TOWNSVILLE HARBOUR BOARD
Report: 1976-1979 Triennium

CONTENTS:
Townsville — and the World Trade 2,3
Members of the Board and Senior Executives 4.5
Chairman’s Review 6,7
Port Development 8,9
Port Services 10,11
Townsville — City 12
— Hinterland 13
Exports Summary 14,15
Imports Summary 16,17
Community Relations 18,21
Navigation — Palm Passage 22
Port People 23
Finance 24
— Report & Statistics Supplement

Moreton Tug & Lighter Co. Pty Ltd.'s tug NELIA, one of two modern tugs each of 26.5 tons, bollard pull, sets off again to bring in another ship to export N. Q. products.
Ships flying the flags of many nations trade with the world to and from Townsville. Over the period of the 1976-1979 Triennium, regular services by Russian ships to Japan and the West Coast of U.S.A. have been established.

A container service to South Korea and a direct shipping service to Papua New Guinea are both new developments to further expand trade. This adds to the traditional destinations of Europe, United Kingdom, Middle East, Japan, Asia and U.S.A.

(Refer Pages 14 to 17 for Export/Import summary, and supplement for Cargo and Destination details).
MEMBERS OF THE BOARD
and senior Executive Officers:

Left to right: (Upper Row)
A. J. HOPE

Group:
W. S. SERVICE — Engineer
I. G. MALPAS — Secretary
A. G. FIELD — Chairman
B. COX — Asst. to Secretary

P. J. R. TUCKER
J. P. DEFRANCISCIS
J. B. MATTHEWS
A. McGrady

Left to right: (Lower Row)
K. V. McELLIGOTT
E. S. P. NETTERFIELD, O. B. E.
A. W. SHIELD
A. A. TICEHURST
Mount Isa copper is crafted to make beautiful drinking vessels and ornaments.
Although the years 1976 to 1979, the period covered by this report, have seen some major changes in the areas of trade, finance and employment, I believe the Townsville Harbour Board has continued to progress and is ready for the upsurge in the economy which should become evident in the months ahead.

Trade peaked in 1977 with a total throughput of 2,550,000 tonnes and fell slightly to 2,464,000 tonnes in 1978 and 2,273,000 tonnes in 1979.

The major reasons for this downturn are all linked to the world economy with a fall of 86,000 tonnes import of oil products whilst exports of sugar fell 83,000 tonnes and phosphate rock some 53,000 tonnes.

Exports of Mt. Isa products of lead and zinc reached an all time high in 1979, whilst refined copper was marginally lower.

The announcement in May, 1978, by the Board of B.H South Ltd. that the company intended forthwith to close down the phosphate mining at Duchess led to the formation of a deputation which waited on the Minister for Primary Industry, the Hon. J. D. Anthony.

As a result of the advice given to the Minister by the British Phosphate Commissioners, the Government declined to intervene to prevent the closure. That this advice was based on the fact that mining would continue for some ten years under the conditions of employment then operating at Christmas Island led the Minister to believe that Australia's supply of base material was secure for at least that period.

Subsequent events have proved that this presumption was ill founded and Australia would in all probability be looking at other supply sources within two to three years.

I believe this great natural deposit at Duchess will again be mined for the benefit of Australian agriculture.

Other matters which continue to hamper the progress of the Port is the rail freight policy of the Queensland Railways, and the resistance by some major sections of the wool brokers to the export of wool from Townsville.

A major wool dumping and core sampling facility was established in Townsville in 1977 offering operating costs lower than those in comparable southern establishments. Despite this advantageous offer to northern and central woolgrowers the trade to date is only some 4,000 bales per annum.

The Queensland Railways did slightly reduce the per bale freight from Western areas to Townsville, but the freight costs per tonne mile are still substantially higher from point of despatch to Townsville when compared with the rate offered to rail wool to Brisbane.

Although valuable support has been given the Townsville facility by the Australian Wool Corporation and the declaration of Townsville as a base depot for the Limited Offer to Purchase Scheme (L.O.P.S.) the wool brokers have continued their opposition to the declaration of Townsville as a wool export port.

These factors, coupled with the continued support of the Railways in railling cargoes, particularly meat, for centralised export at Brisbane and even Sydney precludes the conference shipping lines from using Townsville as a major export port for the products produced in this area.
Coastal ship trading has improved with the introduction of the Australian National Line Service loading cargoes for North Queensland out of Brisbane. However I believe the Australian National Line could do much to improve their service and marketing, and the extension of their wharf facilities, deferred in 1975, should be implemented immediately for the benefit of their coastal and Australia Far East service.

Despite these restraints, the Port has continued to upgrade and improve its facilities. No. 2 Berth has been completed. Shippers and shipowners are now offered a continuous line of reconstructed reinforced concrete decking on steel piles 512 metres in length equipped with a 55 tonne container handling crane and two upgraded electric cranes of 20 tonne and 12 tonne capacity.

A new Roll On Roll Off pad has been completed at a cost of $500,000 and will handle the largest RO-RO ships at present in service.

Planning has proceeded and tenders will shortly be called for the reclamation of 9.1 hectares of land adjoining Berths 2 and 3. A modern container terminal will be constructed on some 4 hectares of this land; whilst the balance will make provision for the handling of bulk liquids — molasses and tallow — and general stevedoring operations.

Townsville is fast becoming established as a major prawn processing base, and to assist in this export orientated industry the Board is establishing a commercial fishing boat harbour in Ross River.

A channel some 2.7 km in length is being cut into the River at a cost of $1.5 million.

A modern unloading facility will be constructed by K.F.V. Fisheries (Qld) Pty. Ltd. at a cost of $150,000 and plans are in hand for the Queensland Fish Board to construct a similar facility.

Besides the great number of local and southern fishermen which make Townsville their base, K. F. V. Fisheries (Qld) Pty. Ltd., has constructed ten new 22.5m steel prawn trawlers to operate out of the port.

This company’s operations will see the employment of up to 300 people in the city, and will take the number employed in this industry to approximately 1,000.

It will therefore be appreciated that the Townsville Harbour Board continues to provide a vital link in the world trade sphere whilst contributing to the trade and employment activities in the city.

In conclusion, on behalf of the Members of the Board I extend to all staff sincere appreciation of their loyalty and devotion to duty without which our organisation could not offer the high standard of service which is our aim.

The regular intrastate/interstate shipping service by A. N. L. takes a wide variety of cargoes to Southern ports. The season October-December each year sees tonnes of Ingham-grown watermelons shipped in open containers to Sydney, Melbourne and Tasmanian Ports.
The reconstruction of berths along the Eastern Breakwater was completed in 1979 at a cost of $4.177 million. In addition the provision of Container crane, Ro/Ro stern loading ramps and upgraded luffing jib cranes involved an expenditure of $2.242 million.

During 1979 Stage 1 Development of the Port was completed at a cost of $12 million.

Work commenced on the Reconstruction of No. 3 Berth in 1971. Subsequently Nos. 2 and 3 Berths have been reconstructed. These berths were designed with portion of the wharf of sufficient strength to carry a container crane, with the balance of the wharf deck capable of supporting the types of loads that a container crane would be capable of handling. The wharf was also designed to withstand the loadings that a container ship could impose on it. The concrete deck is supported on steel piles.

The cost of reconstruction of these berths along the Eastern Breakwater is $4.177 million.

When various buildings were destroyed by Cyclone Althea in December 1971, the construction of a new Port Control Building to accommodate the Board's Port Administration and Engineering Sections and provide office space for the Stevedoring Company and Shipping Agents was included in Stage 1 Development. The cost of this building was $371,000.

To improve the efficiency of the Port the Board installed a container crane on the new berths at a cost of $1.459 million. This crane has a lifting capacity of 55.9 tonnes and its equipment includes an extendable spreader to suit all sizes of containers and a grab of 7.6 m³ capacity.

Also as part of Stage 1 Development two Ro Ro platforms for use by stern angle ramp vessels were constructed at a total cost of $614,000. One Ro Ro platform was constructed at the southern end of No. 4 Berth and the other at the southern end of No. 3 Berth (the container berth). The latter Ro Ro platform allows the simultaneous use of the container crane and stern angle ramp vessels.

To improve the cargo handling facilities on the reconstructed berths the Board's two electrically operated level luffing travelling jib cranes were upgraded at a cost of $169,000. One has an outreach of 11.25 m and a lifting capacity of 20 tonnes and the other has been modified to give an outreach of 21.25 m with a lifting capacity of 12 tonnes.

The major project in Stage 1 Development was the dredging of the main channel, swing basin and berths with the primary objective of accommodating 65,000 dwt tankers. The final cost was $5.22 million. Work is continuing on improving the depths between the swing basin and the berths by the Board's own suction dredge S. D. 'TOWNSVILLE' and its grab dredge.

In November 1978 the Board engaged a dredging contractor to complete a channel into Ross River so as to provide access for fishing and prawning vessels to fish processors established in the area. This will also provide access to a boat harbour to be established in Ross River. In association with the development of this boat harbour it is planned to encourage private developers to provide associated facilities.

Stage II Development of the Port has commenced with the major project being the reclamation of 9.1 hectares of back-up land at the eastern breakwater. To assist with the planning and design of this project, model testing was undertaken by the University of New South Wales Water Research Laboratory. A feature of the design is a submerged breakwater which protects the reclamation which is enclosed in a revetment.

To provide additional information for future planning, a study of Cleveland Bay, on a broad grid pattern using side scan and seismic sonar was undertaken to determine the properties of the bed materials in the Bay. Stability analyses were carried out on the embankments behind wharves aprons to assess the advisability of further dredging at the berths.

Pre stressed concrete decking was extended to No. 2 Berth, which as an extension of No. 3 gives a total continuous length of first class berthing of 512 metres.

Stage 2 of the Eastern Breakwater widening gets under way.

The University of N. S. W. Hydraulics Research Laboratory in consultation with the Board’s engineers have undertaken extensive research with models to determine effect of storm and wave height conditions. The design for the seawall revetment of Stage 2 extension will benefit from this research.
The average turn-over for all cargo vessels using the Port of Townsville is now less than 1.75 days per vessel. The recently completed RoRo pad at the No. 3 Container Berth will provide for simultaneous loading by container crane and stern angle ramp to further expedite cargo handling operations.

Throughout the three years covered by this Report, berths, cranes, storage and services provided by the Board and its contractors, have been extensively upgraded. The following facilities are now provided:

Wharves: 9 operative berths to accommodate shipping up to 60,000 tons d/wt., to lengths of 238 metres and draft to 12.3 metres. (Details see back cover flap).

Cranes: Caters for a variety of lifts. Nos 2 and 3 berths have been designed to co-jointly use both Container and luffing jib cranes simultaneously on either berth.

Bulk Handling Facilities include pipelines for bulk oil at No. 1 berth, bulk molasses at Berths Nos 6 and 7, mineral bulk loader at No. 7 and raw sugar at No. 9.

Roll on/Roll off loading ramps consist of angle ramp pads at Nos 3 and 4 berths and a direct stern loading ramp at No. 10 berth.

Storage Facilities:
- Frozen Meat — 2 cold stores with a total capacity of 2,500 tonnes — with outlets for an additional 120 refrigerated containers.
- Zinc Concentrates — covered storage area with a capacity of 40,000 tonnes.
- Bulk Molasses — four storage tanks, total of 35,000 tonnes capacity.
- Raw Sugar — two sheds which provide a total of 285,000 tonnes storage.
- Bulk Minerals other than Zinc Concentrates — open space storage area for phosphate rock, crude lead, sulphur and refined copper.
- Containers — Three terminals capable of handling and storing 696 containers. (Stage 2 now commenced will provide an additional 9.1 hectares for container handling and storage).
- Bulk Oil — terminals operated by all the major oil companies within the harbour precincts.
- General Warehousing — (both free and bonded) within four kilometres of the harbour.

Road and Rail access — all berths are accessible to road transport and berths 3, 8 and 9 are serviced by railway lines integrated with the State Railway system.

Oil Bunkering — Bunker fuel oil and distillate is available through pipelines at berths 1, 6 and 7. Road tankers are used to bunker small ships at other berths.

General Services — all berths provide electric power, fresh water and ship-to-shore telephone. Garbage collection and incineration service also provided. There are two tugs always on stand-by; three provisioning firms; modern ship repair workshop; oil spillage containment and dispersal equipment as well as conspicuous fire fighting facilities providing 19 hydrants which are connected to flaked hoses with spray nozzles. Oil terminals carry a stock on site of a minimum of 3,000 litres of foam additive.

VHF Radio — is continuously monitored keeping the Port Control Tower in constant touch with shipping movements, the mobile security service and other units of the Board’s administration.

The mineral bulk loading facility is operated by Townsville Transport & Services Pty. Ltd, who have developed and patented a dust collector designed to meet the highest environmental standards.

Wool is shipped from Townsville on pallets and in containers.

Modern equipment of this kind with a lift capacity of 36 tonnes handles containers up to 40 ft.
The City of Townsville grew from a modest settlement with a wharf in Ross Creek.

Today the City, with a population of 100,000 people and a hinterland of untold variety and great riches, is served by the safest, largest and most versatile Harbour in North Australia, shipping its valuable products to the World.
The hinterland, stretching to the Northern Territory border, is known universally for its mineral resources: copper, silver, lead, zinc, nickel as well as gold and uranium, plus immense coal resources in addition to recently proven shale oil potential.

North Queensland also has a vast primary production which is exported through the Port of Townsville to the World: — sugar and sugar products, frozen beef, wool, lamb, live cattle, hides, tallow and farm products.

The vast areas of country are served by road trains to rail heads and green pastures. North Queensland has an annual kill of 600,000 head of cattle from which 85,000 tonnes of boned beef, 30,000 tonnes of meat meal and tallow, and 15,000 tonnes of hides is produced annually.
TOTAL EXPORTS

Total exports through the Port have increased from 1,279,463 tonnes to 1,385,535 tonnes, an increase of 8 per cent during the three years from 1976 to 1979.

MAJOR EXPORTS

The products of the mining industry have provided the greatest export tonnage for the year 1979 (about 57 per cent of total exports). Mineral exports increased from 674,420 tonnes in 1976 to 792,365 tonnes in 1979 i.e. 17 per cent increase.

The products of the sugar industry (sugar and molasses) decreased from 536,182 tonnes in 1976 to 482,261 tonnes in 1979, i.e. 10 per cent decrease.

Raw sugar and molasses represent another important overseas export through the Port of Townsville. In December 1977 the M.V. NESTOR loaded 43,772 tonnes of raw sugar for Canada which still stands as the record largest single shipment of sugar from any port in the world.

The photograph shows the NESTOR departing from No. 9 berth fully loaded and drawing 12 metres. With the aid of one tug the NESTOR cleared the harbour without difficulty.
Mineral products from Mount Isa Mines are one of the major exports through the Port of Townsville. The record single cargo of Mount Isa Mines products to be shipped through the Port was in 1977 when the E. R. SCALDIA lifted 33,567 tonnes of refined and bulk minerals for U. K. and European ports. The photograph shows lead slab and copper cake being loaded by Container crane.

**SUMMARY OF EXPORT TONNAGES**
Trade at a glance for the three years 1977, 1978 and 1979 compared with 1976.

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<tr>
<td>Frozen</td>
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<td>12,211</td>
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<td>Tallow</td>
<td>9,869</td>
<td>9,309</td>
<td>9,699</td>
<td>11,525</td>
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<td>Hides</td>
<td>3,682</td>
<td>3,001</td>
<td>3,649</td>
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<td>969</td>
<td>6,148</td>
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<td>Refined</td>
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<tr>
<td>Copper</td>
<td>138,611</td>
<td>141,453</td>
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<td>127,695</td>
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<td>Concentrates</td>
<td>27,793</td>
<td>29,991</td>
<td>15,295</td>
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<tr>
<td>Concentrates</td>
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<td>Zinc</td>
<td>169,359</td>
<td>247,039</td>
<td>209,078</td>
<td>264,677</td>
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<td>Dross</td>
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<td>Crude Lead</td>
<td>129,065</td>
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<td>149,654</td>
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<tr>
<td>Ore</td>
<td>35</td>
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<td>—</td>
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<td>Nickel</td>
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<td>23,867</td>
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<td>Rock Phosphates</td>
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<td>265,980</td>
<td>379,305</td>
<td>213,168</td>
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<td>674,420</td>
<td>871,294</td>
<td>902,010</td>
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<td>Molasses</td>
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<td>108,835</td>
<td>70,904</td>
<td>26,074</td>
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<td>Sugar</td>
<td>427,535</td>
<td>539,071</td>
<td>483,634</td>
<td>456,187</td>
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<td>Bulk</td>
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<td><strong>INDUSTRY TOTAL</strong></td>
<td>536,182</td>
<td>647,906</td>
<td>554,538</td>
<td>482,261</td>
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<tr>
<td>Wool</td>
<td></td>
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<tr>
<td>(81)</td>
<td>(4,401)</td>
<td>(3,860)</td>
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<tr>
<td>(Bales)</td>
<td>(Bales)</td>
<td>(Bales)</td>
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<tr>
<td>(25)</td>
<td>—</td>
<td>771</td>
<td>691</td>
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<tr>
<td>Cattle</td>
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</tr>
<tr>
<td>(5,160)</td>
<td>(7,309)</td>
<td>(14,840)</td>
<td>(32,088)</td>
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<tr>
<td>(Head)</td>
<td>(Head)</td>
<td>(Head)</td>
<td>(Head)</td>
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<tr>
<td>(2,580)</td>
<td>7,309</td>
<td>14,840</td>
<td>32,088</td>
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<td>5,268</td>
<td>1,338</td>
<td>5,036</td>
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<td><strong>TOTAL</strong></td>
<td>1,279,463</td>
<td>1,576,700</td>
<td>1,534,379</td>
<td>1,385,535</td>
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**SIGNIFICANT CHANGES IN EXPORTS**
The most significant changes in exports from 1976 to 1979 have been:

- Rock phosphate reached a peak at 379,305 tonnes in 1978 and due to the closing of the mine at Duchess in Western Queensland has decreased to 213,168 tonnes for 1979, with the last shipment on 6th March, 1979.
- Due to restriction in the production of sugar in Australia, the export tonnage of sugar and its by-product molasses decreased from a high of 647,906 tonnes in 1977 (sugar 539,071 tonnes, molasses 108,835 tonnes) to 482,261 tonnes (sugar 456,187 tonnes, molasses 26,074 tonnes) in 1979.
IMPORTS

TOTAL IMPORTS
Total imports through the Port have decreased from 961,105 tonnes in 1976 to 887,527 tonnes in 1979 a decrease of 9 per cent.

MAJOR IMPORTS
The highest import tonnage for 1979 was 784,580 tonnes of oil products. This is 88 per cent of the total imports for the year. In 1977 this import was 89 per cent of the total imports.

Townssville is the centre for North Queensland motor vehicle import and distribution. An average of 6,170 motor vehicles from overseas and interstate were unloaded through the Port each year of the three year Triennium. The photograph shows the TENJIN MARU, a specialised motor vehicle carrier from Japan, commencing to unload vehicles for North Queensland destinations.
Bulk oil, which includes oil for general purpose, bitumen feedstock and liquid gas, has been the major import through the Port during the three year Triennium. Tankers have been among the largest vessels to use the Port. The CAUCASUS MARU in 1979 (Beam 36.06 metres) and the EDWARD STEVINSON in 1977 (Draught 12.04 metres) have established records for the Port.

**SUMMARY OF IMPORT TONNES**

Trade at a glance for the three years 1977, 1978 and 1979 compared with 1976.

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<td>General</td>
<td>110 824</td>
<td>60 303</td>
<td>54 631</td>
<td>72 578</td>
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<tr>
<td>Oil</td>
<td></td>
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<tr>
<td>General Purpose</td>
<td>782 031</td>
<td>841 725</td>
<td>809 324</td>
<td>753 506</td>
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<tr>
<td>Bitumen</td>
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<tr>
<td>Feedstock</td>
<td>19 222</td>
<td>19 994</td>
<td>27 488</td>
<td>21 416</td>
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<tr>
<td>Liquid Gas</td>
<td>8 359</td>
<td>9 102</td>
<td>5 049</td>
<td>9 658</td>
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</table>

**INDUSTRY TOTAL** | 809 612 | 870 821 | 841 861 | 784 580

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<td>Fertilizer</td>
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<tr>
<td>Liquid</td>
<td>19 783</td>
<td>19 870</td>
<td>21 523</td>
<td>15 214</td>
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<tr>
<td>Iron and Steel</td>
<td>10 261</td>
<td>6 719</td>
<td>6 799</td>
<td>5 982</td>
</tr>
<tr>
<td>Gypsum</td>
<td>5 357</td>
<td>15 538</td>
<td></td>
<td>9 173</td>
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<tr>
<td>Transhipment</td>
<td>5 268</td>
<td>1 338</td>
<td>5 036</td>
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</table>

**TOTAL** | 961 105 | 974 589 | 929 850 | 887 527

**SIGNIFICANT CHANGES IN IMPORTS**

The most significant change in imports from 1976 to 1979 was a decrease in oil products of 25 032 tonnes. General cargo imports show a decrease of 36 665 from 1976 to 1979. It should be noted however that during this period the method of recording general cargo was changed from Mass and Volume to Mass tonnes only.

**TURN - AROUND OF VESSELS**

The provision of efficient facilities and co-operation of the Board and Port users has maintained a fast turn-around of cargo vessels of less than 2 days.

Whilst not on the regular run for Tourist ships, several visits each year are made by luxury cruise ships, whose passengers are eager to see the sights of luxuriant North Queensland. Here the Russian cruise ship FELIX DZERJINSKI nests into No. 8 berth for a short stop-over.
The Board has given emphasis to its relationship with the community of both the Port and the City which it serves, recognising the social implications of its role as an employer, the significance of the environment and management of its affairs in relationship to costs and quality of services.

The importance of good management to provide an efficient Port in relation to the needs of North Queensland generally and the City of Townsville in particular, has been appreciated in its scope of influence on industrial development, community social structure and realistic conservation.

Changes in methods, the location or provision of special facilities to handle specific cargoes through the Port, have all been appreciated as having an effect on the community — the people of which make up the Port labour force as well as the consumers of the City and producers in the hinterland who rely on the Port's services.

The advent of new cargoes through the Port, particularly in the area of those products which are handled in bulk, have called for environmental study and the development of methods and selection of location to ensure minimum effect on both the environment and the community. It is from this appreciation that strong support is given to extending reclamation sites and space for facilities away from the traditional developed and industrial areas.

Reclamations are planned and are in course of construction which cater not only for the industrial user and the handling of cargoes, but also for provision of amenities such as shore beautification and small boat havens.

During the Triennium the Board has given high priority to safety and the protection of life on the waterfront, in the estuary and on the waters of Cleveland Bay. The needs of small boat owners, and the independence of the individual fishermen and their cooperatives have been recognised by interim favourable treatment until relocated and better facilities can be provided in Ross River. In addition, the Board has given generous support to the Arts and Community Festivals, as well as initiating community education...
Townsville Harbour is rapidly becoming one of Australia’s important fishing ports with an increasing number of trawlers working from this base. A deepened channel has already been dredged into Ross River to give all-weather access to the trawler boat harbour. Private developers are being encouraged to provide associated facilities.

Naval vessels from foreign countries as well as our own Australian naval ships visit the Port on goodwill missions. Typical Australian goodwill is cheerfully extended by the residents of Townsville.
Field lashes out at costs, industry

This education effort has not only been in promoting the Port's services, but in identifying in a positive way the needs of the primary producer, and the effect of the present tremendous freight and transportation costs in getting his products to the market place. The effect of minerals handling from their source has prompted strong effort to ensure that Governments are made aware of the long term effect of hasty short term and inadequately researched analyses. The positive role taken in support of an International Airport for the City of Townsville is a further area of action for the benefit of the North Queensland region as a whole.

The support of the local media generally and when warranted, the participation of national television in regular coverage of activities at the Port is greatly appreciated. This has justified the continuation of a public relations service, which apart from conducting regular tours of the Port by International visitors, tourists, industrialists and school children, is active in the publication of printed material of a standard to appeal to both local and overseas recipients. The regular publication in handbook format of Townsville Port Information, is much sought after and coloured brochures depicting activities and facilities are produced for the benefit of shipowners, prospective Port users and exporters.

Screenings and lectures to special groups are held in the Harbour Board Theatre.

Woolbrokers blasted by Port chief

An exact scale model of the Container Crane, with ship alongside, is on permanent display and is loaned for special exhibitions.

The lighthouse at Cape Cleveland guides ships travelling inside the Barrier Reef making the landfall to Townsville Harbour.

Typical headlines in both National and local newspapers indicate the positive attitude adopted by the Board in promoting the interests of both North Queensland and the Port of Townsville.
PALM PASSAGE

The Board was pleased to receive advice that two navigation lights were installed and operating from 30th April 1979 in Palm Passage.

There are two recognised passages for deep-water vessels out through the Barrier Reef from Townsville — Magnetic Passage and Palm Passage. Palm Passage has by far the least outlying dangers and shoals. The Board, as far back as 1930 has been endeavouring to have navigation aids installed in one of these passages. In 1970 the Commonwealth Department of Shipping and Transport advised the Board that it appreciated the need to provide adequate aids for vessels using Palm Passage. The towers for the lights were completed in 1975.

Ships entering and leaving the Ports of Townsville, Bowen and Mackay will have a much shorter and safer route to the open sea. The Federal Minister for Transport, Mr. Peter Nixon stated that the two automatic navigation aids cost $295,000. They are installed on Pith and Rib Reefs and mark the outer and inner entrances of Palm Passage. The Pith Reef light at the eastern end of Palm Passage is an electronic beacon on a 25 metre high stainless steel lattice tower on a reinforced concrete base. On Rib Reef, a seven metre high concrete and fibreglass structure supports an acetylene powered light.
Times have changed a great deal from the days when sugar was loaded by manual labour. This photograph, taken in 1912, shows the S.S. WOOLOWRA at the Adelaide Steamship Co wharf on the Eastern Breakwater.

People, in the persons of staff of the Board and the employees of the many contractors who provide specialised services at the Harbour, are still the life blood of the Port of Townsville.

Today, the nature of work has changed. The intervening years of the Board’s history has encompassed new technologies which have created new jobs and introduced new skills.

Boring and back-breaking jobs have been superseded with congenial working conditions, and modern equipment controlled by skilled people, has made the physical work load lighter. The co-operative efforts of the receptioniste, clerks and secretaries at the Harbour Board office are as much an integral part of the day-to-day operations of the Port as are the skills of the shipping movements controller, the container crane operator, the draughtsman, the tradesman and his apprentice as well as those who help tie up the big carriers at their berths.

The Board expresses appreciation to all persons associated with the Port for their help, effort and co-operation over the three years of this Triennium.

The Port of Townsville, closely allied with the prosperity of North Queensland, will continue to depend on the efforts, dedication and loyalty of people in the future as it has in the past. With this continued co-operative effort, the challenges of the next decade will be successfully met.
Comparative balance sheets and profit and loss accounts are not shown in this report, but are included in the Board’s annual report of financial and cargo statistics enclosed as a separate document.

Capital Expenditure has been maintained at a high level in order to continue the Board’s development programme. The Board recently celebrated the completion of Stage I of the Port development costing approximately $12 million.

Harbour Fund income has increased from $2,803,253 in 1976 to $3,971,571 in 1979, an increase of 42 per cent. Major Income is from harbour dues, which increased from $2,002,779 in 1976 to $2,859,749 in 1979, an increase of 43 per cent. Tonnage rates income increased by 60 per cent for the same period, from $497,415 in 1976 to $797,807 in 1979.

Harbour Fund expenditure (excluding inter fund transfers and capital expenditure) increased by 77 per cent from $1,620,643 to $2,865,785 in 1979. Major expenditure items were: Interest and Redemption, increasing by 29 per cent from $931,067 in 1976 to $1,198,372 in 1979. (This however, shows a decrease from 33 per cent of $2,803,253 Harbour Fund revenue in 1976 to 30 per cent of $3,971,571 Harbour Fund revenue in 1979). Salaries and Wages increased by 21 per cent from $985,014 in 1976 to $1,188,602 in 1979.

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<td>Total Income</td>
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<td><strong>Major Income Items</strong></td>
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<td>Tonnage Rates</td>
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<td><strong>Total Expenditure</strong></td>
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<td><strong>Major Expenditure Items</strong></td>
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<td>Salaries and Wages</td>
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<td>Interest and Redemption</td>
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<td>Interest and Redemption as % of Total Income</td>
<td>33%</td>
<td>34%</td>
<td>34%</td>
<td>30%</td>
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<td><strong>CAPITAL EXPENDITURE</strong></td>
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<td>Loan Fund</td>
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<td>$514,183</td>
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<td>Expenditure Reimbursed</td>
<td>$803,343</td>
<td>$225,217</td>
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<td><strong>Total</strong></td>
<td>$2,084,997</td>
<td>$1,707,040</td>
<td>$3,102,551</td>
<td>$1,345,836</td>
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In 1979, deep water berths with swing basin have become a reality with specialised facilities to handle the largest ships.

PORT OF TOWNSVILLE WHARVES 1979

No. 1 Berth  
Length: 254 m.  
Max. length of Vessel: 238 m.  
Depth: 12.3 m.  
Wharf deck above datum: 5.18 m.  
(Isolated berth) for tankers and all types of vessels for bunkering.

No. 2 Berth  
Length: 256 m.  
Max. length of Vessel: 238 m.  
Depth: 8.4 m.  
Wharf deck above datum: 5.79 m.  
General cargo berth on Eastern Breakwater.

No. 3 Berth  
Length: 256 m.  
Max. length of Vessel: 238 m.  
Depth: 11.1 m.  
Wharf deck above datum: 5.79 m.  
Container crane berth with stern loading ramp pad for simultaneous loading by crane and stern angle Ro/No.

No. 4 Berth  
Length: 248 m.  
Max. length of Vessel: 238 m.  
Depth: 9.2 m.  
Wharf deck above datum: 5.18 m.  
General cargo berth with stern loading Ro/No pad.

No. 5 Berth  
Length: 122 m.  
Max. length of Vessel: 160 m.  
Depth: 8.5 m.  
Wharf deck above datum: 5.09 m.  
(No. 1 Pier F) general purpose with oil bunker and molasses pipe loading facilities.

No. 6 Berth  
Length: 183 m.  
Max. length of Vessel: 195 m.  
Depth: 11.0 m.  
Wharf deck above datum: 5.09 m.  
(No. 1 Pier W) with bulk shiploader for minerals as well as molasses pipeline loading facilities.

No. 7 Berth  
Length: 213 m.  
Max. length of Vessel: 220 m.  
Depth: 10.3 m.  
Wharf deck above datum: 5.49 m.  
(No. 2 Pier W) services the export frozen beef trade with cargoes from freezer stores erected on the pier.

No. 8 Berth  
Length: 230 m.  
Max. length of Vessel: 228 m.  
Depth: 10.7 m.  
Wharf deck above datum: 5.49 m.  
(No. 2 Pier E) is the sugar loading berth equipped with bulk sugar loader.

No. 9 Berth  
Length: 160 m.  
Max. length of Vessel: 152 m.  
Depth: 7.2 m.  
Wharf deck above datum: 4.99 m.  
(A. N. L. Ro/No berth) with direct stern loading ramp.

Small Boat Haven  
Reclamation in progress (note middle right of photograph above).