port authorities, port employers and dock labour unions to discuss the repercussions of technological change in their countries. They will deal with, among other things, regularisation of employment earnings, organisation of work in port, social repercussions of the introduction of new cargo handling methods, training of port personnel, welfare of dock labour, labour-management relations, and safety and health. Each participant will be requested to submit a paper describing the situation in his home port.

The seminar is organised with the financial assistance of the Swedish International Development Agency.

I.A.A.S.P. meets in Boston in May

Mr. Eric Ellen, 1st Vice-President and Secretary of International Association of Airport and Seaport Police, an Associate Member of IAPH, wrote to the Association that the annual meeting of IAASP will be held in Boston, Mass., U.S.A., from May 23 to 26, 1977, under the theme of

Mr. P.R. Rankilor, I.C.I. Fibres, U.K.

"Violent Crime at Airports and Seaports".

Other panel discussions will be held on "Physical Security, Customs and Police Administration, Insurance and Training", according to his letter.

He advised that should our members wished to attend the Boston Conference, they would of course be most welcome.

He further disclosed that in London they has commenced a pilot scheme on "Container Intelligence Unit" and were preparing booklets on:

- 1. Practical container security
- 2. Protection of ships against terrorism
- 3. Security recommendations-non-operating marine agency

4. Security recommendations—operating marine agency (Copies of the above will be available by writing to: IAASP, Office of the Secretary, Police Headquarters, No. 8 Gallions Entrance, London, England, E16 2QD.) (rin)

I S O meets in September to discuss ro-ro ramps standardization

Dr. N.N. Chopra, Director, Technical Coordination, ISO Central Secretariat, wrote to the Association that the representatives of this Association would be invited to the meeting on the above issues gathered by various international bodies interested in the matter, which is to be held in Geneve on June 6, 1977.

He informed that the members of ISO/TC 8 comprise the member bodies of ISO and in addition observer members of a number of other interested international organizations. The Steering Committee of ISO/TC 8 was considering the question of undertaking international standardization concerning also ro-ro ramps to shore installations. However, before taking a definite decision in this matter it was advisable that an informal consultation be held with the principal other international organizations likely to be interested in this subject.

In reply to this invitation, Secretary-General referred the matter to Mr. Ben E. Nutter, Chairman of IAPH Special Committee on Containerization, Barge Carriers and Ro-Ro Vessels to seek after the possibility of observing the meeting by an IAPH representative.

Mr. Sven Ullman, General Manager of Port of Gothenburg, was also consulted with the matter because he also was taking the chairmanship of sub-committee on the identical matter. (rin)

U.S. Federal Garbage Regulation

Ms. Elizabeth D. Ring, Public Information Specialist, Information Division, Animal and Plant Health Inspection Service, United States Department of Agriculture, wrote to the Association supplying with us a comprehensive extraction of the federal garbage regulations advising that it was important this information reach the owners, officer and crews of all ships sailing from a foreign port to the United States.

In her letter, it was emphasized that the U.S. Department of Agriculture was quite concerned about a possible repetition of the recent outbreaks of livestock diseases, which were economically devastating. You might recall the outbreaks of exotic Newcastle disease on the West Coast,

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which necessitated the destruction of 12 million infected or exposed chickens and other birds, as well as the outbreaks of hog cholera in New Jersey and Massachusetts a few month ago.

In the light of significance involved in the issue, this office reproduced the text of the publication as follows: (rin)

Federal garbage regulations apply to ships arriving at U.S. ports from all foreign countries (except Canada) and from Hawaii, Puerto Rico, the U.S. Virgin Islands, and Guam.

The regulations are necessary to prevent the spread to this country of destructive plant pests and livestock or poultry diseases by garbage.

DEFINITION OF GARBAGE

"Garbage" means all waste from fruits, vegetables, meats, and other plant or animal (including poultry) materials. Also, nonfood items that have come in contact with food—such as table refuse, galley refuse, food wrappers or containers, and other waste materials from ship's stores, food preparation areas, passengers' or crews' quarters, and dining rooms.

HANDLING GARBAGE ABOARD SHIP

Garbage left aboard must be contained in covered, leakproof receptacles inside the ship's guardrail while in territorial waters of the United States.

UNLOADING GARBAGE AT U.S. PORTS

Garbage may be removed in covered, leakproof receptacles under the direction of an inspector of the Animal and Plant Health Inspection Service to an approved facility for incineration, sterilization, or grinding into an approved sewage system.

FOR INFORMATION

For further information, write to: Port Operations Development Staff, APHIS, PPQ, U.S. Department of Agriculture, Federal Building, Hyattsville, Md. 20782.

Visitors

Mr. J. Dubois, Le Havre Port, visited Tokyo

On March 22, Mr. Jacques Dubois, General Manager of Port of Le Havre Authority, accompanied by Mr. Rene Genin, Manager of Commercial Exploitation, visited the Head Office and was met by Secretary-General and his staff. Mr. Dubois was on a trip to Japan and Korea for the dissemination of port information.

During the meeting at this Office, Mr. Dubois disclosed that he and people of Le Havre Port whole-heartedly looked forward to receiving the IAPH delegates to the 11th Conference in 1979 in Le Havre.

Mr. Dubois, one of architects of the 50,000 dock and its lock at Inchon Port, left Japan for Seoul, Korea, to meet with Mr. Kang, Director-General, Korea Maritime and Port Authority. (rin)

Mr. Thomas, J. Thorley visited Tokyo

On March 28, Mr. Thomas J. Thorley, General Manager of Port of Long Beach, accompanied by Mr. Adolf B. Zetterburg, Assistant Director of Port Operations, visited



Mr. Jacques Dubois



Mr. R. Genin

the Head Office and was met by Secretary-General and his staff.

Mr. Thorley, who serves as the Chairman of the Finance Committee of IAPH took time in reviewing the financial papers that the Secretariat prepared for the Committee's study and discussion at the coming Houston Conference and instructed the Head Office the papers should be sent to all members of his Committee for their preliminary study.

In the evening of the same day, the Long Beach Port held a reception inviting representatives of shipping companies and shippers and introduced Mr. James H. McJunkin, Assistant General Manager who was designated to succeed Mr. Thorley upon his retirement as General Manager of the Port in the middle part of this year. (rin)

Delegates from Hawke's Bay, New Zealand, visited Tokyo

On April 1, Mr. E.R. Spriggs, Chairman and Mr. V. Lawrence, Chief Executive Officer of Hawke's Bay Harbour Board visited the Head Office and were met by Secretary-General and his staff. They were on an 8 week business and survey trip to Japan, U.K., W. Germany and Scandinavian countries, on the possible shipping demands for port facilities including the types of ro-ro ramps. Although, they were not able to attend the Houston conference, they opined that the outcomes of the discussion at the Conference would contribute to their study. (rin)



Guests from Hawke's Bay Harbour Board meet IAPH Secretary General and Deputy Secretary General. From left, N. deV. Lawrence, Mr. E.R. Spriggs, Dr. Sato and Mr. Kinouchi.

Membership Notes

New Members

Regular Member

Taichung Harbour Bureau No. 43, Chu-Kong Road, Wu-Chi, Taichung, Taiwan, Republic of China Office Phone: (042) 220414 (Mr. Chen, Ming-Cheng, Director)

Associate Members

Robert R. Nathan Assoc. Inc. (Class A) 1200 18th St., N.W. Washington, D.C. USA Office Phone: 202/833-2200 Telex Number: 248482 Cable Address: NATECON (Mr. James R. Leonard, Vice President)

Wilbur Smith & Associates (Class A) P.O. Box 92, Columbia, S.C. 29202, U.S.A. Office Phone: (803) 771-8844 Telex Number: 57-3439 Cable Address: WILSMITH (Mr. Wilbur S. Smith, Chairman of the Board)

Kokosha Co., Ltd. (Class A) 693 Mikuriya Higashi-Osaka City, Osaka, Japan Office Phone: 06-781-4351 Telex Number: 5278914 KOKOS J Cable Address: KOKOSHA FUSE Japan (Mr. Hidekazu Takano)

Maestria en Ingenieria Portuaria (Class D) Centro Universitario Tampico-CD, Madero, Mexico Office Phone: 5-18-77 Ext. Ingenieria (Mr. Mario Rodriguez, Technical Adviser)

Mr. B. Couvert (Class E) SNCDV 16 Av. Matignon, 75008 Paris, France Office Phone: 720-72-00 Telex Number SAMLED 290354 Cable Address: SAMLED (c/o Societe Navale Chargeurs Delmas-Vieljeux)

PORTS and HARBORS - MAY 1977 21

Testimony Before the Senate Select Committee on Maritime Industry, California

By Robert H. Langner, Executive Director Marine Exchange of the San Francisco Bay Region February 11, 1977

Mr. Chairman and Members:

I am the executive officer of the Marine Exchange, the role I assumed in 1959-the same year my organization formalized its efforts to minimize navigational hazards with formation of our Harbor Safety Committee, currently chairmaned by Capt. Henry W. Simonsen.

The Exchange itself was originated in 1849 to herald the arrival of sailing vessels during the Gold Rush. In the 128 years since, it has become the Golden Gate Region's "eyes and ears" for shipping intelligence and operational reporting. It has pioneered many innovations, a number of which have become nationally-adopted. Several similar organizations at other ports have used this Exchange as a model for their own operations, including most recently New York. In the 1960's, following establishment of almost universal "bridge-to-bridge" intership VHF radiotelephone communications on local waters, we set up a voluntary Vessel Movement/Location Reporting System for all Bay and river operations-first of its kind in the nation. This assured subsequent selection of San Francisco as the test site and system development location for the Coast Guard's Harbor Advisory Radar. "HAR" evolved into the \$4 million Vessel Traffic System-the first Federal VTS program. I commend to you an inspection of its headquarters site on Yerba Buena Island.

Last year-in recognition of its reputation and leadership-the United States Maritime Administration granted the San Francisco Marine Exchange a \$79,000 contract to study and determine the feasibility of a national shipping intelligence system. We have now completed our survey of 22 U.S. ports, and are launching into analysis of extensive data gathered. Next step is to determine feasibility and optimum system design. If successful, the result will be a computer-based, near "real-time" information system for all anticipated and actual traffic covering over 95% of vessel movement at American harbors.

These and many other programs and measures were undertaken to enhance the safe movement of ships within our harbor complex, to minimize potential oil spills and other environmental hazards, and to maintain the flow of waterborne commerce as the single-most important economic activity upon which our economy rests. We have also within the last year sharpened our efforts with reorganization and expansion of the Exchange's Harbor Safety Committee, to further application of the expertise it represents.

Utilizing the extensive professional resources of this task force, evaluations have been made and responses provided to Federal and other proposals which would affect shipping operations here. We have also initiated proposed improvements in navigational aids and operational procedures for safety enhancement.

Following the 1972 collision of the two tankers near the

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Golden Gate Bridge, the Exchange assisted in organizing and provided secretariat services for regional inquiry and response in cooperation with ABAG-the Regional Organization on Shipping and the Environment-ROSE. Among recommendations resulting was support for new national legislation, and testimony was made on the subsequently enacted Ports and Waterways Safety Act. This law provided major new authority for the Coast Guard to initiate and enforce strict regulations and controls over shipping in U.S. waters. A significant 1973 improvement and safety enhancement was establishment here by the Coast Guard, with industry advice and concurrence, of a comprehensive ship traffic separation "scheme". Providing for lanes in each direction for approaching and departing vessels at the entrance to the Golden Gate, the system also set up interior Bay "highways" for traffic as well as a precautionary or "mixing" (interchange) area.

Support of Government proposals was not always unqualified, however. We emphasized and were supported in this viewpoint by many others—that while control over international shipping at our ports should be primarily Federal responsibility, the U.S. Government should assure that local and regional needs and conditions were fully considered in rule-making. Variations in requirements and practices, operations and geography—among others—must be taken into account. The Congressional Committees agreed, and such caveats were included in their reports, reflecting clearly such Congressional intent in passing the measure.

Our recommendations have however created a potential problem of balance, and reflect ongoing need to assess allocation of authority and responsibility to achieve the ends on which there is no disagreement: the safest transit of shipping, with minimal adverse environmental effects.

We believe this Committee shares in this need for definition with us, and in fact, your hearing today is precisely focussed on this issue: What are the limits of Federal control?... Is there need for State regulations?

These same issues have been to some degree involved with the regulation of navigational dredging, with which the Chairman is familiar—an area of concern and action by the California Marine Affairs and Navigation Conference, for which the Marine Exchange serves as secretariat and I as executive director. C-MANC has sought for over 20 years the improvement of channels here as the single most important, achievable safety measure. The strengths and weaknesses of both Federal and State dredging controls and permit processing have been spotlighted in a study prompted by Chairman Marks, and the problems found have yet to be fully remedied.

The series of questions posed in this Committee's invitation to appear, as suggested areas of concentration for testimony, perhaps can best be answered in at least in part by summary review of the issues on which they are predicated. These include:

1. The major portion of our waterborne commerce is served by ships other than American flag. This proportion

has been steadily growing, and in particular applies to tanker traffic engaged in deliveries from non-U.S. sources. (A recap of 1976 Golden Gate shipping activity compiled by the Marine Exchange is appended to this testimony.)

2. Basic responsibility for foreign commerce and its regulation is Federal. The Coast Guard in particular has sweeping authority for control of vessel traffic and standards for ships in U.S. waters.

3. While requirements for U.S. flag vessels and their manning are among the highest in the world, extension of such standards to ships of other nationalities cannot be accomplished by unilateral fiat. Long established international agreements and bodies must be modified and dealt with-such is the nature of multilateral trade and commerce. While the United States Government might be prompted to move expeditiously in seeking agreements to accelerate improvements, it is imperative that such action remain a Federal responsibility. Unilateral action by a state-or combination of states-is almost assured of counterproductive results.

4. Regarding the issue of State establishment of an oil spill liability fund, we regard such action as unnecessary and in conflict with, and pre-empted by, proposed Federal legistlation. Section 1321 of the existing Federal Water Pollution Control Act (33 U.S.C.-1321) prohibits the discharge of oil into the navigable waters of the United States and adjoining shorelines. Vessel owners are liable to the United States Government for cleanup costs up to \$100 per gross ton or \$14 million, whichever is less; terminals and other facilities are liable for such cleanup costs up to \$8 million. Other laws, such as the Trans-Alaska Pipeline Act, 43 U.S.C.-1651 et seq., and private insurance systems, such as TOVALOP and CRISTAL, provide additional cleanup and liability funds.

Congress is now considering a comprehensive bill concerning oil spill liability. It provides for strict liability for damages from oil spills and creates a compensation fund of \$200 million. It would prohibit states from requiring contributions to funds to cover claims for damages of the type covered by the bill.

In our view, the State should leave the creation of oil spill liability funds to the Federal Government, in order to

prevent overlapping, duplicative and conflicting requirements.

As the Committee knows, the U.S. Secretary of Transportation announced on January 31st establishment of a toplevel DOT task force to review existing Federal marine safety regulations and to determine what new measures may be productive to reduce the potential for oil spills. At the same time, Secretary Brock Adams issued new requirements for virtually all tankers operating in U.S. waters, calling for mandatory Loran-C and other equipment as well as regular position-fixing, improved communications between masters and pilots, and other measures. Pending are additional new regulations already subjected to public review and comments, including mandatory use of tugboats and minimum bottom clearance standards for ships in U.S. waters. While our Committee members do not agree in every instance with the DOT proposals in detail, these actions do reflect a more rapid response than in the past by the Federal Government, and a sensitivity for the environment and the public concern with recent tanker spills.

Despite lack of specific encouragement and effort by the State Government-and in fact-in the face of actual and potential barriers by State and local government entities, California's world trade and shipping have soared in recent years. Combining the Port of New York's total U.S. Customs 1976 receipts with that of JFK Airport there for purposes of comparison places the Los Angeles-Long Beach Customs District as second highest in the nation, and San Francisco as third. The impact on our economy of shipping and world trade is essential to our wellbeing. It is critical that our ports and shipping compete on the same basis as other states and coasts-a condition.that demands Federalnot state-standards and regulations.

It is not my intention to close on a cynical note, nor to infer that the maritime industry has not concerned itself greatly with safety and pollution avoidance. Our record here at the Golden Gate, as cited in the beginning of my statement, documents our innovation and pioneering in navigational improvements. We could certainly assure zero accidents by closing down all shipping traffic. On the State could mandate-if constitutional-such requirements as to

(Continued on next page bottom)

Golden Gate Ship Arrivals/Departures

COMPARATIVE STATISTICS-1976

Marine Exchange of the San Francisco Bay Region.

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTALS
TOTAL ARRIVALS	301	270	317	287	317	317	351	326	309	340	325	325	3785
TOTAL DEPARTURES	315	280	300	300	290	305	335	335	315	328		330	3763
AMERICAN FLAG: TOTAL	144	125	150	128	138	140	157	145	144	133	149	138	1691
PASSENGER	6	6	5	5	6	8	8	8	6	6	6	7	77
CARGO	59	54	65	50	65	52	58	58	56	48	53	54	672
TANKERS	63	58	70	64	61	71	82	73	67	72	75	70	826
BARGES	14	7	7	9	5	9	8	6	13	7	11	6	102
MISC. (GOVT.)	2	—	3	-	1	-	1	_	2		4	1	14
			_										
FOREIGN FLAGS: TOTAL	157	145	167	159	179	177	194	181	165	207	176	187	2094
PASSENGER	2	3	1	3	2	9	8	6	7	5	2	2	50
CARGO	129	120	141	130	141	141	145	137	115	154	129	146	1628
TANKERS	24	20	24	20	27	24	30	36	33	40	36	35	349
BARGES	2	2	1	4	1	_	3	1	4	4	3	2	27
MISC. (GOVT.)	-	-		2	8	3	8	1	6	4	6	2	40

Rotterdam Europoort Delta 76/4

A great deal of work still has to be done before the plans for the festive opening of the Rhine-Main-Danube canal can be drawn up. Every new kilometer that is being completed brings the day nearer, but is it a beckoning perspective or a looming threat? For the time being the shipping trade is prepared for the worst.

Seldom have the views about a gigantic project, which has occupied the minds of large groups of Europeans for such a long time, changed so radically in the final phase. Time and again people have spoken in florid language of the major continental waterway which is to link the North Sea to the Black Sea, implying that its establishment would also forge a tie between the European

(Continued from page 23)

decrease materially the volume of vessel arrivals, undoubtedly with a corresponding reduction in accident potential. We know realistically, however, that certain actions/benefits carry with them corresponding results/ costs. California highway engineering and motor vehicle safety programs are regarded as among the best in the world-and we have had the better part of a century now to perfect such regulations and standards. Yet we are forced to tolerate inevitable fatalities and injuries. Similarly, despite controls and government operation usually, public and rapid transit have their casualties-most recently in Chicago. Certainly no form of transportation has proportionately as much spent for safety and accident avoidance-from the design state through testing and certification, training and even ground operational control-as does flying yet disasters are considered an acceptable risk for the speed benefits it assures.

We seek to minimize these negative factors in the inevitable trade-offs encountered. We join with you in concern that the increasing volume of petroleum receipts at California ports poses potential for corresponding increased accidents, spills and pollution. We join in active efforts to minimize such mishaps, in the certainty that they are not totally avoidable. We share conviction that improvements can continue to be made, in equipment, manning, operations and practices. We believe, however, that the major thrust of such regulation productive of hastening these safety improvements should be Federal in origin, with consideration of local requirements and conditions. Our program provides for such "feedback" from experts here to the Federal agencies involved. The State of California has equal opportunity to participate in this Federal process. We suggest that it would be productive for the State of California, to the extent it possesses such competence, to comment and input expertly. We offer our cooperation and experience in this regard. Should it find after a reasonable period that results of such efforts fall short of expectations, only then should unilateral State action be considered.

Thank you.

peoples.

The users of the West European waterways system, who have believed in the 'freedom for all" principle for a long time, are beginning to doubt this more and more.

There is nothing strange in the fact that the idea of a link between the Main and the Danube was first launched by Charlemagne. He did not only dream of a European empire: in 793 he actually ordered the immediate construction of a canal between Resatz (Main) and Altmühl (Danube). But the project soon ended in failure; the conception was too big for his days. One thousand years later King Ludwig I of Bavaria made the dream come true by constructing the Ludwig-Danube-Main Canal from 1836 to 1845, which remained the link between the two rivers until after World War II. Yet, its capacity was inadequate: only ships of up to 120 tons could use it, and soon a larger project was drawn up which did more justice to the European character of the canal. In 1921 the Rhein-Main-Donau AG (RMD) company was founded in Munich to construct the nearly 700-km-long Europa Canal between Aschaffenburg (Main) and Passau (Danube) for ships of up to 1,500 tons. In 1942 the canal had reached Würzburg. After an interruption during the war the work was taken up again and in 1962 the port of Bamburg was opened. Three hundred kilometers had been completed by then; the ships were lifted up 120 m in 27 stages-a fine sample of technical progress. But an even bigger job was still to come: from Bamberg to Nürnberg (another 80 m upwards over a distance of 72 km) and work is now in progress on the final stage. This includes a climb to the highest point: 93.5 metres over a distance of 33 km.

Dampened optimism

In 1972 the port of Nürnberg was opened with a spectacular display; only a stretch of just over 130 km was still to be completed then-first to Kelheim, where the link to the Donau is to be made between 1983 and 1985, and from there to Regensburg. But this is still a long way off. During the inauguration ceremony of the port of Nürnberg admiration of the technical infrastructure was slightly pushed into the background for the first time ever by questions on the economic use of the canal and its consequences. One thing had become clear by then: the canalisation had strongly stimulated transport between Aschaffenburg and Bamberg. Moreover it had proved to be a strong incentive to large-scale industrialisation along the banks, in particular in the towns of Aschaffenburg, Schweinfurt, Bamberg, Fürth, Erlangen and Nürnberg. Expectations were also high of the favourable effects on the regional economy after completion of the stretches to Regensburg and the Austrian border. But this optimism was dampened by the realisation that the Rhine-Main-Danube connection would not only make Eastern Europe accessible to West European inland fleets, but that it would also enable East European ships to expand their field of operations in a westerly direction.

New areas and a larger field of operation mean more opportunities. This was the adage of market economics. On



A schematic survey of the huge Rhine-Main Danube project. Work at the section between Nürnberg and Regensburg is in full progress. The Aschaffenburg-Bamberg section was completed in 1962; it is 297 km long and has 27'steps'. The part of the canal between Bamberg and the port of Nürnberg was opened in 1972. The 171-km-long section between Bamberg and the link-up with the Danube (Kelheim) has 16 different levels. From Kelheim up to just past Passau, a distance of over 200 km, regulation works will be carried out in the Danube.

this basis inland shipping had served the West European countries well. A fleet of 10.5 million tons is transporting 400 million tonnes of goods on a network of waterways with a total length of 18 000 km (1973). The backbone of the transport system is the Rhine, which handles 50 per cent of the flow of goods.

The freedom of shipping on the Rhine was laid down in the Mannheim Act, and the 1921 Treaty of Versailles extended this principle to any ship of any nationality which wanted to sail on the Rhine. This unlimited freedom is now being questioned more and more. And there are other developments, too, which give rise to concern, also among the Dutch, who like to call themselves Europe's carriers (by ship and by road)—not in the least because a fair part of the Dutch national income is earned in this sector.

Inland shipping in a fix

The main question is: can the market economy under which Western Europe has operated so far successfully withstand an attack from the planned economy of the East European countries? Despite the volume of inland shipping, this branch of industry is not without problems. On the contrary: without exaggeration one may speak of a crisis-like situation. The industry is faced with a businesscyclical over-capacity due to fluctuations in cargo offers and the demand for shipping space, which in its turn is affected by the water level. The balance between these factors is already difficult to find, but there is also a structural surplus of capacity.

Motorisation and/or modernisation of the fleet has largely increased the carrying capacity, but many obsolescent ships, though still holding their own, have remained in service. Yet, they do cause problems—hence the freightsharing and price regulations and the breaking-up and laying-up regulations, which have been enforced or are being prepared to restructure this branch of industry.

In this difficult period of restructuring a new phenomenon has cropped up. In 1971/1972 West Germany signed treaties with Poland and the German Democratic Republic. These also included transport paragraphs enabling Polish and East German ships to enter the West European sailing area and freely canvass for freight on the Rhine. This is fully in accordance with the Mannheim Act and they have promptly seized this opportunity. As recently as 1972 not a single Polish ship crossed the Dutch-German border; but one year later no less than 881 ships with an average of 481 tons entered or left Holland via the Rhine. It has appeared that due to the milder winters West Europe is a welcome substitute field of operations for Polish ships when their own waters are frozen up.

This means competition. Nobody is afraid of this, but according to the carriers competition presupposes equal opportunities for all parties. And this is by no means the case. The West European carriers are confronted with an economic system in which production, transport and trade are fully in the hands of the State. This enables the East European countries to control the entire flow of goods and to exclude others, or to compete fiercely with them. All this works quite simple: the State-owned trading companies are in a position to determine their own means of transport for imports and exports by dictating the terms of delivery. It has proved to be difficult for West European companies to set up establishments in East Bloc countries; in many instances a national company has to act as agent for canvassing cargo and it is obvious who will be preferred then. On top of this comes the way in which the rates are fixed. In the Comecon countries a different procedure is followed than in the West, as a result of which the level is in almost all cases below the free market level—sometimes even substantially.

Illustrative

The Austrians are in a position to illustrate this in respect of inland shipping. Since 1955 fixed rates are being used in Danube shipping; requests to adjust the rates are rejected. Underbidding of these rates, which are already too low, has led to the bankruptcy of Austria's second largest shipowners company, Cosmos.

When the Soviets showed interest in purchasing the company and in particular its sailing rights, the Austrian Government put a halt to this by pumping money into the Erste Donau Dampfschiffahrts Gesellschaft, which is already being kept afloat with Government support in order to be able to cope with competition on the Danube. Between the two world wars Austrian companies accounted for 30 to 40 per cent of transport on the Danube; this share has now dropped to five per cent.

This is not likely to happen so easily in West Europe, but it is a sufficiently deterrent example to look forward with great concern to the last link in the Rhine-Main-Danube connection. And inland shipping is of course not an isolated case. It looks as if the East Bloc countries are out for a trial of strength with the western economic system. Apart from the armaments race this is the first giganic fight between the two big economic systems.

'What we are witnessing now are examples of coordination in the fields of foreign policy, trade policy, granting aid and strategic purposes. This combination makes the debates at the home front on assistance to foreign countries with or without strings look rather naive', says Niels Werring Jr., vice president of the Norwegian Shipowners Association. 'What the (East European) system lacks in flexibility is more than made up for by the massive pressure which is behind the activities of the system'. Mr. Werring was speaking on behalf of ocean-going shipping, which has been confronted in the past few years with a tremendous increase in the Soviet fleet and the fleets allied to it-an increase which seems to be concentrated especially on line shipping, container and Ro/Ro shipping and cruise shipping. The Dutch, too, are contributing to this. Undercutting is said to go as far as 40 or 50 per cent below the conference rates and the growth of the market share captured by the East Bloc countries is caused simply by a freight-rate policy which is only possible due to the different economic systems.

Joint action

Inland shipping thus shares the concern of ocean-going shipping. And also that of road haulage and—to a lesser extent—of rail and air transport. Therefore it is not surprising that angry calls for countermeasures are being heard in Holland. This might be possible by concluding bilateral transport agreements comprising quota regulations, by making pooling arrangements, and by including transport paragraphs in trade agreements, in order to ensure that the West European carriers get an appropriate share of the cake. Transport should be regarded in this accords an immaterial export product. But this is a knotty issue in West Europe: trade agreements can be concluded only via the European Common Market and since the prospects for a West European transport policy are still, realisation of this would not be an easy matter.

Yet, whatever the outcome might be, this would still amount to curtailing the freedom of inland shipping. 'Indeed', people will say, 'but the Mannheim Act was aimed at safeguarding the prosperity of the Rhine and this prosperity is now in jeopardy'. In other words: action is wanted. And in view of the Dutch interests at stake the Dutch Government is expected to take such action. But it will be clear that especially Holland, because of its strategic position and its big ports, will be extremely vulnerable if it should try to play a leading role in this. To the ports in particular it is of paramount importance to retain their role as international transport and distribution centres to the benefit of all consumers. This implies that in view of the East European pressure regulations will be inevitable. But such regulations should be drawn up jointly and in common consultations.

Different perspective

We have noted above that the emergence of the East Bloc fleets is a new phenomenon. It is coupled with a carefully planned penetration of traditional markets. It should also be borne in mind, however, that the Comecon countries' trade with areas beyond their own group has expanded considerably. Therefore it is not unreasonable that part of this transport is carried out by these countries themselves. But the actual challenge is to be found in the different way in which they operate. If dumping is really being practised, the question is how long these practices can continue. Someone will eventually have to pay the bill for the difference between the real costs and the rates charged. In the East Bloc it will be the citizen whose standard of living will be affected by his share in the costs. This might perhaps be the perspective of the Rhine-Main-Danube canal-the connection along which not only goods are being exchanged, but also 'immaterial products' such as private enterprise, the freedom of trade and greater prosperity.

Meanwhile the Europa Canal will provide continuing incentives for the industry and the economy as a whole in the canalisation area. Rotterdam may be able to have a share in this. It does not seem reasonable to expect inland shipping, which is so eminently suited for carrying bulk goods and larger items of general cargo, to attract larger flows of goods for Rotterdam as a result of the opening of the canal.

The year 1983 (or 1985-no agreement has reached on this as yet) is still several years ahead of us. There is still time for a common approach. But this should not be postponed too long, for ships have already entered through the back-door while the main entrance is being watched.

JAMAICA: A PROFILE

Extracted from brochure "Port of Kingston Mission" (The Mission was sponsored by The Port Authority of Jamaica in Cooperation with The Shipping Association of Jamaica.)

GEOGRAPHY

Jamaica is situated in the Caribbean Sea south of the eastern extremity of Cuba. It is the largest of the former British Caribbean island having a total area of 4,400 square miles. The island is 146 miles long (from East to West) and 52 miles wide (from North to South). A mountain ridge, just over 7,000 feet at its highest point, divides Jamaica into northern and southern coastal areas. The tropical climate of the island is conducive to agriculture and tourism. Jamaica has an average annual rainfall of 77.1 inches although there are fairly wide variations within the island.

The largest city is Kingston with a population of approximately 600,000, which represents 29% of Jamaica's total population of 2,060,300. The majority of the population is of African origin and the remainder are of European, Chinese, East Indian and Syrian origin. Kingston is the administrative centre of the country and dominates the financial, commercial and industrial life of the country. The process of urbanization accelerated after 1945 and the population of Greater Kingston and other urban centres has grown by 43 per cent between 1960 and 1970 as compared to 15.6 per cent for the country as a whole.

MEMBERS OF The Port of Kingston Mission

NOEL A. HYLTON-Chairman & Chief Executive The Port Authority of Jamaica 40 Harbour Steet, Kingston, Jamaica.

Mr. Hylton is responsible to the Government of Jamaica for the formulation of the national ports policy, to execute the development, operation and regulation of the ports of Jamaica, and to coordinate all aspects of shipping in carrying out this policy. Mr. Hylton is leader of the Port of Kingston Mission.

ERNEST A. GIROD-Chairman The Shipping Association of Jamaica, 5-7 King Street, Kingston, Jamaica.

Mr. Girod is responsible for the chairmanship of the Association's Managing Committee and for directing the administration of the organization. He is, in addition, Managing Director of Port Services Limited, a leading, Jamaican stevedoring company.

BYRON LEWIS-Manager, Kingston Free Zone Shannon Drive, P.O. Box 16, Kingston 15, Jamaica. Mr. Lewis is responsible for the general administration, marketing and promotion of the Kingston Free Zone.

PETER EVELYN–Vice-Chairman, The Shipping Association of Jamaica, 5-7 King Street, Kingston, Jamaica.

Mr. Evelyn is responsible for the vicechairmanship of The Shipping Association. He is, in addition, Managing Director of Lasocean Agencies Limited, a leading Jamaican shipping agency, cargo brokers and container loading traffic management company.

DHIRU V. TANNA–Economic Adviser Ministry of Public Utilities and Transport, 2 St. Lucia Avenue, Kingston 5, Jamaica.

Mr. Tanna is responsible for the monitoring of and advising on enterprises owned and regulated by the Government of Jamaica. In this role he sits on the Board of Directors of the Jamaica national shipping line, Naviera Multinacional del Caribe and West Indies Shipping Corporation.

SPECIAL TRADING ARRANGEMENT

Jamaica joined with other countries in the Caribbean in forming the Caribbean Common Market (CARICOM). This important agreement for regional economic integration can produce significant benefits to all member territories by way of expanded 'domestic' trade and increased production. Jamaica is one of the largest countries within CARICOM and in 1975 exported goods valued at \$30 million to the CARICOM countries being chiefly chemicals, food, and light manufactured goods. Over the last three years Jamaica has shown a consistent trade deficit with her CARICOM partners due largely to the large amounts of rice imported from Guyana and oil and petroleum products from Trinidad & Tobago.

Also in the area of international trade, Jamaica was one of the signatories of the Lome Convention, a unique achievement in relations between developed and developing countries. Under this agreement, many developing nations stand to benefit from favourable trade terms, a scheme to stabilize export earnings, and financial and technical cooperation with the countries of the European Economic Community.

Jamaica is also a preference receiving country under the Generalised System of Preferences (GSP). The GSP is a scheme of tariff preferences arising from a resolution of the United Nations Conference of Trade and Development (UNCTAD) wherein the developed countries agreed to allow manufactured and semi-manufactured products from the developing countries to enter their markets duty free or at reduced rates of duty. Jamaica has not been slow in recognising the tremendous potential of the Lome Convention and the GSP. Many export-oriented projects have begun, for example, the Kingston Free Zone which is a duty-free manufacturing complex on the Kingston waterfront. The Free Zone offers many fiscal and other incentives to exporters who are able to take advantage of the opportunities available.

LABOUR

Jamaica has had a long history of political stability and trade union freedom. A strong trade union movement which developed in the late 1930's has exerted a marked influence on Jamaica's political and economic development since that time. The rise of the unions was a new and dramatic development and its leaders have pressed for increased wages and, more significantly, for political reform. This legacy of determined bargaining has continued up to the present day and the unions have been particularly successful in negotiating wage increases in the most important sectors of the economy: bauxite and alumina and the larger manufacturing enterprises. As a consequence of this, wages in Jamaica tend to be higher than in most other CARICOM members.

POLITICAL PROFILE

Since 1944, when Universal Adult Suffrage was granted, Jamaica's political scene has been dominated by two political parties: the Jamaica Labour Party (JLP) and the People's National Party (PNP). Both parties have enjoyed extensive periods in office since their formation. The JLP won the first election in 1944 and again in 1949. Under the leadership of the late Norman W. Manley father of the present Prime Minister, the PNP took over office in 1955 and again in 1959. In 1962 the JLP won the election and dominated the post-independence period for ten years. Then, in February 1972, the PNP under Michael Manley won a large electoral victory, winning 35 of the electoral seats.

Since 1972 the present Government of the People's National Party has instigated many social programmes designed to relieve the suffering of the poor and unemployed in the society. These programmes work in the areas of employment, adult education, health and nutrition, child-care, and a National Minimum Wage. At the same time, a number of measures were taken to strengthen Jamaica's economic position and to reduce the high level of inflation. These included production incentives, the production levy on the bauxite-alumina industry, an incomes policy, tighter import controls, a restrictive monetary policy, and a less expansionary government budget.

The present Government has openly declared its philosophy of Democratic Socialism. One of the fundamental principles of this philosophy is the belief in democracy and democratic institutions. Democracy aims at giving each person in the society an equal chance to play a part in the free election of governments and in the making of national policies. The democratic principles are an inherent part of the Jamaican way of life, and any attempt to subvert them would be vigorously opposed.

Under the philosophy of Democratic Socialism, there is ample space for private enterprise. In a mixed economy such as Jamaica's the private sector is an integral partner with the Government in the process of national development. There is general recognition of the complementary



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spheres of interest of the private and public sectors. The role of the Government is devoted to the areas of human resources development and basic social services, basic nutrition, infrastructure and public utilities, natural resources, control of financial institutions, and in assistance to the private sector. The Government is fully aware of the vital role that the private sector can play and it has set upon itself the task of providing those conditions that will help to ensure maximum levels of efficiency, productivity, and development in the private sector.

In December 1976 the PNP were returned to power in an overwhelming electoral victory, winning 47 out of the 60 seats contested. The task of the Government in the next few years is seen to be to consolidate and strengthen Jamaica's economic position and to mobilise all Jamaicans to build a society of social equality and economic prosperity.

PORT OF KINGSTON

Jamaica is situated at the crossroads of the Caribbean midway between North and South America and directly astride the main shipping lanes from Europe to the Far East via the Panama Canal. The Port of Kingston is a historic and strategic facility serving as the gateway to the capital city of Jamaica and is emerging as a major transhipment point for cargo distribution in the Western Hemisphere.

Kingston Harbour served the Spanish very well in the

days after Columbus discovered the island over 500 years ago. The original port of Port Royal and later Kingston were thriving centres of commerce under the British who ruled the island for more than 300 years before Independence was declared in 1962. Today Kingston's natural harbour, seventh largest in the world, equipped with modern container facilities, break-bulk wharves and a Free Trade Zone, is the hub of Caribbean maritime activity and the growing centre for intra-regional and extra-regional shipping.

Kingston, the capital of Jamaica, is the island's leading industrial and commercial location. Through its Port passes the bulk of the island's imports and the major portion of its manufactured exports. The city has a modern banking and financial system, a sophisticated business community and an efficient transportation system for the movement of goods both on land and by air through the nearby international airport.

DEVELOPMENT IN SHIPPING

Developments have included the reorganisation and expansion of the Port Authority, the formation of a National Shipping Line, participation in regional shipping enterprises, the building of the Container/Transhipment Port and Free Zone and the modernisation of a variety of port services.

PORT AUTHORITY

Five years ago the Government of Jamaica took the decision to develop the Port Authority from a purely rate-fixing body to a vigorous organisation with broader responsibilities for rationalising the operations of the island's ports, for the development of the transhipment/ container port complex and the Free Zone. The Port of Kingston has been a viable facility for over 200 years. The great volume of trading which took place there since the 18th Century provided a wealth of experience and continuity which made it relatively easy to find a team to plan and execute a programme of development to meet the demands of growing marine activities.

1966 saw the establishment of a brand new port at Newport West replacing the old congested finger piers in the heart of the city. Nine new berths totalling 5,325 feet of berthing space, 419,000 sq.ft. of transit sheds, a wide range of on-shore equipment, an 80 foot roll-on/roll-off ramp, and depths of up to 35 feet of water alongside were provided at the new facility.

CONTAINER/TRANSHIPMENT PORT

In 1972 the Port Authority moved to meet the needs of the Container Revolution with the construction of two more berths providing 1,200 feet of berthing. This, used in conjunction with 900 feet of adjacent berthing, comprises the Container Terminal with its 2,100 feet of berthing and a minimum depth of 40 feet alongside, capable to accommodate some of the largest container vessels afloat.

This modern terminal, in conjunction with the adjoining break-bulk facilities, makes Kingston the most modern port in the Caribbean region and provides the Port with total flexibility to handle break-bulk and containers whether by lift-on/lift-off or by roll-on/roll-off.

The new terminal is served by two 40-ton rail-mounted gantry cranes which ensure speedy loading and unloading of cargo. These cranes are able to move 20 foot, 35 foot and 40 foot containers at the rate of 30 an hour. Further on-shore handling is provided by Karrilift transporters used for the movement and stacking of containers on 40 acres of back-up land.

The 40,000 sq.ft. freight station is laid out to ensure the speedy stuffing and unstuffing of containers. Chassis and road heads are provided for smooth and quick movements of containers and there is an area accommodating varying connections for refrigerated units-plug-in, tower and clipon.

OPERATION OF THE TERMINAL

While the Government of Jamaica owns the transhipment/container facilities and while this complex is administered by The Port Authority, it is managed and run by a consortium of experts in the successful management of wharves in Jamaica.

The new Kingston Transhipment/Container complex has been operative for over a year and in that time has attracted some of the world's major shipping interests—Sealand, Seatrain, Zim, Columbus and CAROL Lines. These and other lines using the Port of Kingston have established links with Europe, the Middle East, the Far East, North America and Australia.

The essential ingredient for success in operating a transhipment service is the establishing of vital feeder routes to carry cargo to the major commercial centres of the region.



FEEDER SERVICES

The West Indies Shipping Corporation, the CARICOM regional shipping line, links Kingston with ports of the Eastern Caribbean. In November its first container ship—the "Caricom Enterprise"—began serving the area and will be joined by a second vessel shortly to cope with the volume of cargo which for WISCO grew 17 per cent between 1974 and 1975, approximately 25 per cent between 1975 and 1976, and continues signs of increasing.

A comparatively new inter-regional shipping line, Namucar, now maintains a service between Jamaica, Mexico, Costa Rica, Nicaragua, Venezuela and Cuba, and has provided further links between Jamaica, the Western Caribbean, Central and South America. In addition to these Caribbean based feeder services, there are those provided by other companies which give the Port of Kingston connections with important ports around the globe.

SUPPORT FROM JAPAN

The Port of Kingston is convinced that it has an attractive proposition to offer shipping interests operating in the region. Indeed the business community in Japan with its traditional foresign had as long ago as 1972 recognised the Port's potential, as it was Nippon Fudosan Bank and other leading Japanese banking institutions co-ordinated by Daiwa Securities Company Inc. who showed practical interest in Kingston's port development and provided the initial financing backing to the transhipment/Free Zone.

The Port of Kingston has been greatly encouraged by the interest shown and encouraging opinions expressed by the Mission from the Japan Container Association which visited Jamaica last year to take a close and detailed look at Port developments.

LATIN AMERICA AS A MARKET

Traditionally, Latin America has been a major trading partner of industrialised nations, absorbing in 1975 approximately 13.5 per cent of imports from the major industrialised countries. Japan has the fastest growth rate of export to Latin America over the past ten years, with an annual average increase of approximately 31 per cent. The major exports from this country have been automobiles, spare parts, light industrial machinery, electronic equipment, industrial raw material, watches; just to name a few. With this volume of trade directed towards Latin America from both East and West, quite naturally the Latin American market becomes sophisticated and highly competitive. In addition, some countries in their quest for industrialisation have imposed restrictions on imports. As a result, some traditional suppliers of the market have found it necessary to locate subsidiaries in the region to maintain their market share. The second feature has been the location of distribution centres such as the Kingston Free Zone in the area to facilitate a speedier and more efficient distribution system.

THE KINGSTON FREE ZONE

The Kingston Free Zone, unlike most other Free Zones, provides structural and functional facilities, not only for commercial type operations, but also for manufacturing. The incentives offered for locating manufacturing/ processing plants in the Free Zone will include exemption from taxation on exports for ten years and thereafter will be required to pay only 50 per cent taxes. These operations will also qualify for additional fiscal incentives based on outstanding export performance.

In the Free Zone all enterprises are:-

- 1. exempted from paying customs duty or any form of import duty
- 2. exempted from import restrictions
- 3. exempted from any licensing requirements
- 4. exempted from work permit (work permit for expatriates is automatic).

Business activities in the Caribbean and in Latin America, like most other developing countries, have become more restrictive due to economic circumstances. These restrictions have taken various forms ranging from quantitative restrictions to total prohibitions. The bureaucracy and red tape, therefore, add to the difficulties which already exist in doing business and an environment free of restrictions, bureaucracy and red tape could greatly enhance the efficiency and profitability of a business undertaking. This is precisely what the Kingston Free Zone offers.

ACCESS TO DOMESTIC AND REGIONAL MARKETS

Although the Kingston Free Zone is export oriented, special conditions exist whereby the Free Zone interprise is permitted access to the domestic and original markets. This special facility is condition by—

- (a) circumstances such as adequacy of regional suppliers
- (b) ratio of third country exports to domestic supply.

For commercial enterprises, the Free Zone companies are allowed 20 per cent of the entire output into the domestic market and unlimited access to the regional market.

BANKING AND CURRENCY REGULATIONS

Banking operations in the Free Zone fall within the framework of laws governing banking and exchange control in Jamaica. However, special facilities have been provided for Free Zone operations which are very flexible to accommodate the wide range of industrial and commercial activity which usually takes place in a Free Zone.

PHYSICAL FACILITIES

There is an area of approximately 150 acres of land including a land bank for future development adjacent to the Port of Kingston. The initial area comprises of 14 acres of land with 5 semi-detached factory-cum-warehouses. These are fairly flexible in structure with minor modification, which can accommodate a variety of business activities. Additional units will be completed shortly.

INFRASTRUCTURE

The area is well served by adequate public utilities such as power, water, telephone and telex. It is also ideally located with respect to the city and the airport. Located on the outskirts of Kingston there is available an excellent pool of labour with adequate training facilities.

PRINCIPAL BENEFITS OF THE ZONE

- (a) lowering cost of holding stocks, since duty will be paid only when stocks are finally sold and consigned to the purchaser
- (b) lowering warehousing costs through economic rates of rental
- (c) lowering freight cost through a more expeditious transportation system
- (d) savings in customs duty by discarding sub-standard, impure or damaged and waste material
- (e) savings by not having to pay for shrinkage, evaporation or seepage
- (f) savings in insurance on stocks by insuring in the Zone only for the landed value of the stock.

Port of Long Beach News

1. Port of Long Beach Sends Trade Mission to Japan Seeking Increase in \$2.1 Billion Annual Trade

(Released in Tokyo March 28, 1977 at a reception held at the Hotel Okura, Momoyama Room):-Japan, the traditional number one trading partner of the Port of Long Beach, California-both in total tonnage and in total value of commerce-is presently being visited by a delegation of harbor officials who are meeting with leaders in the business and maritime industries to further increase the more than 4.6 million tons of cargo now exchanged annually.

Richard G. Wilson, president of the Long Beach Board of Harbor Commissioners, points out that in the year just ended, 2,239,600 tons of cargo arrived at Long Beach from Japan, while 2,403,263 tons were exported through the Port to Japanese destinations. The total value of goods both inbound and outbound amounted to \$2,118,000,000, a new all-time record high.

Steel and steel products headed the list of cargo imported from Japan via Long Beach, with 848,400 tons handled. Electrical equipment accounted for 235,100 tons, vehicles for 182,300 tons, machinery 104,300 tons and plastic goods 54,400 tons. Other products inbound from Japan topped 600,000 tons.

Exports shipped into Japan through the Long Beach gateway were led by petroleum coke with 1,135,200 tons, fresh citrus fruit with 130,700 tons, cotton at 85,600 tons and grain with 70,000 tons. Vehicles accounted for 43,800 tons and chemicals 95,200 tons.

Toyota Motors, Inc. maintains a major auto import facility in Long Beach, including extensive facilities for the preparation of cars for direct delivery to dealers.

A second Long Beach auto terminal operated by the Pasha Group handles such other Japanese automobiles and trucks as Mazda, Honda, Subaru, Chrysler Colt, Plymouth Arrow and Ford Courier.

Long Beach boasts the only container facility operated by Japanese interests in the United States at the ITS Terminal operated by International Transportation Service, Inc., a California subsidiary of K-Line. With four 40-ton gantry cranes, it is one of the most efficient cargo handling facilities in what is widely regarded as America's most modern port.

Long Beach will soon be shipping the 100,000,000th case of fresh Sunkist citrus to be exported in the last seven years, half to the Far East and half to Europe and the United Kingdom. This movement also establishes the Port of Long Beach as the leading citrus center in the world.

Joining with Harbor Commission President Wilson on the current trade mission are Harbor Commissioner Reed M. Williams, Long Beach City Councilman Don Philips, Port General Manager Thomas J. Thorley, assistant General Manager James H. McJunkin, and assistant Director of Port Operations A.B. Zetterberg.

The Port of Long Beach is represented in Japan by Japan Prad Company, Ltd., John G. Hasegawa, president, whose



Long Beach, Calif., 030977 (Port of Long Beach News):-Captain Ole Kristensen of the Arild Maersk points out on space satellite photo of Southern California the location of the Maersk container terminal on Pier J in the Port of Long Beach to Port Commerce Director Lee Sellers and Captain Knud Olsen, terminal manager from San Francisco. The Arild is the 9th in Maersk Line's fleet of fast container and heavy equipment vessels now in service to the Far East.

address is Yamate Mansions, Suite 1002, 19-5 Udagawa-Cho, Shibuya-ku, Tokyo 150.

2. 2 Harbor Commissioners Named

Two new Harbor Commissioners, both with maritime backgrounds, have been named by Long Beach City Manager John Dever to serve six year terms at the Port of Long Beach. The appointments of E. John Hanna and Reed M. Williams were confirmed in unanimous action by the City Council.

Hanna, 58, has been a Federal official for 33 years and is presently Director of Industrial Relations at the Long Beach Naval Shipyard. He has been active in numerous civic, charitable and professional organizations and was chairman of the City's Human Relations Commission for nine years.

A Berkeley graduate, Hanna was selected as Layman of the Year in 1970 by the Long Beach Area Council of Churches and Man of the Year in 1971 by the Greater Long Beach YMCA. He is an instructor in industrial management at Long Beach City College Terminal Island campus.

Williams, 50, is a senior partner in Graham & James, a wellknown California legal firm, and specializes in maritime, admiralty and international law. A graduate of the California Maritime Academy, he has been a deck officer in the American merchant marine and served four years on the Academy Board of Governors. He is also on the Board of the Los Angeles-Long Beach Propeller Club.

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Long Beach, Calif., 032177 (Port of Long Beach News):-Visiting the Koppel Inc. grain terminal in the Port of Long Beach recently were 180 members of Far-Mar-Co, a large cooperative in the midwest and plains states which provides unit trains of feed grains to Koppel, largest berthside terminal in Southern California. As Far-Mar-Co production leaders, they enjoyed a vacation aboard the Queen Mary while visiting the harbor and nearby tourist attractions.



Long Beach, Calif. (Port of Long Beach News):-RHINE EXPRESS JOINS EURO-PACIFIC FLEET IN LONG BEACH SERVICE. Euro-Pacific's fleet of fast fully-cellular containerships was enhanced with the recent first arrival in the Port of Long Beach of the Rhine Express. The joint service provides calls every 10 days and 17 day service to the United Kingdom and Continental ports. From left are Jess Miller, the Balfour, Guthrie & Co. District Manager, Captain Axel Siburg and the Port's assistant Director of Operations, A.B. Zetterberg, who presented the vessel with an Apollo portrait of Southern California from 105 miles in space.

Prior to entering private practice, Williams was an attorney with the U.S. Justice Department, Admiralty and Shipping Section. He obtained his law degree at the University of California, Hastings College of Law.

In making the appointments, Dever noted that both Hanna and Williams "bring special talents to the Harbor Commission in terms of long experience in harbor-related matters at a critical time in the development and operation of the Port."

3. Bulk Grain Terminal to be Modernized

An \$8.6 millionn modernization program for the largest berthside bulk grain terminal in Southern California, the 2.2-million bushel capacity facility operated by Koppel, Inc. at Berths 210 and 211 in the Port of Long Beach, has been approved by the Long Beach Harbor Commission.

Board president Richard G. Wilson noted that the major contract in the project, totaling nearly \$6 million, calls for installation of the latest state-of-the-art grain handling and dust control systems and would result in Koppel being able to load grain more efficiently and with virtually no pollution.

A traveling gantry shiploader costing \$1.3 million will facilitate loading of the larger bulk ships in less time than smaller vessels are presently handled, while a new rail system and bottom dumper will accommodate unit trains.

Last year, Koppel exported more than 700,000 tons of wheat, corn, and sorghum through the facility. It is expected that the increased loading capability will enable the terminal to accommodate more of California's recently developed export commodity-winter wheat grown in Imperial and San Joaquin Valleys-as well as a greater volume of commodities from the more traditional wheat and feed grain producing states. 031477

4. Sellers Named Assistant General Manager

The Long Beach Board of Harbor Commissioners has named Lee Sellers, the present Director of Commerce for the Port of Long Beach, to succeed James H. McJunkin as Assistant General Manager. The promotion is effective upon the retirement of Thomas J. Thorley as General Manager on June 1, at which time McJunkin will take over the top post.

Sellers came to the Harbor Department in 1970, after retiring from the U.S. Army as a Colonel. He was named Director of Port Operations in 1971 and last year was made Director of Commerce.

Prior to that, his military assignments included Director of Terminals, Military Traffic Management and Terminal Service in Washington, D.C. and Chief of Export Control for the Western United States.

Sellers is active in numerous maritime organizations, including the Los Angeles-Long Beach Propeller Club, of which he is Secretary-Treasurer. 031677



Long Beach, Calif., 032177 (Port of Long Beach News):-SUEZ CANAL AUTHORITY OFFICIALS VISIT LONG BEACH HARBOR. Recent visitors to the Port of Long Beach included two officials from the Suez Canal Authority, who toured harbor facilities and discussed engineering, construction and operation problems with Long Beach port staff members. Pictured receiving desk flag sets from Chief Harbor Engineer Bob Hoffmaster, center, are Abdel Salam Badawy, Suez Transport Engineer, left, and Mahmoud Hussein Hussein, Chief Engineer of the Suez Canal Authority. The delegation also visited Korody-Colyer Corp. in Wilmington to inspect a large engine parts order placed there by Egypt.

5. Bob Hoffmaster Named Engineer of Year

Bob Hoffmaster, Chief Harbor Engineer for the Port of Long Beach since 1958, was recently named Engineer of the Year by his peers, the members of the Long Beach Chapter of the California Society of Professional Engineers.

Hoffmaster, who started his long engineering career with the Port 39 years ago, is the first person in several years to receive the achievement award.

Citing his outstanding contributions to the engineering profession, and particularly his engineering accomplishments since 1938, Chapter officials noted that during his career, Long Beach has grown from a two-berth harbor to become what is widely regarded as America's most modern port. More than \$250 million in construction projects has been planned, engineered and construction supervised by Hoffmaster during this period.

Cargo tonnage has increased many times over to reach a record 31.4 million tons last year. This is expected to more than double by 1980 upon completion of the oil terminal now being planned to accommodate Alaskan North Slope petroleum production.

Hoffmaster recently announced his retirement, effective July 1, 1977. The Port of Long Beach has launched a nationwide search for qualified applicants and it is expected that his successor will be named by mid-May. 031477



Dr. Donald B. Bright

6. New Director of Commerce

Dr. Donald B. Bright, for the past 18 months Director of Environmental Affairs for the Port of Long Beach, has been named Director of Commerce by the Board of Harbor Commissioners, effective June 1. He replaces Lee Sellers, who will become assistant General Manager on that date.

Bright joined the Long Beach Harbor Department staff in September, 1975, as a full-time consultant in charge of environmental affairs. Prior to that, he had served as Chairman of the South Coast Regional Coastal Zone Conservation Commission, Chairman of the Department of Biological Science at California State University, Fullerton, and Chairman of the Board of Governors of the Southern California Ocean Studies Consortium.

Dr. Bright earned his doctorate degree in Biology from the University of Southern California and is a Fellow of the Southern California Academy of Science. He has published more than a score of scientific papers and is the recipient of Research Grants from the U.S. Fish and Wildlife Service and Bureau of Land Management.

According to Harbor Commission president Richard G. Wilson, Dr. Bright will continue to be responsible for Environmental Affairs functions, as well as assuming the varied new duties of Director of Commerce. 032177
News Release From Port of Seattle

1. New Marketing Director

Seattle, Washington, February 25, 1977:-Henry J. "Hank" Levinger has been named director, Marketing Department, of the Port of Seattle, effective March 1, according to Richard D. Ford, executive director of the Port.

Levinger has been manager-marketing, second ranking position in the Trade Development Department which is renamed Marketing Department of March 1 also. He replaces Robert O. Edwards who retires February 28 as the veteran head of the department.

He joined the Port in 1963 as Alaska field representative, Trade Development Department, becoming assistant director of the department the following year. In 1969 his title changed to manager-marketing but he was still second in charge. The change was to reflect more clearly his role in the development of overland common point (OCP) import cargoes for the Port.

The new change of department name further signifies emphasis on marketing although the title of OCP cargo is itself phasing out. The same import cargo will be handled for transcontinental shipment to points beyond the continental divide to the mid-west and east coast but its rate at every west coast U.S. port will be the same.

Levinger began directing the Port in OCP-import transcontinental traffic when the Port's share was nearly zero tonnage. He brought the Port into No. 1 position when it overtook Los Angeles as previous leader. The Port has maintained that lead since 1969.

Levinger's background includes 35 years of transportation in rail, water, truck and warehousing. He was at one time operations manager for Pacific Highway Transport Seattle, and later for Interlines Motor Express, Oakland, California. He is a retired colonel, U.S. Army transportation corps reserve.

He will head a staff of 50 scattered from New York to Hong Kong. The department encompasses activities of the Export-Import Rate Bureau and the transcontinental import traffic from Pacific Rim countries to points beyond the Rockies, formerly called OCP trade. He also heads general marketing and the field offices in New York, Chicago, Spokane, Alaska, Tokyo and Hong Kong. The Port's first field office was established by his department in 1955 in Spokene followed by offices throughout the world in the Port's program to become personally involved with shippers and carriers in the international trading community.

Part of that personal involvement is evidenced by Levinger's heading a group of Port staff members and local shippers and carriers to four cities in the south and mid-west on the eve of his becoming head of his department.

Hosting a series of "Port of Seattle Nights" the group will visit Atlanta February 28, Southfield (Detroit) Michigan March 1, Omaha March 2 and Kansas City, Missouri, March 3. Local shippers and carriers in those areas have been invited to attend by special invitation.

2. New Legal Officer

Seattle, Washington, March 7, 1977:-Carol Doherty is

the Port of Seattle's new legal officer effective today, (March 7) according to Richard D. Ford, executive director of the Port.

She replaces James D. Dwyer who became senior director for planning and port relations when the Port's administration changed in mid-January.

In addition to a bachelor's degree from the University of Wisconsin, she attended New York University School of Law before transferring to the National Law Center of George Washington University, Washington, D.C., from which she received her doctorate in law with top honors (eighth in a class of 358) in 1972.

Arriving in Seattle in 1973, she joined the Seattle office of the Environmental Protection Agency Region X as staff attorney, becoming assistant regional counsel in 1974, the post she left to join the Port.

In 1976, Doherty received the EPA Award for Outstanding Youth Achievement and in 1975 was the recipient of the EPA regional administrator's Distinguished Achievement Award for Advancement of the Status of Women in Region X.

She is married to an attorney and is the mother of a seven-month-old daughter. The Doherty family lives in Seattle.

3. Climbing Container Traffic

Seattle, Washington, March 8, 1977:-The Port of Seattle is now number one in container traffic on the west coast and second only to the giant and superactive New York harbor.

The latest comparison in Seatrade magazine of London shows Seattle's 574,850 container units edged out the Port of Oakland, California by nearly 3,000 in 1976. Oakland had 571,972 units. All figures, which are now confirmed, are in twenty-foot equivalent units (TEU's) in order to give fair comparison for the various sizes of containers in world use.

Projections for 1977 for both Seattle and Oakland give Seattle a 30,000 lead over Oakland-615,000 versus 585,000.

The Port of Seattle has climbed steadily in container traffic since its first full container terminal went into operation only 13 years ago. Seattle now ranks among the top seven ports of the world in containers according to compilations made annually by the prestigious Container-isation International of London.

The inevitable expansion in transpacific trade has accounted for much of the increase in container traffic. Since Seattle is on the Great Circle Route bringing it several hundred miles closer to the Far East than ports farther south, its traffic increased through natural advantages as well as through expanded facilities and services. It is also the closest major port and the gateway to Alaska with whom trade has increased dramatically.

In addition, the Port's decision in 1962 to concentrate on the relatively new container system caused it to build full-container terminals and to convert many older berths and finger piers for containers. All are served by high-speed container cranes—13 so far—with ample back-up acreage and container freight station services.



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ANNOUNCING !!

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Orbiter Probe

Jane's Freight Containers 1977

Price £25.00 by Jane's Yearbooks Published March 7, 1977

March 7, 1977 (Jane's Yearbooks, Paulton House, 8 Shepherdess Walk, London N1 7LW):-RENT A PORT-New ideas and better use of existing facilities required to reduce congestion in the 1980's. In his Foreword to JANE'S FREIGHT CONTAINERS 1977 the Editor, Patrick Finlay, points out that congestion in ports throughout the world is likely to become critical as urgent and fluctuating demands for raw materials and consumer products tax existing facilities.

One solution to this growing problem could be modular floating ports available for charter, similar to the one now under construction in Japan for the Jordanian port of Aqaba. This will provide one berth with a length of 150 metres equipped with two cranes while facilities for handling roll-on vessels are provided at each end. The pontoon is linked by twin bridges to the shore where storage and marshalling areas are being laid out. Aqaba is reported to have ordered a second facility and another is under consideration by Saudi Arabia.

Until these modular ports are available in sufficient numbers the value of roll-on vessels in serving congested ports will remain unchallenged, although the Editor points out that many of the roll-on vessels in service today are designed neither for the length of voyages or the mix of cargoes they have to undertake.

Even in major ports, however, there is much that can be done to ease congestion by better utilisation of land and mechanical aids. The Editor points out that although New York and Rotterdam handled approximately the same tonnage of container traffic in 1974, Rotterdam did so with approximately half the number of cranes, using a third of the land area. If New York's cranes worked as hard as Rotterdam's they could handle another 9 million tons of container traffic without using more land or building new terminals.

In the air, Mr. Finlay quotes a Boeing report which forecasts that random air freight loads will decrease from 80% in 1976 to 10% in 1985 and that consignments will be moving on regular routes in $20 \times 8 \times 8$ ft units. If this prediction, which is supported by a number of airline executives, is correct then we stand on the threshold of a vest expansion in airline container traffic.

Jane's Freight Containers 1977 now contains information from 270 ports, 65 airports, 85 railway organisations, over 310 operators, some 62 lessors and 412 manufacturers of containers, handling equipment etc.

AAPA Port Executive Seminar

Washington, D.C. (The American Association of Port Authorities, Inc.):-The American Association of Port Authorities will hold a Port Executive Development Seminar at the Shamrock Hilton Hotel, Houston, Texas, April 18-22, 1977. The intensive five-day program is designed to enhance the professional problem-solving skills of port personnel at the middle and upper management levels.

According to AAPA, the objective of its educational program is to develop a greater understanding of the principles of good management among port executives, and to broaden the port manager's knowledge and understanding of the economic, social, political, and technical forces which influence the management of a port through case studies of actual port management problems.

Topics to be covered by the Seminar include regional planning, purpose of a port authority, personnel problems and job evaluation, land use/lease policy, economic feasibility studies, project management, budgeting, marketing and trade development, tariff techniques, decision-making in government, and comparative port systems.

The Seminar will be conducted by Dr. Joseph D. Carrabino, Professor of Management, Graduate School of Management, University of California at Los Angeles, and Dr. John L. Hazard, Professor of Marketing and Transportation, Graduate School of Business Administration, Michigan State University. Both have had practical experience in the port and transportation field, Carrabino with the Los Angeles Board of Harbor Commissioners and the Pacific Coast Association of Port Authorities, and Hazard as a former Assistant Secretary for Policy, Plans and International Affairs, U.S. Department of Transportation.

Those interested in attending the Houston Seminar may contact AAPA headquarters, 1612K Street, N.W., Washington, D.C. 20006, telephone (202) 331-1263.

Registration is limited to port executives.

Dry Season Arrives A Full Month Early

Balboa Heights, Canal Zone, Panama, January 7, 1977 (The Panama Canal Spillway):—Dry season made its annual debut a full month earlier than normal this year, in fact, the earliest on record, delighting lovers of outdoors sports but causing concern for those who manage the Canal's water resources.

By arriving November 21, the dry season closed out a "rainy" season that set a number of records, all of which impair the work of providing both acceptable lake levels for ship traffic and hydroelectric power in place of expensive gas turbine electricity.

Weathermen in the Engineering Division's Meteorological and Hydrographic Branch point out that it is reasonable to

(Continued on next page bottom)

Nanaimo Harbour News

Extracts from ``Nanaimo Harbour News'' March 1977

1. New Port: Year of Decision

Because of escalating costs and the need to continually upgrade present facilities, a decision on Duke Point is vital this year, says Doug Greer, chairman of the Nanaimo Harbour Commission.

"One of the problems is assembling the property needed and transferring water leases," commented Mr. Greer. "It is now more than three years since the idea of building a new port at Duke Point was actively considered. At that time the Harbour Commission discussed the proposal with MacMillan Bloedel.

"Now the Provincial Government and departments of the government have become involved and we still haven't

expect a longer than normal dry season. In other words, an early dry season does not mean that an early rainy season will follow.

Accumulated rainfall for the wet months from May through November at the 19 stations across the Isthmus totalled 60.57 inches, 27 percent below the normal of 83.52 inches. This was the driest May-November in the last 20 years.

In terms of Gatun watershed runoff, calendar year 1976 was the driest of any since these records were begun 63 years ago. July, August and December all produced the lowest level of water runoff on record for these respective months, thereby driving down the runoff level for the entire rainy season.

Both November and December dumped more than average rain on the Isthmus during 1975, which received about normal rainfall for the entire rainy season.

But November of 1976 reflected the return to drier conditions with an early transition period. The amount of water received from the watershed was only 21,363 million cubic feet, 40 percent below the 63-year average. The accumulated January-November inflows amounted to 102,533 million cubic feet, 37 percent off.

The average precipitation from the 19 watershed stations during November was 8.59 inches, 44 percent below the 20-year normal of 15.22 inches. The first 14 days of November averaged just 4 percent below the daily normal of 51 inch but the last 16 days of November averaged 78 percent below the daily normal for the month.

Gatun Lake, as of December 28, was more than 2 feet lower than the corresponding date a year ago and Madden Lake was down 16 feet.

According to Met. and Hyd. the premature dry season was caused by the early onset of dry season tradewinds coupled with the movement of the Intertropical Convergence Zone south of the Isthmus.

Despite the lack of rain, however, Madden and Gatun lakes will be maintained at a level sufficient to provide adequate potable water for all users of the reservoirs. received a definite decision.

"However, the major problem is the economics of the proposal. If work had commenced on the new port some three years ago we could, by now, have three berths almost finished at a cost of about \$20 million. If we stay within this figure today, we can only have two berths."

Don Beaton, Commissioner responsible for the development, says that even if the land is acquired through the B.C. Development Corporation, the problems are not solved.

"We need industries to locate on the site," he said. "Two or three sawmills would be a good start to the development. But until we have a decision, it's difficult to get an industry to commit itself."

At the same time, the three berths at the Nanaimo Assembly Wharf need considerable investment, both to maintain them in first class condition and carrying out upgrading to handle the larger ships that are coming in.

"Should we spend several million dollars on the present Assembly Wharf facilities or put the money into the new port?" asks Doug Greer.

"The Assembly Wharf was not originally designed to handle ships of the size of the Warschau which has a gross weight of 49,000 tons. In addition to normal maintenance, we have to spend many thousands of dollars to ensure that such ships, when in Nanaimo, have a completely safe berth.

"At the same time we have to improve facilities of meet customer requirements. The new warehouse, being built at a cost of \$500,000 is specifically for pulp storage. It will increase our warehouse capacity to over 100,000 square feet.

"This year certainly has to be a year of decision," added Mr. Greer.

2. Revenues at Record High

Total revenues of the Nanaimo Harbour Commission in 1976 were \$2,226,407 compared with \$1,606,543 in 1975. This is a record figure.

Income from the Assembly Wharf was \$1,941,744, property rentals \$119,107, harbour dues \$90,362 and the Commercial Inlet Basin \$75,194.

Salaries and wages totalled \$829,444 and general expenditures \$462,391. In addition there were loan interest repayments of \$31,881 and depreciation of \$265,895.

At Port of Spain, Trinidad, A Container Berth is Under Construction

Port Authority of Trinidad and Tobago (See front cover also.)

Port of Spain, Trinidad, 25th February, 1977:-This Container Berth is 1,085 feet long, Paving approximately 15 Acres, along with drainage, lighting, fencing etc., for container handling and storage. Improvement of existing dock access road. Installation of Electricity Sub Station. Weight Bridge with operator's office. Control Tower and Terminal Office. Services including Water, Sewerage, Fire Fighting etc. Specialized maintenance facilities.

Mobilisation-5th January, 1976.

Project completion date 12th September, 1977.

This Container Berth 6A, when completed will be equipped with 960 feet of Container Rail track and will be contiguous with the existing container Berth at No. 6 and the General Cargo Berth at No. 7. Because of this length of Rail track two 600 feet long container vessel could be accommodated simultaneously (with an overhang at Berth 6 and 7), and operated together.

A summary of storage area is as follows:-

OPEN STORAGE:

Berth 6A	15.2 Acres
Former Shell compound	2.3 Acres
Berth 6	4.5 Acres
West of Shed 10	1.0 Acres
	23.0

COVERED STORAGE:-

Warehouse No. 9	90,000 Square Feet
Warehouse No. 10	72,000 Square Feet
	162,000 Square Feet

Types of units to handled include 20, 35 and 40 feet containers. Storage would be in stacks in addition to on-leg storage.

Equipment on Order For Container Berth 6 A

2 only 40 long Ton Paceco Gantry Cranes with Spreaders for loading and unloading Containers.

2 only Yard Gantry Crane 2 only Straddle Carrier 1 only 52000 lb Fork Lift 1 only 20000 lb Fork Lift 5 only 4000 lb Electric Fork Lift 60 only Trailers 6 only Tractors. Central Container Refrigeration System.

Office moving to WTC

Baltimore, Md., March 1, 1977 (News from Maryland Port Administration):-The Maryland Port Administration officially moves its headquarters offices to the World Trade Center Baltimore on March 7, 1977.

The move affects all MPA personnel and operations formerly centered in the seven-story office building at 19 South Charles Street, which has served as an interim headquarters for the agency for the last five years.

Actually, the move returns the MPA to the site of its original office location at Pier 2, Pratt Street. The agency outgrew the overcrowded three-story building which served as its headquarters since the creation of the old Maryland Port Authority more than 20 years ago. That building was torn down to make room for the World Trade Center Baltimore when construction was started in late 1972.

The move to the WTCB involves the relocation of some 180 executive and staff employees. The physical move of office equipment will occur during the weekend of March 5-6. The last day MPA will operate out of the Charles Street site will be March 4.

The MPA will be a tenant-landlord of the WTCB, acting in effect as agent for the Maryland Department of Transportation which built the 30-story landmark on the edge of Baltimore's reconstructed Inner Harbor at a cost of about \$22 million. The five-sided, high-rise office structure promises to be the center of international trade activity in the bustling port of Baltimore.

The move brings to fruition a 13-year-old plan which was conceived by the old Maryland Port Authority and carried out by the renamed Maryland Port Administration after it was absorbed into the Maryland Department of Transportation in July 1971. Construction was paid for by the consolidated transportation fund of the Department of Transportation.

The MPA will occupy the sixteenth-to-twentieth floors of the WTCB, with Executive Offices, Trade Development, Transportation Departments, and Legal Departments on the 20th floor. The MPA's Engineering and Planning Departments will occupy the entire 19th floor; while Port Promotion, Finance and Administration, Purchasing, Real Estate and Insurance Departments will share the 18th floor.

The remaining two floors will house Accounting, Data Processing and the Mailroom on the 17th; and Personnel, Terminal Operations, and Port Services on the 16th. The latter will also include the MPA's building manager's office.

All telephone numbers currently used by the MPA will remain in effect and unchanged. The remaining more than 300 employees assigned to MPA terminals in the port of Baltimore (Dundalk, Locust Point and Clinton Street Marine Terminals), Pier 7 boat operations center and field engineers will not be affected by the move.

The MPA also employs about 20 staff members at seven field offices outside of Baltimore (four overseas and three in the U.S.).

1977 Cruise Guide

New York, N.Y., March 7, 1977 (News from The Port Authority of NY & NJ):-A 1977 New York cruise guide, featuring a list of all passenger ship sailings from the Port of New York to the end of the year, has been issued by The Port Authority of New York and New Jersey. The handy, free reference brochure entitled "Cruises-New York", also



Long Beach, Calif. (Port of Long Beach News):-Among recent distinguished visitors to the Port of Long Beach, California, was Mr. Morihisa Emori, Consultant to Mitsubishi Research Institute, pictured left as he was presented with flags of friendship by Harbor Commissioner James H. Gray. Mr. Emori was formerly Managing Director of Mitsubishi Corporation.

contains information on the New York area as the best place to start or end a cruise.

Material is included on automobile parking for ship cruises as well as transportation available to and from the Passenger Ship Terminal and the New York-New Jersey Airports, bus and railroad terminals. The guide also provides information on direct motorcoach service by Greyhound Lines between the Ship Terminal and points in the Eastern United States.

The guide lists continuing sightseeing and cultural events in New York during 1977, information on museums and sporting events, and a month-by-month calendar of special events that will take place during the cruise season through November. The guide also details a number of sight-seeing attractions near the New York City Passenger Ship Terminal area, or within a few minutes of these Hudson River passenger piers in midtown Manhattan.

Copies of "Cruises-New York" may be obtained without charge from the Marine Terminals Department, The Port Authority of New York and New Jersey, One World Trade Center, Room 71 West, New York, New York 10048, Telephone: (212) 466-7956.

Seminars on heavy lift

New York, N.Y., March 8, 1977 (News from The Port Authority of NY & NJ):-Heavy lift capabilities at the Port of New York-New Jersey will be promoted by the Port Authority, in conjunction with Witte Heavy Lift, Inc. and ConRail at seminars on the use of its 500-ton floating derrick, the "Century," with shippers in at least three cities.

The first of the seminars is being held in Pittsburgh today at the Duquesne Club with approximately 25 major shippers from the Pittsburgh and Eastern Ohio areas. James J. O'Brien General Manager of Trade Development for the Port Authority will preside and introduce Port Authority



Long Beach, Calif., (Port of Long Beach News):-Largest single shipment of oil and gas production processing equipment ever moved through the Port of Long Beach was loaded recently aboard the special heavy-lift vessel Dona Placida for transport to Belem, Brazil, via the Panama Canal. From there, the 35 pieces built by Trico Superior and totaling 1,422,810 pounds, will be loaded onto barges for a 2500-mile tugboat trip westward across Brazil to the headwaters of the Amazon, where they will be pulled by sledge to oil sites in Peru. Once processed, the area's 110,000 barrel daily output will be pumped over the Andes by pipeline to the Pacific. It is expected that the \$4-million shipment will require 60 days to reach its remote destination. Occidental of Peru and Petroleos Del Peru placed the joint order.

and industry speakers.

Those addressing the heavy lift seminar are Anthony J. Tozzoli, Director of Marine Terminals for the bi-state agency; John Arnold Witte, President of Witte Heavy Lift, Inc., which operates the "Century" for the Authority; and Robert L. Downing and Donald A. Washburn, both of ConRail.

New York terminal operators also have been invited to send representatives to the meeting. Additional seminars by the heavy lift promotional team are scheduled for Houston on March 31 and Chicago in the latter part of April.

At the same time, the Port Authority announced that the "Century" will make one of the heaviest lifts it has ever performed, starting Wednesday morning, March 9, at Berth 61, Port Newark. The floating derrick will lift a 462-ton stator from a special rail car, then turn and position it on the dock at the head of Port Newark Channel for later removal on or about March 21 by a specially equipped vessel, the "Giant."

The stator, manufactured by the Westinghouse Electric Corporation of Pittsburgh, is being moved by rail to Port Newark for shipment to Taiwan. It is being handled at the New Jersey seaport by the "Century" in advance of the ship's arrival for loading so as to place the huge cargo shipment within easy reach of the ship's boom and free the specially built rail car for use on other movements.

Port of Los Angeles News

Public Relations Division Robert G. Robinson, Director

1. Fiscal 1977-78 Budget

March 2, 1977:-The Los Angeles Board of Harbor Commissioners today (Wed., March 2) received for review a \$98.5 million budget for the Harbor Department for fiscal 1977-78, submitted by General Manager Fred B. Crawford. The figure includes an operating budget of \$20.9 million, an increase of 8% over 1976-77.

Also included is a capital construction program of \$62.3 million, which represents a \$28 million increase over the previous year's figure. This is expected to be partially financed through a \$30 million revenue bond sale.

Major projects under this program include development of a new container terminal at Berth 122-124 (\$15.6 million); a Harbor Department office building (\$6.4 million); land and property acquisition (\$6 million); Cabrillo North Basin Marina project (\$2.4 million); a new container crane for Berths 233-235 (\$3.5 million); wharf and shed facilities at Berth 89-90 (3.1 million); and expansion of the bulkloader (\$2.2 million).

Among other expenditure categories are contributions to the employee retirement system (\$1.7 million); provisions for bond redemption and interest (\$8.3 million); equipment, including a new pilot boat and construction of a pile driver barge (\$584,000); materials, supplies and services (\$8 million); and salaries, including health and medical benefits (\$11.6 million) for the 604 positions at the Harbor Department.

Total revenues projected for next year are \$40.2 million, an increase of \$4 million over the current fiscal year. The largest increase is in the area of shipping service: dockage (charge against a ship at berth), wharfage (charge against cargo moved over the wharf) and preferential berth assignment fees.

Additional revenues from such sources as rentals, oil royalties, sales of material and services, and interest, are expected to increase by about 11%.

2. Timms' Landing Monument

March 2, 1977:-The Los Angeles Board of Harbor Commissioners today announced that Timms' Landing in Los Agneles Harbor has been declared a Historical-Cultural monument by the Los Angeles Cultural Heritage Board.

Located at the northwest end of Fishermen's Slip near Ports O' Call Village, site of the Timms' Landing monument is a small landscaped park. During the mid-1800's, the area adjacent to this region, now mostly underwater, was a stage coach and freighting station and arrival point for incoming passenger steamers and freighters.

August W. Timms, owner of the station and one of the area's original settlers, provided rest and bath facilities for the new arrivals; a stable, corral and barn for the stage lines operating between the harbor and then-downtown Los Angeles; and a ship's chandlery. Timms' home at the



Los Angeles, Calif., 030877 (Port of Los Angeles):-Traditional Port of Los Angles First Arrival Plaque is presented by Los Angeles Harbor Commissioner George Izumi, second from left, to Capt. Giannoulis Gialouris of the Pergamos Shipping Co., Ltd. vessel Kyriacos A.S. on the ship's recent initial call in Los Angeles Harbor. Participating in the ceremony are Ralph Kramer, left, Vice President, Beaufort Navigation, and Capt. Jorgen Gredsted, President, Beaufort Terminals. The ship was carrying 6,250 tons of California cotton to Alexandria, Egypt.

Landing was constructed from the deck house of a ship destroyed near the narrow entrance of the shallow harbor. Today, the entrance is more than a 1,000 feet wide and its Main Channel 35 feet deep.

3. Activities by Port Officials

March 9, 1977:-Proposed dredging of Los Angeles Harbor, approved last year by the U.S. Congress, is expected to be brought closer as the result of action today (Wed., 3/9) by the Los Angeles Board of Harbor Commissioners.

The Board authorized a delegation of Port and City officials to attend hearings before the Appropriations Subcommittee of Public Works in Washington, D.C. The delegation will request \$400,000 be placed in President Carter's budget to cover the cost of design engineering for the dredging project. This engineering phase must be completed before the Harbor Department can select a dredging company to deepen the Port's Main Channel to -45 feet.

The \$400,000 request will be part of a total \$14 million approved by Congress for the dredging project but not included in the President's 1977-78 budget because of the late (October 1976) authorization.

Testimony at the Congressional hearings, held March 28–April 1, will be coordinated by the California Marine Affairs and Navigation Conference.

Attending the Hearing as part of the Harbor delegation will be: Los Angeles City Councilmen John Ferraro and Robert Wilkinson, Harbor Commission President Nate DiBiasi, Commissioner George Izumi, General Manager Fred Crawford, Chief Harbor Engineer Larry Whiteneck, Trade Development Director Bob Kleist and Legislative Analyst Glenn Hughes.

Also authorized by the Board will be participation by a Port delegation in trade development conferences in two other Eastern cities. The group will host a reception and luncheon in New York on March 29 for approximately 100 importers/exporters, freight forwarders, freight consolidators and transportation representatives, where it will present a program outlining recent and future Port developments.

A similar reception will be held March 30 in Chicago during the Mid-West Foreign Trade Convention.

Attending one or both of the receptions will be George Izumi, Fred Grawford, Director of Port Operations Ron Kennedy, Glenn Hughes, Robert Kleist, and Assistant Trade Development directors William Chernus and Herley Peck.

Cost of the two inter-related trips is expected to be \$12,000-\$16,000.

4. \$11 million wharf development

March 16, 1977:-An \$11 million wharf development project at the Port of Los Angeles entered its second phase today (Wed., 3/16) with approval by the Los Angeles Board of Harbor Commissioners of two demolition and removal contracts.

Authorized was the demolition of a wharf and the clearing of backland around Slip 232 on Terminal Island. The two projects, estimated to cost \$765,000, are expected to be completed by mid-summer. Performing the work will be Guy F. Atkinson Company, San Francisco, and A-1 Lin-Ty Demolition Company, Downey.

Under a previously-awarded contract, three buildings around the slip are now being removed.

Both projects are part of a terminal development in which a 330,000 sq.ft. slip will be filled and new wharf and backland constructed. The majority of the fill material will be obtained by dredging an adjacent portion of the Main Channel to 45-foot depth.

The dredged material will be deposited in the slip to a height of 10 feet below the ultimate wharf height. Dry material will then be brought in to build up the last 10 feet to wharf level.

The newly-created area, which is expected to be ready for occupancy by September 1978, will connect on both sides with existing terminals and will provide a major container complex with 4,624 feet of concrete wharf and approximately 100 acres of backland.

5. LNG Facility Approved

March 23, 1977: – The Los Angeles Board of Harbor Commissioners today (Wed., 3/23) approved a contract with a Southland consulting firm to review recommendations for a proposed Liquefied Natural Gas (LNG) facility in Los Angeles Harbor.

Arthur D. Little, Inc. was authorized to study and analyze two recommendations presently being evaluated by the Harzardous Cargo Task Force.

The consulting firm will evalute a risk assessment study performed by Science Applications, Inc., and the fire

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protection recommendations performed by University Engineers.

The Task Force is a multi-agency panel established by the Los Angeles City Council at the recommendation of the Los Angeles Harbor Department following the December 17 explosion of the oil tanker Sansinena in Los Angeles Harbor.

The Task Force is impowered to investigate and evaluate safety regulations, equipment, practices and procedures to all hazardous cargo presently or proposed to be handled within the Los Angeles Harbor District. Their findings will be reported directly to the Los Angeles City Council, accompanied by recommendations for legislation and procedures designed to ensure the safest possible handling of hazardous cargo.

In approving a contract with Arthur D. Little, Inc., the Board also authorized the appropriation of \$28,000 for the contract.

6. Big Bond Issue and Huge Grant

March 24, 1977:—The Los Angeles Board of Harbor Commissioners this week in two separate actions approved an agreement with a Los Angeles law firm for bond counsel services and authorized the hiring of a new employee to administer a multimillion dollar federal grant.

O'Melveny & Myers, a law firm used for many years by various City agencies, was retained to give its opinion regarding the validity of a proposed \$30 million bond issue in 1977.

The additional position approved by the Board, an administrative assistant at a salary range of \$1,307-\$1,540, was deemed necessary to administrate and coordinate the numerous activities associated with a \$7.6 million Economic Development Administration grant recently allocated to the Harbor Department. Granted under the Public Works Employment Act, Title I, of 1976, the grant is designed to increase employment in the Harbor area by financing several construction projects. These include channel, bank and street improvements and backland development in the area of Berths 230-235.

Three New Services Inaugurated From New Orleans to the Middle East and Europe

by Rosemary James Port of New Orleans

New Orleans, Louisiana, March 1, 1977:-At a joint news conference this morning, officials of the Port of New Orleans and Morflot America Shipping Inc. announced the inauguration of three important new services from New Orleans to the Middle East and Europe.

Morflot America Shipping (MORAM) represents the Baltic Shipping Company. MORAM president Arthur C. Novacek revealed that Baltic is instituting a direct Roll-on/ Roll-off shipping service from New Orleans to the Middle East, which will include the ports of Jeddah, Dammam, Kuwait and Basrah.

According to Novacek, this direct service will commence with the sailing of the MAGNITOGORSK from New Orleans on March 25. Novacek advised members of the shipping community that the next sailing would be with the KOMSOMOLSK from New Orleans on April 15 and that the service will continue three-after on a monthly basis.

The Baltic Shipping Company already has had two Ro-Ro sailings from New Orleans with cargoes for Middle East destinations transhipped by Baltic Shipping's own Ro-Ro feeder vessels at Rotterdam. The success of this initial operation prompted Baltic to inaugurate a direct service, Novacek said.

An additional Ro-Ro service will be provided directly to North Europe by the vessels SKULPTOR KONENKOV and SKULPTOR VUCHETICH, with the first sailing from New Orleans on about March 26.

During the news conference, Novacek stated that New Orleans is an ideal port for Ro-Ro vessels because it has new, first class Ro-Ro facilities and also because inland rates for Ro-Ro type cargoes from the Middle West tend to favor New Orleans.

Louis H. Harrero, IV, a member of the Board of Commissioners of the Port of New Orleans, said, "This additional Ro-Ro services announced by MORAM will provide the necessary frequency of sailing from New Orleans to these major ports of the Middle East and will be welcome news to major exporters of machinery, rolling stock and project cargo movements. Along with our present Ro-Ro barge ship, container and conventional ship capacity, it offers the necessary diversity required by exporters and importers not only in the United States but to our trading partners in the Middle East and North Europe."

Novacek also announced that the Baltic Shipping Company will provide regular, full containership service from New Orleans to all major ports of North Europe on a fortnightly basis.

The vessels utilized in all three services will operate out of the port's modern Ro-Ro and container terminals located on the Inner Harbor-Navigation Canal, and served by the Mississippi River-Gulf Outlet.

New Orleans is a logical port of exit for much of the cargo moving into the booming areas of the Middle East because of its location at the hub of the nation's most



The Baltic Shipping Company's vessel KOMSOMOLSK is pictured during loading operations at the France Road Terminal of the Port of New Orleans. The modern Roll-on/Roll-off vessel will be employed in the new direct service from New Orleans to the Middle East.

extensive inland waterway system, which means that consumers of the Middle East can take advantage of more economical barge transportation for massive cargo movements.

With the addition of new, direct Ro-Ro services, shippers will be guaranteed that if they can't make a sailing by one service, they can make another sailing shortly thereafter.

Roll-on/roll-off service is extremely important to the Middle East trade. In many of the countries, the port facilities are still inadequate to handle the heavy traffic of import cargoes caused by the recent oil boom in the Middle East. The oil boom has resulted in a demand for oil field equipment, of course, but the affluence the oil has brought to these nations also has resulted in a demand for projects such as schools, military facilities, whole new cities, hospitals, hotels and roads. These projects all require imported components from the United States, and much of these materials are manufactured in Middle West areas which have direct access to New Orleans through the excellent water highway systems and equally good rail and truck networks.

Port congestion has become extremely severe in many areas of the Middle East, with conventional ships waiting as long as 150 days to unload their cargoes at some ports.

Roll-on/rool-off ships require very little in the way of shoreside cargo handling equipment and can, therefore, bypass this congestion and assure shippers of faster cargo delivery.

In addition to port officials and Mr. Novacek, also present at the news conference were William Heffernan, executive vice president of MORAM, and Peter Herbst, vice president-Gulf, MORAM.

Increased Sea and Air Activity in New York in 1976

The Port Authority of NY & NJ

New York, N.Y., March:-The Elizabeth/Port Newark marine terminal complex and Newark International Airport showed significant increases in activity in 1976 over 1975. The Port Authority of New York and New Jersey, however, plans renewed promotion efforts this year at these important marine and air terminals in the Elizabeth area.

The Elizabeth-Port Authority Marine Terminal, the nation's leader in container handling activity, also showed marked increases in emplyment last year. A total of 4,444 seaport employees, with an average annual payroll of \$52,200,000, worked in Elizabeth in 1976, as compared with 3,190 workers earning \$33,157,000 in the previous year. They handled nearly 9,000,000 long tons of general cargo, recording 8,917,759 long tons as compared with 8,099,841 long tons in 1975, an increase of 10.1% in 1976.

At neighboring Port Newark, employment also rose to 3,221 workers with an annual payroll of \$39,015,000 in 1976, over 1975's employment totals of 2,962 workers earning \$32,557,000. Port Newark, which handles both containerized and break-bulk cargoes, handled automobiles, scrap metals, ores, packaged cargo, and meats among other commodities in totaling 2,102,692 long tons of general cargo in 1976. This represented a 12.2% increase over the 1,873,995 long tons handled in 1975.

Last year, some 2,313 ship arrivals were recorded at the New Jersey marine terminals of the Port Authority, including Hoboken along with Elizabeth/Newark. The three New Jersey marine terminals had a combined tonnage in general cargo of 11,064,352 long tons, with a total estimated employment of 7,755 workers and an estimated total payroll of \$92,391,000.

Newark International Airport, with nearly 173,000 plane movements, handled some 6,753,000 passengers in 1976, along with over 121,000 tons of cargo. The annual employment survey at the New Jersey airport showed that it provided jobs for 6,096 workers in 1976.

Last year, AIRLINK, a new mini-coach service connecting Newark International Airport with bus and railroad stations in downtown Newark, was inaugurated. The one-year demonstration project sponsored jointly by the Port Authority, New Jersey Department of Transportation and the City of Newark is expected to increase use of New Jersey's largest and busiest airport. The cost, to be paid by the Port Authority, is estimated at \$450,000.

Two additional jointly sponsored demonstration projects to improve ground transportation to and from the Airport were initiated last year. Group riding in taxis from Newark International Airport to Manhattan at reduced rates began on October 25, when Mayors Thomas G. Dunn of Elizabeth and Kenneth A. Gibson of Newark, joined Port Authority Chairman William J. Ronan in brief ceremonies at Terminal A. Group taxi riding, a six-month demonstration project, is sponsored jointly by the Port Authority and the Cities of Elizabeth and Newark, with the cost, estimated at about \$170,000, to be paid by the Port Authority.

At the same time, a related program of civilian taxi dispatchers, at the passenger terminals was begun for six-month period. The taxi dispatchers, employees of the Cities of Elizabeth and Newark, supervise cab loading both for group rides and exclusive use. The Port Authority is reimbursing the two municipalities for payroll costs of about \$110,000.

Port Cargo Promotion Pays Off

Early this year, the freighter "Lucy," carrying 2,500 steel beams and angles from Japan, arrived at the Elizabeth-Port Authority Marine Terminal with the first sizable shipment of steel products to move through the New Jersey-New York Port in the last six years. This marked the first tangible results of a major campaign undertaken by the Port Authority in cooperation with the New York Shipping Association, International Longshoreman's Association, and the New York Terminal Conference to make the Port once again a major importer and exporter of steel. Reductions in steel handling charges at the Port of New York-New Jersey made it competitive with other East Coast ports.

Imports of steel products through the Port of New York, which had declined from 760,000 long tons in 1971 to 376,000 long tons in 1975, are expected to rise this year under the impact of the improved rates and the Port Authority promotional program.

Also in January, the Port Authority welcomed Electro Plastics, Inc. a new tenant to Port Newark, where they are assembling imported articles for distribution to the Middle Atlantic area. Electro Plastics, formerly located in the City of Newark, employs more than 100 people, many of them minority workers. They were in danger of moving out of the City and possibly out of the State of New Jersey.

Instead, Electro Plastics selected Building 305 on the north side of Port Newark to conduct their assembly operations on toys and other materials shipped through the nearby Elizabeth-Port Authority Marine Terminal. They thereby demonstrated their confidence in the Port Authority's efforts to attract waterfront industry to the bi-state Port, and arrest the movement of jobs and businesses from the metropolitan area.

"Century" Gives Heavy Lift Service

A Hillside, New Jersey company operating equipment based at Port Newark has since last October provided vital heavy-lift cargo service in the New Jersey-New York Port. Witte Heavy Lift, Inc. assumed heavy lift operations with the "Century," a floating derrick capable of lifting up to 500 tons of cargo, under an arrangement with the Port Authority which has owned the equipment since 1972.

Resumption of the service, discontinued by the former operator in June, assures the preeminence of the Port in (Continued on next page bottom)

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New luxury ship inaugurating New York-based cruise service

New York, N.Y. March 14, 1977 (News from The Port Authority of NY & NJ):-Mayor Abraham D. Beame today praised the Cunard Line for bringing its cruise ship, the Cunard Princess-the newest passenger ship in the world-to New York to inaugurate regular sailings in April between the New York City Passenger Ship Terminal and Bermuda. The ultra-modern vessel will arrive in the Port of New York in two weeks.

The Mayor discussed the new cruise service at a meeting in City Hall with Ralph Bahna, President of Cunard Line, Limited, and William J. Ronan, Chairman of The Port Authority of New York and New Jersey, which built and operates the Passenger Ship Terminal for the City.

After the meeting, Mr. Bahna presented the Mayor with an attractive three-foot scale model of the Cunard Princess as a memento of the occasion.

The Mayor congratulated Cunard Line, the Port Authority, and Thomas Cook, Inc., a major tour operator, for exploring and adopting imaginative new cruise marketing concepts in New York to expand the prime Bermuda travel market.

"I want to congratulate the officials of Cunard for their decision in basing the Cunard Princess in New York," Mayor Beame declared.

"Cunard Line, a major steamship service in the long and proud history of this port," he continued, "has shown its confidence in the Port of New York and the attractiveness of New York City as a leading cruise gateway. After much intensive research, it has selected our port as the one best qualified to insure a sound return on a \$60 million investment—the cost of its magnificent new ship."

Port Authority Chairman Ronan, in discussing the new cruise program, said: "This is the kind of business foresight that will help this port use its modern Passenger Ship Terminal to serve better the citizens of this great New York-New Jersey metropolitan area.

"At the same time, the new cruise program will help the City and the Port Authority attract residents from other cities to come to New York. You might say, Mr. Mayor, they can taste the joys of the Big Apple as a bonus to their vacation aboard ship."

The Cunard Princess will sail from New York on April 2

handling heavy lift shipments and related cargoes that might otherwise be diverted to competing ports. In addition, Witte has published a new reduced rate schedule to encourage heavy lift shipments through the bi-state Port. The new schedules have the net effect of reducing costs of heavy lift services by at least ten percent and up to as much as 50 percent, depending upon the amount of cargo lifted. Moreover, the Port Authority through seminars which it is sponsoring in conjunction with Witte Heavy Lift, Inc. and ConRail in major industrial centers in the West and Southwest, is promoting the use of the "Century" with shippers of heavy lift cargo. for Bermuda on the first of weekly seven-day cruises leaving the port every Saturday through October 22. It is estimated that the new Cunard ship will bring some 45,000 cruise passengers to New York.

Two-Port Service

Other vessels sailing to Bermuda dock at either Hamilton or St. George. The new Cunard Princess will stop in both major ports on the romantic island on the same voyage.

Typically on Mondays and Tuesdays, it will dock at St. George, a 17th Century village on the East End, noteworthy for its excellent golf and tennis courts and miles of scenic beach.

The Cunard ship will then cruise from St. George to Hamilton, where it will dock on Wednesday and Thursday of each week. Passengers will have the choice of enjoying the scenic sailing or staying ashore and rejoining the ship after she docks in Hamilton, the capital, and a delight for shoppers.

Sail and Stay

Another new travel concept was developed as a result of creative efforts by the Port Authority to add variety to, and also expand, Bermuda travel programs from New York. Working with Thomas Cook, Inc., major Bermuda hotels, Eastern Airlines and Cunard, the Port Authority helped to develop a new sail and stay "package tour". The totally new travel program offers Bermuda vacationers the opportunity to divide their week's trip, and spend half the time aboard ship and the other half of the week ashore at one of nine luxury Bermuda resorts: The Belmont, Bermudiana, Castle Harbour, Elbow Beach, Grotto Bay, Holiday Inn, Princess Hotel, Sonesta Beach or Southampton Princess.

Vacationers will be able to either sail to Bermuda on Cunard Princess, stay at one of the nine top hotels and fly home via Eastern Airlines or reverse the order and fly to Bermuda and sail home.

New Luxury Ship

The new Cunard Princess, a 540-foot-long, 17,586-ton luxury ship, can accommodate some 750 passengers in 380 passenger rooms. It has a crew capacity of 350 and is fully air-conditioned.

"When the Cunard Princess is christened later this month at our New York City Passenger Ship Terminal by Princess Grace of Monaco," Mayor Beame concluded, "it will be the first naming of a passenger liner in our city.

"And when Terence Cardinal Cooke, Archbishop of New York, blesses the vessel," the Mayor added, "he will be extending the wishes of millions of his fellow New Yorkers to the Cunard Princess for many 'bon voyages' from the Port of New York in future years."

Port of Portland in 1976

February 1977 "Portside" (News from the Port of Portland, Oregon):—On land, at sea and in the air ... 1976 was the year the Port of Portland put it all together.

At year end, marine cargo tonnages were soaring ... new trade routes were being forged far up the Columbia River and to Alaska ... the Port's presence was more pronounced in world markets ... new marine facilities and airports had come on to line or were nearing completion ... air passenger totals hit an all-time high ... general aviation operations increased substantially ... an expansive economic development policy was adopted ... and construction of the largest dry dock on the West Coast was approved by Port District voters and is now under design.

It all happened at the Port of Portland during 1976. The year began slowly . . . a period of stabilization as the world worked its way back from a general recession. But in the second half, Port of Portland business boomed, resulting in the second highest tonnage year in history with imported automobiles and containers leading the way.

During 1976 Portland retained its leadership as number one port and distribution center in the Pacific Northwest and as the leading export port on the entire West Coast.

On the basis of a survey by one of the nation's leading trade journals, "Handling & Shipping," Portland was ranked the 11th largest distribution center in the U.S.-moving up from 16th position in a survey conducted by the publication ten years earlier.

The biggest harbor-related news during 1976 was approval by Port District voters of an \$84-million general obligation bond measure allowing construction of the largest dry dock on the West Coast along with 3,000 feet of berth space at the Port's Swan Island Ship Repair Yard. The dock will be operational by early 1979 and will handle vessels in the 120,000-to-190,000-deadweight ton range. Legislative approval is pending to permit the Port to apply revenues from the shipyard to pay debt service costs on the bonds.

Also before the legislature is a change in statutory authority that world allow the Port to provide technical assistance upon the request of governmental bodies, to smaller communities within the tri-county Port District.

This was one element of a new plan for Port economic development that included an intensive marketing and sales program for the Port's industrial properties at Swan Island and Rivergate.

The year also marked completion of the 40-foot Columbia River ship channel, approved by Congress 14 years earlier. The channel from Portland to the sea originally was dredged to a depth of 25 feet beginning in 1891 with creation of the Port of Portland as a dredging authority. Over the years, the project depth has been increased in five-foot increments to the present 40-foot level. The channel is 600-feet wide.

A bright note for the Marine Development Department came in 1976 with the selection of Portland as the new U.S. entry point for distribution of Toyota imports to the Midwest. Portland was already the Northwest distribution point for Toyota, handling an average of 24,000 cars annually for regional sales. Another 60,000 Toyota auto-



Oakland, Calif., March 2, 1977 (Special to "Ports and Harbors". Marine Exchange of the San Francisco Bay Region):-Golden Anniversary of the Port of Oakland was recently celebrated at a gala dinner ceremony at Jack London Square. On hand for the 50th birthday party for the second largest ocean containerized cargo facility in the United States was William Walters (left), president of the Board of Oakland Port Commissioners, and Paul A. O'Leary, president of the Marine Exchange of the San Francisco Bay Region, who presented a commendation certificate for the occasion.

mobiles had been shipped through New Orleans for Midwest distribution. With Portland's selection as Toyota's U.S. entry point, Port officials believe that by 1978 more than 200,000 cars will enter the U.S. over its facilities.

To keep pace with its role as the major West Coast auto import center, the Port is investigating the possibility of constructing a 51-acre terminal on ready land in Rivergate near Fulton Terminal 6. One reason Toyota selected Portland as its U.S. entry point was because of the abundance of prime land.

Soros Associates Proposes to Build and Operate a Bulk Terminal in San Francisco

San Francisco, Calif., February 23, 1977 (Port of San Francisco News):—One of the world's largest bulk cargo terminal builders today broached a proposal to build a major bulk handling facility at its own expense on the Port of San Francisco's south waterfront.

Soros Associates, headquartered in New York City, suggested to the San Francisco Port Commission a development agreement under which a wholly owned Soros subsidiary would engineer, build and operate the terminal on Pier 94 north, south of Islais Creek.

The undertaking, involving an expenditure in excess of \$30 million, would be handled by Bayshore Bulk Terminal Company.

The agreement would include an option to shift the site from Pier 94 north to Hunters Point Naval Shipyard should the port succeed in obtaining a sublease of a part of the shipyard from Triple A Machine shop.

"The firm recognizes Hunters Point has a far greater economic and cargo potential than Pier 94 north," said Port Director Thomas T. Soules.

"Bayshore therefore wishes to be guaranteed the first option on Hunters Point if that property becomes available to us."

Pier 94 north, for which the port has no immediate development plans, includes a portion of filled land which slid into the bay in November, 1973.

The port then redesigned the orginally planned twoberth container terminal as a one-berth facility, and the new Pier 94 was completed last year in that configuration.

"Any previous plans for the Pier 94 north area would have entailed a major expenditure of port funds and the money simply is not available," said Soules.

Should Bayshore obtain all the necessary permits and build the terminal—a two to three year project—a lease will be drawn under which the port will collect a land-use rental. When the bulk cargo starts moving, the port will additionally collect a percentage of the "through-put" revenues.

Soros Associates News Release

Soros Associates, an international consulting engineers, specializing in the planning, design, construction management of port developments and bulk handling systems, announces the opening of its U.S. West Coast branch office in San Francisco at 50 California Street, Suite 3600, effective March 15, 1977. The firm is headquartered at 575 Lexington Avenue in New York City and is currently active on projects in over 20 countries.

The San Francisco operations will be headed by Mr. Vello Kiisk, Director of Engineering. Mr. Kiisk has over twenty years of materials handling, marine design and construction experience, most recently with Kaiser Engineers of Oakland and previously with the Marcona Corporation, the Port of Portland and U.S. Coast and Geodetic Survey.

Soros Associates is also the sponsor of a recently



Mr. Vello Kiisk

announced proposal to develop and operate a coal terminal at Pier 94 in the Port of San Francisco through a separate entity, Bayshore Bulk Terminal Company established for this purpose.

"The Executive Corner"

Savannah, Georgia ("Georgia Anchorage", January-February 1977):-After ten years of debate, the stage is now set for a Congressional showdown over waterway user charges within the next two or three months. The imposition of waterway user fees would constitute a radical change in U.S. policy with respect to the Nation's rivers, harbors and waterways. All domestic waterways are tollfree. Ships, barge tows and recreational craft may navigate federally constructed, operated and maintained channels without payment of special levies, fees or user charges. This federal policy has prevailed, without significant interruption, for almost 200 years.

Until this past year, only the inland waterways were targeted for these tolls. The 1977 version of the bill, however, will, according to our Congressional leaders, seek to levy user charges on ocean vessels entering our deepwater ports and recreational craft, as well as barge tows.

We firmly believe toll-free water transportation is important to the Nation's economic stability, energy security, agricultural productivity, export trade and expanding employment opportunities. The time has come for all of us to rally around the ship and do everything we can to defeat this legislation which will impose additional burden upon already heavily ladened surface transportation costs. Write or call your Congressman! (George J. Nichols, Executive Director, Savannah, Georgia Ports Authority).

Navigation Projects' Decline Hit as Federal Responsibility

California Marine Affairs and Navigation Conference (=C-MANC) San Francisco

Washington, D.C.-Despite demonstrated growing dependence on ocean commerce and water-related recreation, navigation projects continue to slip in national priorities, California witnesses asserted today (Thursday, March 31) in testimony before Congressional appropriations committees.

Robert H. Langner, executive director of the California Marine Affairs and Navigation Conference (C-MANC), cited the Golden State as a "test tube for this brew of frustration, delay and deferred priorities."

More than thirty California Congressmen and C-MANC members appeared before House and Senate Public Works Appropriations Subcommittees to seek funding of 59 projects and studies, with total federal cost of almost \$200 million. To complete the undertaking in coming years, \$133 million must be appropriated. For fiscal year 1978, President Carter has called for \$21,955,000 to be spent. C-MANC recommendations exceed this amount by \$3,945,000, representing the capability of the Corps of Engineers to spend such funds economically and efficiently.

Noting that the California organization represents all commercial ports and most recreational harbors of the state, and its members were appearing for the nineteenth consecutive year before Congress, Langner submitted an illustration of the "paperwork jungle" as an example of excessive regulations and their confusing administration. The diagram represented the maze of state and federal processing of a routine annual dredging permit application a process which can require up to a year for approval and heavy expense to applicants.

Whille worldwide trade rose 12% last year, Langner said the San Francisco Customs District increased 21% in receipts, and the state's total foreign commerce is estimated at almost \$31 billion in 1977–a 14% boost.

Similarly, California's utilization of small craft harbors reflects maximum public benefits, yet the coastline lacks natural havens and must depend on inadequately-developed harbors-of-refuge.

Combined with excesses of "red-tape" afflicting these projects are costly and often non-result-productive environmental constraints, Langner testified. California's commerce also faces a plethora of new vexations such as retroactive taxes on imports and a unilateral anti-boycott law. Only the vitality of this trade permits its expansion despite such barriers.

Federal policies and actions are however the principal reason why both total and relative funding has been declining, the witness noted. Complimenting the appropriations committees for their efficient allocation of limited funds, and continuing "sympathy, understanding and support", Langner said overall responsibility is with national government. "If the mechanism works less effectively, it is

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of federal design. As navigation's share of the budget dollar continues to shrink, it is a result of nationally-established priorities. If Corps of Engineers' capabilities become increasingly elastic and used as a means to achieve predetermined executive goals, then this erosion of their validity reflects policy decisions long since reached."

Concluding, the C-MANC statement called for review of laws used by federal agencies to justify their excessive and unproductive regulations and paperwork, and for oversight action by the Congress. Navigation projects merit much more than current negativism and hypercriticism. Their growing contributions to national well-being must see a reversal of such attitudes and policies.

On Friday (April 1), more than fifty Californians and organizations will join in sponsoring the 18th annual Golden State Luncheon on Capitol Hill, with Congressional host Harold T. "Bizz" Johnson, chairman of the House Public Works Committee, and presented under C-MANC auspices.



San Francisco, Calif., 2/3/77 (Marine Exchange of the San Francisco Bay Region):-Long-time Pacific Coast maritime industry leader Carl C. Bland (left) was honored by the Marine Exchange of the San Francisco Bay Region following his recent retirement as senior vice president of Balfour, Guthrie & Co., Ltd. The former Exchange director was presented with a commendation for his long service to shipping by the organization's president, Paul A. O'Leary.

7th International Harbour Congress Antwerp, Belgium, 22-26 May 1978

Organized by: Koninklijke Vlaamse Ingenieur severeniging (Royal Flemish Society of Engineers)

According to tradition, the 7th International Harbour Congress will deal with problems related to maritime and inland ports.

SECTIONS AND GENERAL REPORTERS

The activities of the Congress are spread over 6 sections dealing each with a particular subject of harbour activity.

During the working sessions of the Congress no individual lectures will be made, but a general review of the accepted papers will be presented in each section by the General Reporter for that section. Preprints of papers will be distributed in advance to all members of the congress.

There will be opportunity to discuss the papers.

LANGUAGES

With the purpose of standardizing the efforts of contributors, general reporters and editor, all papers and documents shall be written in English only.

However, during the sessions, simultaneous translation into Dutch, English, French and German shall be provided.

PAPERS

All persons who intend to contribute with a paper on one of the themes (given hereafter) of the Congress, are requested to send 3 copies of the abstract of their paper (300-400 words in English) together with the attached application card to the Secretariat by May 15, 1977. Papers will be selected on the basis of these abstracts by the Program Committee.

Only original papers describing significant new work will be accepted. Authors will be notified not later than June 30, 1977, and will receive instructions for the preparation of the final paper. The final version of accepted papers will be required by October 1, 1977.

EXHIBITION

The 7th International Harbour Congress will also feature the 4th International Harbour Exhibition of models, photographs, maps, diagrams, small tools, drawings, technical and economic data, etc. pertaining to ports and their activity and to harbour engineering and equipment. All information concerning stands and participation fees can be obtained at the Secretariat.

PARTICIPATION TO THE CONGRESS

Persons who wish to attend the Congress, are requested to return the attached form. They will receive in due time the complete program and participation conditions.

SECRETARIAT

7th International Harbour Congress

Ingenieurshuis Jan van Rijswijcklaan 58 B–2000-Antwerpen tel. 031/33 65 24

SECTIONS AND THEMES

- 1. Geology and soil mechanics related to harbour engineering
- 1.1. Geological structure and growth of river mouths or estuaries and coastal seas or near-shore zones
- 1.2. The use of geology, soil mechanics and geophysical methods for the extension offshore of harbours and the construction of harbour islands
- 1.3. The problems of stress and strain characteristics of soils for deep excavations and permanent constructions
- 1.4. Sloping banks equilibrium and protection
- 1.5. Site preparation by artificial consolidation
- 1.6. Recent developments in the design and realization of pile foundations
- 1.7. Soil mechanics problems when constructing and deepening quay-walls
- 1.8. Safety related to geotechnical problems

2. Hydraulic engineering (infrastructure works) offshore and in coastal harbours

- 2.1. Investigations in the field of design of new harbours; developments in the extension offshore of harbour sites and harbour mouths, including the construction of terminals and artificial islands
- 2.2. Hydraulic and nautical problems in harbour engineering in connection with new harbours and the extension of existing harbours and harbour entrances, also in relationship with the sedimentary aspects
- 2.3. Recent realizations in the construction of breakwaters, piers, quay-walls and floating structures including mooring and fendering problems
- 2.4. Problems concerning the adaptation of harbours and their equipment to large and especially new types of ships
- 2.5. Economical, technical and ecological aspects of dredging and reclaiming
- 2.6. The need of model investigation for offshore and coastal harbours

3. Hydraulic engineering (infrastructure works) in non-coastal harbours

- 3.1. New developments in the field of design, extension and adaptation of harbour entrances, docks and sites
- 3.2. Recent realizations in the construction of locks, quay-walls, piers, dry-docks for large or new types of ships, including mooring and fendering problems
- 3.3. Design and construction of floating and anchored structures in tidal waters for berthing and discharging ships
- 3.4. Flood barriers on tidal rivers: conception, studies and

Europe-Africa

realization

- 3.5. Economical, technical and ecological aspects of dredging and reclaiming
- 3.6. Study of the specific needs for harbour extension in the case of young or recent harbours in rapid expansion and for new or expanding harbours in developing regions

4. Civil engineering or suprastructure works in harbours

- 4.1. Permanent and temporary storing sheds
- 4.2. Fixed bridges of large span and movable bridges
- 4.3. Construction of roads, railroads and waiting areas for heavy-load trucks
- 4.4. Pipe-lines, electrical lines and cables (underground and overground)
- 4.5. Tunnels, silos and all kinds of service-buildings
- 4.6. Study of the specific needs for harbour extension in the case of young or recent harbours in rapid expansion and for new or expanding harbours in developing regions

5. Harbour appliances and electromechanical harbour equipment

- 5.1. Developments in construction of cranes and adaptation of harbour equipment to present-day vessels. Handling of containers, bulk materials and large unit-loads; expectations for the future
- 5.2. Driving equipment for movable bridges, locks and dry-docks
- 5.3. Modern calculation of hoisting apparatus, in regard with fatigue and damage theory. Uniformity of standards
- 5.4. Radarization of harbours; beacons and navigation systems
- 5.5. Removal of floating dirt and oil
- 5.6. Equipment of young or recent harbours in developing regions
- 5.7. Design of harbour equipment to ensure a minimum life-cycle cost

6. Safety provisions in harbours and the protection of the environment

- 6.1. Harbour-tied environmental problems: air, water, soil, thermal and horizon pollution; waste removal; noise
- 6.2. Dangerous materials: transport, handling, storage
- 6.3. Safety measures and regulations: standardization
- 6.4. Fire prevention and fire fighting
- 6.5. Safety and training of personnel
- 6.6. The protection of harbour equipment against storm surges, tsunamis, hurricanes, etc.

The General Cargo Phenomenon

Antwerp, 19/12/1976 (Port of Antwerp Promotion Association Press Release):-After the North-Atlantic zone, the Far-East, Australia and New Zealand, other as important traffics will probably by 1985 be based on the principle of unitization, particularly the containerization. Mention is made of the Caribbean Isles (already started with Carol (Caribbean Overseas Line), South Africa, the northern part of South America, Brazil, the Mid East and various regions in West Africa.

For this phase in the container evolution the circum-

Empresa Nacional Portuaria

Stage I Port Facilities Port of Puerto Castilla Republic of Honduras, C. A.

Notice of Prequalification

During the months of September and October, 1977 the Empresa Nacional Portuaria (ENP) will solicit bids from prequalified contractors for the Stage I Construction of Port Facilities at Puerto Castilla, Honduras, C.A. The project will include:

. Dredging	150,000 C.M.
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- 2. Hydraulic fill 500,000 C.M.
- 3. A pile supported wharf, 450 m. long 17,100 S.M.
- 4. A transit shed 3,000 S.M.
- 5. A warehouse 3,000 S.M.
- 6. A Port Operations building 800 S.M.
- 7. An Immigration and Customs building 800 S.M.
- 8. A maintenance building 560 S.M.
- 9. Two open sided lumber storage sheds
 - 3,000 S.M. (Ea)
- 10. Pavement 185,000 S.M.
- 11. Utilities (lighting, power, communications water supply drainage)
- 12. An elevated water storage tank 300,000 Gal.
- 13. A palm oil storage tank 17,500 Barrels
- 14. Three Fuel oil storage tanks 5,000 Barrels (Ea.)
- 15. A bunker fuel oil storage tank 20,000 Barrels
- 16. Ancillary buildings (guard houses, switch gear rooms, etc.)

Interested firms that have satisfactorily performed comparable work should apply promptly for prequalification forms to:

a) Tippetts-Abbett-McCarthy-Stratton 345 Park Avenue New York, New York 10022 Attention: Mr. Irving Greenzang, Or

- b) Cerna y Maier S. de R.L. Apartado Postal 115 Tegucigalpa, D.C. Honduras, C.A. Attention: Mr. Hector Cerna, Or
- c) Licenciado Antonio Jose Coello, Gerente Empresa Nacional Portuaria Apartado Postal No. 18 Puerto Cortes, Honduras, C.A.

Prequalification forms must be filled out and returned by registered mail, to Tippetts-Abbett-McCarthy-Stratton with a copy to ENP, no later than June 15, 1977.

Bids will be received only from prequalified contractors.

50 PORTS and HARBORS - MAY 1977

stances for the Port of Antwerp are much more favourable than with the first penetration of the container in Europe. The Scheldt has been better adapted to the traffics with large and deep-draughing vessels thanks to dredging works, increased safety on the river, organizational measures, dispatch etc., and the connections with the European hinterland-by rail, road and by river-cause no problems.

The decisive factor, however, is the potential for cargo which can be transported in containers or as unit loads.

This "Antwerp phenomenon" (31 million tons general cargo in 1974 and 24,3 million tons in 1975, in spite of the crisis) has been the basis for the decision taken by e.g. ACE Group and Carol to include Antwerp as a direct port of call for their container fleet.

With the extending port-bound industry the traffic of containerized or containerizable products is constantly growing.

(Petro-) chemical products, spare parts for cars, a.o. are in principle containerizable and will in the near future be transported in tank or conventional containers.

All this can be read in an article by B. Van den Bossche in the No 90 of the bimonthly review HINTERLAND, in which the author also reviews the factor specialization i.e. groupage of cargo which appears in two different forms (line and expedition groupage). Thus Antwerp has 7 of the 37 groupage terminals which are recognized by the conference on Canada, and 13 of the 38 on the United States.

Beside the usual articles relating to insurance, new lines, railway, economics, the review also contains an article by

G. Haazen which highlights the role Antwerp plays as a port of transit and import for forest products (woodpulp, paper etc.), while C. Van Elsen sums up the global package of services the cargo handlers render in the port.



Loading of coils at Port of Antwerp

Image: mail of the second s

Information: General Management of the Port, Town Hall, Antwerp, Belgium.

Port Investment Should Be Profitable

Speech to the Liverpool Branch of the Institute of Freight Forwarders

London, 23 February 1977 (British Transport Docks Board):-Sir Humphrey Browne, President of the Institute of Freight Forwarders, speaking in Liverpool last night (Friday, 25 February) at the Annual Dinner of the Liverpool Branch of the Institute, said that the ports of the United Kingdom had responded effectively to changes in the pattern of seaborne traffics. In so doing considerable problems had been overcome since ports had been faced with an exess capacity of the wrong sort and required heavy capital investment in new facilities.

Sir Humphrey, who is Chairman of the British Transport Docks Board, pointed out that the needs for the unit load revolution had been met by providing facilities for roll-on/ roll-off traffics and container handling. Entirely new harbour facilities had been established for bulk traffics, such as iron ore, so that large and very large vessels could be handled; and equipment had been provided for handling high throughputs. Better grain handling facilities had been provided on a large scale, as at Liverpool, and for small ships at several ports.

All this was no more than could be expected of the ports; but it was not always realised that extraordinary changes had been involved-changes in equipment, in methods, and in manpower.

"For example," said Sir Humphrey, "one million tons of cargo conventionally handled requires ten berths, extensive sheds, and 40 cranes. The same tonnage in containers requires one berth, considerable back land, two special cranes, equipment for moving containers but no conventional sheds. Roll-on/roll-off cargo requires no cranes but often specialised equipment." Similarly the handling of bulk traffics on a larger scale required heavy capital investment and resulted in curtailment of labour.

Costs had been contained not only by reducing the labour force but also by modernising handling methods, by improving operational efficiency and by savings in the engineering field. For instance, the cost of dredging had been cut at some ports as a result of imaginative research.

Sir Humphrey again stressed his well known belief in competition as a crucial factor in securing efficiency. Ports were certainly subject to acute competition now because the island had contracted through improved communications and transport. "The whole of the United Kingdom is every port's hinterland today-Scotch whisky is exported through Southampton."

Competition was undoubtedly a stimulous. At the same time the ports were entitled to a reasonable return. In the past the yield on dock investment had been very low indeed, certainly not sufficient for the future health of the industry; in fact after allowing for inflation, ports, over the years, had not really made any profit at all. This was being corrected. It was in the long term interests of port users that ports should secure a reasonable return on investment.

Personnel Director Designate

London, 24 March 1977 (British Transport Docks Board):-The British Transport Docks Board has appointed Mr. John Smith, at present Head of Personnel, Television Programmes, BBC, as Personnel Director Designate. Mr. Smith will take up his appointment at the Docks Board's London headquarters at Marylebone on 1st June and will succeed the Board's present Personnel Director, Mr. Kenneth Domony, when he retires on 31st December.

On lst January 1978 Mr. Smith will assume responsibility for personnel administration and industrial relations covering the Board's 19 ports. He has been with the BBC since lst January 1962, when he returned to Britain after six years as a District Officer with HM Oversea Civil Service in what was then Tanganyika. Before taking up his present post, which he has held since 1969, Mr. Smith was for four years the BBC's Current Affairs Group Organiser at Lime Grove Studios.

Mr. Smith, who is 45, is a Member of the Institute of Personnel Management. He was educated at Maidstone Grammar School in Kent, and after national service with the Royal Artillery in Hong Kong, went on an open scholarship to University College Oxford, and graduated with an honours degree in history. In 1967 he attended the Administrative Staff College at Henley.

Mr. Smith is married, with two daughters and one son, and lives at St. Albans.

More Dockers for Avonmouth

Bristol, March 2, 1977 ("Portfolio" A Newspaper for the Port of Bristol):-The continuing spell of bad weather, which has led to the loss of 2513 gang hours in the period 1st October to 31st January, together with the loss of several skilled men to Middle East ports, has led to some unwelcome news for the Port of Bristol.

The news, that the conferences covering the trade from India, Pakistan and Bangladesh to the U.K. were doubling their port surcharge at Avonmouth to 10 per cent because of a shortage of berths and labour, came as a bitter blow to the Port Authority who have been making strenuous efforts to make good labour shortages.

Fifty-nine men authorised by the National Dock Labour Board at the end of last year have already been recruited and allocated.

As a result of further losses, however, principally to the Middle East, a further application has been made to recruit another forty men.

Port of Esbjerg, Denmark: 160 Million Kroner Investment

Extracted from "Port of Esbjerg 1976"

Esbjerg is currently in a rapidly accelerating development as a central port for traffic across the North Sea, and transit traffic to all parts of Scandinavia and the northern Continent. An understanding of this is implicit in the port expansions made in recent years, and in the plans already prepared for the future. As a State-owned port, Esbjerg is under the authority of the Danish Minister for Transport, Mr. Niels Matthiasen, who says: »I expect Esbjerg to continue to develop, and investments to increase, so that the requirements of its clients can be reasonably provided.«

On several occasions, the Minister has indicated that his department, and the Danish government, consider the development of Esbjerg to have great importance for the country. Partly because Esbjerg is considered to be the Danish alternative to ports in Germany, Holland and Britain for certain forms of traffic.

For many years a steady modernisation and expansion of the port has taken place. This year, the second phase of the eastern harbour expansion will be completed. New land has been reclaimed and the Europe Pier is the first concrete result of this activity. Even before the pier was completed, a company with extensive international relations, Allfreight Ltd., began construction of a main terminal.

The Vestkraft Pier has been expanded and can now receive ships of up to 230 metres length. This limit will be increased further. In the period from 1974 to 1980, the eastern harbour expansion will involve an expenditure of about 80 million kroner. The result will be more available land, and more quay space. Other plans involve a tanker pier outside the harbour basin, and close to the Vestkraft generating station.

Large new areas are already available on the reclaimed section, and the harbour dredger, »Taurus« brings new loads of sand in every day from the channel through Grådyb Sandbar. New land is being made all the time. The Port has already earmarked an area which is still sea for a modern railway freight centre. In the near future, Danish Railways are expected to approve construction plans, for the existing railway freight centre in the centre of the town is short of space. This project will also involve a thorough re-planning of railway services in the harbour area.

It is worth noting that a number of the regular users of the Port of Esbjerg have had their special requirements included in planning these expansions.

The eastern harbour project will reach completion in the summer of 1980, and work will then start on modernizing the southern harbour area. About 24 million kroner has so far been earmarked for pier expansion for DFDS Seaways' vessels, which carry Denmark's agricultural export to Britain from Esbjerg.

Another 12 million is to be used to modernize and expand the Container Harbour, which is one of the three places in Denmark where container cranes lifting 32 tons are available. Similar lifton/liftoff facilities are only found in Copenhagen and Aarhus.

The traffic harbour has the largest basin, and over the next four years over 30 million kroner is to be invested in deepening the basin and improving piers. This is needed to serve the grain and fodder companies based there. One of these companies has just built northern Europe's highest silo.

All in all, about 160 million kroner is expected to be invested in the Port of Esbjerg over the next five years when expansion plans for the fishing harbour are included.

Esbjerg and Geography

A few years ago, the term »good transport facilities« just meant that the transport task at hand was done effectively. Today, speed as well as efficiency is needed for a transport centre to be competitive. More than any other Danish port, Esbjerg can meet the need for fast, safe and rational transport to and from Scandinavia and the northern Continent.

Each year, the costs involved in running a business rise steadily. Production plant is costly, so are raw materials, and particularly the investments needed in the transport sector have risen sharply. Heavy investments presume rapid turnover and optimum use of the available production apparatus and means of transport. The alternative is the unattractive sight of earnings barely meeting interest payments and other expenses.

And large freighter can save up to Dkr 100.000 by calling at Esbjerg instead of an East Jutland port, since the length of the voyage is reduced by about two days. This is not something caused by efficient marketing, a high standard of service or anything else, except perhaps the geographic location and the wisdom of the people who founded the city. If the alternative were Copenhagen, the saving, by calling at Esbjerg,—would be considerably larger, and no-one can afford to ignore economies like this today. The simple facts of transport economy will inevitably favour the direct route to central geographic transport centres, and Esbjerg is such a centre for the Scandinavian and northern Continental area.

Rationalisation and the gradual change in transport patterns have led to considerable discussion between Danish ports. The larger ports, Aarhus, Aalborg and Copenhagen, have felt that Esbjerg's rapid growth is due to its status as Denmark's only major State-owned port. The implied criticism in this attitude brought a comment from the Danish Minister for Transport, Mr. Niels Matthiasen:

"The south-west orientation of The Port of Esbjerg is a natural advantage some other ports do not have. Shipping today wants to use the shortest possible distance and the fastest turnaround in port, and these two factors make Esbjerg preferred to the Danish ports on the eastern coasts. And Esbjerg also has very good land-transport connections with other parts of the country, both road and rail. (Continued on next page bottom)

Le Havre Flashes, January, 1977

Le Havre, France (Port of Le Havre Flashes, January, 1977):-

• Front cover brief: 80 million tonne target beaten in

1976

↓ Front cover photo: Port of Le Havre seen from air from "avant port"



(Continued from page 53)

Together, these factors have provided the foundation for Esbjerg's rapid growth in export and import trade, and for this reason we will in the future be prepared to invest in the port if a well-documented and reasonable demand exists.

This is the view of the Minister, and the fact that vessel and supply charges and other port fees are the same in all Danish ports shows that Esbjerg has not sought custom through price-cutting, but that custom has sought Esbjerg.

The volume of cargo is rising steadily, and the figures for net vessel tonnage over the last five years show an increase of 50 per cent.

Some of Esbjerg's new customers have explained that they chose Esbjerg after a careful study of the map. And it is increasingly common to hear that Esbjerg was chosen as an alternative to British or north Continental ports.

For east-west traffic connecting to Esbjerg, the bottleneck within Denmark itself is the Great Belt. On routes to the rest of Scandinavia the hindrance is the Øresund, between Zealand and Sweden. Plans for bridges across both have been under discussion for years. A Belt bridge is likely to come first, and the Danish Parlament is expected to

approve plans for it this summer. The Transport Minister hopes that work can begin on it this year. A bridge linking Denmark and Sweden is currently the

subject of very thorough investigation by a Danish-Swedish committee.

Transport Minister Niels Matthiasen believes it would be quite feasible to carry out both these huge projects simultaneously.

When-not if-the two bridges are completed, Esbjerg can expect to see a further development, though its contours, remain vague today. They point to Esbjerg as a distribution centre for Great Britain/Scandinavia/Northern Continent, and a transit centre with excellent road and rail connections. Eastwards towards Funen, Zealand, Sweden and on to Norway and Finland.

Northwards through Jutland. South over the border to Germany. The fourth direction-west-has currently about 20 weekly departures to Great Britain, which is a good basis for a further expansion in this direction. Furthermore, Esbjerg's modern airport is equipped to handle a respectable volume of freight from all corners of the world.



• Le Havre-Boston direct by U.S. Lines

U.S. Lines have been providing a direct service since November 22nd from Le Havre to Boston, using one vessel a week, which then goes on to New York, Baltimore and Norfolk. This is in addition to the longstanding service from Le Havre to New York, Philadelphia, Charleston, Jacksonville and Savannah, which also operates once a week. U.S. Line vessels are frequent visitors to the port of Le Havre, which is used both by the company's ocean-going vessels and by the feeders serving England. Scotland, Spain and Portugal.

• Another helicopter for the States

On November 9th a second "Puma S.A. 330" helicopter touched down at the Quai de l'Europe terminal on its arrival from the works at Marignane near Marseilles. It was loaded three days later on the containership Atlantic Champagne, which was about to sail for New York.



• Very heavy loads for South Korea

The port of Le Havre's 200-tonne floating crane was used on November 18th to put two Alsthom transformers aboard the Compagnie Maritime Belge freighter Mokaria. They weighed 170 tonnes apiece and were on their way to South Korea, where they were due to be off-loaded at the port of Inchon.

• Good things from Ireland

The Irish Continental Line's car ferry St Patrick, which operates a regular service between Le Havre and Rosslare in southern Ireland, carries a good quantity of freight in addition to its complement of passengers. Meat and fruit are the staple items, but in the month of October alone she also carried Irish butter for Italy, milk for France and oysters for Spain, as well as a number of Irish thoroughbreds on their way to new owners on the Continent.

• New type of timber wagon

A new type of French Railways wagon was loaded with rough timber on November 15th in the stock yards of the Société d'Importation de Bois Tropicaux, this being the first time it had been used in Le Havre. It is an open wagon 18.50 m long and 2.57 m wide ($60'8'' \ge 8'5''$), with a tare weight of 26 tonnes and a carrying capacity of about 53 tonnes. The specially reinforced stanchions are designed to withstand a very high lateral thrust from 20 or 21 logs weighing an average of one tonne each. Five of these new wagons are being allocated permanently to Le Havre, where they will be a valuable addition to the existing timber handling equipment.



• Antifer's first six months

During its first six months in service, the new Havre-Antifer terminal, opened on 13th April 1976, had excellent rate of berth occupation and was used in the normal course of trade by 65 tankers of 200,000 dwt and over. They included 26 vessels of 200 to 250,000 tonnes, 29 of 250 to 300,000 tonnes, 6 of between 300 and 400,000 tonnes and 4 of over 400,000 tonnes. A number of them could not therefore have been accommodated in any circumstances at the present oil wharves in Le Havre itself.

Vessels tying up at Antifer during the period under review had a total capacity of 17.7 million tonnes deadweight and discharged 11.8 million tonnes of crude oil, though this figure does not represent the total amount of cargo carried, since 35 tankers put in only to lighten before continuing up the Channel-confirming in the process that Antifer is ideally placed for this type of operation.

(Continued on next page bottom)

Marseilles/Fos ``Europort South''

1. December 1976, the monthly magazine of the Port of Marseilles Authority

EDITORIAL

1976 is drawing to a close and the balance sheets will be drawn up in January.

It has been a difficulty year for everyone and the competition is becoming increasingly severe. Nevertheless, the volume of traffic through the port of Marseilles Authority this year has already enabled us to climb back into the "100 million tonne" league.

During the year, many new shipping lines have opened up regular services from Marseilles-Fos taking advantage of its excellent road and rail links with the European hinterland.

RO/RO and containerized traffic through the Suez Canal is becoming increasingly important, particularly to the Red Sea and the Persian Gulf.

There are already over seventy RO/RO sailings from Marseilles-Fos to the Near East.

RO/RO being the best way of overcoming the problem of congestion at these ports.

(Continued from page 55)

Nine new containerized lines have been launched on

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• Pilots go by helicopter

To keep its service fully in line with the present pattern of traffic, the Havre Pilotage Station has acquired an Aérospatiale Alouette III helicopter, which it uses for conveying pilots to and from very large vessels calling at Le Havre or Antifer. It was brought into service last May and is used for about 80% of all arrivals at the Havre-Antifer oil terminal, though it only complements, and does not replace, the surface craft traditionally used by the pilotage service. Nine times out of ten the helicopter puts the pilot aboard by landing on the deck, but winching is used occasionally. Le Havre is the second port in Europe, after Rotterdam, to adopt the air-lift system for its pilots. these routes this year, as well as others to South-East Asia, the Far East and, as from 1977, to South Africa.

Marseilles-Fos can again become the Gateway to the Orient: as the first port of call on the Northbound run and the last port of call on the Southbound run, it will be of primary interest to shippers and forwarders. For our part, we shall continue our efforts to make this ambition a reality.

> Y.P. REMOND Commercial Director of the P.M.A.

IN BRIEF

• The 11,000-tonne floating dock recently purchased by the P.M.A. is expected to be put into service in March-April 1977.

• Design studies are under way at the P.M.A. for two special emplacements, one of the and one at Fos, for storage inside the Port of dangerous cargoes.

• 3,100 Tonnes of potatoes from the U.S.A. have arrived at Marseilles on board the Italian ship "Punta Bianca". 2,000 Tonnes were discharged at Marseilles and the rest of the cargo carried on to Italy.

• The National Pleasure Boat Council has decided to set up

• Great increase in container traffic

During the first nine months of 1976 the port handled 235,951 containers, with a gross weight of 2,080,455 tonnes, against 166,735 (equalling 1,440,965 tonnes) during the same period in 1975. This means that during the first three quarters of the year the throughput of containers had already surpassed the figures for the whole of the previous year both in numbers and in tonnage, since the total throughput in 1975 amounted to 231,675 boxes with a gross weight of 2,005,837 tonnes. This amazing increase undoubtedly owes much to the new containerised lines that chose Le Havre as a scheduled port of call during 1976, and in particular to the shipping groups that operate regular services between Europe and the Far East.

• Antifer: Dispersal port for Europe

The world's largest vessel, the 550,000 dwt French tanker Batillus, made her second trading visit to Le Havre on November 23rd, when she off-loaded 170,000 tonnes of crude in order to lighten before going on to Rotterdam with the rest of her cargo. Yet not a drop was for French use, all 170,000 tonnes being immediately pumped aboard the Torne, a Swedish tanker which sailed shortly afterwards for Göteborg.

The existence of Le Havre-Antifer thus made it possible for the Batillus to bring oil for refineries in Holland and Sweden at a much lower cost than if smaller tankers had been used for the purpose.

The importance of Antifer as a major European port for lightening vessels and dispersing cargoes grows greater week by week. By the end of December, more than 100 tankers of 200,000 dwt and over had tied up at its two berths since the new terminal became operational on April 13th last.



Fos-bird's-eye view (Port of Marseilles)

a branch in the Provence-Alps-Côte d'Azur region. It will be responsible for establishing the yacht port building programme and for harmonizing the local regulations.

• During the first ten months of 1976, container traffic at Fos was 71,375 TEU (compared with 62,273 in 1975) and at Marseilles it was 23,823 TEU (compared with 16,796 in 1975), making a total of 95,198 TEU compared with 79,069 in 1975.

PORT ACTIVITIES

• The largest cargo of crude oil ever received at Fos was recently discharged from the 421,000 dwt tanker "Golar Patricia".

The "Golar Patricia" is 377 m long, 60 m wide and has a draught of 22.94 m.

At the same time, at other berths of the oil terminal, the following ships were discharging 220,000 and 230,000 tonnes of crude, respectively:

- The 260,000 dwt "British Bride", 341 m long, 52 m wide and drawing 20.10 m.
- The 238,000 dwt "Neptune World", 321 m long, 52.50 m wide and drawing 19.85 m.

• Two 6-tonne cranes have just been transferred from Marseilles to the mineral quay at Fos by the ship repair company "Ateliers J. Paoli" acting on behalf of the P.M.A. The maritime transport between Marseilles and Fos was effected by the barge "Chamar III" belonging to the Compagnie Chambon.

• The nationalized "Iraqui Maritime Transport Company" of Baghdad, a member of the Medmecon conference, is starting a monthly service from Marseilles to the port of Basrah.

The first ship on the run, the m.v. "Basrah" of 13,220 tonnes, has just arrived at Marseilles.

The "Basrah" is 156 m long and 21 m in breadth, with a speed of 15 knots and a capacity of 18,000 m³ including 150 m³ of refrigerated space. With its derrick, it can load or discharge by its own means packages of up to 60 tonnes. Agents for the "Basrah" are the société HERPIN.

2. January 1977 "Europort South"

EDITORIAL

Best wishes for the New Year! We hope that 1977 will bring our readers all the happiness and prosperity that was often lacking in 1976.

The Port of Marseilles Authority which has just regained its rightful place in the "100-million-tonnes" league, intends to do everything in its power to ensure the prosperity of its partners in 1977.

For the shipper, it will multiply its efforts to assist imports and exports by making new contacts with transporters at all levels and by promoting the advantages of Marseilles at home and overseas. For the forwarder, it will



Paris is a sea port

Turntable of the navigable waterways of France, Paris is directly linked with the channel by a modern waterway.

Sea going vessels of up to 1,200 d.w.t cargo capacity are able to navigate the Seine up to Paris, and 200,000 tons per year are transported to and from the U.K., Ireland, North Germany and Scandinavia, without transhipment, therefore without risk of damage or pilferage and at a lower price of transport.

The Port of Paris Authority is also able to offer wharves and port complexes for the reception, transit, storage or shipment of goods.



PORT AUTONOME DE PARIS 2, quai de Grenelle 75015 PARIS

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continue to supply reliable information on the quickest ways of forwarding goods by land and sea at all levels of the international transport system.

For the shipowner and his agents, it will continue the work of remodeling the Port of Marseilles and building new quays at Fos, so that any ship, whatever its size, can be received in excellent conditions. In return, the P.M.A. hopes that its partners will make an effort in 1977 to be really competitive, so as to enhance the natural advantages of our Port and attract more business from overseas.

If these wishes can be made to come true, 1977 will really be a Happy New Year!

IN BRIEF

• THE P.M.A. at HAMBURG

The P.M.A. had a very successful stand at the International Transport Exhibition (T.A.I.) which was held at Hamburg from the 16th to 20th November 1976.

During the Exhibition, the P.M.A. made numerous interesting contacts with professional transporters from many difference countries.

• Passenger Accommodation

The P.M.A. is starting a new phase in the work of modernizing La Joliette Passenger Terminal, which will enable the terminal to handle increased and more diversified passenger traffic, including local traffic to the Frioul Islands. The cost of this phase of the work amounts to 9.3 million francs.

• First call of a third generation container carrier at Fos

The 50,000 dwt container carrier "NIHON", belonging to SCANDUTCH-MESSAGERIES MARITIMES, made its first call at Fos on 16th December. Fos has been chosen as the only port of call in the Mediterranean on this shipping company's Far East line, which will call at Fos every ten days with a ship capable of loading 2900 containers for export as well as import purposes (as from 5th February). The line makes Singapore in 15 days and Hong-Kong in 19 days. Feeder service are available for freight to or from Genoa and Barcelona. Agents for the line in Marseilles are GEMER.

• A new Ro/Ro ship

The ro/ro ship "RINAVALON" recently made its first call at the Port of Marseilles. This ship flies the Spanish flag and has been chartered by the Compagnie Marocaine de Navigation in order to reinforce their ro/ro service between Marseilles and Casablanca. The line already has one weekly sailing from Marseilles ensured by the "LAMARA", but the development of this traffic has encouraged CO-MA-NAV to charter the "RIVANALON" so as to be able to make two regular weekly sailing to Casablanca. The "RIVANALON" is slightly smaller than the "LAMARA" and has a gross tonnage of 72,400 cu.ft and a net tonnage of 20,600 cu.ft. It can load twenty-two 40-ft trailers between the deck and the garage and its lower hold can accomodate the equivalent of 75 linear meters of rolling stock up to 2.60 meters in height. It is also equipped with ten connections for refrigerated containers.

• Increased underground oil storage (Continued on next page bottom)

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Bremen News

Bremen International

• For Fair Distribution of Seas' Riches

Bremerhaven, 31.1.77 (BremIn). Only with an orderly utilisation of the vast and mainly still untapped resources of the seas will it be possible to achieve, in the interest of the long-term needs of mankind, a just distribution of the ocean wealth and to prevent squandering and irreparable environmental defilement. The international disposition of ocean utilisation is-as the present Maritime Law Conference shows-in the process of fundamental change. This alteration is based on the priority of interest given by the countries to their assured access to oceanic reserves. Insofar the debates in the Maritime Law Conference constitute only a partial aspect of the general discussion on the international economic structure. This conference is thus more a symptom than the reason for alterations in the international maritime law. This was the opinion expressed by the Director of the Institute for Foreign and International Economic Law, Frankfurt, Professor Dr. Günther Jaenicke, in the 103rd Bremen Tobacco Collegium in January 1977 held in the German Shipping Museum in Bremerhaven. The principle of the freedom of the seas for all countries, as understood to date, applies in practical terms only for civilian and naval shipping and air passage, but would not be a suitable basis for regulating other oceanic revenues. Thus new conceptions for international cooperation are required. The trend visible at the Maritime Law Conference towards nationalisation in the field of exploitability of ocean resources, without simultaneous shouldering of obligations to ensure appropriate access to others, constitutes no reliable basis for an orderly administration and fair distribution of this 'common heritage of mankind'. Short-term national economic interests must give way to long-term exigencies and requirements. Rational international cooperation could accommodate differing interests and help in avoiding conflict, above all with the aid of the USA and the USSR.

• 100 Years BLG, Largest European Port-Operating Company Celebrates Jubilee

Bremen, 31.1.77 (BremIn). The 'Bremer Lagerhaus-Gesellschaft (BLG)', one of the most modern port operating enterprises in the world—and at the same time, with 4,200 employees, the largest in Europe—celebrates its centenary on February 1st 1977. The BLG, more than any other organisation, has played a decisive part in the sweeping development of the Bremen/Bremerhaven portgroup to take, inter alia, the leading position in the container, lash and ro-ro trades and to become the first German computer-port, the know-how of which is in great demand in many lands.

The BLG was founded by Bremen merchants, like many small port firms, as a private undertaking on 1st Feb. 1877. It became a municipal company (administration) in the 'twenties and was transformed in 1963 by an exemplary skeleton-agreement with the Free Hanseatic City of Bremen, into a compound concern enjoying the advantage of closest ties with all municipal and state institutions and yet having complete freedom of enterprise in planning and financial flexibility within the superstructure of the portgroup.

Currently the BLG has 13 container-bridges, 2 loadingbridges, 3 100-ton floating-cranes, 50 shore-cranes, 3 ro-ro installations, 1 container-terminal having 800,000 sq-metres operational area, 15 quay-sheds, nine general-cargo sheds, 4 warehouses, 2 reefer-installations, 3 grain piers and numerous other facilities. Its proficiency is commensurate. Alone on the general-cargo sector the BLG handled over 10 million tons in 1976 (9.3 million tons in the previous year).

• Bremerhaven Port: DM 487 Millions Invested in Three Decades

Bremerhaven, 31.1.77 (BremIn). On the occasion of the 150th birthday of the seaport town of Bremerhaven the present senior burgomaster, Bodo Selge, for the first time revealed the total proportion of Bremen's port investment from public funds over the past thirty years, relative to Bremerhaven:— DM 487 millions. Indeed over the last 7 years there has been alone an investment in the Bremerhaven container terminal—one of the most important in Europe—of DM 210 millions.

• Bremen: Port Extension to be Vigorously Pursued

Bremen, 31.1.77 (BremIn). DM 71 millions have just been voted in 1977 for: a multi-purpose general-cargo installation having 450 metres quayage in Bremen and—for Bremerhaven—the construction of a fruit warehouse, 8 additional container-terminal mobile van carriers, etc.

• German Seaports Recovering Again after Recession Year 1975

Bremen, 14.2.77 (BremIn), With a total tonnage handling of some 147 million tons, the German seaports in 1976 were again showing a 9% improvement over the 1975 recession year, although admittedly still some 12 million tons behind the record year of 1974.

• Further Extension to Bremerhaven Container-Terminal

Bremerhaven, 28.2.77 (BremIn). Bremen's Senator for Ports, Brinkmann, declared that, due to the specialised ship types-containers, Lash, Ro-Ro-again increasing their share of the total general-cargo from 33.4% in 1975 to 35.7% in 1976 DM 200 millions are being allocated for additional extensions to the Bremerhaven container-terminal and for creating lay-by berth facilities for large-type ships.

• Highly Efficient Ports Need Port Specialist Labour

Bremen, 12.3.77 (BremIn). To enable the efficiency potential to be deployed to the full, modern ports require not only first class technical equipment but, also just as much, a social and personnel structure which fully conforms to the technical demands. Only a relative training system, in view of the speed in development, can guarantee

The Société GEOSEL, which operates the underground oil storage facility at Manosque, is increasing the number of its underground depots from 12 to 18 and its capacity from 4.1 million m^3 to 6.6 million m^3 . When completed, the enlarged facility, which is connected to the Port of Fos by pipeline, will cover an area of 126.55 hectares.

the necessary high ability to react and adapt; stressed the director of the Port Specialist School, Bremen-Fredy Mahlstedt, on the occasion of the presentation to sixty new port specialist workers in Bremen of the Port-Specialist Certificate (79 had participated in the course). The specialist certificates in Bremen not only bring considerable social advantages to the holders, but also 6.5% more in wages.

• Alexandria Makes the Start in May Port-Management Seminary of Bremen Institute of Maritime Economics

Bremen, 12.3.77 (BremIn). The Arab League has invited leading personnel in Arabian ports to a two-week portmanagement seminary in the second half of May at the Arab Maritime Transport Academy in Egypt's second largest city and most significant port (a leading one in the Mediterranean):-Alexandria. The seminar, which specifically concentrates on the Near East problems, will be led by the Director of the Institute of Shipping Economics in Bremen, Dr. Ludwig Beth, who will be accompanied by four of his scientific colleagues of his institute as well as experts from the BLG, Europe's biggest port-handling company. Two years of close economic cooperation has already existed between the institutes in Alexandria and Bremen. The support of both the West-German government and the Hanseatic City of Bremen is being lent to the matter. Dr. Beth: "This is the first of a series of such seminaries to be continued in 1978 in Southeast Asia and in South America. We are already fully committed for 1977 in Bremen". For there the scientific exchange will be pursued with the relevant institute in Danzing and be opened with Japan and- for a second time-a scientific colleague is to proceed to Geneva to attend a specialistic investigation for UNCTAD. In February Beth himself attended a meeting of the Forecasters forum in London, will participate in the International Advisory Group of Shipping Statistics in Oslo in March and, in April is to speak before the annual meeting of the National Defence Transport Association in Milan. Moreover the Bremen Institute is replying to written queries from universities, institutes and undertakings in Norway, Sweden, USA, Israel, England, France, Egypt and Poland relating to problems of shipbuilding finance, market analyses and liner shipping etc. The Bremen know-how is in demand.

• Bremerhaven Enlarges Car-Handling Plant

Bremerhaven, 12.3.77 (BremIn). An additional carhandling plant with an area of 24,000 square metres is currently being produced in the 'Kaiserhafen' of Bremerhaven, to be followed by one of 60,000 sq.m, so that the new installation will then command a parking area of 84,000 square metres.

• Bremerhaven-Chicago Nonstop-Containers w.e.f. April 1st 36th Full-Container Service: Winter-Bremerhaven-Norfolk; Summer-Bremerhaven-Montreal/Toronto and Bremerhaven-Detroit/Chicago

Bremerhaven, 12.3.77 (BremIn). The 36th full-container service for Germany's largest container terminal, at Bremerhaven, opened on 22nd February 1977 with mini-freighter "Regine" (3,882 tdw, 210 containers) for the Great Lakes & European Lines Inc, which was founded in Chicago before the turn of the year and which has its main European office in Bremen. This is the first nonstop liner container service between Bremerhaven and Norfolk and, for the ice-free period from April 1st to around December 31st, direct connections between Bremerhaven and Toronto and Bremerhaven-Chicago. The American shipping company has initially placed seven mini-freighters on this route and the number will soon increase to ten. There will be an immediate twice-weekly service from Bremerhaven. Later, according to GLE-manager in Bremen, Manfred Merz, the company will also be using larger freighters here.

• Bremen: Continuing External Trade Activity

Bremen, 12.3.77 (BremIn). In January 1977 the total cargo-handling of the Bremen ports (Bremen + Bremerhaven) was 12.3 percent over that of January 1976. Dieter Tidemann, Senator for Economics and External Trade, attributed this favourable development, in his latest business-prospects report, to the 'continuing intensive external trade activity'. A strong upward revival, however, has still to be experienced, added the senator. Orders received by Bremen industry rose by 9.8 percent in December 1976, over those of the previous month—indeed without shipbuilding, by even 28.8%. In fact for the shipbuilding industry the medium-term prospects indicate "scarcely any signs of favourable development".

• Still No Obligatory Pilotage on the Weser

Bremen, 12.3.77 (BremIn). Bremen will also in the future refrain from making pilotage compulsory, assured the Bremen Senator for Ports Shipping and Traffic, Oswald Brinkmann. In explanation he referred to the exceptionally low number of ship-collisions on the Weser: with 60,670 registered ship movements (the total number is considerably more) there were only 15 collisions. Apart from this about 80 percent of the ships voluntarily accept pilotage service.

Hamburg Port Consulting founded

Hamburg (Hafen Hamburg Report 4/1976):-The "allround" port of Hamburg is one of the world's major ports and it is for this reason that the Free and Hanseatic City of Hamburg is generally interested in offering a service in the ports and transport industry sector through a company specialising in consultancy, planning and carrying out of projects in this field. HHLA is the leading cargo handling company in the port of Hamburg with a wide range of highly specialised and multi-purpose terminals. Its planning departments possess tremendous practical experience and valuable know-how and in future it is intended to make increasing use of this for the benefit of ports in other countries.

• Hamburg's interests and HHLA's potential have been combined ideally through the foundation by HHLA (itself owned by the City of Hamburg) of a subsidiary company—the Hamburg Port Consulting GmbH.

In the words of Senator Helmuth Kern, Chairman of the Board of HHLA: "The founding of the Hamburg Port Consulting GmbH was prompted by the consideration that developing countries are not being helped merely by building ports and then leaving them to their own devices in running them. We have come to realise that it is also necessary to supply the know-how for management, operation and administration. This is where the main field of HPC's activities will lie.

Furthermore, before planning and construction begins, it is necessary to spell out the performance required. During building, constant supervision by an expert is necessary. He must make sure that which the engineers produce will really be of maximum use for the project.

We therefore regard our company as a package offer for engineering offices and various firms in the port to help them in coping with projects which depend on the co-operation of specialists from different sectors."

HPC activities

The aim of HPC is to export Hamburg's know-how in port and transport industry matters. Its main functions in the port and transport industry sector can be listed as follows:

Economic Research viz.

competition analysis

trends in maritime traffic

cost/use analyses for port and transport investment site analyses

promotion of port industries (new factories)

Technical Planning viz.

- planning, design and construction of port facilities of all kinds and of all related infrastructure and suprastructure measures.
- preparation, yarrying out and/or supervision of construction works subject to tender in the hydraulic and port engineering sectors and in respect of inland waterways.

Organisation/Management viz.

organisation and management of handling facilities of all kinds

consultancy in the sector of general port administration Training viz.

provision of courses for specialists and trainees in all of the aforementioned fields in Hamburg

sending out of specialists and consultants to foreign countries

Potential interest may centre on a combination of these sectors, in particular the latter three viz. planning, management and assistance in training.

HPC co-operation on partnership basis

As subsidiary of the HHLA, HPC has unrestricted access to the technical and operational know-how of a modern port operator. Furthermore as HHLA itself is owned by the City of Hamburg, HPC also has access to the know-how of various Hamburg State institutions such as the Port Engineering Authority, the Port of Hamburg Authority (including Free Port Department) etc.

In order to be in a position to complete world-wide in the often highly complex port planning field, HPC will also work closely on a partnership basis with all other relevant firms: companies operating in the port of Hamburg economy, shipping, industry, engineering services and consultants. The first approaches in this direction have already been made.

HPC is organised according to the project management

principle. The company has two managers: Dr.-Ing. Wilfried Schmidt-Pathmann (also Managing Director of HHLA's Technical/Operations Department) who is responsible for coordination with HHLA, co-operation with outside firms and technical matters, and Dipl.-Ing. Peter Dietrich who is responsible for Sales and Projects.

Hamburg venue for IVA 1979

Hamburg (Hafen Hamburg Report 4/1976):-The International Transport Exposition (IVA) 1979 will take place in Hamburg from 8th June to 1st July, 1979 as a world transport exhibition. The federal authorities are taking part in this exposition by way of the Federal Transport Ministry. The Free and Hanseatic City of Hamburg is promoting the venture.

After the major transport exhibitions of 1953 and 1965, IVA 1979 is the first comprehensive international transport exhibition in the world to provide an overall picture of the degree of efficiency and research in all sectors of transport. It will present products, research results and development projects. Excursions to the scenes of practical work, as well as congresses, seminars and symposiums in the Congress Centre Hamburg will supplement the events at the exhibition grounds. At the same time IVA 1979 will create new, up to date standards by way of more intensive orientation towards the requirements of the economy.

For the exhibitors IVA 1979 will be a forum for business contacts and a representative marketing instrument. The specialist visitor is intended to find in Hamburg an information market for solving problems, a survey of transport planning, methods of national and international cooperation, and a suitable vehicle for a diverse scientific and technical exchange of ideas. The public interested in modern traffic media can obtain in Hamburg information on the wordwide state of traffic techniques, on new transport structures and developments, and on measures and plans paid for by the taxpayers.

For the first time in the concept of such a function the city and region of Hamburg will be part of the extended scene.

Modern transport facilities, many of which by international comparison have done pioneering work, will be incorporated in the exposition programme. These include such facilities as the Container Centre Waltershof, the Elbe Lateral Canal, the railway marshalling yards at Maschen, the biggest of their kind, and Post Office Hamburg 2 as the biggest parcels handling unit, the Federal Motor Highway E3 with the new Elbe tunnel and the combined Hamburg Traffic Association. The overall show has five thematic sectors: transport systems, transport routes, transport media, transport economy and transport aids. The IVA placard and its symbolism were introduced on the occasion of a first press conference. Before the background of a globe the five most important transport media show the path to the future-road-rail marine shipping-inland shipping-aviation.

Sail Amsterdam 1980

Amsterdam, January 1977 ("Haven Amsterdam"):-So pleasurable and successful was SAIL AMSTERDAM 700, held two summers ago as part of the city's 700th anniversary celebrations, that Amsterdam has decided to sponsor a similar event, SAIL AMSTERDAM 1980, as a prelude to that year's Tall Ships Race.

The exact dates are not yet known, but are tied to the Summer Olympics in 1980. However, Amsterdam will be the scene, once again, of a sailing celebration, lasting several days, at the end of July or beginning of August. Roughly the same sort of programme will ensure and, again, the unique Dutch platbodem (kurs) boats will be featured.

Later, the vessels will parade out the North Sea Canal to IJmuiden where official Tall Ships Race, sponsored by the Sail Training Association, will begin, ending several days later at the Swedish Baltic Port of Karlskrona.

Further details will be published in HAVEN AMSTER-DAM as they are announced.

Additional Harbor under Construction



Amsterdam, January 1977 (Amsterdam News Letter):-A small underground explosion in Amsterdam on November 18, 1976, signaled the first stage in the construction of the new Azië (Asia) harbor, which is to branch off from the Amerika (America) harbor, in the city's Western Port Area.

The additional port facilities are being developed in response to continuing interest on the part of firms desiring warehousing space in the area, small commercial concerns involved with trans-shipment of petroleum and its byproducts, and those companies engaged in exploring and drilling for off-shore oil.

Before giving the starting signal, Mr. C.H. Goekoop, Alderman for the Port, commented on the appropriateness of the name-Azië-noting there have long been strong trading links between Holland and the Orient.

The harbor, with a depth of 13 meters (43ft.) below sea-level and an initial capacity for ships up to 50,000dwt. (eventually to 85,000dwt.) is being built by a method new to the Netherlands.

By using a series of strategically placed underground explosions, the sandy ground mass is shaken about and compacted, permitting easier excavation. The technique, which is both simple and inexpensive, was developed for use in Holland by the Bureau of Soil Mechanics in the Amsterdam Department of Public Works.

Completion of the project is scheduled for 1978.

Gray Mackenzie Monthly Bulletin January 1977

• Abu Dhabi

82 vessels called at Mina Zayed during the month of January, 1977, with 80,720 deadweight tons of cargo on board for discharge. Additionally, one vessel discharged 15,800 tons of timber. Imports consisted of 59,025 tons general, 395 tons steel, 14,400 tons cement and 6,900 tons bitumen.

The cruiser vessel m.v. "Danae" called at this port on 22nd January from Muscat and sailed for Kuwait on 23rd with about 400 passengers on board.

There has been slight improvement with regard to congestion. Delays varied between 26 to 31 days and it is anticipated that the position will remain steady during February.

Dredging work on the new extension berths has commenced.

Steel works and roofing of storage sheds has been completed on the new deep water berths No. 14 to 19.

Abu Dhabi National Oil Company (ADNOC) has recently signed an agreement with a Dutch firm for the supply of two new dredgers costing 75 million Dirhams. The dredgers are expected to join ADNOC's fleet of dredgers within 14 months. The dredgers will be used for deepening Mina Zayed, other harbours and land reclamation.

A contract for the construction of the new Abu Dhabi Airport terminal building has been won by Engineering Construction Corporation, a wholly-owned subsidiary of Larsen and Toubro of India. The cost of the terminal will be 121 million Dirhams (\$30 million). It was designed by Aeroport de Paris. The main runway contractor for the airport is a Japanese joint venture comprising Takenaka Komuten and Kumagai Gumi.

The Abu Dhabi Government has allotted 2,400 million Dirhams for the construction of a new port with 34 quays in Abu Dhabi adjacent to Mina Zayed. The work is expected to commence shortly and will be completed within three years and will be in full use in four years time.

Nippon Steel Corporation and Nissho Iwai, both of Japan have jointly won a DH. 82.64 Million (\$20.7 million) order from Abu Dhabi Marine Areas Ltd. (ADMA) to install 95 kilometers of pipeline in the offshore fields of Zakum and Umm Shaif. Pipe laying will begin in May and should be completed by October. About 11,000 tons of concrete steel pipes will be needed.

Khorramshahr

During January 89 vessels discharged a total of 384,653 tons of import cargo. In additon, passenger cruise ship "Danae" called for two days.

There was a berthing delay of 8 to 12 days.

Port of Adelaide: Official Opening of Container Terminal and Berth

Port of Adelaide South Australia March 17th, 1977

1. Speech by The Hon. Des Corcoran, M.P., Deputy Premier and Minister of Marine

Mr. Premier, fellow ministers, parliamentary colleagues, Mr. Mayor, Sir John (Knott), Mr. Griffith and distinguished guests.

May I start by thanking you all for coming here today for this opening ceremony and by extending a warm welcome particularly to our guests from interstate and overseas.

There is no particular significance in the fact that the terminal is being opened on St. Patrick's Day or that the huge crane over there has a green hue.

In fact I had toyed with the idea of putting back the official opening until the arrival of the first ship, the Visurgis, which as most of you will know is due here next week.

But that was not to be because most of you had made your arrangement to be here today.

My function is to introduce to you our Premier, Don Dunstan, without whose perception and understanding we would not be gathered here today for this ceremony.

I know that Don, in his speech, will tell you why this terminal is necessary both for the welfare of the Port of Adelaide and for the continuing industrial development of this state.

Before handing you over to the Premier I would like to say a few words of tribute to the Department of Marine and Harbors for the excellent job they have done in providing this facility.

Though the Department has been studying containers for 10 years this project was born 6 years ago when 1 sent the former Director of Marine and Harbors, John Sainsbury, overseas to study at first hand the impact and facilities for containerization at 4 of the world's major ports.

He reported back to me that we should proceed immediately with the construction of a container ship berth.

And 13 days later our government gave the green light to the project—a move that was endorsed by the Parliamentary Standing Committee on Public Works which is representative of both the government and the state opposition.

The credit for what followed—the planning and design, the construction, the negotiations for a terminal operator must go primarily to John Sainsbury and in latter days to his successor, John Griffith.

To Denis O'Malley, Bob Kinnane, deputy to both John Sainsbury and John Griffith, Bert Moyses, former Engineer for Planning and Development, to Dean Pickering, Lindsay Taylor and the departmental officers, tradesmen and workers who put into effect the dreams and schemes of the

First Ship for Container Terminal

Adelaide, 17th March, 1977 (Office of the Minister of Marine, State Administration, Victoria Aquare, South Australia):--

The German built vessel, Visurgis, due in Adelaide next Wednesday, 23rd March, will be the first ship to use the new \$8M Container Terminal at Outer Harbor, the Minister of Marine, Mr. Des Corcoran, revealed today.

The Visurgis will discharge 24 full containers and load 84 full containers before it leaves the Port of Adelaide.

The fully containerized ship is registered in Vienna and is on full time charter to Associated Container Transportation (Australia) Pty. Ltd. It will take on a cargo of cattle hides, sheep skins, wool, wool tops, leather, mixed peel and yacca gum.

The cargo to be discharged includes tyres, tiles, food stuffs, spirits, chemical products, personal and household effects, motor vehicle, tractor and washing machine parts and machinery.

The ship loaded up at London and Liverpool and also discharged and loaded cargo at Fremantle, Sydney, Melbourne before coming to Adelaide.

After leaving Adelaide it will go via the Suez Canal to Genoa, Fos Sur Mer (France) and Tilbury.

engineers.

To the casual eye this terminal and berth would seem to be nothing more than a huge crane surrounded by open space and a couple of buildings.

The major part of the work done on this facility lies unseen, unapparent either under your feet or under the water behind me.

I do not intend to bore you with statistics but a few facts are worth recording.

1.5 m cubic meters of sand, limestone and clay were shifted during dredging of the berth and 1st swinging basin and subsequently used for reclamation of low lying areas in the vicinity.

4 500 cubic metres of concrete and 500 tonnes of reinforcing steel were placed during construction.

48 000 tonnes of crushed rock was used as filling.

The retaining wall of the wharf is 19 metres or 62 feet high.

The heavy duty bitumenous pavement was specially designed to carry axle loads 10 times greater than ordinary highways.

Four other government departments, E. & W.S., highways, mines and South Australian railways assisted the Marine and Harbors Department during various phases of this operation.

The Main part of construction was carried out by the Department of Marine and Harbors and at times over 100 men were employed on site.

Five principal contractors were engaged in specialist

areas and an architects' firm engaged to design the control and amenities building.

These facts will give some idea of the dimensions of the task in providing this facility.

Now that it is a reality let us all play our part to keep it busy.

I now call upon our Premier, Don Dunstan-who definitely needs no introduction-to speak to us and to perform the opening ceremony.

2. Speech by the Premier Don Dunstan

The Minister of Marine Des Corcoran, The Director of the Department of Marine and Harbours, John Griffith, Sir John Knott, Your Worship the Mayor of Port Adelaide, Mr. Marten, My Parliamentary Colleague Jack Olson, Distinguished Guests, Ladies and Gentlemen:

This magnificent new terminal has risen here through the collective efforts of very many people: engineers, architects, tradesmen and building workers, to name only a few. But two people played especially important roles in providing Adelaide with this sophisticated facility–Des Corcoran, my tremendously hardworking Deputy and Minister of Marine, and John Sainsbury, who retired last year as Director of Marine and Harbours. They were a formidable combination–I won't say they were known to make strong Cabinets weep, but they often came very close.

When John came back from Europe in 1971 saying Adelaide needed a container terminal, Des put the case to Cabinet so persuasively that less than two weeks after John's return the project was approved. Since then South Australia has designed and built a container complex which has drawn on the world's best and then improved on that. We have had the advantage of seeing the pitfalls and mistakes in the design and operation of container terminals around the world and we have been able to avoid repeating those errors.

As well, we have made this project part of an overall, planned port development to ensure that the efficiencies and economies of containerisation aren't lessened by outmoded support facilities and services. With this new complex, Adelaide has a complete cargo handling chain which makes sure that the time and cost advantages of cellular transport don't stop at the terminal gates.

Speed is the essence of this complex-speed in getting the containers off the ships with the spreader crane, speed in getting the containers onto rail or road transport and speed in back-loading. The equipment is the most modern in Australia and will provide an extremely quick turnaround time.

The natural advantages of the Port of Adelaide-deep water and no congestion or queuing-have been maximised, as the VISURGIS will demonstrate when it unloads and loads next week.

As well, the terminal is built so that future expansion will not only be fully integrated with buildings and facilities already here, but will be an integral part of the co-ordinated development of the Port of Adeliade as a whole.

The Port last year handled more than 4-million tonnes of cargo, and we can expect that figure to rise substantially. The combination of 67 km of modern conventional wharves plus the addition of this specialist container berth

which can also handle roll-on roll-off and heavy lift vessels reinforces Adelaide's reputation as one of the flexible and diverse Ports in Australia.

With more than 400 hectares of industrial estates available nearby, Port Adelaide is an enticing, economical focus for industrial and shipping activity, from throughout our State and the rest of Australia. Adelaide is ideally located as a central distribution point with quick rail, road and air links to the other States, and with this new terminal our ability to service other capitals is greatly enhanced.

Adelaide's advantages as a central location are being recognised by more and more industries, who see the benefits of relocating away from the choked up industrial sprawls of Sydney and Melbourne. In the ten years between 1966 and 1976, South Australia's manufacturing industry work-force grew by 12 percent, at a time when manufacturing employment in Victoria rose by only 3 percent and in New South Wales actually fell.

Last year, manufacturing employment in South Australia grew by 1.4 percent while nationally it fell by 2 percent with drops of 2.6 percent in New South Wales and 1 percent in Victoria.

Total employment in South Australia increased by 2.6 percent at a time when national employment remained static with a fall in Victoria, and a 1.1 percent decline in New South Wales.

Considering that we are proportionately the most highly industrialised State in Australia and that manufacturing industry in the rest of the country has experienced severe difficulties, those figures point to substantial achievements in our policy of expanding and diversifying South Australia's industrial base.

While we have been able to go against the National trend and increase our employment, South Australia has continued its long record of industrial stability of consistently recording the lowest level of industrial disputes in the country. With almost 10 percent of employment, South Australia last year had only 4 percent of time lost through industrial disputes. The rate of strikes in South Australia was less than 45 percent of the national rate—a tribute to the South Australia tradition of employers, trades unions and Government being able to get together and resolve disputes and of their being able to see that South Australia's interests are better served by co-operation and not confrontation.

Those attitudes are of particular importance to shippers, exporters and importers, because the Australian Stevedoring Industry Authority figures on strikes at Port Adelaide show that days lost through un-authorised stoppages are between two to four times lower than other capital city ports.

As a result of that co-operation and consultation, Port Adelaide is an efficient and reliable port which, combined with the Government's commitment to still further upgrade the facilities and berths, makes it a considerably more attractive proposition than the Eastern seaboard ports.

The State Government doesn't just preach about the need for better communication—we have implemented our ideas in many areas. In port Adelaide we have set up a Port Users Advisory Committee, with membership drawn from fourteen groups involved with the Port, such as shipping organisations, importers and exporters, trade unions, transport companies and Government departments. Apart from giving the Minister and his Department valuable help in resolving immediate questions, the Committee will be able to draw on a very large pool of ideas and expertise and provide the Government with advice on the overall, longer term growth of Port Adelaide.

It is vital to the development of South Australia that all the economic groupings in our community should be able to meet each other on common ground and that those different groups should have quick access to the Government and to means of talking with each other.

The Port Users Advisory Committee will meet those needs for this specific area, as well as being an important addition to the other existing channels of communication between Government, industry, commerce and the union movement.

Co-operation has long been the hallmark of the South Australian community, for despite the political affiliations of the Government in power at the time, the State has always recognised that community undertakings are needed to provide services necessary to development, and that there needs to be a high level of co-operation between those community undertakings and private organisations.

With this terminal, that very practical outlook has continued. While the Department of Marine and Harbours owns the whole facility, much of it has been leased to one of the most experienced companies in the field of container handling—Trans Ocean Terminals. Working in partnership, the Department and Trans Ocean will provide a service which will be the envy of the rest of Australia.

It's fitting that this \$8.7 million addition to South Australia's industrial services should be opened in the same week that Adelaide is experiencing the spectacular and colourful aspects of another form of Government assistance and ecouragement to industry—Nth. Malaysia Week. The two events are completely dissimilar, yet they are closely related in intent. With this terminal, the State Government saw the advantages of Adelaide having a sophisticated and flexible container berth in order to give our exporting and importing industries access to the most modern form of sea transport. We went ahead and built it and it's now an important part of the industrial support services provided to South Australian industry by the State.

North Malaysia Week is an unusual and very enjoyable way of showing another instance where the Government saw the advantages to South Australian industry and went out and got on with the job. By gaining access to the Malaysian market for componentry and semi-processed exports, South Australian industry has the opportunity to develop and expanding market and to lessen our dependence on the Australian domestic economy. By spreading our areas of export, we can provide additional work for our factories in South Australia and an important boost to providing security of employment and the maintenance of stable production patterns.

Those two example show that the State Government is continually working with industry to provide better physical services, better market services and better exporting services. The South Australian Government has got on with the job of assisting our firms and factories in practical, innovative ways, through assistance, incentive and leadership.

I'm very pleased to open this terminal and to back up Des Corcoran's remarks about the great work which John Griffith and his Department have done in building this facility. It is a great achievement. And on St. Patrick's Day, I'm not brave enough to finish up without again expressing my personal thanks and the Government's appreciation to the work Des Corcoran put into this project. It's a great pleasure to open officially the new Port Adelaide Container Terminal.

A ``Record '' of Time

An editorial in "Port of Melbourne Quarterly" October-December, 1976

"This will be the place for a village" the significant, yet well known statement credited to John Batman, founder of Melbourne, after his thirty-ton chartered schooner Rebecca sailed up the Yarra in 1835, may be directly related to today's Port of Melbourne.

Furthermore, Batman's decision must in some respects take part of the credit for the Port of Melbourne being what it is today, as it was his businessmen, pastoralists and professional leaders who laid the foundation of the "new" colony early last century. In fact, Batman made that famous statement very close to where the Port of Melbourne's first two wharves were constructed in 1842 and within a "stone's-throw" of the present Melbourne Harbor Trust building.

Such facts, together with details of the many challenges and difficulties and the success registered in the history of the Port of Melbourne, are recorded in the Trust's Centenary book, "Port of Melbourne 1835-1976"

After some six years of research, planning and preparation, well known author Olaf Ruhen has written the history of the Port of Melbourne from the first troubled passing of the Rebecca, through the many problems of the formative years and the trials and tribulations of the embryonic days to the port's present position as Australia's major overseas general cargo port and the leading container port in the Southern Hemisphere.

"Port of Melbourne 1835-1976" was officially launched on 1st November, by His Excellency, Governor of Victoria, Sir Henry Winneke, when he cut a ribbon which deposited a time-capsule into the wharf-apron at 3 East Swanson Dock. The time-capsule contains a copy of the book, other Trust publications, a special bottle of vintage port, newspapers of the day and other publications.

The site chosen for the capsule is of special significance, as it typifies overall, the works projects instituted by the Trust which played a major role in achieving the eminent position of the Port of Melbourne in its 100th year.

Present at the launching, which was preceded by a tour of the port area on board the Trust's inspection vessel m.v. Commissioner, was the full Board of the Commissioners of the Trust; senior Administrators; the Governor of Western Australia, Air Chief Marshal Sir Wallace Kyle; the Director-General, Public Works Department, Mr. D. Little; the Director of Ports and Harbors, Mr. A.J. Wagglen; author Olaf Ruhen; and representatives of leading book publishers

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Passenger Lifts for Container Cranes

Melbourne Harbor Trust Port Gazette Summer, 1976/77

The Melbourne Harbor Trust Commissioners have let a contract for the fitting of passenger lifts to the two twin lift container cranes at the Port of Melbourne's "common-user" container berths at East Swanson Dock. A similar lift will also be fitted to the third crane for East Swanson Dock currently being constructed for the Trust by Deer Park Engineering.

The lifts are to be installed progressively, and the first will be fitted to the new crane after it has been accepted by the Trust from Deer Park Engineering.

It is anticipated that construction of the crane will be completed in June, 1977, and that the three lifts will be operative by mid-1978.

The Trust has awarded the contract for the supply and fitting of the three lifts to Electruck Pty. Ltd. of Regents Park, New South Wales, and it is anticipated that the total cost of construction to Department of Labour and Industry requirements, including electrical supply, M.H.T. radio system and nominal spares will be \$200,000.

Electruck is no stranger to the container field, as the company carries out medium engineering work including design, manufacture and repair of crane spreaders and container trailers and repair of bridge cranes. In addition, the Managing Director, Mr. P. Cannon, has had considerable experience in crane manufacturing. Electruck has indicated that it will sub-contract the erection of the lifts to local contractors.

It is understood that the owners and operators of the other container cranes in the Port of Melbourne, Seatainer Terminals Ltd. (three cranes at West Swanson Dock) and Australian National Line (one crane at Webb Dock), are to have similar passenger lifts fitted to their respective cranes.

It is anticipated that the sixteen container cranes presently operating or under construction throughout Australia, will all be fitted with passenger lifts in the near

and sellers.

In releasing the time-capsule, Sir Henry Winneke said: "The Port of Melbourne's development has kept ahead of world shipping and trade demands, which together with and as is clearly illustrated in this book, is a tribute to the determination and resources of its administrators throughout the past one hundred years".

The book is available through major booksellers in all Australian States at \$17.95, or, direct from the Melbourne Harbor Trust-current enquiries for the publication indicate that it may become a collector's item.

To obtain a copy through the Trust, a cheque for \$A20.000 (includes package and postage) should be forwarded, together with mailing address to:-

Public Relations Officer Melbourne Harbor Trust Commissioners P.O. Box 2239T MELBOURNE, Vic., 3001 future.

The Australia-wide decision to fit this equipment follows an emerging trend, as a crane recently erected in Wellington, New Zealand, was fitted with a passenger lift and seven cranes in Baltimore, U.S.A. have been similarly equipped. It is reported that cranes under construction in Germany and Japan will also have lifts fitted.

The equipment to be fitted to Trust cranes by Electruck are "EASIRISER" lifts and have been specifically designed to provide various combinations for adaption to all makes of wharfside container handling cranes. The "EASIRISER" is designed as a passenger lift for the convenience of the drivers and maintenance personnel. Fitted with a modern rack and pinion hoist system and utilising twin drive assemblies, the lifts each have a capacity of four persons, or 400 kg. with a rated speed of approximately .5 metre/ second (107 feet/minute).

Each lift will be fitted to a crane leg in order to make use of existing crane accessways for emergency entrance to lift wells wherever possible.

Nagoya Port News Nagoya Port News February 1977

• 40 Swimmers Make Fans Forget the Cold at Annual Winter Dip

On January 15th (Coming of Age Day in Japan), the annual Port Winter Swim was held on the east side of the Central Pier under the auspices of the Aichi Swimming Federation and the cooperation of the Nagoya Port Authority. The thermometer reading was 3.3 degrees centigrade at one o'clock, before the 40 members of the Federation dove into the 10.5-degree waters—a sight that literally left spectators shivering. The winter dip effectively displays the "clean water" campaign results at Port of Nagoya, while making the port more and more a part of the people since its inception in 1974. The steady stream of races, diving and "old-style" strokes offered spectators reason to forget the cold. The oldest swimmer was seventy—in keeping with the Port's seventieth anniversary. The youngest was thirteen. And three particpants had just "come of age" on the occasion.

• Water Cleaner Than Regulations Require

Before the Winter Swim became a regular event at the Port of Nagoya, the Port Authority had been moving to upgrade water quality with considerable success. Although it has no legal clout, the Authority was quick to get behind measures to improve water quality and clean up the port. As a result, the gradual cleanup since 1968, when conditions were their worst, has yielded waters far cleaner than governmental pollution levels require. For example, measurements taken at the time of the Winter Swim showed C.O.D. (Chemical Oxygen Demand) of 3.3 ppm (required: under 8.0 ppm) and D.O. (Dissolved Oxygen) of 7.0 ppm (required: above 2.0 ppm)-marvelous levels.

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AUSTRALIA

Port of Melbourne Chairman's Review

Annual Report 1975-76

Melbourne, Australia:-Despite the unsettled world trade conditions, important factors to emerge from a review of the Port Authority's operations over the past year were the comparatively small decrease of 3.8% in tonnage and the continuing increase in container cargo traffic. Unfortunately, it was necessary to increase wharfage and tonnage charges to enable the Trust to operate effectively against the inflationary spiral.

It is appropriate to review the main activities of the port under general headings.

TRADE-Tonnage amounted to 16.598 million, a reduction of 681,000 tonnes. General cargo remains predominant at 12.876 million tonnes, approximately 60% of which was containerised, totalling 7.582 million tonnes of cargo and 385,880 containers. It was disappointing to see the loss of some interstate cargo to rail over the past year, particularly the cessation of the container shipping service to Western Australia.

FINANCE—A surplus of approximately \$239,000 resulted after providing for appropriations and State levies. The port still pays a tax of 8% on wharfage and tonnage revenues and of course this is magnified when the Trust has to pay such a high rate of interest for its loan monies.

DEVELOPMENT—The Commissioners continued their policy of putting back surplus funds into capital works to keep improving the facilities of the port. Approximately \$16 m was spent on wharf construction, access roads, container cranes, dredging plant and operations, demoli-

• Visit by General Manager of Fremantle Port Helps Seal Ties of Mutual Friendship and Exchange

On January 27th, the Nagoya Port Authority welcomed the General Manager of Australia's Port of Fremantle, Captain Beresford L. Noble, together with his wife. Following the greetings by Fumio Kohmura, our Executive Vice President, and talks with everyone, the visitors made a tour of the waterfront facilities, Nagoya Castle and a ceramics showroom.

Fremantle is the largest port in western Australia, and it ranks along with Sydney, Melbourne and Brisbane as one of the nation's leading ports. Captain Noble expressed the longstanding desire of Fremantle to join hands with Nagoya as Sister Ports. Port of Nagoya is also eager to encourage exchange between both ports, and it was agreed that both sides would give serious consideration to the form the mutual arrangement should take. Mr. J.R. Watson, Port Authority Commissioner, had broached the possible relationship on his visit here in January of last year, and the Commissioner will come again in near future to carry the talks further.

The flow of cargo between Nagoya and Fremantle totals about 200,000 tons per year. Cars, ceramics, iron and steel, and daily use commodities are shipped from Nagoya, while Fremantle sends wool, cereals and comestibles. Nagoya's imports from Fremantle exceed its exports to that port. To promote greater understanding between the two ports, the tions, etc. Over the past three years, total capital expenditure has amounted to approximately \$46 m.

OPERATIONAL-The port's two main shortcomings over past years-the lack of night navigation and depth of water-have greatly improved. All vessels to an overall length of 230 m (756') are now handled into Swanson Dock after daylight hours to a draft of 10.2 m (33'6"). During August this year, a 300 m (945') length container ship negotiated the river in daylight hours and swung on arrival at the entrance to Swanson Dock. Next year the Trust hopes to guarantee a depth of water of 12.2 m (40')and within a few years the final stage of dredging will see a depth of 14.0 m (46'), enabling a draft of 12.7 m (41'6") to Swanson Dock. Provision has also been made to widen the navigational channel in the river from 120 m (400') to 150 m (500') or 180 m (600'), if necessary. It is expected that these improvements to navigation within the port will be sufficient for many years to come.

The Cargo Facilitation Committee under the chairmanship of the Harbor Master continues to operate in a practical manner and it is pleasing to note the co-operation from all sections of the industry.

VICTORIAN PORTS INQUIRY—The Trust has given evidence at the Inquiry on two separate occasions and it will also be giving rebuttal evidence later in the year. I understand the Committee will be reporting their conclusions to Parliament next year.

COMMUNITY COMPLEX-It is hoped that next year a start will be made on the World Trade Centre project which (Continued on next page)

monthly "Port of Nagoya" news (Japanese circulation) published an article on the Port of Fremantle on its January issue, a step for which Captain Noble expressed appreciation.

Nagoya A Candidate to Host '81 IAPH Confab

Nagoya has thrown its hat into the ring to host the 12th biennial meeting of The International Association of Ports and Harbors (IAPH) to be held in 1981. The Nagoya Port Authority plans to encouraging the port's candidacy with fellow IAPH members, backed by such as Nagoya City, Aichi Prefecture and the Nagoya Chamber of Commerce and Industry. The International organization was founded with head offices in Tokyo to encourage mutual friendship, exchange and information relay-needed for management and operation of worldwide ports and harbors. There are now 326 member organizations hailing from 62 countries. The biennial meeting, the key decision-making means of the international organization, will be held in Houston this coming April, then in Le Havre in 1979. Nagova hopes to host the event in 1981. Fumio Kohmura, Executive Vice President of the Nagoya Port Authority, has been an active member of the IAPH Executive Committee since 1973, and the 1981 meeting is being sought for Nagoya since it would coincide with the 30th anniversary of the founding of the Nagoya Port Authority as well as write a new page in port development.



exhaustive feasibility studies over two to three years have shown to be viable and a necessary part of future development of trade and the shipping industry. The Government will be asked to approve of a Government Guarantee to raise the necessary finance.

ENVIRONMENTAL—The Commissioners have continued a policy of beautifying the port through programmes directed towards tree-planting, cleaning of river banks and beaches, and the re-roofing and painting of port structures.

The "Alternative Land Transport Routes to Webb Dock Report" was completed by the University of Melbourne Centre for Environmental Studies and submitted to the Victorian Government. The Report is being made available for public comment prior to the Government taking a final decision on road and rail links to the port area. The Trust has made no commitment to the Australian National Line to provide a rail link into Webb Dock.



Mr. Lee Chow Soon, Asst. Director (Establishment) PSA presented a salver to Capt. Obraaten, Master of the Chemical Carrier, M.T. "Risanger" during her maiden voyage call on 28 Feb. 77. (Port of Singapore Authority)

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