

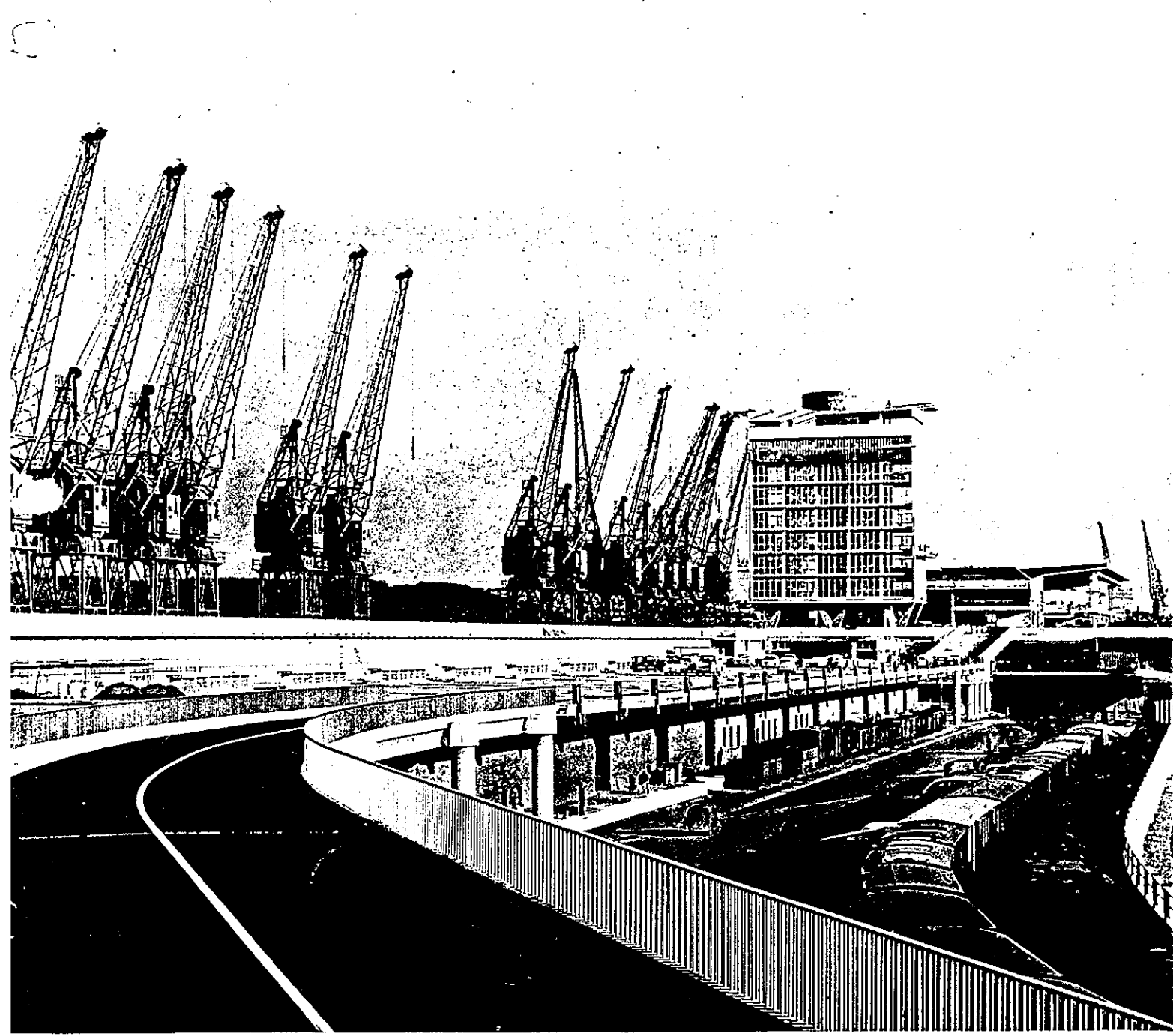
TRADE LINKS

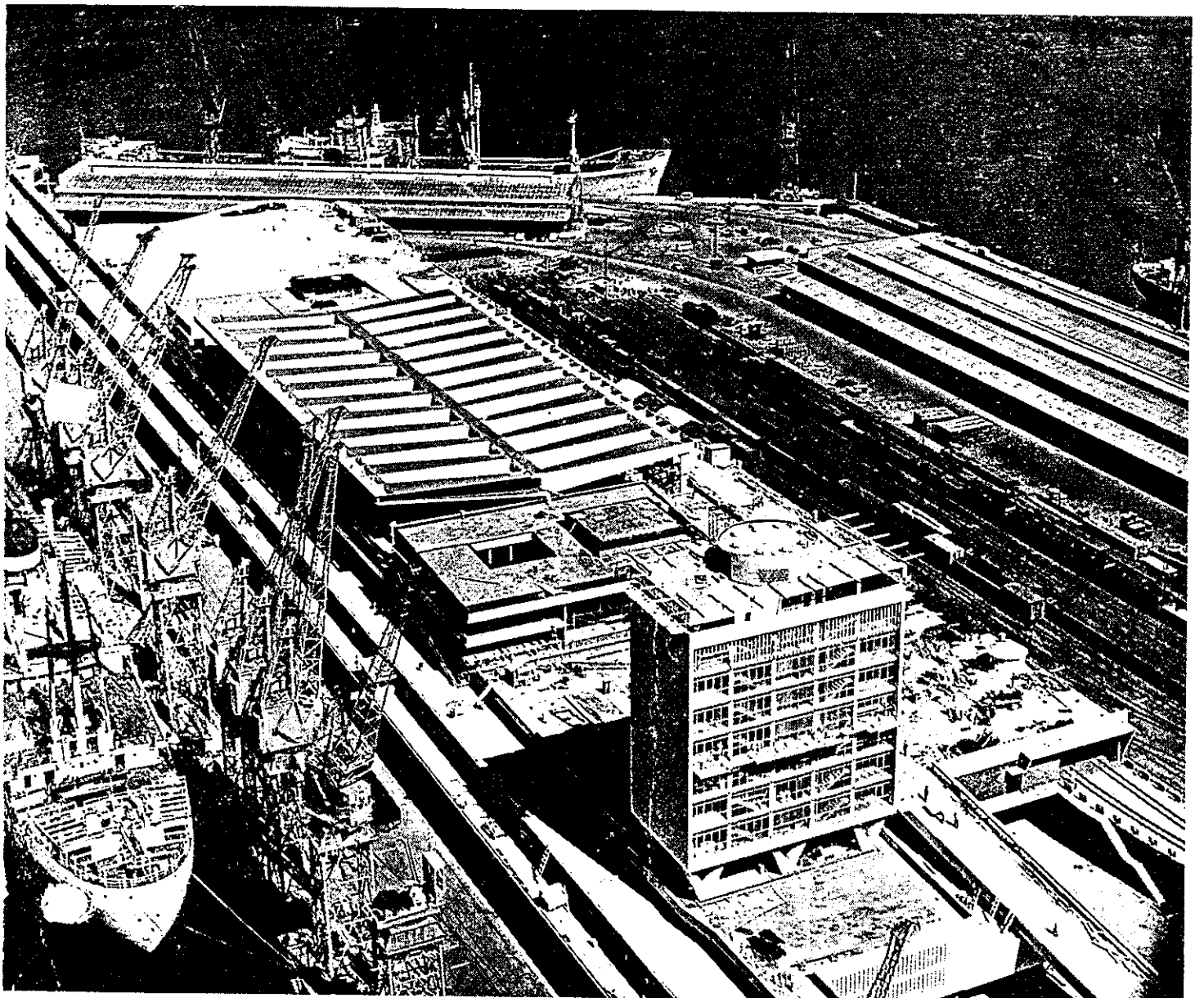
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AFRICA'S MOST MODERN MARINE TERMINAL

This aerial view of part of the T Jetty shows the layout of the R5 million passenger terminal which is nearing completion.

In the foreground is the eight-storey administration block while immediately behind is the European restaurant. Under the large reinforced concrete roof of coffered construction will be the actual terminal building for use by passengers after they have disembarked or before embarking on the mailship.

On the far side of the terminal building is the non-European building, while the flat concrete expanse at the extreme left of the photograph has been designed as a "heliport" for helicopters.

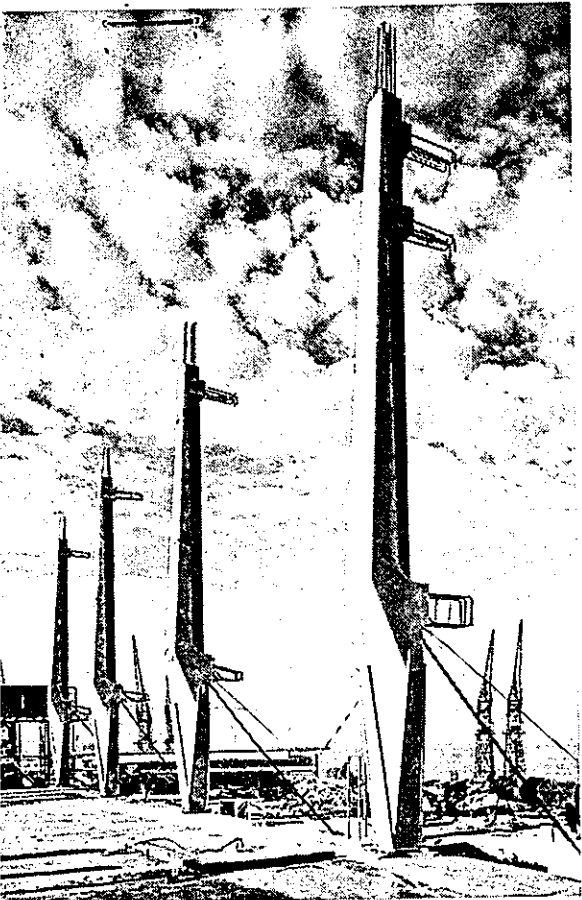
Photographed by Dennis Cleaver

DURBAN'S NEW R5,000,000 marine passenger terminal and fruit pre-cooling store which are due to be completed towards the end of January next year, are the most modern in Africa.

The terminal which has completely transformed the look of the T jetty, covers the entire length of L and M berths which were previously used for vessels under repair.

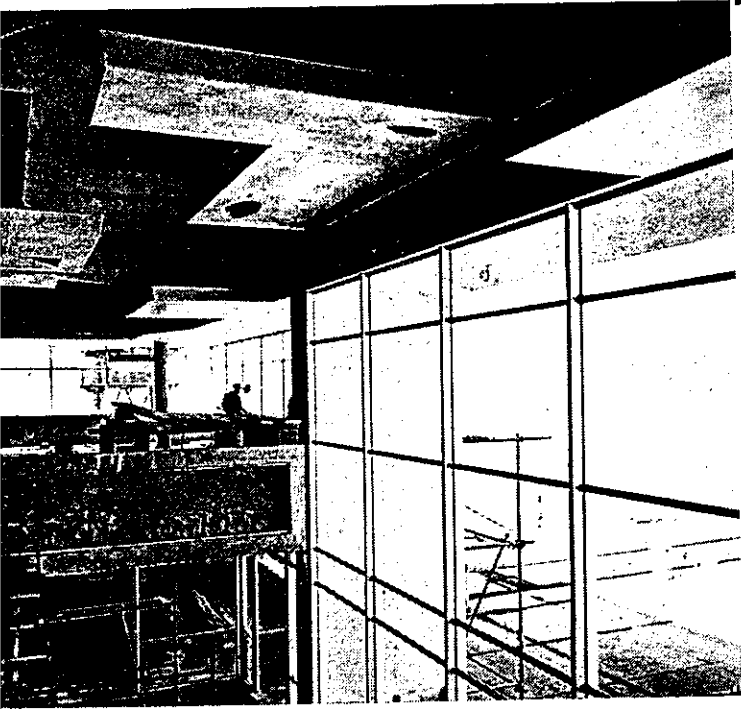
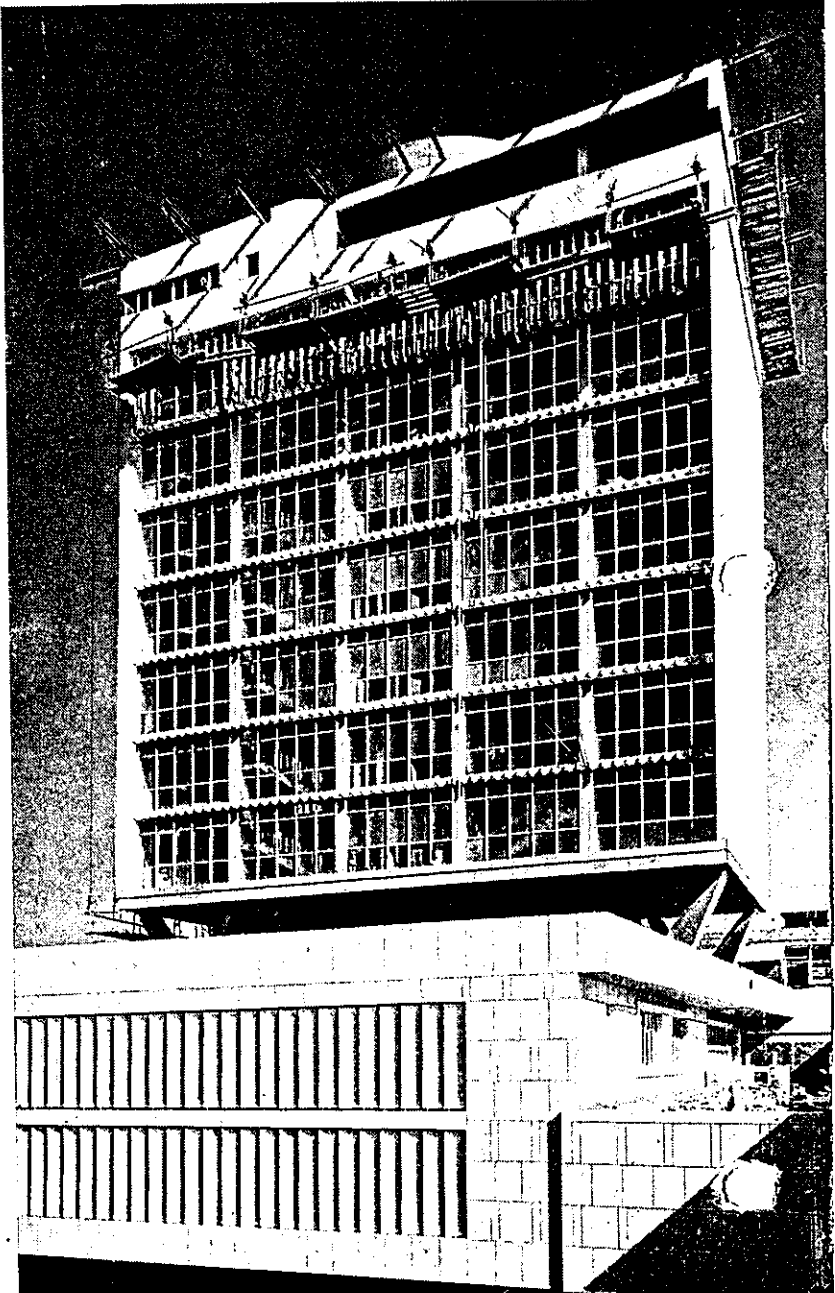
The project is the most impressive in Durban's harbour development since the war and will assist in the efficient and quick dealing with passengers who arrive in Durban in the large liners.





These smooth-finished concrete pillars, which are eye-catching in their futuristic design, will support the roof of the terminal building, which will house banks, shops and the customs hall. They were moulded in glass fibre and steel moulds on the site and then hoisted into position

The front facade of the eight-storey administration block atop the marine passenger terminal on the T Jetty. For protection against the strong glare of the sun, aluminium louvres, which were supplied by Consolidated Aluminium Industries Ltd of Durban, will cover the whole window walls. The building will house the Port Office, the Port Goods Department and the various other departments which are an integral part of the port's administration



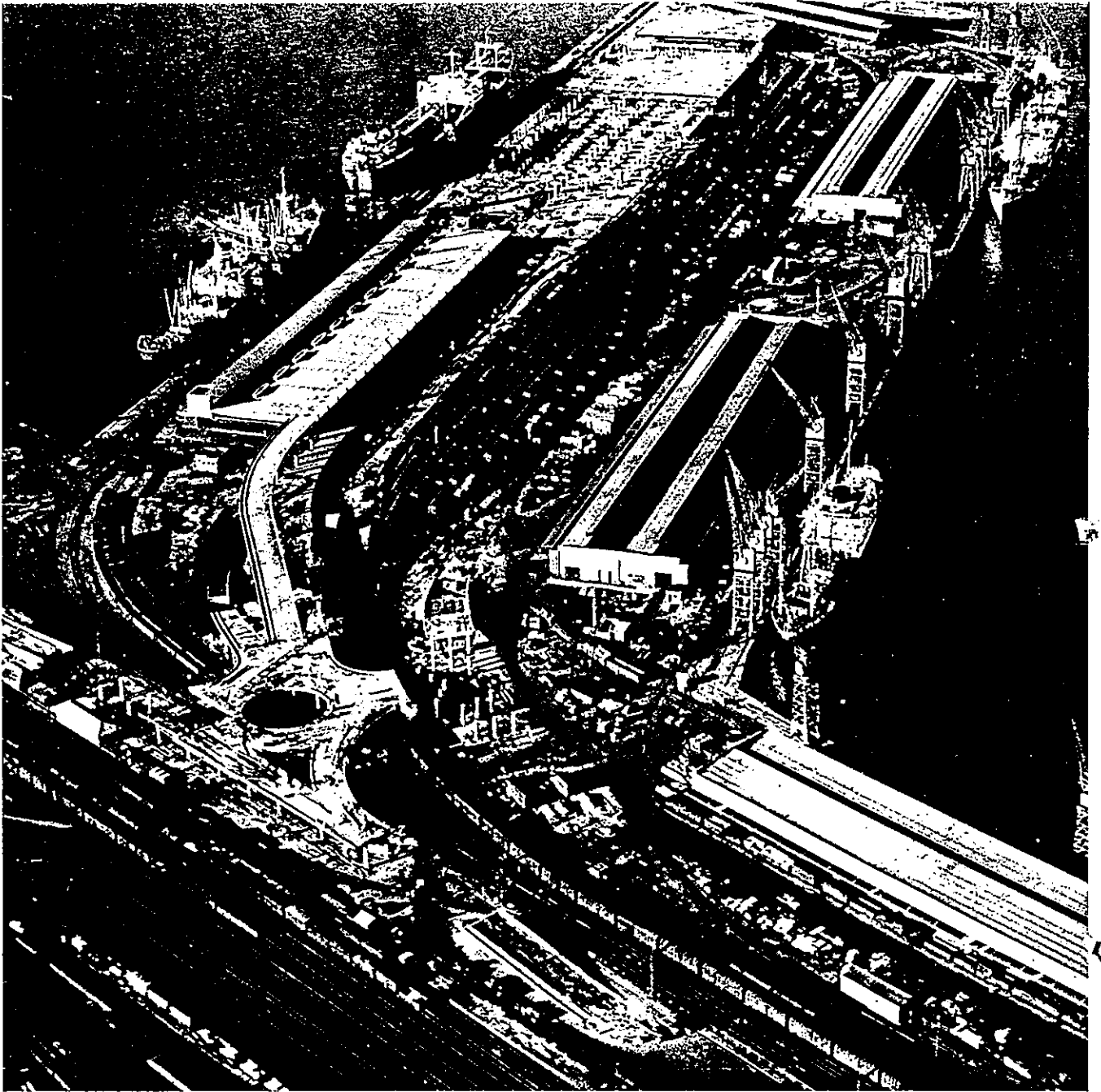
Passengers embarking and disembarking from vessels at the new terminal will pass through a modern concourse which is the only one of its kind in South Africa.

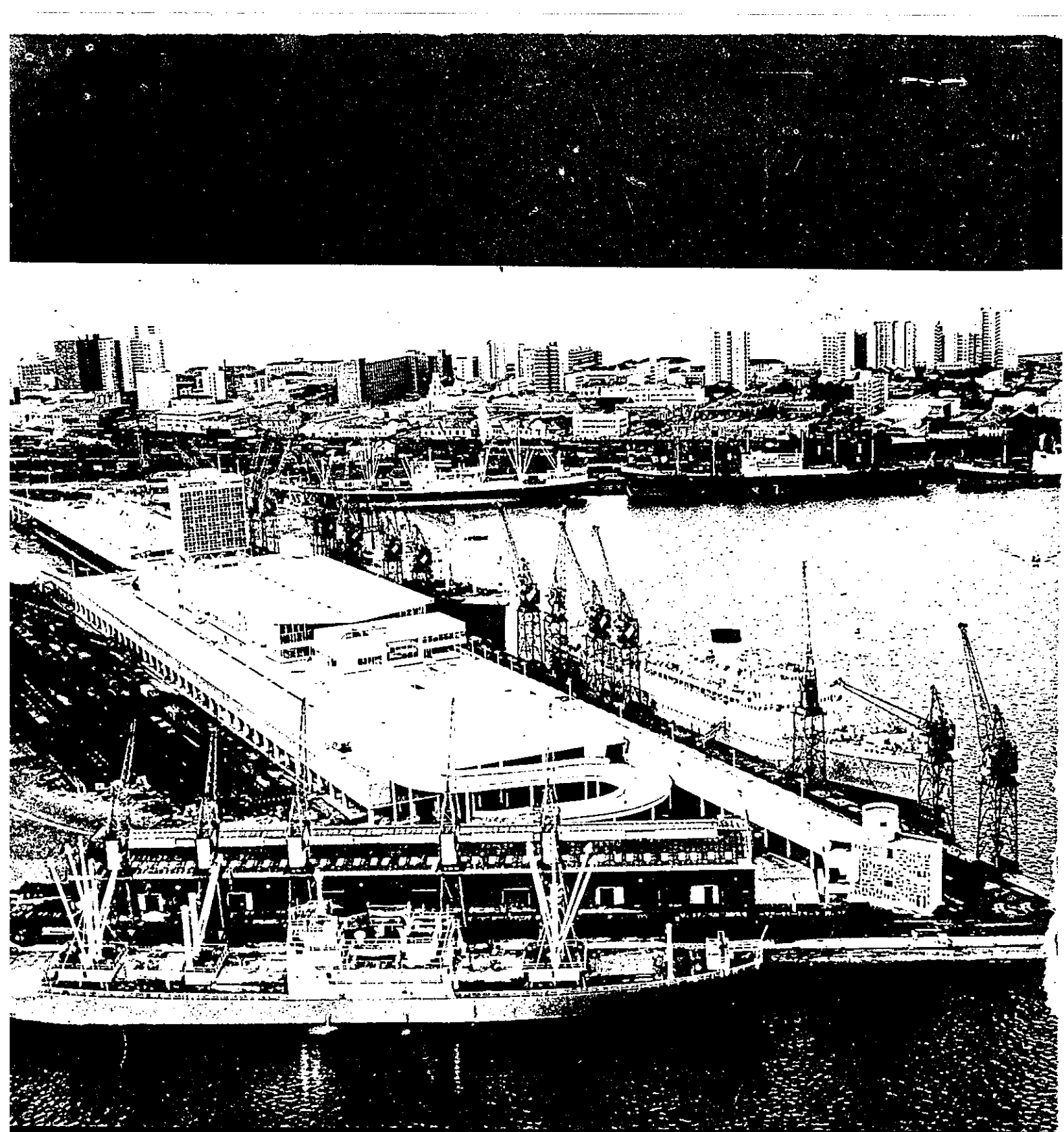
The building which was built by Roberts Construction, houses the most up-to-date pre-cooling store in the country, from which more than one million cases of oranges and thousands of cases of other fruit have been shipped, primarily to the United Kingdom, since it began operation in May.

The Railways will save thousands of rand on subsidised railage by the establishment of this modern pre-cooling store at Durban, because of the much shorter haul from the Eastern Transvaal and Natal, compared

Please turn over →

The unusual suspended concrete ceiling of pleasing odd shapes and sizes which is featured in the non-European restaurant of the marine terminal on the T Jetty



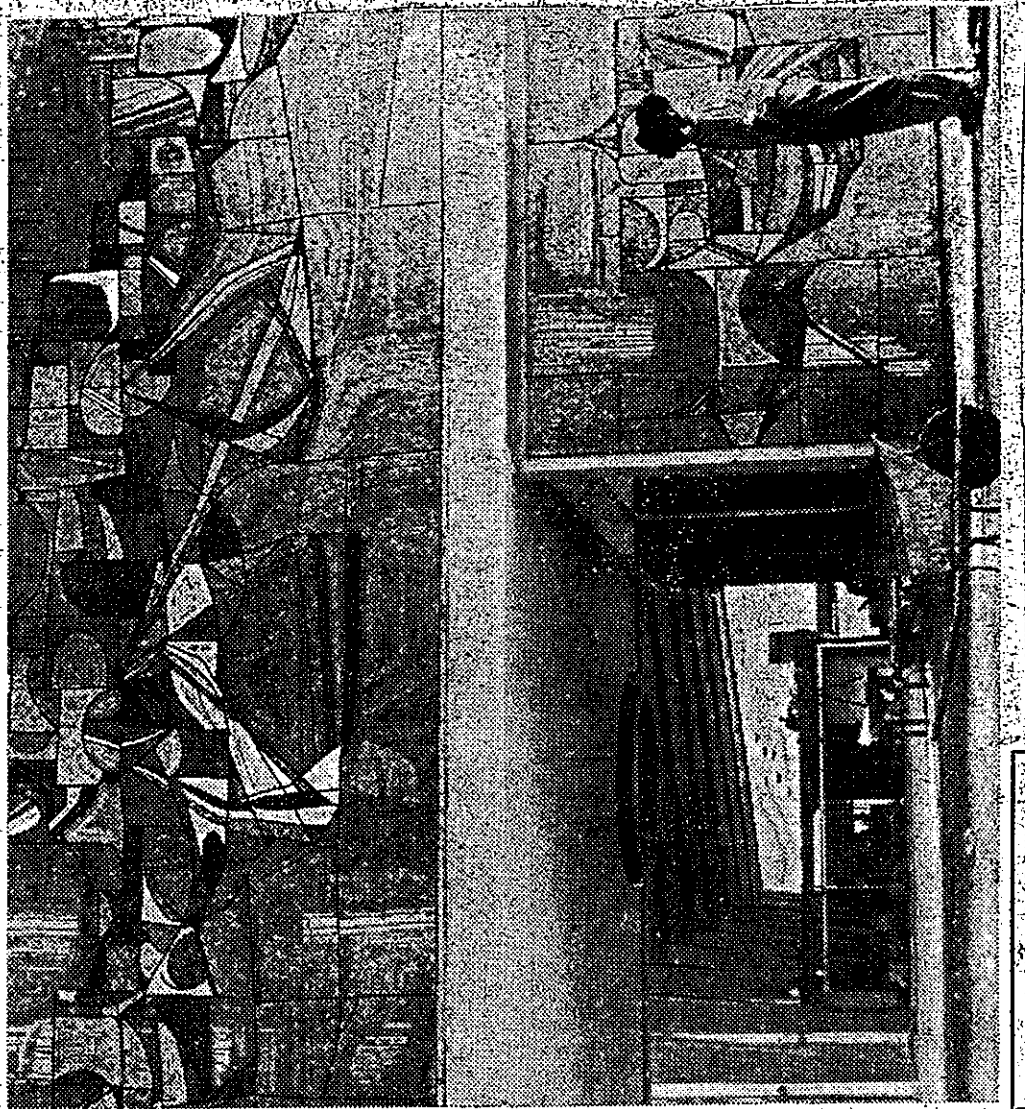


A view of Durban's Marine Terminal (shortly to be featured in this magazine) with the city's beachfront skyline in the background. (Photo: Durban Publicity Bureau)

THE NATAL DAILY NEWS, THURSDAY, MARCH 22, 1962

MARINE TERMINAL IS THE EPIPHONE OF NEW IDEAS

Unusual works in
new terminal



By HELEN
BOTH

NOW that the new marine terminal and pre-cooling store in Durban—not by far the biggest, but certainly the most modern in the world—is nearing completion, I approached the consulting engineer, appointed by the Railways, to learn a little more about the person behind the idea.

He said: "If you want to talk about me as a person: certainly the answer is 'No.' If you want to talk about the building the answer is 'Yes.'"

In his lofty office on the 14th storey of a building, I was not surprised to find lofty ideas, and certainly learnt a few interesting facts about the new Marine Terminal.

I mentioned the eight-storey block of offices perched on top of a few apparently fragile V-shaped columns. He remarked

with an amused smile: "There was a stage at which these columns caused us great concern."

He related how, after the fourth storey was completed, a junior partner began to panic about the strength of the columns. He was telephoned in Johannesburg and asked for his advice as a consulting engineer. After this frantic call he began to have doubts himself.

"STOP WORK"

"Stop work until I get back," he replied. Back in Durban he called a meeting. They decided to test the strength of the columns by building a miniature to-quarter scale.

According to the miniature scale, the weight for the column was reduced to 56,000lb. When they began to load the column, everyone concerned was on tenterhooks — if it could not carry the weight, the whole building would be useless. It came near 56,000lb., it ex-

CONT'D

ALL SMILED

It was only when the crush proved three times as strong as the calculated load (which is the absolute safety mark) that the real tension was gone and all smiled.

This, however, proves how seriously a number of people at the top take their responsibilities when they have the safety of hundreds of people to consider.

This block provides facilities for African workers. About 24 years ago at a meeting, heads of departments concerned were asked to put forward useful suggestions for improvements.

FOOT BATH

The result: A unique foot-bath was designed. It is an elliptical wall about 18in. high in the form of a swimming pool, with a wall along the centre equipped with about 30 taps at regular intervals.

Africans squat down in comfort on the outside wall, while they turn on the taps to wash their feet. Adjoining this there is a room with showers in long corridors.

Next to the huge mess room where they can sit down at long tables during lunch hour, there are hundreds of lockers where they can safely leave their personal belongings.

Surely South African as well as overseas critics must lose face when they allege "that nothing is

being done for the African in South Africa."

Another feature of this building is the engine-room of the pre-cooking store. The control-room has one entire wall filled with hundreds of coloured buttons. From here all correct temperatures are maintained for the fruit in the cool chambers.

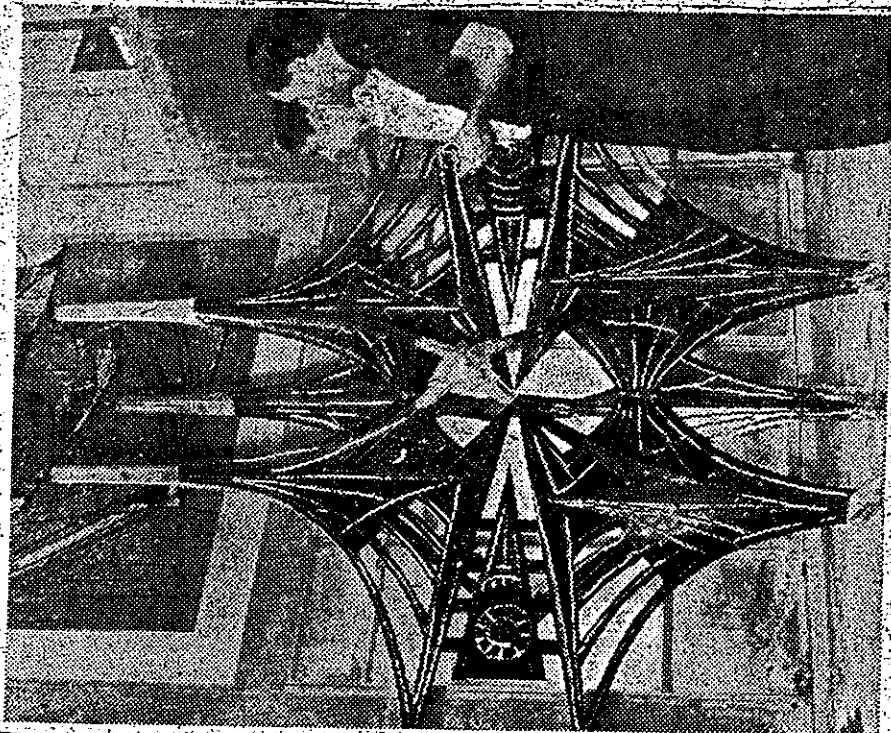
The greater part of the mosaic work was done by Professor Bandinelli. He remarked that I had noticed the signs of the Zodiac on the painting on one of the outside walls. Did it mean anything in particular? I was told it was really just the idea of the artist as the mood gripped him; with a few other ideas and initials of people concerned with the building, scattered here and there.

The marble facing on some of the walls gives a beautiful finish, and with all the miniature lawns, decorative flower-boxes and fish ponds, there is indeed a feast for the eye.

"What was the idea behind all these?" The consulting engineer replied: "Not by bread alone man lives." Like a flower comes up in a soulless desert, so this building is an idea. The art and polish are part of the soul.

And says he: "So you see a Mr. Smith or a Mr. Thomson as a person does not really count, but a group of men who work collectively to carry out an IDEA that is important. We are starved for ideas in South Africa. Riches do not lie in owning beautiful houses and smart motor cars, but in aspiring towards something higher—an IDEA."

"Strange," I pondered as I walked out. Truly great people are always simple, unaware of, and take no credit for their importance.

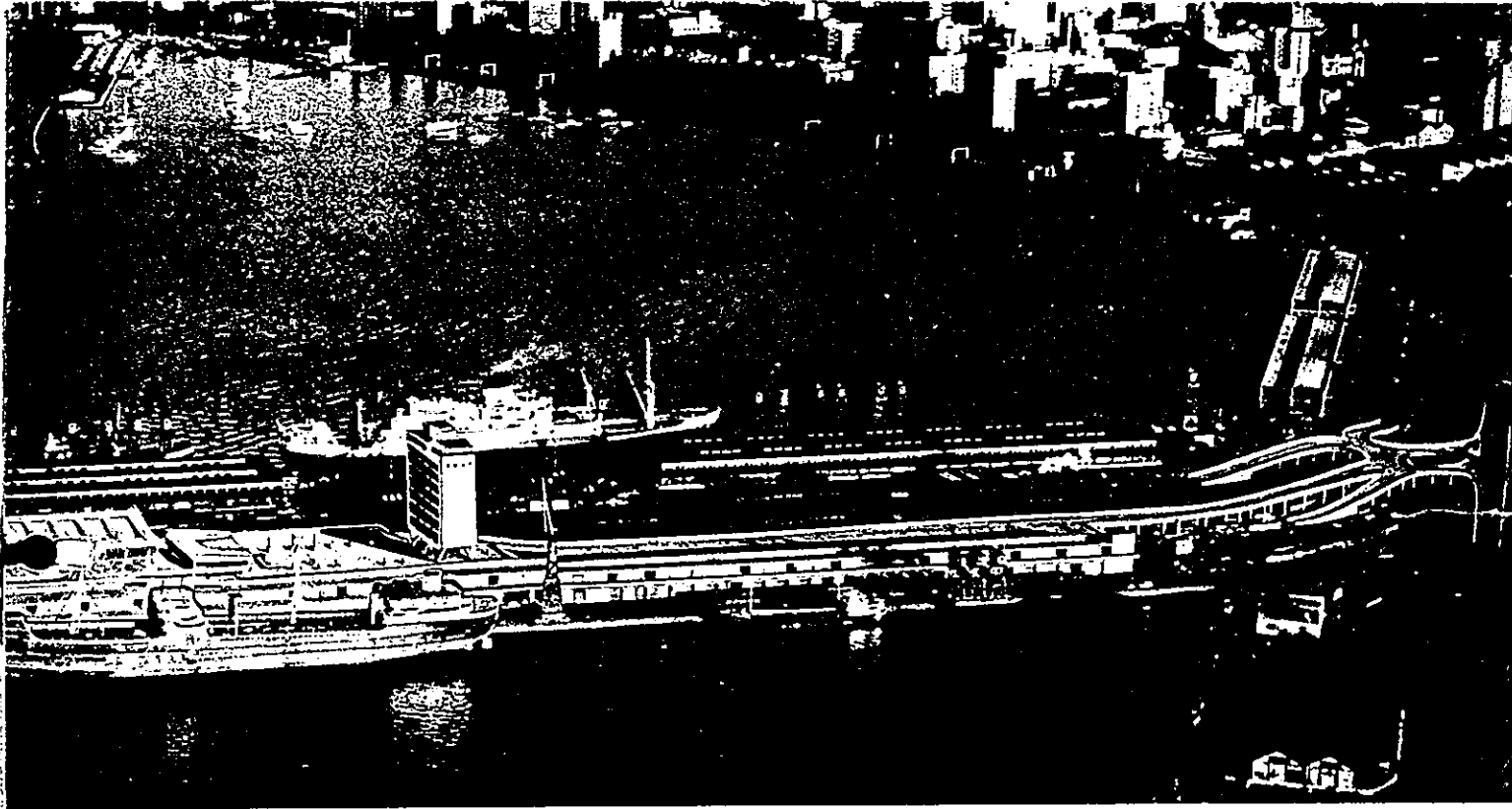


STRIKING and colourful mosaics are featured in the new marine terminal in Durban Harbour.

Covering large expanses of wall, they are all abstract in keeping with the contemporary design of the building. The mosaic in the top picture occupies a wall in the vestibule of the European section.

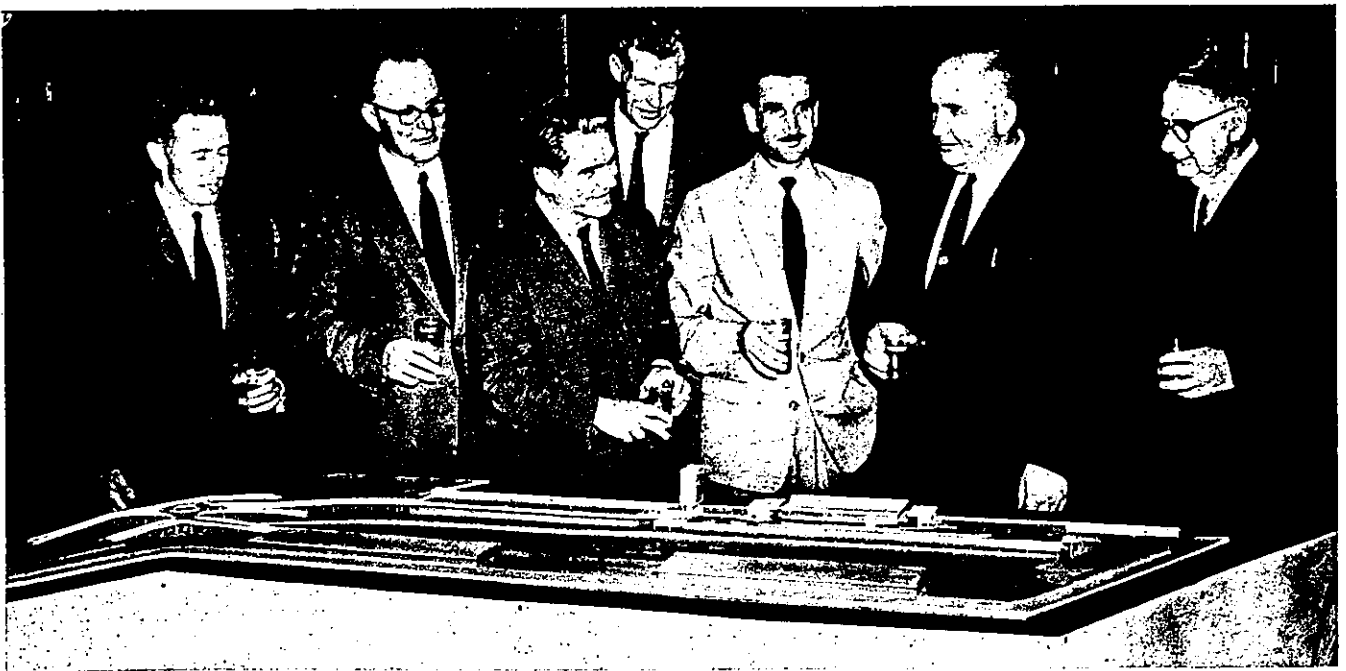
Lovers of modern art and architecture will find the marine terminal a place of interest, for within its design is incorporated many unusual works. One of them is this sculpture (bottom picture) in steel, designed and executed by Mr. John Hooper, Senior Lecturer in Fine Arts at the Natal University in Maritzburg, who is pictured near the camera.

The sculpture weighs about a ton. Mr. Hooper is doing several other metal sculptures for the building.



A broad deck suitable for use by helicopters is at the left. Mailships will tie up approximately in the position shown by the vessel in the foreground. Picture gives a fine impression of the well-situated terminal, with access to it by way of a traffic round-about at the extreme right. The Victoria Embankment runs from right to left past the yacht basin. In the right background is part of the Greyville Racecourse.

OCEAN TERMINAL FOR DURBAN



At the official handing over ceremony last year. From left: G. H. Sturt (Shell), S. Worman (Shell), M. S. Zakrewski (Consulting Engineer), J. E. D. Bramwell (Natal Manager, Roberts Construction), F. E. Ingram (Project Manager, Roberts Construction), C. Rezelman (System Manager, S.A.R. & H.), R. Dixoa (System Harbour Engineer, S.A.R. & H.).

Handing over of Harbour buildings at Durban

THE Acting General Manager of the South African Railways and Harbours, Mr. J. P. Laurens, officiated at the handing over ceremony of the Harbour Administration building at Durban Docks early in December.

The Harbour Administration building

is part of the development project in the Harbour area usually referred to as the Ocean Terminal. This project is valued at approximately R6,000,000. The major part of it is the building contract being executed by Roberts Construction at the estimated cost of

R3,400,000. This is the biggest single building contract of this nature ever let to a South African firm of contractors. The contract was started on the 1st May 1959, and certain sections have already been handed over to the Railway Administration and were put into operation at once.

The completion date of the precooling stores was determined by the orange crop in the Eastern Transvaal. Although the starting date was delayed through unforeseen circumstances, the work was completed on the scheduled 31st May 1961. The R500,000 refrigeration plant was supplied and installed by Airco Engineering Ltd. using Carrie equipment throughout.

The ablution block and the cargo sheds were handed over at the end of July, 1961. The Harbour Administration building is now complete and the passenger terminal is due to be completed on the 28th February, 1962. The entire project will be completed on the 31st March, 1962.

The area under construction is about two-fifths of a mile long, 5,500 tons of reinforcing steel were used in the construction and the combined length of the reinforcing bars is 7,000 miles. The concrete weighs 80,000 tons.

The consulting engineers for this project were Messrs. Zakrzewski & Partners who were responsible for the design and supervision of work. The architectural side of the project was in the hands of the architectural section of this firm.



Messrs. D. D. N. de Villiers (System Manager), J. Douglas Roberts, J. P. Laurens, M. S. Zakrzewski and C. A. Milne (Mayor of Durban).

ABOUT 7,000 miles of steel reinforcing, weighing 5,500 tons—enough to stretch from Cape Town to London and beyond—have been used in the construction of Durban's ocean terminal.

Excavation above the waterline amounted to 32,000 cubic yards, and 4,000 cubic yards were excavated below the waterline.

Four thousand cubic yards of fill and 60,000 cubic yards of concrete were required. In all, 12,000 cubic yards of brickwork were used.

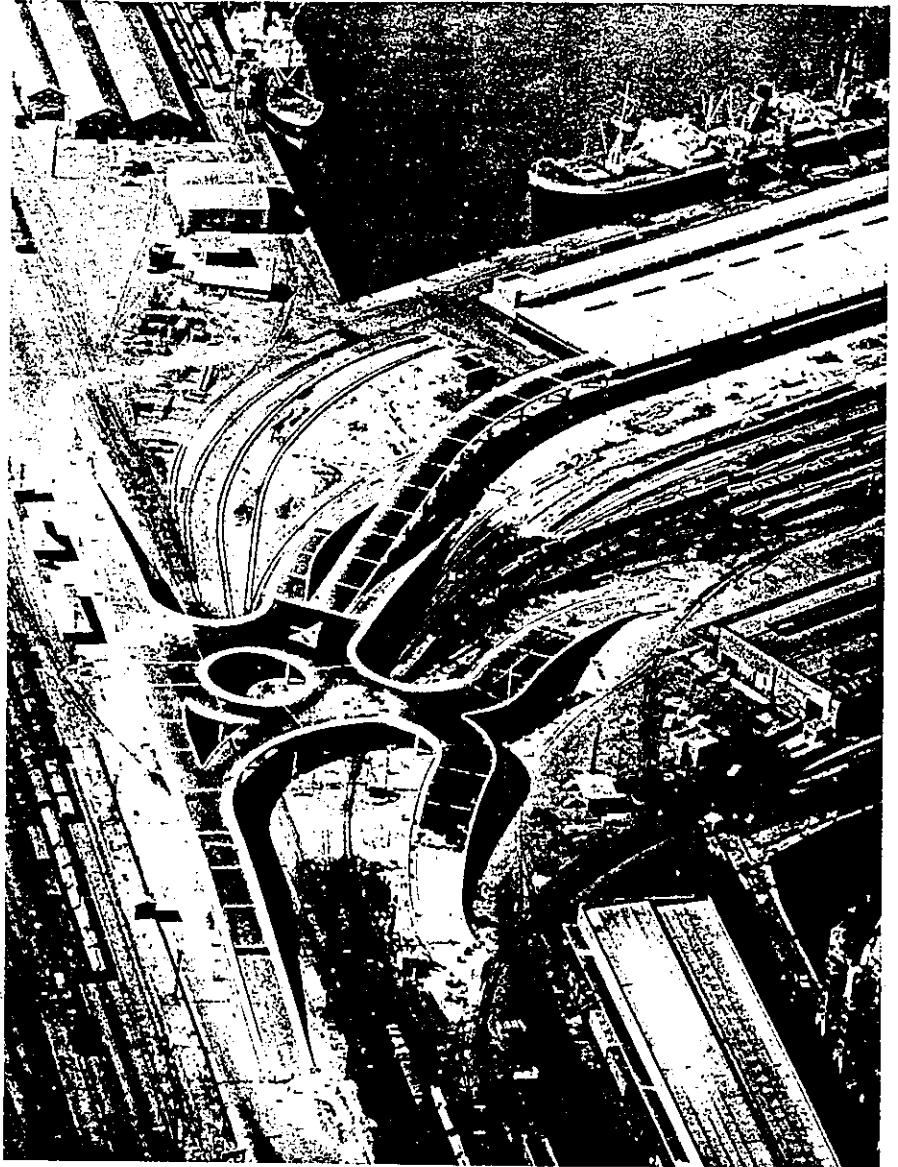
All concrete to this contract was pumped by a 6-inch Pumpcrete concrete pump, the average delivery being about 4,500 cubic yards a month. There are 54 pre-cooling tunnels 75 feet by 11 feet 6 inches, with vapour barriers of fibre glass and aluminium sheeting.

The unique building was designed by Messrs. Zakrewski and Partners, consulting engineers, and the contract carried out by Roberts Construction Limited.

Top left:
Picture was taken from the air during an early stage of construction of the round-about for road traffic leading to the big car park (left centre).

Bottom left:
Portion of the huge cargo shed on the ground floor.

Right:
The completed traffic round-about and, in right background, part of the big parking space next to the passenger deck.



NEW STATOR FOR ESCOM

AN alternator stator with a capacity of 60,000 kW has recently been installed at the Electricity Supply Commission's Umgeni Power Station near Durban. It was manufactured by the Turbine-Generator Division of Associated Electrical Industries Ltd. in Manchester, England, and the installation was done by Associated Electrical Industries South Africa (Pty.) Ltd. Consulting electrical and mechanical engineers are Messrs. Merz and McLellan. Pictures show the stator being offloaded at Durban Docks from the Clan Line steamer *Ayrshire*, using the ship's derricks, and being placed on specially prepared foundations in the Umgeni Power Station. The South African Railways made special arrangements for its transport there on a Type U11 well wagon of the Electricity Supply Commission.





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* * *

EDITORIAL

The romance of diamonds never fails to fascinate. In this issue we detail the history of the world-famous Premier Mine, near Pretoria, where the fabulous Cullinan Diamond—the world's biggest gem stone—was found at the turn of the century. Today the mine is the most important producer of industrial diamonds in Southern Africa.

South Africa's second scientific expedition to Queen Maud Land in the Antarctic is the subject of a special feature.

A third article of interest details the mass production of disposable plastic cups at a factory in Pinetown, Natal, where the only electronic equipment of its kind in the sub-continent, imported from Germany, is now turning out millions of containers a year.

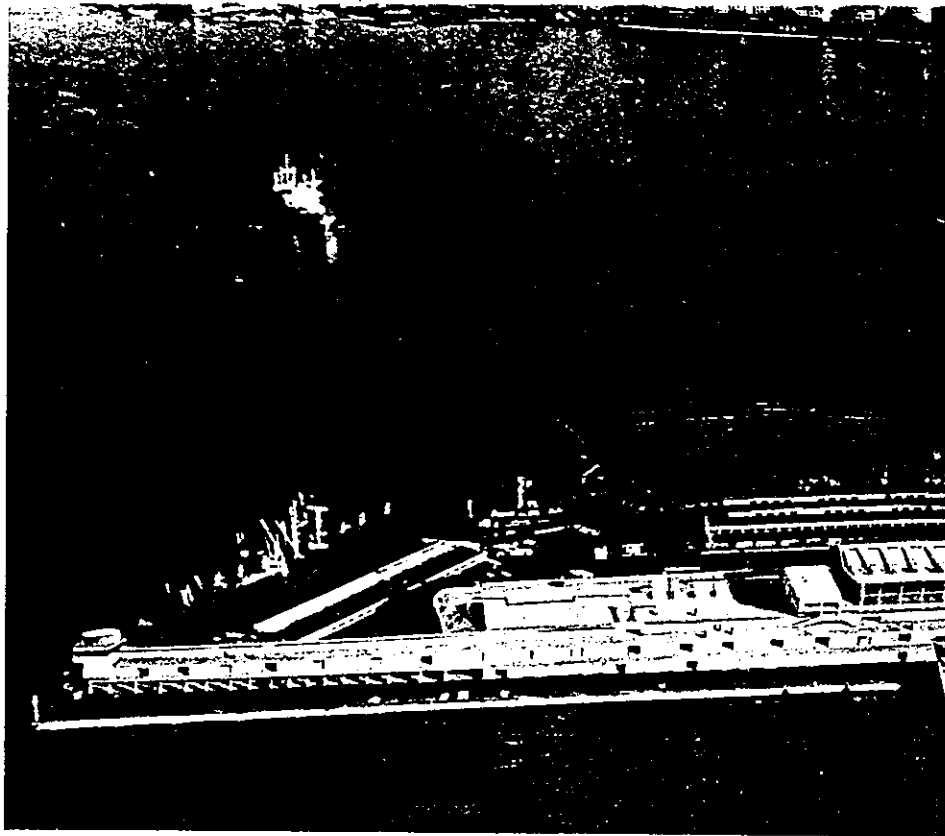
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FRONT COVER

ANTARCTIC LANDSCAPE. A survey team pitches camp on the Kohl-Larsen Plateau, with snow-capped Smillie Peak towering in the background. This scenery is typical of what a South African scientific team will encounter during their year's stay in the ice. They left for the Antarctic in the chartered sealer *Polarhav* early in December. See page 6.

(A Shell picture)

Printed in Cape Town by Hortors Ltd.



A view from the air of the new ocean terminal, to which an artist has added buildings as they will appear when the project is complete in about a year's time. The eight-storey administrative block is shown at the centre of the picture. To its left are the passenger deck, customs sheds, offices, restaurants and retiring rooms.

MAGNIFICENT NEW

DURBAN'S importance as the Union's premier port will be enhanced towards the end of the year with the completion of an elaborate £2 million ocean terminal. It will be the finest in the Southern Hemisphere, providing unrivalled facilities for the expeditious handling of general cargo and luggage, fruit from pre-cooling stores at the wharfside, and passengers from the top deck of three.

A portion of the ground floor cargo shed was handed over towards the end of last year, at a formal ceremony, by the contractors, Roberts Construction Limited, to the South African Railways and Harbours Administration. The terminal is due to come into full service in December.

The terminal and cargo sheds will occupy the entire length of the 2,200-foot T Jetty near the east end of the Victoria Embankment, close to the centre of the city.

There will be three long decks, and the "nerve centre" will be an eight-storey administrative block at the centre of the jetty, surmounted by a radio mast. The bottom deck will be for handling general cargo and luggage, the first floor will house fruit pre-cooling tunnels and a repacking

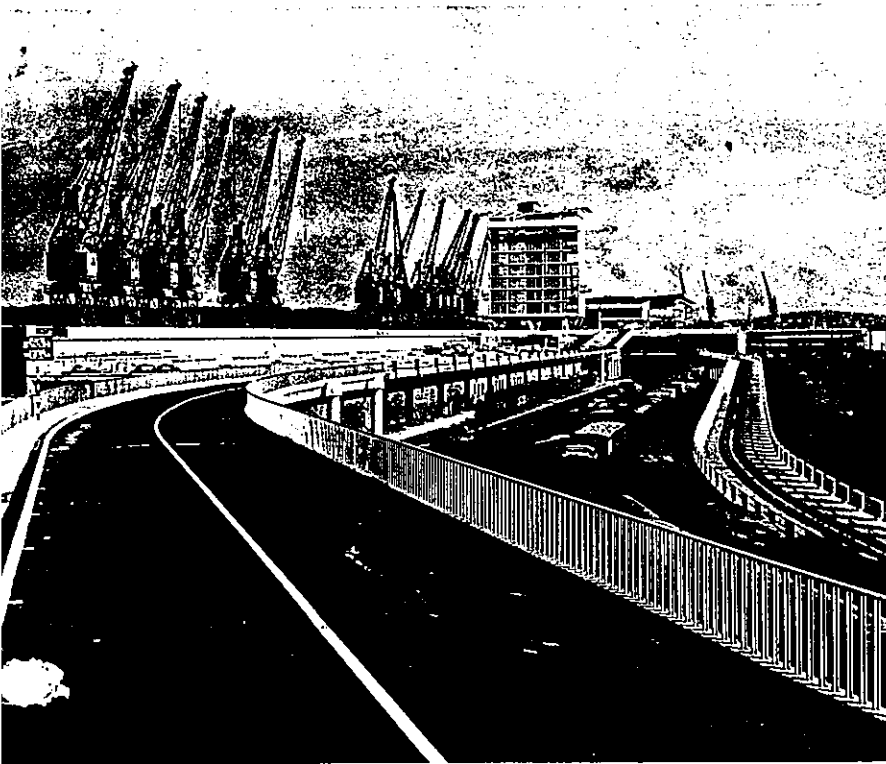
depot, and the top floor will be a terminal for passengers.

A feature of the project will be convenience of access to passengers, who will be able to arrive directly opposite the mail-ship by car, complete Customs formalities and go aboard by telescopic gangways without the need to climb or descend stairways.

Restaurants for Europeans and non-Europeans, a bank, retiring rooms and shops are included in the scheme, work on which started in September, 1959.

The approach to the terminal is by way of an overhead bridge expanding into a broad car park on the top deck. At the far end of the terminal there will be another broad deck large enough for use by helicopters.

MARINE TERMINAL DURBAN



In the transport business the two trickiest commodities to handle are said to be people and perishable produce. Unless both are accorded V.I.P. treatment the repercussions are usually most unpleasant—in more ways than one.

But there is no likelihood of this happening at the new Ocean Terminal now taking shape on the quayside at Durban, Africa's premier port. Costing R5,000,000, this ultra-modern concrete and aluminium building complex incorporates the latest and most advanced ideas on how to handle passengers in comfort, and at the same time provides facilities for handling perishable foodstuffs that are believed to be unrivalled anywhere else in the world.

The Ocean Terminal can be divided into four sections. There is the terminal proper where travellers will be able to wait in a spacious lounge or visit a restaurant which has panoramic views over Durban Harbour. It also has a small shopping centre.

Next, there is the eight storey harbours administration building which with its attractive anodised aluminium facade serves as a landmark for miles around.

Then under the terminal and administration block are housed the extensive pre-cooling sheds in which fruit and other perishable produce from Natal and the Transvaal are chilled prior to being shipped overseas. Altogether the Ocean Terminal has 54 cooling tunnels with a total capacity of more than 4,000 cubic tons of foodstuffs.

Finally, there is the elevated road system along which traffic can flow freely from the docks entrance without being hindered by shunting trains and the other obstacles normally encountered in a dock area.

We must confess considerable interest in the new Ocean Terminal, for in all modesty we would like to mention, with some justification, that where it isn't concrete it is aluminium. Altogether more than 300 tons of the light metal have been used at the Ocean Terminal for the curtain-walling, windows, doors, partitions, sun blinds, balustrading, air-conditioning ducts and internal fittings. And in addition we believe that one or two of the planned Sculptures are to be in aluminium as well.

There are several reasons why aluminium was chosen for this project, but the most important was that it is the best metal for the job as no other material would be able to withstand so well the extremely corrosive conditions experienced in the harbour area.

The Marine Terminal was designed by M. S. Zakrzewski and Partners, Consulting Engineers, and The Roberts Construction Company Ltd., are the main contractors while Consolidated Aluminium Industries Limited, are responsible for the manufacture and installation of the aluminium work.

