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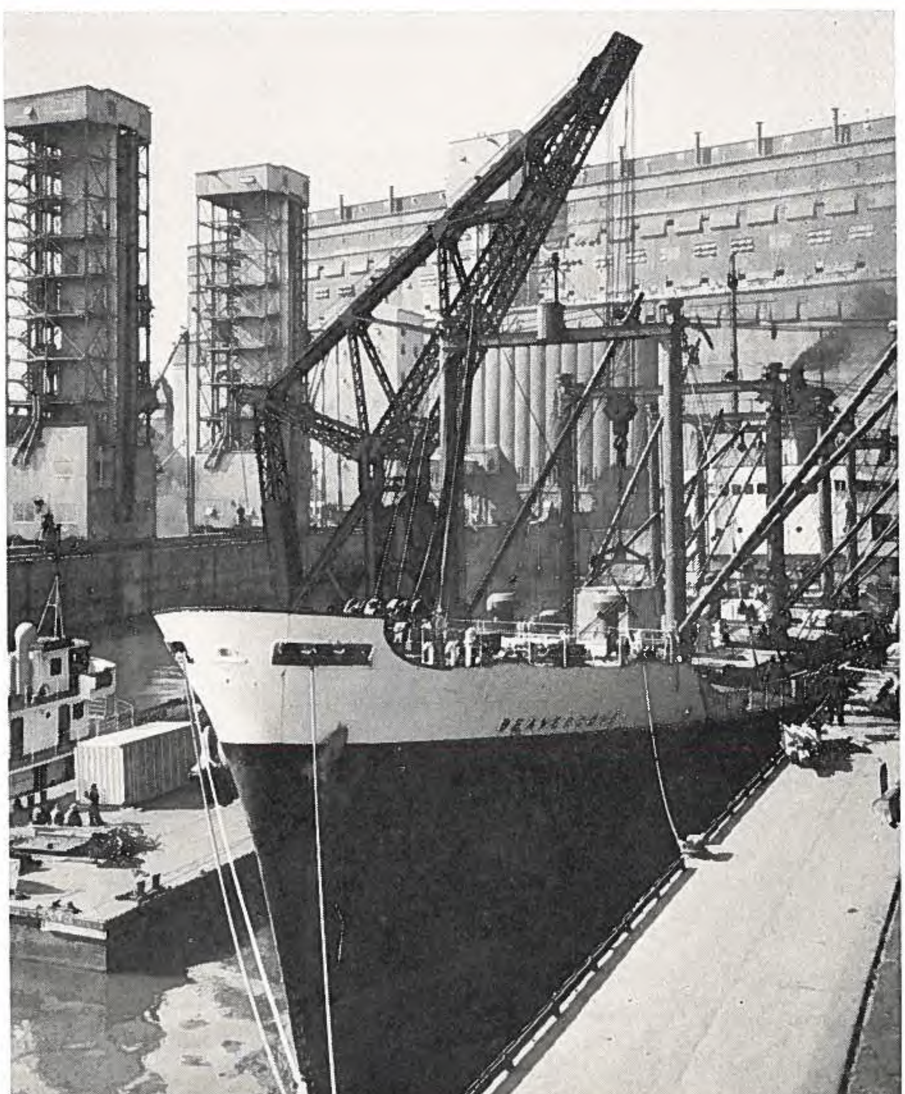

Will Containerization Reshape Your Market?

FOREIGN TRADE

AUGUST 19, 1967 Vol. 128 No. 4

COVER: The floating crane is used to put containers aboard a vessel in Montreal. The increase of container traffic has led to Montreal being chosen as the site of Canada's first year-round container port. The new facilities will be completed by November 1968.

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Will Containerization

M. A. JOHNSTON,
Assistant Editor, "Foreign Trade".

Canada Announces Container Port

As this article was going to press, Manchester Liners Ltd. and Furness, Withy & Co. Ltd. announced plans for a year-round containership service between the ports of Manchester and Montreal. Three vessels will be built to provide weekly sailings across the Atlantic. The first of them will enter service in November 1968, and by March 1969 a regular weekly schedule will be in operation. The new containerships will be fitted with cellular slotted ho ds to carry 500 standard 20 x 8 x 8 foot containers. A top speed of 21 knots will enable the ships to make the crossing in six and a half days; time in port at each end will be only 36-48 hours.

The National Harbours Board has given detai s of the container terminal facilities at Montreal which are to be ready by November 1968. The berth at Section 70 will be 650 feet in length and have an area of approximately 13 acres. Its equipment will include a 35-ton gantry crane. Close to the Louis Hyppolyte Lafontaine bridge and tunnel, it will have quick access to the Trans-Canada highway as well as direct rail communication. Furness, Withy & Co. Ltd. will operate it and when not required for Manchester Liners, it will be available to other steamship lines for handling container traffic.

The capital investment involved in providing ships, containers and port facilities in Montreal and Manchester will exceed $30 million. Manchester Liners point out that it will continue to provide weekly express sailings by conventional liners.

COLLECT ARTICLES on containerization and very soon you will have a filing cabinet full. Much of the information will not be relevant to your business today, but if you take it into account in forward planning you will have a head start on your competitors.

Containerization is a way of mechanizing the handling of freight, increasing productivity and directing traffic to the most efficient means of transport. To be profitable, the specialized equipment—ships, cranes and the containers themselves—has to be used intensively and needs a large volume of traffic and good organization. Some of the incidental benefits, however, can be realized before a full-scale container operation is built up. Exporters, in fact, are often first attracted to containerization as a way of cutting down loss and damage in transit and being able to use domestic packaging for export shipments. Once they become accustomed to shipping in containers, they go on to exploit the method's other advantages, such as savings in time and a wider choice of routings which are possible because the containers are designed to be intermodal (readily transferable from one means of transport to another).

The container revolution, still in its early stages, has already changed many long-established business habits. Moreover, it is gaining impetus just when trade barriers are being lowered and regional groupings like EEC and EFTA are giving industry greater freedom in choice of location. The eventual narrowing of the cost differential between transporting raw materials and manufactured goods will stimulate secondary industry in less-developed countries. In coming years,

Reshape Your Market?

In the past, methods of handling general cargo in the export trade have changed slowly. Containerization brings a whole new concept of transportation and offers the exporter many other advantages.

the new generation of transatlantic container ships, jumbo jets and fast liner trains will make a major impact on trade and trade routes. Exporters who anticipate a new situation have a decided advantage over those who are content to wait on events.

High Volume Is the Key

Containers are used by a growing number of Canadian companies, but mainly for high-value or fragile goods. The present low volume and the tendency of traffic to flow one way only are responsible for the relatively high cost of handling at the port and of delivering empty containers to the customer's plant. Collapsible containers have been suggested as one way of overcoming the problem of trade moving predominantly in one direction and Saguenay Shipping is successfully using small ones in Caribbean trade.

A modern container berth—and Canada has decided to build one at Montreal—requires a large capital investment and only yields an adequate return if it is intensively used. The Canadian Shippers' Council is at present busy analyzing traffic flow to determine the volume of cargo moving through the ports which could be containerized. The Department of Trade and Commerce is contributing to this analysis. The question is not so much whether the merchandise can be packed in that sort of a box, but whether it will be cheaper over-all to ship it that way. It is particularly difficult to decide how much of the less-than-container lots could advantageously be consolidated into containers and how much should continue to be shipped as it is now. In the Canadian situation, to know this is vital: without the volume represented by less-than-container lots, Canadian ports could hardly expect to provide specialized container facilities at attractive rates. If rates are too high, the cream of the traffic may go south through United States ports.

Canadians can take some comfort from knowing that they are not the only ones in this predicament. Britain is having to rework its recent port modernization plan because it was based on extensions to ports all around the coast. Now that one container berth can be expected to handle between six and ten times the tonnage going through a conventional berth and liner trains are already running, the need is for fewer and more specialized ports. The British know that Rotterdam and Antwerp will take transatlantic traffic away from their ports if they are not extremely efficient; the container port at Tilbury is a bold answer to competition (see article on page seven).

The Shipowners' Dilemma

The container ships now being built will sail at the speed of a passenger liner and be able to discharge and reload a cargo of up to 1,000 containers in a matter of hours. Their effective carrying capacity will be equal to that of a fleet of dry cargo ships using today's methods. The capital cost of the new container ships is usually beyond the means of individual shipping lines, which will have to join together in consortia to build and operate them.

Will trade expand fast enough to keep these ships busy? Can containers be filled with cargo both ways? How can a shipowner obtain a reasonable return on his conventional dry cargo ships? These are some of the questions which confront the shipping industry, where profits have been generally low for years. They are questions which vitally concern the Canadian exporter too.

Ironically, the situation has been forced upon shipowners by conditions ashore. Ships now spend up to two-thirds of their life in port, but only when they are at sea with cargo are they earning. There is limited scope for increasing the productivity at sea of existing ships, but considerable scope for improving turnround in port by better presentation of cargo, the wider use of pallet pooling schemes, the up-grading of labour and a reduction in work stoppages. Containerization is a radical step which removes the greater part of the handling from the port area and, also significant, puts it where security is easier to maintain.

A period of intense competition lies ahead: competition between ports, between types of vessels, between direct shipments and completing the journey overland, between palletized cargo and containers. What the exporter should look forward to is not an era of ocean freight bargains (containerization is expected to do no more than hold rates steady) so much as faster delivery, more careful handling and, perhaps, less paperwork.

Keeping Containers Moving

Because they are so versatile, containers present management with special problems. Just how efficiently the owner can keep track of a box which moves freely between truck, airplane, ship and freight car will make a big difference to costs—and therefore to the rates the exporter

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These Canadian Pacific containers are being transferred from rail flat cars to road trucks by means of the Steadman Railtainer system. Hydraulically-operated claws mounted on the vehicle in the centre move the container over to the truck alongside. Low-density traffic at outlying points can be handled efficiently by this method which was developed in Canada.

pays. Individual shippers may be able to arrange a shuttle service for their own containers, but for general traffic, complete mobility is essential.

Quick customs clearance is most important. Inspection should preferably be done inland as close as possible to the final destination. In some countries, Customs officials still have to be convinced that containers should move across frontiers as part of the transport system with some simple form of control, rather than being treated as imports until proved otherwise.

The long argument over standards and the eagerness of enthusiasts in the United States to get started resulted in the proliferation of containers which do not conform to the ISO (International Standards Organization) standards—8 feet x 8 feet cross section and length of 10, 20, 30 or 40 feet, with certain specified corner fittings. Only one container in eight in the United States conforms to ISO standards; Sea Land, for example, uses 35-foot containers. Non-standard containers, especially, should be clearly marked with exterior dimensions. The variations are often small, but they could disrupt the smooth unloading of a ship or the transfer of containers at a railroad. A similar problem arises where careless users have treated containers as handy boxes for storing things (they would have thought twice about using the company's new truck) and have allowed fittings to become damaged.

Legal Problems

The total transport concept implicit in containerization can only develop freely if it rests on a sound basis in law. There are important differences between the laws of various countries governing overland transport and these laws must eventually also be harmonized with maritime law, a process which could take many years. Meanwhile, difficulties are being met as they arise.

Insurance companies have run into serious problems with insuring containers because damage or loss is seldom evident before the container is opened at its destination. If damage has occurred on the journey, rarely is it possible to fix responsibility with certainty on one of the carriers. This means, in effect, that the direct risk insurer (insurer for the consignee) is unable to sue the appropriate liability insurer (carrier's insurer) and has to pay the whole amount out of his pocket. He sets insurance premiums accordingly. Such a situation is avoided when one of the carriers accepts responsibility for the entire journey. The direct risk insurer can then reduce the premiums because, in the event of a claim, he can recover from the liability insurer. A low incidence of damage is usual in containerized shipments—provided, of course, the containers have been properly packed in the first place. (The contents have to stand up to shunting, braking and the motion of a ship at sea—heavy pieces left unsecured in a loosely packed container can do extensive damage. Also, the usual precautions have to be taken against contamination from other cargo in the container and sweating during temperature changes.)

Putting Canada's Viewpoint

It is in the long-term interest of the exporter to harmonize his business with world trends, to profit from the new opportunities changes bring. Acting alone, however, he can do little to influence the pattern of events.

On his behalf, associations of various kinds and government agencies have been attending meetings in many parts of the world. The Canadian Standards Association, for example, has taken an active interest in the work of the International Standards Organization which drew up standards for intermodal containers. Canadian shippers, shipping organizations and port authorities have constantly been in touch with each other and their counterparts abroad. Officers of the Department of Trade and Commerce have represented Canada at international conferences on containerization, such as the United Nations Interregional Seminar on Containerization and Other Unitized Methods for Intermodal Movement of Freight, held in London, England, in May of this year. Information flows back to the Canadian business community.

The Individual Exporter

Long-term planning is one thing, but moving next month's production is another. The export manager can do little about the shape, presentation or quantity of the goods he must ship in the immediate future. However, forwarding agents, inland carriers and steamship lines can often help him choose the best method in the circumstances and suggest changes which would make later shipments cheaper or quicker.

A thorough appraisal of shipping methods should take into account all the alternatives—not only different means of transport, but the changes possible at both the production and distribution ends. Would it be better to assemble an awkwardly-shaped, fragile product at its destination? Would a minor change in the product or pack permit you to put in another row? Is it cheaper in the long run to cut out overseas warehousing and use air freight? Can you give the buyer adequate incentives to make him take larger lots? Are you, in fact, putting your sales effort in the right place or are you just picking up business no one else wants? Do containers make it possible for you to export new products—for example, your bulk chemicals or frozen goods?

When you consider containerization, consult the experts and look at the various possibilities. For international trade, the 20 x 8 x 8 foot container is the most popular, but larger containers are also used in Europe where railways and highways permit. There are smaller containers of various sizes.

If you do not have a full container load, you can still ship in a container. Your freight forwarder will consolidate several consignments and they will go as far as possible in a container. Where several Canadian manufacturers are selling to the same importer, they may go the whole way.

Exporters having a steady movement of products overseas may consider owning or leasing containers. Keeping track of the whereabouts of a fleet of containers and getting them back according to a planned schedule may involve more administrative work than anticipated. This is especially true for the exporter selling to a number of foreign markets. The exporter can rely on the shipping line directly or his forwarding agent to provide containers. On some trade routes, shipping lines supply containers free of charge, while on others a rental fee applies. Freight is normally charged on the weight of contents. (In your calculations don't forget that unless the customer specifies shipment in containers, you might have to pay any heavy lift charges at the other end too.)

Ask Your Friends

Canadian exporters and forwarding agents can provide you with practical help from their own experience. We talked with Denning Freight Forwarders Ltd. in Montreal earlier this year about leasing containers. They have shipped some 700 containers of various kinds in the past four years and are agents for Container Transport International Inc. Denning reported a steady growth of its leasing business and believed that there was plenty of scope for further expansion.

We also talked to Mark Shor, Vice-President of United Cargo Corporation (Canada) Ltd. UCC is part of the Smith Transport Ltd. group of companies which are wholly-owned subsidiaries of the Canadian Pacific Railway Co. His firm quotes all-inclusive charges (calculated on the pound or dozen to help exporters price their exports accurately). Again, we heard of encouraging results and confidence in the future.

Steadman Industries Ltd. of Rexdale put on a small demonstration for us to show how their side-transfer system works. We saw containers being loaded onto freight car chassis from a truck in just over a minute each and were impressed with the simplicity of the operation. The Steadman Railtainer system is being used by both Canadian National and Canadian Pacific to handle containers with express freight and is also in operation in parts of the United States and overseas. It is well suited to the volume of traffic typically encountered under Canadian conditions and has the advantage of a comparatively low capital cost. Steadman also makes containers.

On the same occasion we discussed the broader aspects of containerization with Lt. Col. H. Travers Lake, general traffic manager of Levy Industries Ltd. and a man with experience of transportation problems in many parts of the world. He was particularly concerned about the lack of specialized container-handling facilities at Canadian ports and feared that, unless the situation were remedied, competition from over the border would seriously affect the volume of trade handled by our ports. If you import components, you will find Lt. Col. Lake's article on containerization of import shipments, published in the *Importers Bulletin* of March 8, 1967, most informative. (The address of the Canadian Importers Association Inc. is 2249 Yonge Street, Toronto 7.)

Moffats Limited of Weston, Ontario, uses regular container-ship sailings to supply its associate company at Uddingston, Scotland. The firm finds that door-to-door container service has solved many of its transport problems. Damage has been practically eliminated, the domestic pack is adequate, and 35-foot containers can be loaded easily with a forklift truck. Moffats has saved on both freight and insurance costs too.

Morrison-Lamothe Limited of Ottawa ships pies and frozen goods in refrigerated containers to London, England. It does so because damage is less and the goods are kept constantly refrigerated from factory to customer's warehouse. The containers

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cross the Atlantic aboard Canadian Pacific ships.

Its customer specified containers, so Samsonite of Canada Ltd. has been using containers to ship luggage to Britain. Experience has shown them that, especially with containers of 300 to 400 cubic feet capacity (the size that you load five to a truck), it pays to try different types and sizes until you get the best utilization of space for your product.

Proctor-Silex has been using 20 x 8 x 8 foot containers for shipping their toasters through Toronto to Europe. They load the individual packs into the container at the plant, and customers make up their master packs at the other end to suit local needs. Proctor-Silex has reduced the cost of shipping a toaster to Europe by about one-third.

We have mentioned a few of the companies we have talked to, but there are many more exporters willing to help their friends with advice. Trade associations also have much helpful information to offer. However, you must base your decisions on your product, your location, and your customer's needs.

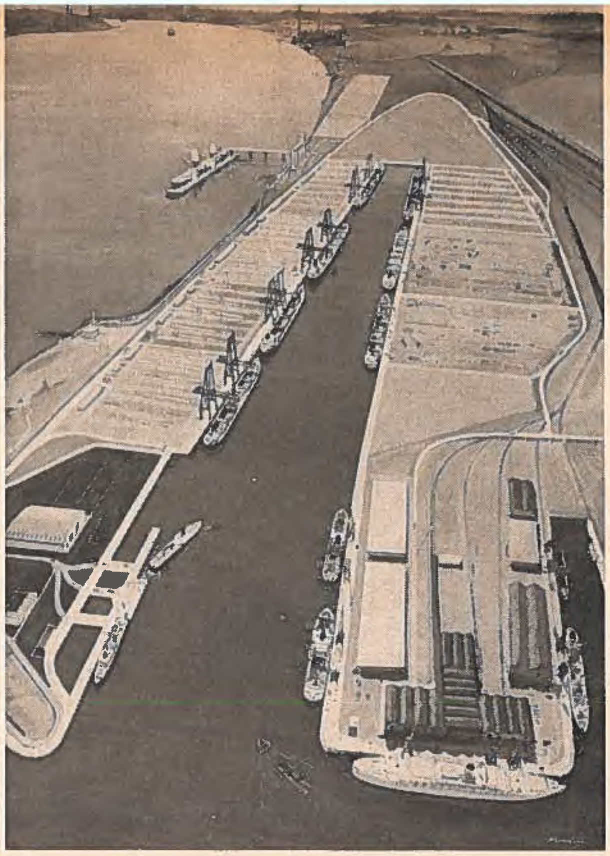
Jumbo Jets and Liner Trains

Exports from Canada by air have increased rapidly in recent years. Most freight is consolidated by the airline into large pallet loads before it is put aboard or is stowed semi-manually in the belly of the aircraft. Already, airlines offer an incentive to encourage shippers to pack in certain standard-sized boxes. As the carrying capacity of aircraft increases and flying time is cut, the problem of sorting cargo and clearing it through Customs will become more acute. The big cargo jets will be able to handle large containers and the work of stowing them will move away from the air terminal to the factory or freight forwarder's depot, just like container traffic by sea.

On the railways, the practice of shunting and remaking trains until the individual freight cars arrive at their final destination will be challenged by the technique of liner trains. These trains move as a unit between two points and run to fixed schedules; the shipper simply books space on board the train and delivers his goods to the railhead in containers. Such trains are already in regular service in Britain and the European trunk system TERRE is getting under way; they will act as a powerful magnet in drawing trade to their terminal ports, which is why Halifax has stressed the importance of liner trains in North America.

The container has indeed thrown ideas on transportation back into the melting-pot. The various operations required to move goods from producer to consumer can no longer be properly considered in isolation; they must be taken together as parts of an organic whole. The concept of the transport mix in coming years will surely become as familiar and as important to good management as the marketing mix is now. ●

A fork lift truck is used to load a 35 foot container at Moffats Ltd., factory in Weston, Ontario, for shipment to the associate company in Scotland. Moffats has found that containerization has made loading easier and saved money on packing, insurance and ocean freight.



Tilbury Prepares for Container Age

Threatened loss of container traffic to major European ports has spurred on the Port of London Authority to develop its own container facilities. Work at the chosen spot is well advanced. This artist's impression emphasizes spacious layout and good access.

L. N. LAUNDY,
Commercial Officer, London.

BRITAIN is making a determined effort to avoid being left behind in the technical revolution that has been taking place in the ports of the world since the advent of the container age.

Because of the advanced state of container berths in European ports, particularly Rotterdam, there is a real danger that transatlantic container traffic might bypass British ports. They would then become merely feeder ports receiving transshipments from major European container terminals. Small container ships and feeder ships are already calling at a number of British ports in increasing numbers but transatlantic container shipments are sent to European ports for loading onto oceangoing vessels.

To counter this threat, the Port of London Authority is forging ahead vigorously with a £20 million development program destined to make Tilbury Britain's first and major ocean container port, with facilities on a scale which will put it among the world leaders of the container revolution. Construction started in 1965 and early in 1968 the first large ocean container ships are due to start a scheduled service between Tilbury and New York. This will be followed later in the year by services to other parts of the world.

PLA Does Planning

Much of the credit for the Tilbury venture is due to the initiative of the Port of London Authority which, in anticipation of the container era, embarked on an extensive research and planning program in order to estimate future trade levels, their nature, and the port requirements for handling them.

In conjunction with the research carried out by its Operational Research and Development Department, the PLA engaged outside consultants to make an extensive survey of the trade and traffic flows to and from ports in Britain. For this impartial and scientific study, the first of its kind in this field, the consultants approached 10.000 firms in the manufacturing and distributing trades. They received a 90 per cent response to their questions —a very high percentage by market research standards.

The results of this independent survey—the much publicized *PLA/Martech Report*—established that:

1. The dominant industrial area for international trade is London and southeast England—and not, as generally thought, the Midlands or the northwest.

2. Over 30 per cent of exports and imports originate or end within southeast England.

3. More than a quarter of the Port of London's trade originates within 30 miles of the port and more than half within 100 miles.

4. The Port of London also attracts considerable trade from northwest, northeast and southwest England, Scotland and South Wales. The only variation in this general pattern is in exports to North America, where Liverpool is the leading port.

The facts which came to light as a result of the *Martech Report* and the PLA's own research program revealed a potential ocean container traffic in and out of the Port of London of several million tons a year. These findings convinced the PLA that a major expansion of the London docks was necessary both in its own and the national interest and that substantial new capital investment was justified.

Why Tilbury?

Tilbury was the obvious choice for the type of port complex the planners had in mind. Ideally situated on the north bank of the Thames, some 25 miles down-river from the other four great London dock groups, Tilbury was ripe for development. It had the two main requirements necessary for a modern container port: an adequate depth of water and plenty of land space adjoining the berths.

It is due in large measure to the foresight of the Port of London Authority's predecessors, the East and West India Dock Company, that the modern development and extension of Tilbury dock is possible. It was in 1882 that this company, obviously aware of the advantages of a dock system nearer to the sea, started to build a new dock at Tilbury marshes and acquired the surrounding land for future expansion.

Since the formation of the PLA in 1909 there has always been some port development at Tilbury but up to now no major advance, apart from the construction of the entrance lock and drydock in 1928.

Development in Three Stages

The total development at Tilbury will consist of nearly two miles of deep-water berths and it is the largest single dock development in Britain since the King George V dock was opened in 1921. Seven new ocean container berths (six deep sea and one short sea) are under construction and the first of these will be operational early in 1968. The whole project is due for completion in 1969.

Stage one—a £3 million project, has been completed and is in operation. On the west side the two roll-on roll-off berths (Nos. 35 and 37), specially designed for the ferry service operated by Atlantic Steam Navigation Co. between Tilbury and Antwerp and Rotterdam, came into use in July 1966. On the east side there are two new deep water berths with a total length of 16,000 feet, backed by two modern pillarless-span sheds. It is claimed that these transit sheds are probably the best in the world.

Stage two—will cost in the region of £10½ million and is well under way. The first ocean container berths will be ready in 1968. All of these berths will be equipped with gantry cranes; four massive £200,000 Vickers Paceco "Portainers" and twelve straddle carriers have already been ordered. Along the west side, where there is 2,400 feet of quay length backed by 44 acres of land, three ocean container-ship berths are under construction. The extensive hinterland behind these berths will be ideal for the handling of containers.

The east side has 2,100 feet of quay length and some 60 acres of land. The PLA has already leased two substantial areas to Canadian and Swedish companies for bulk cargoes—mainly packaged timber, wood pulp, kraftboard paper and allied products. It is estimated that the throughput for these berths will be five times the conventional throughput.

Stage three—approved by the Minister of Transport in October 1966, consists of a straight-line extension of stage two by 1,000 feet of deep water quay on either side, at a cost of £5½ million. This will provide at least two more container berths.

In addition there are two new developments in the old part of Tilbury docks. Number 26 berth has been redesigned and reconstructed to handle roll-on ferries of the England-Sweden Line consortium for a new London to Gothenburg service. This is primarily a service ferry for passengers and their cars and much of the cargo is in containers which are driven in and off the ships by hydraulic platform trucks. In September 1966 the first ship to use this berth was discharged and loaded within six hours, an operation which used to take up to six days for the old ships on the London-Gothenburg service.

Number 34 berth has also been redesigned for the purpose of handling packaged timber and is the first terminal in Britain especially provided to handle full shiploads of packaged timber from the Canadian Pacific coast. Outputs at discharge ex ship to quay of up to 27 standards (81 tons) per gang hour are being achieved and a typical vessel recently discharged 9,000 tons of packaged timber and plywood in 44 working hours. This is less than half the time it would have taken to discharge a similar cargo in conventional piece form by conventional methods.

Bid to Recapture Grain Trade

A new £3 million grain terminal is to be built into the river. The discharging plant, which will be one of the fastest in the world with a rated maximum discharge of 2,000 tons per hour, will consist of two combination dual-purpose discharging towers 180 feet high, modelled on the lines of those used in Canada, each with a marine leg bucket elevator and ancillary pneumatic discharging plant working independently. The terminal's jetty will be 900 feet long and constructed to take the largest bulk carriers likely to use the Port of London in the foreseeable future. It is estimated that a 35,000-ton bulk carrier will be completely unloaded in 32 working hours. The terminal will be as efficient as any yet built in Europe and although initially it has been planned for up to 35,000-ton carriers, it will be possible to take 45,000-ton carriers by additional dredging.

It is expected that the lower freight rates which will result from the quick and efficient discharge of freighters should enable the Port of London to recapture most of the grain transshipment trade lost to Antwerp, Rotterdam and Amsterdan since the 1939-45 war.

New Deal for Dock Labour

Apart from plans for fast cargo-working and more efficient shore handling of landed cargo, the PLA has not lost sight of the need to improve working conditions for dockers. The talks with dock labour on manning and pay scales are regarded as just as vital as negotiations with shippers and shipowners, and the PLA is negotiating with the unions to secure economic working methods. The new canteen building at Tilbury docks is described as "one of the finest of its kind in any part of the world" and other amenities for the dockers are already scheduled.

Special Rates for Containers

To encourage modern methods of transportation, the PLA has decided to break away from the traditional method of transportation charges and at its special container berths is quoting a single inclusive rate per container of given size to cover all port charges, irrespective of its contents. This single rate includes all the normal port charges on ship or goods and will enable the containership operators to quote a single "door to door" charge.

Inland Haulage

The Port of London Authority has agreed with the Board of British Rail that a new Freightliner train terminal will be constructed at Tilbury within the dock area. This depot will be handling container traffic from all main British rail centres and will be ready early in 1968. It has been estimated that when all the container berths at Tilbury are operational, the ultimate Freightliner potential for British Rail could be in the region of 100 trainloads weekly.

There is also a very good road network at Tilbury which will enable lorries to go to and from the docks to anywhere in the country without passing through the heavily congested London area. In addition, the north bank of the Thames, on which the dock is situated, is connected with the south side by the new Dartford-Purfleet road tunnel.

Other British ports also have plans for ocean containership terminals. The National Ports Council has made recommendations to the Minister of Transport in relation to a number of major schemes put forward by various port authorities. These should ensure an adequate number of container berths strategically placed at British ports and the construction of deep sea berths is already under way at both Liverpool and Greenock.

However, Tilbury has already obtained a commanding lead and there are a number of good reasons to substantiate the Port of London Authority's claim that Tilbury alone among British ports has a real chance of becoming a major European terminal, capable of feeding Continental ports as well as catering to British trade. London is the nearest British port to the industrial areas of northwest Europe. The great European ports like Rotterdam and Antwerp are only 150 miles away from Tilbury and it would be possible for small, fast container ships to make the round trip from Tilbury to these Continental ports and back in 24 hours. This will enable large ocean container ships to turn round at Tilbury in a matter of hours, while the containers to and from the Continent are moved by the feeder services.

Whether in fact Tilbury will become Europe's foremost container port remains to be seen. Certainly there will be vigorous competition from other European container terminals, notably Rotterdam. But undoubtedly Tilbury is a port with a great future. ●

Norway's Answer to Containerization

THE latest word in shipping is "containerization". Norwegian shipowners however—and they own the fourth largest, and probably the most modern, merchant fleet in the world—have refused to convert to this system. Furthermore, they have developed their own new method.

Erik Heirung, assistant director of Fred Olson & Co., one of Norway's largest shipping lines, reports that his company has conducted a study of the entire field. It also had some painful experiences with containers. The result was the introduction of the fork truck-to-fork truck unitized method of shipping.

This method is based on the principle that small units are the best for efficient general cargo handling. The cargo is unitized on pallets, in crates, and in small containers up to about 6,600 pounds. Fork truck-to-fork truck handling of unitized shipments makes it possible to discharge some 3,000 tons of cargo in only six hours.

A number of Norwegian ships have been designed for this method of transport. In addition to conventional hatches for loading and discharging, these ships also have side-ports. The loading space inside the ships is divided into decks six feet high. The decks are flush and removal of hatch coamings and stanchions makes it easy to use the fork trucks.

This method eliminates manhandling the cargo. Fork trucks on the dock place the loaded pallets in the side-port and then fork trucks on board take each unit and stow it in one of the decks. Or alternatively, a pallet elevator on board may serve all decks. Thus, expensive dock facilities to allow for the rise and fall of the tides are not necessary.

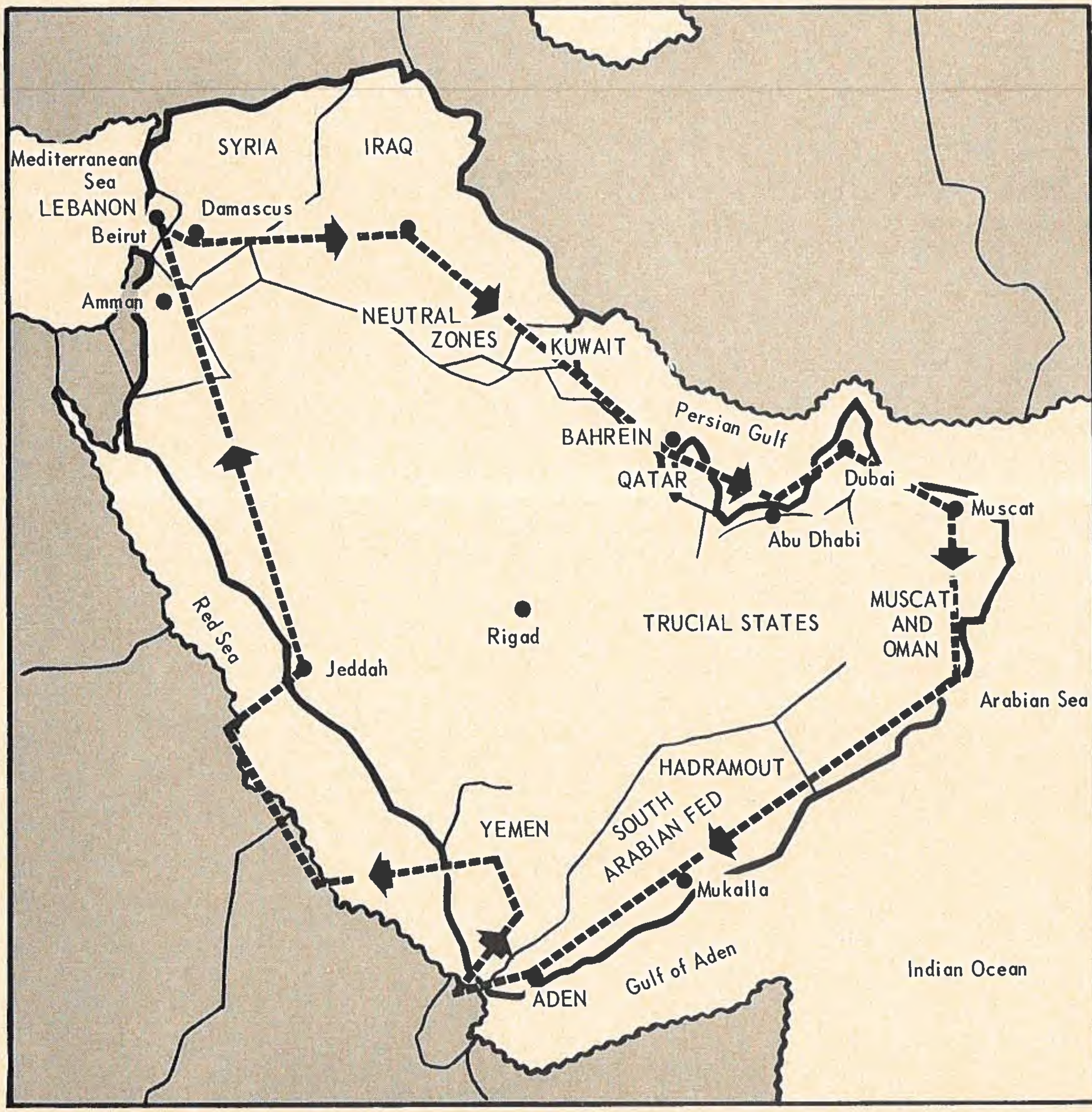
The smaller units used in the fork truck-to-fork truck system offer real savings in cargo handling when individual orders are too small to make up an unbroken unit for the containerization method. Packing and unpacking of trailers and containers at shipping terminals require considerable handling and increase labour costs. The fork truck-to-fork truck method, with its palletized units, avoids this problem and is therefore cheaper for shipment of smaller orders.

Small shipments which can be handled quickly also reduce storage costs. Buyers make more efficient use of expensive warehouse space by ordering just enough to meet the short-term demand and getting prompt delivery of subsequent shipments.

These are the arguments raised by the Norwegian shippers in favour of their method compared with containerization. Since the majority of Canadian exporters ship in comparatively small units this system merits careful study.

—DENNIS B. BROWNE,
Assistant Commercial Secretary, Oslo.

Markets in the Arabian Perimeter



The broken line shows the route the author followed on his tour of these Arabian Peninsula countries.

Last spring, the author toured the countries around the rim of the Arabian peninsula, from Kuwait to Yemen. Here is his report on his study of these markets and on the opportunities for Canadian initiative that he uncovered in a fast developing area.

I. V. MACDONALD, *Commercial Counsellor, Beirut.*

THE TRADITIONAL PICTURE of the Arab Middle East dies hard. In reality, unprecedented developments are taking place in many of the Arab countries and in some of them will bring per capita incomes to figures equal to or better than those in the United States and Canada today.

The basis of Arab progress and prosperity is chiefly the exploitation of ample petroleum resources. Governments in the area are, however, making increasingly enlightened efforts to diversify industry and sources of income and advance the social welfare of their people.

Ian Macdonald (second from left), discusses Canadian engineering services with prominent businessmen in Dubai, commercial centre of the Trucial States.

Kuwait

Farthest along the road to opulence is the State of Kuwait where, in less than one generation, the transformation into a prosperous and thriving urban society is being completed. This rapid rate of progress has involved a sustained high level of capital spending which in turn has provided excellent opportunities for overseas consultants, contractors and suppliers. Kuwait has also offered substantial amounts of short- and medium-term funds to financial markets in the more highly industrialized countries. Long-term loans to less affluent Arab countries are made available by the Kuwait Fund for Arab Economic Development which sponsors such projects as railway equipment in Sudan, hydro- and thermal-electric projects in Jordan, and an oil pipeline in Algeria. Many others are being considered, including water, power and port projects in Lebanon involving a prospective loan of $43 million. There could be opportunities for Canadians in these projects.

Canadian contributions to Kuwait's development in the past have been confined to consulting engineering services and to a somewhat limited trade in automobiles, oil refinery equipment, household appliances, groceries, plywood, clocks, tires, brake linings, wheat, barley, engines, and sulphur. The future should see much greater penetration by Canadian companies in such fields as oil-drilling services, construction of marine installations, mass-produced housing, light manufacturing in joint ventures, sewerage and water installations, pipeline construction, and fisheries development.

It is gratifying to note the growing strength of Canadian interest in Kuwait's development as evidenced by the increasing number of Canadian business visitors—consulting engineers, exporters, contractors, bankers and financial experts.

Specific projects in Kuwait attracting Canadian companies at the present time are: the Shuwaikh port extension; the Kuwait waterfront redevelopment program (Corniche Project—consultants: Project Planning Associates,

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The author, visible in the background, attended a luncheon with the ruler of Dubai, Sheikh Rashid Bin Said Al Maktoum, and the rulers of other Trucial States. Modern construction in background reflects the progress of this new oil producing state.

Import Tariffs

Kuwait

A duty of 4 per cent ad valorem is levied on all dutiable goods imported into Kuwait except liquor and liquefied petroleum gas (100 per cent). Some 20 items are listed as exempt from customs duty. Preferential rates apply to specified products imported from certain Arab countries. No surcharges. The rate of duty and the exemptions are set out in a Notice published by the Customs Department.

Bahrain

Rates of duty are 5 per cent ad valorem on all foodstuffs and necessities, 10 per cent on non-essential goods, and 35 per cent on alcohol and tobacco.

Qatar

General rate of 2½ per cent ad valorem applies to most goods. Duty on tobacco is 10 per cent, on beer, phonographs and phonograph records 15 per cent, and on liquor 30 per cent. There are minor port charges, but no surtaxes and no preferential duties.

Trucial States

Includes seven Sheikhdoms in the Persian Gulf region—Aiman, Abu Dhabi, Dubai, Fujairah, Ras al-Khaimah, Sharjah and Umm-al-Qaiwain. Dubai applies a 4.625 per cent ad valorem rate on all items imported with the exception of watches (1.25 per cent ad valorem) and gold bullion (free). Goods imported by air into Dubai are dutiable at 2 per cent. Sharjah's duties are 2.5 per cent for imports by sea or land, and 2 per cent by air. Abu Dhabi applies a 2 per cent duty on all imports. No duties levied by the other states. No surtaxes; no preferential duties.

Toronto); the proposed 100-mile water pipeline from the Euphrates; large-scale, low-income housing construction; a microwave link with Basra, Iraq; underground telephone cables for Kuwait city; troposcatter communication with Bahrain/Damman; small brackish water purification plants; aerial and irrigation surveys; expressway construction; gas pipeline network consulting and contracting services, including re-injection of gas underground; television consulting services; chlorine manufacturing plant; a 500-mw. thermal (four units) electricity-desalination plant with a 20 million-gallon fresh water capacity, and so on. (Kuwait production of desalinated water now totals 11 million gallons per day and this is expected to rise to 50 million by 1970.)

Major industrial enterprises already completed in Kuwait include the world's largest desalination plant, an oil refinery, a cement factory, a spiral-weld steel pipe plant, petrochemical fertilizers (urea and ammonium sulphate), a modern flour mill, an asbestos cement factory, a fisheries company that is already exporting shrimps to the United States, and a state experimental farm.

Canadian companies will find Kuwait Government departments and purchasing offices of the concessionaire oil companies (Kuwait Oil Co. and Arabian Oil Co.) receptive to their offers, which are best made with the assistance of a local representative.

Saudi Arabia

Travelling south along the Gulf past the oil-rich "Neutral Zone" (site of a new discovery by Aminoil-Getty) and passing the world's richest offshore oilfield at Safaniya, one soon arrives at the Island of Bahrain and the nearby installations of the Arabian American Oil Company in Saudi Arabia, around which have grown up the triplet cities of Dhahran, Dammam and Al-Khobar.

In many ways the modernization of the major cities of Saudi Arabia has paralleled that of Kuwait. Moreover, the influence of Aramco in the Eastern Province of Saudi Arabia is readily recognized. It carries on many development activities not directly associated with petroleum and therefore offers a prospective market for

Canadian goods and services of many types. (See article "Aramco Buys World-Wide" in the August 5, 1967, issue of *Foreign Trade.*)

Far more important, however, are the comprehensive and well-financed economic and social welfare programs of the Saudi Arabian Government, in the course of which substantial amounts are being spent on medical services, housing, education, defence, ports, transportation, communications, roads, electrification, mineral exploration and development, fisheries, resources surveys, etc. These are accompanied by encouragement of manufacturing industry and joint ventures with foreign companies.

Saudi Arabia is a good market for construction machinery, equipment and supplies, consulting services, motor vehicles, building materials, air conditioners, pumps, school and hospital equipment, pharmaceuticals, diesel or gas-powered generators, marine equipment, concrete block manufacturing machinery, bulk and packaged foods, communications equipment, and even women's sportswear.

Projects of interest to Canadian contractors and suppliers include port construction at Dammam, satellite earth station for Jeddah, international air terminal construction at Riyadh and Jeddah, feeder airport construction, roads, a complete national university at Riyadh, improved telephone and electricity services, grain elevator construction, flour mills, defence installations, drilling programs, irrigation schemes, agricultural modernization, pipeline contracts, joint manufacturing ventures, mineral and oil concessions.

The country has adequate reserves and current earnings of foreign exchange, a very favourable balance of trade, few import restrictions, and generally low rates of duty. Established industries include oil refining, cement production, furniture manufacturing, construction, fish processing, printing and bottling. These will be augmented in the near future by production of petrochemical fertilizers, plastics, iron and steel, tires, chemicals, and various light industrial products. Foreign investors are welcomed as partners in new industries, and provision has been made for favourable tax treatment and unrestricted repatriation of dividends and capital. With its vast area of 800,000 square miles, its progressive government and business leadership, its rapidly growing wealth, its promise of future discoveries, and its friendship towards the West, Saudi Arabia surely presents a most attractive challenge to imaginative Canadian businessmen. To date only a few Canadians have investigated the potential but they promise to be well rewarded.

Qatar

The State of Qatar adjoins the oil-producing areas of the Eastern Province. Although the volume of oil produced there has been smaller, output is expected to rise significantly in the near future. Qatar has made economic progress and offers a small but regular market for Canadian consumer goods and a periodic market for construction contracts and equipment.

Abu Dhabi

Nearby are the Trucial States, the richest, most famous and most colourful of which is Abu Dhabi. The new ruler of Abu Dhabi, Sheikh Zaid bin Sultan Al-Nahayyan, has embarked on an accelerated development program in which the Canadian consulting engineering consortium, Cansult Ltd., is playing a major part in airport, bridge and harbour design and

Ian Macdonald visited the site of the proposed harbour project for Abu Dhabi, richest of the Trucial States. The harbour has been designed by the Canadian consulting engineering consortium, Cansult Ltd., which is playing a major part in the state's development planning. The author is contemplating cargo offloaded on the beach; the cow is just contemplating.

construction supervision. Other consultants have been employed on town planning, housing, schools, hospitals, water pipelines, and road construction, all of which offer opportunities for Canadian contractors and equipment and material suppliers.

The boom in Abu Dhabi shows every indication of continuing for several years and will soon raise the per capita income of its 20,000 people to the highest level in the world. It is obviously a market well worth watching by Canadian exporters of luxury products, consultants, contractors and suppliers of equipment. It is also a potential source of investment funds.

Visitors to Abu Dhabi may have difficulty obtaining accommodation there at the single hotel (although the Ruler has made available his guest-house to many business visitors from overseas). When there is no accommodation, it is possible to reach Abu Dhabi by taxi from picturesque Dubai.

Dubai

Dubai is a well-developed commercial centre serving the Trucial States and trading regularly as far as Kuwait, Pakistan and India while maintaining connections with Muscat and Oman. Harbour facilities are to be improved, new roads have been completed or are under construction, a new international airport terminal is being designed by a British architect, three modern hotels have been built, new apartment buildings are under construction, large investments are being made in offshore oil development, and local investors are expressing interest in establishing light manufacturing operations.

The population is expanding rapidly with the influx of foreign families, technicians, shopkeepers and service personnel. Dubai should be cultivated by Canadian consultants, contractors and exporters because of its growing importance and as a centre of contact with the less-developed Sheikdoms of the Trucial States—Sharja, Fujaira, Ajman, Umm-al-Qaiwain, Ras-al-Khaima—all of which occupy territory geologically favourable to oil production.

Part two of this review of markets on the Arabian peninsula will appear in our next issue—The Editor.

Oil Companies in the Arabian Peninsula

	Per cent ownership
Bahrain	
The Bahrain Petroleum Company Limited	
Standard Oil Co. of California	50
Texaco Inc.	50
	100
Kuwait	
Kuwait Oil Company Limited	
BP (Kuwait) Ltd. (British Petroleum Co. Ltd.)	50
Gulf Kuwait Company (Gulf Oil Corporation)	50
Kuwait Shell Petroleum Development Co.	
Royal Dutch/Shell	100
Qatar	
Qatar Petroleum Company Limited (same ownership as IPC Ltd.)	100
Shell Co. of Qatar Ltd.	
Royal Dutch/Shell	100
Saudi Arabia-Kuwait Neutral Zone	
American Independent Oil Company	
Philips Petroleum Company	37.34
Signal Oil & Gas Company	33.58
Ashland Oil & Refining Company	14.13
J. S. Abercrombie	7.07
Globe Oil & Refining	3.53
Sunray Mid-Continent Oil Company	2.94
Pauley Petroleum Inc.	1.41
Getty Oil Company Limited	
J. Paul Getty interests	79
Other stockholders	21
Arabian Oil Company	
Saudi Arabian Government	10.0
Kuwait Government	10.0
Kansai Power Company	7.3
Tokyo Power Company	6.9
Yawata Steel Company	6.9
Fuji Steel Company	6.9
Nippon Kokan	6.9
Other companies and individuals	45.1
Saudi Arabia	
Arabian American Oil Company	
Standard Oil Company of California	30
Texaco Inc.	30
Standard Oil Co. (N.J.)	30
Socony Mobil Oil Company	10

	Per cent ownership
Abu Dhabi (Trucial States)	
Abu Dhabi Marine Areas Ltd.	
British Petroleum Co. Ltd.	$66\frac{2}{3}$
Compagnie Française des Pétroles	$33\frac{1}{3}$
Abu Dhabi Petroleum Company (Same ownership as IPC Ltd.)	100
Fujaira (Trucial States)	
Bomin Mineralolgesellschaft (oil & mineral concessions)	
Ras-Al-Khaima (Trucial States)	
Union Oil (onshore & offshore concessions)	
Southern Natural Gas	
Sharja, Ajman, Umm-al-Qaiwain (Trucial States)	
John W. Mecon (onshore & offshore)	
Union of California (onshore & offshore)	
Dubai (Trucial States)	
Dubai Petroleum Company (onshore concessions)	
Continental Oil	55
Sun Oil	$22\frac{1}{2}$
Deutsche Erdol	$22\frac{1}{2}$
Dubai Marine Areas Limited (offshore concessions)	
Continental Oil	35
British Petroleum	$33\frac{1}{3}$
Compagnie Française des Pétroles	$16\frac{2}{3}$
Deutsche Erdol	10
Sun Oil	5
Muscat and Oman	
Petroleum Development (Oman) Limited	
Shell	85
Partex	15
Wintershall AG (outside territorial waters)	
Dhofar (Muscat and Oman)	
Concession shared by:	
John W. Mecom	
Union of California	
Continental Oil	

Commonwealth and Preferential Tariff Changes in the Kennedy Round

In the July 1, 1967, issue of "Foreign Trade", the results of the Kennedy Round as they affect Canadian exports to a number of leading markets were published. Since then, Britain and other Commonwealth and preferential countries have announced the results of their participation in the Kennedy Round. The effect upon Canadian exports of Kennedy Round concessions extended by such countries is summarized below. For further information, write to the Commonwealth Division, Office of Trade Relations, Department of Trade and Commerce, Ottawa.

Britain

Because the purpose of the Kennedy Round negotiations was to reduce trade barriers through reductions in the levels of most-favoured-nation tariffs it necessarily follows that some narrowing of preferences enjoyed by Commonwealth countries was to be expected.

At present approximately 95 per cent of Canada's exports to Britain enter that country free of customs duty, and 60 per cent of total Canadian exports consist of items granted free entry from all sources. The other 35 per cent enter free under Commonwealth preference, which means that goods of non-Commonwealth and non-EFTA origin are subject to higher tariffs than Canadian goods. Industrial goods originating from EFTA countries enjoy preferential tariff treatment, as do Canadian goods. The remaining 5 per cent of Canadian exports comprise goods that are subject to payment of Commonwealth preference tariffs but usually at lower rates than those payable on goods imported from countries not entitled to preferential tariff treatment.

The Kennedy Round concessions do not in any way alter the terms of access for goods which are imported free of duty from Canada. The British Kennedy Round concessions have, however, reduced MFN tariffs on most goods enjoying preferential tariff treatment, thus reducing the preferential margins. The reductions vary from product to product but in many cases amount to 50 per cent. Despite these reductions, however, Canada will continue to enjoy significant preferential tariff treatment over a wide range of exports, mainly manufactured goods and processed foods.

A number of products were excluded from the British Kennedy Round tariff negotiations. Those of particular interest to Canada are mostly fish products, many processed food products, soyabean oil, wheat flour, and fabrics and articles of apparel not containing manmade fibres.

For those goods subject to preferential duties, such as motor vehicles and parts, goods containing manmade fibres, musical instruments, watches, and spirits or goods containing spirits, reductions have been made in the MFN tariffs, with proportionate reductions in the preferential tariffs. Canada will therefore continue to receive preferential tariff treatment for most of these goods and will also enjoy more favourable tariff treatment.

The situation of individual industries is as follows:

Chemicals—British MFN tariffs will be reduced generally by 50 per cent or if the present rate is over 25 per cent to 12½ per cent, conditional upon the United States abolishing the American selling price system of valuation for benzenoid chemicals. If the ASP system is not eliminated, a smaller reduction will be implemented.

Agriculture—MFN tariffs on almost all agricultural products will be cut by 25 to 50 per cent. The 5 per cent MFN tariff on soyabeans has been eliminated. The margin of preference between the preferential and MFN tariff on unmanufactured tobacco will be reduced by 25 per cent conditional upon the United States abolishing ASP on benzenoid chemicals.

Textiles—Tariff reductions ranging up to 33⅓ per cent will be made in MFN rates for articles in the textile industry which contain manmade fibres. Proportionate reductions will also be made in the Commonwealth preferential tariffs. The MFN tariffs on cotton fabrics were not reduced in the Kennedy Round. These products enter from Canada free of duty.

Forest Products—Britain will make reductions in these tariffs ranging between 15 and 20 per cent for paper and up to 50 per cent for wood products. The eight shillings per standard MFN duty on rough lumber will be eliminated.

Metals—In this field, tariff reductions ranging from 20 to 50 per cent were negotiated.

Machinery, Electrical Goods—Tariff reductions ranging from 25 to 50 per cent are general in the machinery and electrical goods and equipment sector of the tariff.

Motor Vehicles and Parts—MFN tariffs will be reduced from 6 to 50 per cent, with proportionate cuts made in preferential tariffs.

Other Manufactured Goods—On most of these, MFN tariffs will be reduced by 50 per cent.

It is planned to make the British tariff concessions effective in stages on the following dates:

July 1, 1968—40 per cent of reduction
Jan. 1, 1970—20 per cent of reduction
Jan. 1, 1971—20 per cent of reduction
Jan. 1, 1972—20 per cent of reduction

The table on page 17 outlines major British tariff reductions of interest to Canada and gives the value of exports in these items.

Australia

Australian concessions in the Kennedy Round apply to some 95 items and involve reductions in MFN tariffs or margins of preference or the binding of existing MFN duty-free treatment. Where the margins only are bound, Australia is not committed to maintain the absolute levels of the preferential and MFN rates. The reduction of margins of preference involved, in some instances, reductions of MFN tariffs and in others, increases in preferential tariffs. On a number of items the Australian concessions are dependent upon the completion of negotiations with the EEC.

The principal Canadian products affected are wall panelling, some cotton fabrics, knives, cash registers and specified electrical equipment for vehicles. For most of these products the margins of preference have been either reduced or eliminated. See the table on page 18.

New Zealand

New Zealand concessions in the Kennedy Round are selective in items involved but some 475 items were negotiated. Reductions in MFN tariffs and preferential margins were negotiated and selected existing duty-free MFN tariffs were bound. In some cases where MFN tariffs are to be reduced, proportionate cuts are to be made in preferential tariffs. In the few cases where the preferential margins only are to be bound, New Zealand has not contracted to maintain the MFN and preferential rates at absolute levels.

The principal items of interest to Canada which were negotiated are sausage casings, canned sardines, monacids, papermakers' felts, and papermaking machinery. For a number of these items the margins of preference that Canada enjoys are to be reduced but for sausage casings and some fabrics the preferential tariffs are to be reduced. See the table on page 19.

South Africa

South Africa made concessions on 14 tariff items. On two of these, the most-favoured-nation rates have been bound at their existing levels. For all others, the MFN rates have been bound at levels lower than those now in effect. Canada pays the MFN rate on all these items. South Africa extends preferential tariff treatment only to a selected number of items from specific countries. Concessions are offered on two items which enter under preferential rates from Britain and New Zealand only, but the concessions relate to the levels of MFN rates. See the table on page 19.

India

In the Kennedy Round, India reduced duties by an average 35 per cent on eleven items. In addition, preferential rates of duty applicable to imports from Britain were eliminated for six items. Canada is subject to MFN tariff treatment in India. Items of interest to Canada in the Indian schedule are pumps, weighing machines, and selected types of machinery and parts, on which tariffs are to be reduced from 40 to 27½ per cent.

Malawi

Malawi's participation in the Kennedy Round was limited. Some 15 items were negotiated and largely consisted of bindings of present rates of duty. Main exports items in Canada's trade with Malawi were unaffected.

Ireland

Ireland negotiated in the Kennedy Round in connection with its current accession to the GATT. Approximately 530 items were negotiated under the MFN tariff but for the most part these consisted of bindings of existing rates of duty. In addition, existing duty-free treatment was bound on some 250 items under the MFN tariff. Special preferential tariffs (which apply to Canada) were also negotiated on some 40 items and these for the most part involved reductions of existing tariffs, usually by 10 per cent of the present rates. Canada does not currently have significant exports of items on which the special preferential tariffs were negotiated.

Jamaica

The new Jamaican schedule emerging from the Kennedy Round comprises reductions or bindings of present rates of duty on some 59 items. Tariff cuts range from approximately 25 to 50 per cent, with most reductions in the neighbourhood of 35 per cent. Former MFN tariff rates ranged between 5½ to 27½ per cent and were reduced to between 3½ and 15 per cent. Preferential rates of duty are to be reduced in proportion to the cuts applied to the MFN tariffs.

Main items subject to tariff cuts which are of interest to Canadian exporters were cellulose film and sheet, selected types of machinery, and steel cables. See the table on page 19.

Trinidad

The new Trinidad schedule emerging from the Kennedy Round comprises some 130 items. However, for over 90 items the Trinidad offer consisted only of bindings of present rates of duty. Reduction in tariffs were involved in only 40 items and in most cases represented full 50 per cent cuts. Canada has virtually no trading interest in items where tariff rates were reduced. ●

Major British Tariff Concessions of Interest to Canada

Item No.	*Brief Product Description*	*British MFN Rate of Duty* *Present*	*Final*	*Canadian Exports to Britain 1966 ($ million)*
02.01(B)(1)(b)	Edible offals, beef and calf, except tongues and sweetbreads	20%	10%	4.6
07.05(D)	Dried white beans	8%	4%	3.1
12.01(B)	Soya beans	5%	Free	10.4
16.04(C)	Canned salmon	5%	2½%	9.8
23.04(A)	Soya bean cake and meal	15%	10%	20.1
26.01(A)	Radioactive ores and concentrates	10%	Free	22.6
Chs. 28–29	Organic and inorganic chemicals, etc.	10–33⅓%	5–12½%*	25.5
40.02	Synthetic rubber	8–10%	4–5%	11.7
43.03	Fur goods and apparel	25%	20%	1.9
44.03(D)(1)	Softwood, pulpwood	8/-per standard	Free	2.4
44.05(A)(7)(a) 44.13(A)	Rough lumber, softwood Dressed lumber, softwood	8/-per standard 7½%	Free 5%	61.3
44.15(A)	Plywood	10%	5%	25.6
48.01(B)(1)	Kraft wrapping paper	13⅓%	10%	3.3
48.01(A)(1)	Liner board	12½%	10%	15.9
48.01(B)(3)(6)	Groundwood printing paper	16⅔%	15%	2.4
48.01(B)(3)(C) 48.05(A)(3)(C)	Writing and reproduction paper	16⅔%	15%	2.2
48.05(B)	Corrugated container board	12½–20%	10–18%	3.7
73.15	Carbon steel, sheet and strip	0–15%	0–12%	4.4
74.03	Copper bars, rods and shapes	10%	8%	2.1
75.05(B)	Wrought nickel anodes	10%	8%	30.0
76.02 76.03	Aluminum bars, rods, plates, sheets, etc.	12½%	8%	2.4
78.01(A)(1)	Lead pigs, blocks and shot	7/6 per ton	Free	10.0
79.01	Zinc blocks, pigs and slabs	10–33⅓%	5% to £1.10.0 per ton	27.0

*Conditional upon termination of the American selling price system of valuation of benzenoid chemicals by the United States.

Major British Tariff Concessions of Interest to Canada

Item No.	*Brief Product Description*	*British MFN Rate of Duty* Present	*British MFN Rate of Duty* Final	*Canadian Exports to Britain 1966 ($ million)*
84.06(A)(2) 88.02(B) 88.03(B)	Aircraft, aircraft engines, aircraft parts	14–16%	7–7½%	2.1
84.15	Refrigerators and refrigerating equipment	12–14%	7½%	2.1
84.17	Appliances for cooling food	8–16%	7½%	1.8
84.53 84.55	Punch-card sorters, tabulators, computers and parts	14%	7½%	4.1

Major Australian Tariff Concessions of Interest to Canada

Item No.	*Brief Product Description*	*Present Rates* General	*Present Rates* Preferential	*Final Rates* General	*Final Rates* Preferential	*Australian Imports from Canada 1965-66 (A $'000)*
18–06–900*	Chocolate and other food preparations containing cocoa, except beverages	47% primage 10%	22½% primage 5%	47½% margin bound	22½%	10
39–01–320	Plastic laminated rigid sheets for wall panelling	45% primage 10%	20% primage 5%	45% margin bound	20%	232
51–04–910	Miscellaneous woven fabrics of continuous man-made fibre, under bylaw	2.1c/sq.yd. or, if lower, 7½%	Free	Free rate bound	Free	16
55–09–390	Miscellaneous woven cotton fabrics, less than 6 oz/sq.yd.	2½%	Free	Free margin bound	Free	113
60–05–190	Miscellaneous knitted outer garments	52½% primage 5%	22½%	52½% margin bound	22½%	34
70–20–110	Sliver, rovings, chopped strand and mat of glass fibre	30% or, if higher, 12c/lb.	20% or, if higher, 12c/lb. less 10%	30% or, if higher, 12c/lb. margin bound	30% or, if higher, 12c/lb.	14
ex 73–02–900*	Ferro-alloys, excluding ferro-manganese	Free	Free	Free rate bound	Free	91
82–09–290	Table or kitchen knives	37½%	27½%	37½% margin bound	37½%	203
84–52–200*	Cash registers	10%	Free	7½% rate bound	Free	276
85–09–999	Miscellaneous lighting and signalling equipment for motor vehicles	37½% from Canada: 30%	27½%	37½% margin bound	37½%	14
85–23–100	Motor vehicle wiring harness	37½% from Canada: 30%	27½%	37½% margin bound	37½%	40
97–07–900	Fishing rods and tackle	55% primage 5%	17½%	55% margin bound	17½%	31

* Australian concessions on these items are dependent upon completion of negotiations with the EEC.

Major New Zealand Tariff Concessions of Interest to Canada

Item No.	*Brief Product Description*	*Present Rates* *MFN*	*Present Rates* *Preferential*	*Final Rates** *MFN*	*Final Rates** *Preferential*	*New Zealand Imports from Canada 1964-65 (NZ $'000)*
05-04-01	Sausage casings from hogs	$2.50/ 100 lb	$2.50/ 100 lb	$1.25/ 100 lb	$1.25/ 100 lb	106
16-04-06	Canned sardines	$2.08/ 100 lb	$1.25/ 100 lb	$1.25/ 100 lb	$1.25/ 100 lb	58
ex 28-03-00	Carbon	Free	Free	Free	Free	26
29-06-01	Phenol, pyrogallol	Free	Free	Free	Free	24
29-14-09	Miscellaneous monoacids	20%	Free	10%	Free	176
55-09-52	Miscellaneous dyed fabrics for apparel	15%	Free	7½-10%	Free	48
55-09-53	Miscellaneous printed fabrics for apparel	15%	Free	7½-10%	Free	86
55-09-61	Miscellaneous bleached fabrics for household use	15%	Free	7½-10%	Free	36
55-09-62	Miscellaneous dyed fabrics for household use	15%	Free	7½-10%	Free	20
55-09-63	Miscellaneous printed fabrics for household use	15%	Free	7½-10%	Free	20
59-17-09	Miscellaneous industrial fabrics	45%	25%	22½%	12½%	374
68-04-00	Millstones	20%	Free	10%	Free	32
84-06-27	Miscellaneous internal combustion engines	55%	20%	27½%	17½%	36
84-31-00	Papermaking machinery	20%	Free	10%	Free	198
91-06-00	Time switches	20%	Free	10%	Free	38

* In all these concessions, the MFN rates only are bound.

Major South African Tariff Concessions of Interest to Canada

Item No.	*Brief Product Description*	*Present Rate*	*Final Rate*	*South African Imports from Canada 1963 (R'000)*
37-02-90	Unexposed photographic film in reels	10%	5%	167
ex 84-53	Electronic digital computers and accounting machines operated in conjunction with punched cards	5%	2%	85

Major Jamaican Tariff Concessions of Interest to Canada

	Present Rates *Preferential*	*Present Rates* *MFN*	*Negotiated MFN Rate*
Cellulose film	11%*	16½%	10%*
Steel cables	Free	5½%	3½%
Selected machinery	Free	5½%	3½%

* Jamaica states that preferential rates of duty will be reduced in proportion to the reductions on the MFN rates.

What's current in commodities?

Electronic Components

Israel—Electronics industry has made great progress since 1962. As production rises and export markets appear, demand for imported components and electronic equipment increases.

D. L. GOLDING, *Commercial Officer, Tel Aviv.*

THE GOVERNMENT of Israel's new economic policy announced in 1962 included plans for the establishment of an electronics industry. Such an industry, with its high technical content, seemed well suited to a country possessing few natural resources but with an abundance of skilled engineers.

In the plans, the industry was divided into two categories: one, consumer goods comprising the manufacture of radios, gramophones, television sets, etc., and two, specialized electronics equipment for industry. It began with local assembly from imported components but this gradually changed as the development and expansion of markets made local production of many components feasible. Equipment development and production are actively encouraged and in many instances directly supported by the Government through grants and low-interest loans. As a result, Israel now produces a great diversity of equipment for industry.

Communications Equipment

Telephone equipment was at first assembled on the basis of knowhow agreements with foreign companies. Today, in new plants, a full range of products in the field of communications is turned out, plus all the telephones required in Israel and the greater part of the public main exchanges and private exchanges. The telephones and exchanges are produced to an international standard of quality, with the result that producers have successfully exported to Britain, Iran and Turkey. Among the electronic products designed, developed and manufactured in Israel, is a power supply and automatic charger which keeps emergency batteries charged automatically to maintain power through blackouts. It is used at relay stations, switchboards, dispatch panels and vital communication centres. Another is a single tone call system which provides a low-cost and reliable method of selective calling on crowded communication channels. Also manufactured is a tentone calling console which enables an operator to transmit to mobile stations through a number of communication networks.

Considerable investment in new machinery and testing equipment during the last few years has resulted in remarkable progress in electronic technology and electronic equipment. Extensive application of solid state elements, printed circuits and other developments has resulted in products which give an excellent technical performance, with considerable reduction in the size and weight of the equipment.

The range of products is continually being enlarged as research goes on at internationally known institutes such as the Weizman Institute, the Haifa Technion, the Hebrew University, and the laboratories of manufacturing companies. Exports are already increasing and prospects for the future are good.

With the emphasis on the scientific field and with export orders increasing, the market for components is expanding. Competition is strong, but Canadian exporters will find many op-

TABLE I

ISRAEL'S IMPORTS OF ELECTRONIC EQUIPMENT AND COMPONENTS

	1963	1965
	(Can. $'000)	
Loudspeakers	37.8	87.5
Audio frequency amplifiers	29.2	96.0
Sound amplifier sets	4.3	13.0
Radio telegraphic transmission & reception apparatus n.e.s.	1,273.3	1,229.4
Radio receivers for motor vehicles	138.2	162.8
Sound receivers n.e.s.	—	735.5
Radio receivers operated by crystal, radio transistors	—	477.4
Parts of radio and television sets	—	162.0
Transmission and reception apparatus n.e.s.	115.6	258.1
Electrical capacitors fixed n.e.s.	181.4	308.0
Electrical capacitors variable	65.0	249.5
Apparatus for making and breaking or protecting electric circuits		2,447.0
Electric contacts of or coated with silver or gold	1,004.0	109.8
Devices and accessories for making contacts n.e.s.	356.4	470.9
Telephone parts for manufacture of telephone sets	108.0	191.8
Telephone switchboards and exchanges	3,288.1	7,311.2
Telegraphic apparatus, including teleprinters	170.6	312.2
Carrier current line systems	831.6	3,012.0
Electric line telephonic & telephonic apparatus	94.9	82.1
Parts for radio, television, radar, radio telegraph	655.6	1,769.0

TABLE II

CANADA'S EXPORTS TO ISRAEL OF ELECTRONIC EQUIPMENT, ETC.

	1964	1965
	(Can. $)	
Commercial communication equipment		82,429
Television receiving sets		61,587
Electronic tubes and parts		448
Components for communication equipment		2,577
Telephone apparatus, equipment and parts	1,797,000	12,000
Radio receiving sets	252	
Radio & TV equipment	18,245	
Communication & related equipment	15,408	

portunities, and should explore this market extensively.

Last year saw the beginning of television broadcasting in Israel with the opening of an educational television network; in fact, it was the first country in the world to begin with educational television. The Government is now planning a general television network to be in operation in late 1968. Studios are under construction and broadcasting equipment is being sought. Plans are afoot to begin local assembly of television sets under licence. A factory is being built in Jerusalem for this purpose but at the present time all sets are being imported, with a substantial number coming from Canada. Current surveys indicate that there are 30,000 sets in Israel and the potential market is estimated at 750,000.

Radios and gramophones are assembled locally, and recently FM sets have been added to the range following the introduction of FM broadcasts by the national radio network. Parts such as ceramic, chemical and mica condensers and tubes are all imported. Variable condensers for tuning, sockets, and a full range of loudspeakers and transformers are produced by the local industry but competing imports are permitted in most instances.

A 1966 survey of the electronics industry indicated that output by 1970 will reach approximately U.S. $10 million. This suggests an expanding market for components which should be of interest to Canadian manufacturers. The Commercial Division of the Canadian Embassy in Tel Aviv will be pleased to investigate market interest and potential for any firm. Send us full information on your product, plus technical data and prices. ●

Chemicals

Mexico—As chemical industry expands, pattern of imports changes. Best Canadian opportunities are—fine chemicals, certain pharmaceuticals, inorganic chemicals, sophisticated raw materials.

A. D. McARTHUR, *Assistant Commercial Secretary, Mexico, D.F.*

THE CHEMICAL INDUSTRY is one of the fastest growing sectors of Mexico's rapidly expanding economy. The demand for chemicals increased more than 460 per cent from 1950 to 1965 and a further 70 per cent rise is forecast by 1970.

During the period 1950-1965, imports decreased from 31 to 22 per cent of total demand and by 1970 this figure will drop to 15 per cent. However, although imports hold a decreasing percentage of the chemical market, in absolute terms they have risen appreciably. In 1965 Mexico imported about U.S.$220 million worth of chemicals and by 1970 the figure is expected to be U.S.$240 million. Chemicals account for 20 per cent of total annual imports.

The outlook for the industry is for accelerated growth, especially in petrochemicals. But because Mexico's industrial base will also broaden at a rapid pace, the prospects are that it will be a good market for imported chemicals for a number of years.

Import Policy Is Restrictive

Mexico's general policy on imports is protectionist. An import licensing system is designed primarily to encourage and protect domestic producers, to direct investment into those economic sectors requiring increased production, and to assure that foreign exchange is used principally for essential imports.

The major objectives of this policy are import substitution by domestic production and diversification of foreign suppliers. Generally, when a firm begins to manufacture a product in Mexico it can arrange to close the border to foreign competition either partially or totally, depending on the extent to which it can satisfy local demand.

TABLE I

MEXICAN CHEMICAL IMPORTS*

	1965 (U.S.$ million)
Inorganic chemicals	134.0
Pharmaceutical products	16.0
Fertilizers	12.1
Tanning, dyeing and coloring materials	13.2
Essential oils, perfumes and cosmetics	9.0
Soaps, cleaning and polishing compounds and dental waxes	2.7
Albumin materials	2.5
Explosives	1.5
Photographic and cinematography products	13.6
Miscellaneous products	25.5
Total	**219.4**

* The years 1963 and 1964 have been excluded because of a change in import classifications for 1965.

Source: Anuario Estadistico del Comercio Exterior, 1965.

In 1964, some 65 per cent of total imports by value were subject to import licensing, and the number of items is increasing. As a result, imports of finished products have declined in recent years and the emphasis has shifted to imports of producer goods and raw materials.

In chemicals, Mexican production is far from satisfying local demand. The growing volume of imports includes a wide variety of products which are not produced in this country or produced in insufficient quantities. Imports during 1965 are set out in Table I.

Canadian Sales Fluctuate

Canadian sales of chemicals to Mexico have fluctuated between $7 and $8 million a year since 1961. (See Table II.) By far the most important item has been synthetic rubber, but a development in the petrochemical field will substantially affect our exports of this product. The establishment of a synthetic rubber plant, a joint venture between Polymer Corporation (40 per cent) and Pemex, Mexico's national petroleum monopoly, (60 per cent) will replace much of the synthetic rubber now imported from Canada. However, Canada may well be able to supply some of the pharmaceuticals, fine chemicals and inorganic chemicals for which demand is growing. And if Canadian fertilizer producers are in a position to supply this market, they can look forward to good sales until about 1969.

Fertilizer Nationalized

Mexico's production of chemical fertilizers is growing but substantial quantities are still being imported. The Mexican Government is striving to improve the lot of impoverished farmers and to boost production from economic agricultural units.

The first move in this direction was the nationalization of fertilizer manufacture—not because the Government wanted to make fertilizer but rather to keep the domestic manufacturers afloat. Guanos y Fertilizantes has become the government fertilizer monopoly by combining with several privately owned companies.

The Government has also arranged for two giant new fertilizer plants to be built by U.S. companies. Both plants are due on stream in 1969 and each will have about 400,000 tons of phosphate fertilizer capacity and Mexican majority ownership. A third plant at least as big as the others is scheduled to be built some time later.

These three plants will have a combined capacity nearly three times larger than total Mexican fertilizer consumption, which in 1965 reached 470,000 metric tons. Guanos y Fertilizantes will control Mexican distribution and prices and the companies will be free to export the major part of their production, mostly to other Latin American countries.

Nitrogen fertilizers, however, are still top sellers in Mexico. In 1965 Mexico produced 123,000 nutrient tons of nitrogen fertilizers and 43,000 nutrient tons of phosphate compounds.

In anhydrous ammonia fertilizer production, Pemex has the biggest capacity (132,000 tons) but it is split among many relatively small plants operating at high unit costs. Two other government-operated companies have ammonia capacity totalling 57,000 tons. An improvement in the cost and supply picture will come with a 1,000-ton-per-day Pemex plant now being built.

Insecticides to Protect Cotton

The market for insecticides, like that of fertilizers, is becoming increasingly competitive. At the retail level, about U.S.$40 million worth of insecticides are sold in Mexico each year.

The key to insecticide sales in Mexico is the world cotton market. Cotton producers buy U.S.$23 to $34 million worth of these products each year and export 1.9 million bales of cotton, accounting for 20 per cent of total exports. General-purpose insecticides (DDT, toxophene and BHC) are made in Mexico by various companies. Production of these three items accounts for 83 per cent of all Mexican-made technical grade insecticides. The Government is currently negotiating with a number of firms, both Mexican and foreign, for the establishment of facilities to produce parathion insecticide. If such a plant becomes a reality, imports will decrease sharply (see Table III).

First quarter 1966 imports of insecticides totalled 2,580 tons, down from 3,530 tons for the same period in 1965.

Pharmaceutical Chemicals Needed

Mexico imports a wide variety of drugs, medicines and pharmaceutical specialties but only a limited number of these in substantial quantities.

It is anticipated that by 1970 the market for pharmaceutical products will increase by 50 per cent. In general, this sector of the industry is highly developed and much of its im-

TABLE II

CANADIAN CHEMICAL EXPORTS TO MEXICO

	1963	1964 (Can.$'000)	1965
Chemical elements n.e.s.	241	245	179
Metallic salts of inorganic acids	196	149	207
Radioactive elements and isotopes	14	31	7
Phenols, phenol alcohols and derivatives	27	13	22
Aldehyde function compounds	....	21	50
Hydrocarbons and derivatives	....	....	29
Alcohols and derivatives	101	130	132
Organic acids, anhydrides	148	61	46
Nitrogen function compounds	13	33	....
Organo-inorganic compounds	....	....	28
Polyethylene resins—not shaped	175	33	96
Plastic and synthetic rubber	6,733	6,437	6,626
Industrial chemical specialties and explosives	44	42	84
Petroleum and coal products	2	2	2
Vitamins and preparations	33	45	17
Veterinary medicines	....	9	7
Medicinal and pharmaceutical products	248	273	637
Total	**7,975**	**7,524**	**8,169**

Source: DBS

TABLE III

IMPORTS OF INSECTICIDES

	1963	1964 (U.S.$ '000)	1965
Aldrin	89	130	—
Dieldrin	3	223	406
Parathion	819	—	—
Parathion base	1,628	1,750	2,162
Methylic parathion	1,513	3,054	8,297
Ethylic parathion	276	254	1,317
Clordan	55	36	79
Piretro	13	20	31
Rotenone	—	—	13
Toxaphene	22	72	41
Heptachlor	20	12	31
BHC	21	—	57
Malathion	36	140	143
DDT base and others	937	717	718
Unspecified	4,770	6,844	2,522

Source: Direccion General de Estadistica port requirements are for fine chemicals.

Import duties on pharmaceutical raw materials not produced in Mexico are generally low to moderate. Permits are not granted for the import of pharmaceuticals for which domestic products can be substituted. All pharmaceuticals are subject to price control and must be registered with the Ministry of Health before they can be sold in Mexico.

Inorganic Chemicals Promising

Inorganic chemicals in terms of dollar volume present the largest market for Canadian exporters. In 1965 Mexico imported U.S.$134 million of these products and expectations are that demand will remain high.

The growth and development of various industries has resulted in increased consumption of synthetic resins, soda ash, phosphorous, aluminum hydroxide, manganese dioxide and many other chemical elements and compounds.

However, in step with the growth of other industries, the Mexican inorganic chemical industry has also expanded production. At present Mexican production fills almost all the needs of domestic users of sulphuric acid and caustic soda. The manufacture of many other products will gradually be expanded to the point of self-sufficiency and new ones will be produced as market demand grows.

Nevertheless, a wide variety of chemical elements and compounds that are now being imported in significant quantities, as well as new ones, will have to be imported in even greater amounts.

Petrochemicals Growing Fast

The growth of the petrochemical industry has and will continue to be most dynamic. The key to this growth is the ambitious program of Pemex to produce more than twenty basic items from which more than 200 secondary items can be derived. At present, Pemex's investment in petrochemical facilities exceeds U.S. $200 million and plans are for an eventual investment of close to U.S. $400 million.

The secondary petrochemical industry, either alone or in association with the Government, has invested a total of U.S.$146 million to produce carbon black, urea, phosphoric acid, fertilizers, phenol, detergents, polyester fibres, acetone and many other products.

Government policy in this area is directed towards a high degree of Mexican production concentrated on satisfying local demand and selling in the export market, principally to LAFTA countries.

As a result, projected new developments correlate with products now being imported and will eliminate many of these in the near future.

The rapid expansion of Mexico's chemical industry offers opportunities for Canada to supply inorganic chemicals not yet produced locally as well as fine chemicals and some sophisticated raw materials. In addition, there may be opportunities for chemical plant equipment and engineering services.

Canadian companies now selling to international firms with subsidiaries in Mexico should look into the possibilities of selling their products here.

Selling the Mexican market successfully is best done through a local agent. Personal contact is highly important and a good agent will contribute a great deal to effective sales promotion.

For further information on the market for individual chemical products in Mexico, contact the Chemicals Division, Department of Trade and Commerce, Ottawa, or the Commercial Division of the Canadian Embassy, Apartado 5364, Mexico 5, D.F.●

Shipping to the Leewards and Windwards

IN SPITE OF close attention to the Eastern Caribbean by Canadian exporters the growing market in the Leeward and Windward groups is often overlooked in favour of Trinidad and Guyana. Yet these eight small islands represent a potential market of 748,000 people.

Shipping services from eastern Canadian ports to Barbados and Trinidad generally are adequate to serve Canadian trade with these islands. There are, however, certain shortcomings in service from eastern Canada to the Leeward and Windward Islands. Today, the only connection is provided by Saguenay Shipping Limited. A further difficulty that shippers encounter is the fact that a regularly scheduled refrigerated service cannot be assured. This situation is most serious during the period of peak seasonal demand, extending from mid-October to mid-January.

Only four of the islands have deep-water harbours—Barbados, St. Vincent, Grenada and St. Lucia. Barbados has the most extensive berthing facilities, with a 10,200-foot pier capable of handling 4,000 ton vessels. All eight have warehouse facilities.

Canadian exporters at times route shipments through Miami or New York to connect with shipping lines offering direct sailings to the eastern Caribbean. Vessels of the Booth-Lamport Express West Indies Service sail regularly from New York. Atlantic Lines Limited and Blue Ribbon Lines schedule frequent sailings from New York and Miami. A number of trucking companies provide a fast service between New York and points in Ontario and Quebec. One road transport firm operates trucks daily from Montreal and Toronto, carrying both refrigerated and dry goods, to ports in Florida for transshipment to markets in the Caribbean.

Air shipment should not be overlooked. Air Canada's regular flights out of Toronto and Montreal to Antigua, Barbados and Trinidad connect with British West Indian Airways and Leeward Islands Air Transport (currently operating two de Havilland Twin Otters) to service all the small islands. It is worth mentioning that BWIA and LIAT also serve Martinique and Guadeloupe, with a combined additional potential market of 600,000.

A tour of the islands has convinced me that though Canadian exporters would benefit from improved shipping services from Canada, they are not at any real disadvantage in competing with other manufacturers for the Caribbean dollar. We should therefore take advantage of the tremendous fund of goodwill toward Canada in this area.

—KENNETH G. RAMSAY,
Commercial Counsellor, Port-of-Spain.

The Ocean Freight Market

DURING THE FIRST two months of the quarter, rates were generally stable in both tanker and dry cargo trades. Following the closure of the Suez Canal, progressive increases in tanker rates for movements from the Persian Gulf and the Caribbean took place. Dry cargo rates subsequently followed the trend to higher levels with rates climbing appreciably at the end of the quarter. In major Canadian trades, average charter rates for the second quarter of 1967 rose above the rates recorded in the previous quarter and in the corresponding period a year ago.

The tanker rate for black oil from the Caribbean to United States North Atlantic ports was approximately INTA-scale minus 35 per cent at the beginning of the quarter, fell about 30 points towards the end of April, and then soared to reach a level of INTA-scale plus 50 per cent at the end of the quarter.

CHARTER RATES—SECOND QUARTER 1967

The rates shown in column A are in sterling or U.S. dollars with the Canadian dollar equivalent in column B calculated at £ = $3.03 and U.S.$ = $1.08. For comparison the rates a year ago are shown in column C with the Canadian dollar equivalent in Column D calculated at £ = $3.01 and U.S.$ = $1.08.

TIME CHARTERS

The classes of ships indicated have been selected as representative for the purpose of illustrating time charter rates. Average rates per deadweight ton per month for the second quarter of the year were as follows:

	1967 SECOND QUARTER		1966 SECOND QUARTER	
	A	B	C	D
	£ or U.S.$	Can.$	£ or U.S.$	Can.$
GENERAL TRADING (approximately 6 months)				
Motorships 11,000-12,999 dwt. 13-14.9 knots	3.54	3.82	4.05	4.37
Motorships 13,000-14,999 dwt. 13-14.9 knots	3.43	3.70	3.78	4.08
Steamships 9,000-10,999 dwt. 9-10.9 knots	15s.6d	2.35	2.80	3.02

TRIP CHARTERS

Average rates for the second quarter of the year were as follows:

	1967 SECOND QUARTER		1966 SECOND QUARTER	
	A	B	C	D
	£ or U.S.$	Can.$	£ or U.S.$	Can.$
HEAVY GRAIN (per long ton)				
St. Lawrence to Britain	41s.2d	6.24	36s.6d	5.49
St. Lawrence to Belgium/Holland	3.52	3.80	3.80	4.10
St. Lawrence to France	5.78	6.24	6.35	6.86
St. Lawrence to East Coast of India	75s.10d	11.48	90s.3d	13.58
St. Lawrence to West Coast of India	69s.7d	10.54	81s.1d	12.20
St. Lawrence to Italy	6.30	6.80	6.46	6.98
St. Lawrence to Poland	4.70	5.08	3.44	3.72
St. Lawrence to Algeria	6.85	7.40	....	....
St. Lawrence to Albania	65s.6d	9.92	....	....
Churchill to Britain	45s.0d	6.82	....	....
Churchill to Poland	6.50	7.02	....	....
Great Lakes to Britain	71s.5d	10.81	72s.9d	10.95
Completing St. Lawrence	37s.11d	5.74	41s.1d.	6.18
Great Lakes to Belgium/Holland	8.30	8.96	8.23	8.89
Completing St. Lawrence	3.86	4.17	3.36	3.63
Great Lakes to Denmark	9.50	10.26	11.03	11.91
Great Lakes to France	12.10	13.07	11.00	11.88
Great Lakes to Norway	63s.0d	9.54	....	....
Completing St. Lawrence	32s.6d	4.92	....	....

	1967 SECOND QUARTER A £ or U.S.$	B Can.$	1966 SECOND QUARTER C £ or U.S.$	D Can.$
Great Lakes to Italy	11.00	11.88	10.25	11.07
St. John/Halifax to Albania	62s.6d	9.47	....	....
British Columbia/North Pacific to Japan	7.66	8.27	7.76	8.38
British Columbia to the Philippines	7.46	8.06	8.09	8.74
British Columbia to Venezuela	7.81	8.43	7.35	7.94
British Columbia to South Africa	56s.0d	8.48	....	....
British Columbia to Communist China	35s.6d	5.37	45s.1d	6.79
British Columbia to East Coast of India	68s.0d	10.30	....	....
British Columbia to West Coast of India	47s.0d	7.12	....	....
COAL (per long ton)				
Hampton Roads to Belgium/Holland	20s.11d	3.17	20s.10d	3.14
Hampton Roads to Japan	7.00	7.56	7.40	7.99
Hampton Roads to West Germany	22s.7d	3.42	....	....
British Columbia to Japan	3.40	3.67	3.90	4.21
FLOUR (per long ton)				
St. John/Halifax to Morocco	10.00	10.80	....	....
OILSEEDS (per long ton)				
Great Lakes to Spain	11.00	11.88	....	....
British Columbia to Japan	7.67	8.28	7.38	7.97
POTASH (per long ton)				
British Columbia to East Coast of India	11.22	12.18	....	....
British Columbia to West Coast of India	10.35	11.18	....	....
SCRAP IRON AND STEEL (per long ton)				
U.S. Atlantic to Japan	12.19	13.17	11.59	12.52
California to Japan	8.15	8.80	8.42	9.09
Great Lakes to Japan	13.78	14.88	....	....
SULPHUR (per long ton)				
British Columbia to Australia	61s.6d	9.32	72s.0d	10.84
British Columbia to Greece	8.25	8.91	9.50	10.26
British Columbia to Spain	9.38	10.13	....	....
British Columbia to New Zealand	52s.6d	7.95	64s.6d	9.71
British Columbia to India	12.18	13.15	....	....
OIL BLACK (per long ton)				
Venezuela to Portland, Maine	1.62	1.75	1.16	1.25
Persian Gulf to Portland, Maine	6.17	6.66	2.64	2.85
Venezuela to Canada	1.92	2.07	....	....

South Africa Builds a Merchant Marine

INCREASED South African demand for foreign goods and hence for cargo ships following World War II led to the formation of the South African Marine Corporation Limited (SAFMARINE). Commencing operations in 1946 with three American Victory-type vessels, the fleet now consists of 21 ships.

A government-sponsored body, the Industrial Development Corporation (IDC), acquired financial control of SAFMARINE in 1959, but a substantial minority interest is held by the British Commonwealth Shipping Company.

In 1961, SAFMARINE purchased the Sprinbok line and absorbed its ships into the SAFMARINE fleet; in 1966 it acquired two bulk carriers. At the same time two passenger-carrying mailships were purchased from the Union Castle Company.

The IDC is currently forming a new all-South African company which will control a fleet of tankers. Six have already been bought for chartering to oil companies. By 1972 it is expected that the new fleet, to be managed by SAFMARINE, will be transporting half of the Republic's crude oil requirements.

SAFMARINE ships today transport 10 per cent of the 25 million tons of cargo which pass through South African harbours each year. As the merchant marine expands and ocean freights are paid to local shippers, South Africa will realize additional savings of foreign exchange.

The South African Government provides incentives to encourage local shipbuilding. During 1966, a 20 per cent import duty was imposed on all vessels built overseas for South African registry. Credit terms are offered and a 35 per cent subsidy granted to local builders of ships of over 6,000 tons.

A new slipway designed for building large ocean-going ships will be in operation this year at Durban.

—H. VAN ALPHEN,
Commercial Assistant, Cape Town.

Canadian firms interested in selling capital equipment or engineering services to the Greek Public Power Corporation will wish to study this appraisal of opportunities there.

Greece Progresses with Power Program

BRUCE A. MACDONALD,
Commercial Counsellor, Athens.

THE Greek Public Power Corporation recently put out an English translation of a report showing its remarkable development during the 15 years from 1950, when it was founded, to the end of 1965.

Interesting as the report may be to electrical engineers and makers of electrical equipment, it is equally interesting as revealing the tremendous progress possible in the development of an originally primitive country by the application of modern administrative, economic, and technical methods. In 1940 only 28 per cent of the Greek population was served by electricity. By the end of 1965 the percentage had risen to 72. It is now 74.6.

The Corporation is the largest single buyer of equipment and materials of all kinds in Greece. Its total assets amounted to Drs. 21.5 billion (over U.S.$700 million) at the end of 1966, of which over two-thirds represents the value of its generating plants. In 1965 this utility plant value was greater than the value of all other Greek industrial plants put together. This may no longer be true because, largely thanks to the industrial power made available by the Corporation, several large new industries have come into existence. The best example is the U.S.$130 million smelter of Aluminum de Grèce (Pechiney).

Progress since 1950

Table I shows in concise form the over-all progress made since the national system was set up and a national electricity policy applied. The reader will note that installed capacity increased by over 500 per cent and actual power production by nearly 800 per cent.

A ten-year program (1965-1974) drawn up in 1965 provides for a total consumption of 12.75 billion kwh. in 1974, or nearly three times the 1965 figure, and for an increase in per capita consumption from 531 kwh. in 1965 to 1,440 in 1974.

Table II lists the existing generating stations with the individual and grand total of installed capacity.

Customers and Revenues

The PPC today has only three direct customers: Aluminum de Grèce at Distomon, south-central Greece, Nitrogenous Fertilizer Company at Ptolemais, and the Larco Nickel Company at Larymna.

In 1965 the PPC's total revenue amounted, after deduction of internal debt charges, to Drs. 2,190 million. After further deduction of all expenses and depreciation, there was a net operating revenue of Drs. 1,067 million, and after various further deductions (for example, municipal tax adjustments), a final net balance of Drs. 648 million (roughly U.S. $22 million).

The Corporation's services throughout the country endeavour constantly to educate the consuming public in the application of electricity. In cooperation with Greek manufacturers of electrical appliances, displays, exhibitions and demonstrations are organized. A sales-on-credit system is operated which is restricted to Greek-made appliances.

Financing Progress

The Corporation has financed its investment program with its own funds through the proceeds of domestic loans (e.g., the Bank of Greece and Postal Savings Fund), domestic bond issues, proceeds of loans from foreign governments (the U.S.,

TABLE I

EXPANSION IN ELECTRIC POWER, 1950-1965

		1950	1965
Installed capacity	(kw.)	200,000	1,066,000
Electric power production	(kwh.)	570,000,000	4,320,000,000
Per capita production	(kwh.)	80	531
Consumption in the capital area	(per cent)	80	58
Consumption in all other areas outside the capital	(per cent)	20	42
Percentage of population receiving electric service	(per cent)	32	72

TABLE II

GREEK GENERATING STATIONS

Steam Electric	Installed Capacity (kw.)
St. George (Units 1-7) (oil)	194,250
Aliveri (lignite)	80,000
Ptolemais (Unit 1) (lignite)	70,000
Ptolemais (Unit 2) (")	125,000
Ptolemais (Unit 3) (")	125,000
New Phaleron (oil)	64,500
Aspropyrgos (gas-turbines)	28,000
Marcupoulon (" ")	28,000
Total steam-electric stations	**714,750**
Hydroelectric	
Agra	50,000
Ladon	70,000
Louros	10,300
Tavropos	130,000
Verria	1,800
Serres	800
Naoussa	5,000
Total hydroelectric stations	**263,400**

TABLE III

LOANS OBTAINED BY PPC

	Orig. Amt.	Bal. left on 1/1/65	Amts. Drawn in '65	Bal. left on 12/31/65
Old Loans		(millions of U.S.$)		
AID—Kremasta	31	7.4	5.6	1.8
AID—Kremasta	7.7	7.7	3.8	3.9
AID—Kastraki	21.6*	20.8	0.3	20.5
European Development Bank	6	3.8	1.9	1.9
New Loans				
Bank of America	6	—	6	—
Irving Trust Co.	5	—	5	—
Export-Import Bank	5	—	5	—
First National City Bank	3.5	—	3.5	—

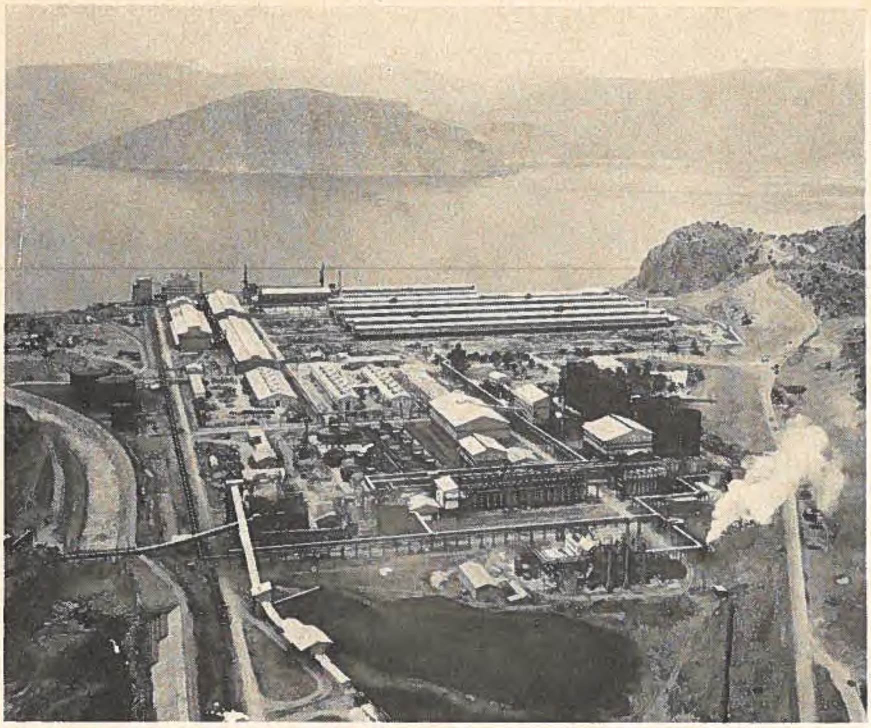
*When it was decided that this project would be undertaken not by a U.S. company but by a consortium of three Greek construction contractors, the AID allocation was reduced to U.S. $3.5 million.

TABLE IV—POWER FORECAST

Winter Season

	1965-66 MW	1966-67 MW	1967-68 MW	1968-69 MW	1969-70 MW	1970-71 MW	1971-72 MW	1972-73 MW	1973-74 MW	1974-75 MW
Maximum demand (peak) forecast	960	1,232	1,377	1,520	1,685	1,865	2,060	2,250	2,455	2,675
Plan to meet the power demand (peak) of the Interconnected System										
"Net" power presently supplied by the existing stations of the interconnected system during the 1965-1966 winter season	1,045	1,042	1,032	1,017	1,017	957	957	903	903	903
New Stations										
Kremasta Units II, III, IV		328	328	328	328	328	328	328	328	328
St. George Unit VIII			140	140	140	140	140	140	140	140
Aliveri Unit III				140	140	140	140	140	140	140
Thermal Unit 200/135 MW					185	185	185	185	185	185
Kastraki Units I—III					240	240	240	240	240	240
Kremasta Unit V						109	109	109	109	109
Megalopolis Unit I							115	115	115	115
Polyphyton							118	118	118	118
Ptolemais Unit IV								135	135	135
Megalopolis Unit II								115	115	115
Avlaki								170	170	170
Ptolemais Unit V									135	135
Arachtos—Pournari									130	130
Thermal Unit 250/230										230
Total available power	**1,045**	**1,370**	**1,500**	**1,625**	**2,050**	**2,099**	**2,332**	**2,698**	**2,963**	**3,193**

NOTE: In view of the fact that the operation of the Neon Phaleron SES and of certain units of the St. George SES will be gradually discontinued and the power supplied by the SES of LIPTOL limited, the total power of the system available during the 1965-66 winter season began to decline gradually.



This is the Aluminum de Grèce plant on the Gulf of Corinth in central Greece.

France and West Germany), from private foreign banks, and from credits extended by some of its foreign suppliers.

The loans in foreign exchange obtained by the PPC in previous years and in 1965, and the amounts drawn in 1965 are listed in Table III.

A contract for the construction of the 150 mw. third unit at the Aliveri thermal station was concluded in December 1965 with the French companies Alsthom and Stein & Roubaix. The cost of the project in foreign exchange will be covered by a $3.2 million special credit from the French Government and by $11.4 million in credits to be obtained from the contracting firms and French banks.

In addition to the foregoing, the West German Government authorized a loan of DM.200 million to the PPC through the Kreditanstalt für Wiederaufban for the so-called Megalopolis project near the site of ancient Sparta in the Peloponnese (southern Greece). This was to be a thermal station using local lignite deposits, but technical difficulties developed over the lignite. These were submitted to the German group, IPCO—Kraftanlagen Heidelberg, assisted by mining engineers of Preussen Elektra A.G., for study, and its findings are awaited. The PPC strongly favours this project in keeping with its policy of using domestic resources wherever possible.

Future Plans

Table IV gives the Corporation's forecast of the growth in power demand over the years ending with 1975 and the development plans being made to meet it.

The budget estimate for 1967 is Drs. 8,480 million (U.S.$283 million) compared with Drs. 6,590 million (U.S.$230 million) in 1966. It is expected that power generated will increase in 1967 by 26 per cent to reach 6,300 as against 5,000 kwh. in 1966.

On March 30 a new bond issue was announced of one billion drachmas. The bonds will bear interest at 7 per cent, will be repaid within 20 years, and will contain a "gold clause"—that is, the owner can demand, if he so wishes, payment of interest and repayment of principal in U.S. dollars at the present rate of exchange which is U.S.$1.00=Drs. 30.

Possibilities for Canada

Possible opportunities for the sale of electrical equipment of many kinds, from heavy generating equipment to light-line hardware, may be apparent to manufacturers of such material from the developments outlined above.

To assess these opportunities realistically, the following factors should be borne in mind:

1. If and when the Megalopolis project is undertaken, tenders for it will be limited to West German firms.

2. Further tied credits will probably be forthcoming from West European countries. Moreover, Eastern European countries, especially the U.S.S.R. and East Germany, are apparently prepared to supply equipment in return for surplus Greek agricultural products, such as tobacco. The Soviet Union, for example, is supplying a generating unit for the new generating station at Piraeus against tobacco.

3. It is the opinion of experts that the two Greek manufacturers of aluminum and/or copper cable, (Viohalco & Fulgor), are capable, both technically and quantitatively, of supplying the thousands of miles of additional transmission-line cable which will be required over the next 10 years, especially as, under existing Greek regulations, foreign quotations for any product also made in Greece must be at least 35 per cent below the domestic offer to be acceptable.

4. Domestic steel fabrication plants may offer severe competition for the hundreds of steel pylons or towers which will be needed.

5. In wooden line poles and crossarms, Canadian firms have never been competitive to date. These have mainly come from European suppliers, although one U.S. firm (Vimasel Company, 44 Whitehall St., New York 4, N.Y.), is reported to have supplied about $1 million worth of pitch pine poles from the Southern U.S., shipped out of Gulf ports, in each of the past few years. Here again, however, the PPC's policy of favouring domestic supply is an important factor. It is co-operating with the Forestry Division of the Ministry of Agriculture in developing the supply of wooden poles from Greek forests and it is using a growing number of Greek-made concrete poles.

6. Porcelain insulators are now being made in Greece.

Canadian suppliers interested in PPC business should remember that it is useless to quote on equipment involving large expenditures unless at least medium, or better still, long-term credits can be offered. For products involving smaller expenditures, insistence on letter of credit terms will usually result in the offer being ignored. Finally, it should be noted that at times it is stipulated that offers must be accompanied by a supplier's bond amounting to 5 per cent of the quotation. If the offer is accepted, that bond is refunded but it must be replaced by a performance bond equal to 10 per cent of the quotation.

Although offers can be made directly to the PPC, it is almost essential to have a good agent in Athens who can, in the first place, give advance notice of forthcoming requirements and once an offer has been submitted, follow it up closely with the appropriate officials of the Corporation. Interested firms which do not have a representative in Athens are invited to write to the office of the Commercial Counsellor and every effort will be made to interest the best available Greek firm or firms.

Atomic Power Plants

The Greek Atomic Energy Commission and the Public Power Corporation have been keeping under review, in common with other interested agencies of the Government, developments taking place in the production of electricity in atomic power plants. Representatives of U.S., British and Canadian firms engaged in this field have visited Athens. In some cases it has been suggested that the desalinization of sea water could be usefully combined with the production of power. It is not considered likely that the Greek authorities will reach any early decision. It is recognized that if and when it is made, the decision will be influenced strongly by the long-term financing offered. ●

Children's Wear for California

A UNIQUE event tied in with the annual Golden Gate World Trade and Travel Week, May 22-June 3 in San Francisco, took place during a "Canadian Centennial" travel show at the Mayfield Mall in suburban Mountain View. This unusual shopping complex caters to one of the fastest growing and most prosperous areas of Northern California.

The Canadian Children's Apparel Manufacturers Association of Montreal shipped in a selection of the finest fall and winter outerwear from eight of its member firms. Fashions ranged through jumpers with matching coats to jacket, slacks and skirt sets and stylish snow suits. Arranged by the Assistant Canadian Trade Commissioner in San Francisco, the shipment was consigned to the Mayfield Mall Merchants' Association, to be returned immediately following the series of fashion shows.

Events began with an informal reception and luncheon, with colour added by the Port Moody Pipers. Coupled with a variety of activities typical of Canada, from a totem pole carver and jade craftsman to extensive exhibits depicting Expo 67 and Centennial Year activities, fashion shows began at 7 p.m. each evening during the week-long affair.

"Reaction cards" were completed by the viewing public to enable the Canadian exhibitors to design and price their goods for the West Coast market. Although it was not a buyers' show, managers and owners of children's wear stores on the Mall also offered their comments. All were enthusiastic about the high quality of the Canadian fashions but felt that some of the winter wear was a little too heavy for the Californian climate and that brighter colours would be more appealing.

The Canadian manufacturers were thus able to size up both public and commercial reaction to their fashions in this lucrative children's wear market. The San Francisco office is now hard at work locating representation for those firms interested in exploiting sales opportunities in this area. ●

These youngsters are wearing two of the Canadian outfits for children that they modelled during fashion shows held in a suburban shopping complex near San Francisco. The shows went on every evening for a week and gave the Canadian manufacturers an opportunity to gauge consumer and buyer reaction.

foreign tariffs and trade regulations

GHANA

ECONOMIC CHANGES—The Government of Ghana announced major economic changes on July 8th. Among those of major interest to Canadian exporters are:

1. The New Cedi was devalued and is now worth approximately Can.$1.06 compared with the previous rate of Can. $1.51.

2. Import licensing program was liberalized by extending the Open General Licence to cover virtually all spare parts and chemicals, all pharmaceuticals, insecticides, and some other commodities.

3. Import duties and sales taxes were reduced or eliminated on selected basic commodities such as rice, flour, milk, motor spirits so as to alleviate the effect on lower income groups.

Further details may be obtained from the Commonwealth Division, Office of Trade Relations, Department of Trade and Commerce.

trade lines

Colombia makes agreement with Spain

Colombia and Spain have just signed an agreement to increase their mutual trade. Under this agreement Spain will extend a U.S.$60 million credit to Colombia for imports of capital goods—Bogota.

South Africa has record sugar crop

During the 1966/67 season which ended in April, South Africa produced a record 1.79 million short tons of sugar compared with slightly over one million short tons in 1965/66. The South African Sugar Association recently announced that a R10 million loan, guaranteed by the Government, would be made to the sugar industry—Cape Town.

British direct mail agency buys census tapes

British and International Addressing Ltd., Britain's largest direct mail agency, purchased the computer tapes of last year's census and is converting them into the most sophisticated mailing system ever offered to British advertisers. New selection will break down the country demographically into 42,000 districts averaging 350 households per district. It will differentiate, for example, between commuters by car and commuters by bus, "young" and "old" areas, crowded and open areas, and so on—London.

Turkey plans television stations

At least two television stations will be built in Turkey during the next five years, one in Istanbul and one in Ankara. Turk-Phillips is already assembling TV sets at a rate of five a day, with 50 per cent of the parts made locally. It is reported that a second producer may soon have sets on the market as well—Athens.

Swedish exchange links short supply and surplus capacity

The Sub-Contractors Exchange of the Swedish Association of Engineering and Metalworking Industries issues a monthly bulletin to each of its 1,100 members listing Scandinavian firms that have surplus capacity or need new suppliers. An average of two inquiries per announcement has resulted to date, and firms report having established numerous new business contacts. The bulletin is not available to non-members of the Swedish Organization, but interested Canadian firms can receive names of suitable companies with excess capacity available for licensing. Application should be made to the Swedish Association of Engineering and Metalworking Industries, Artillerigatan 34, Stockholm Ö, either direct or through the Trade Commissioner in Stockholm—Stockholm.

Sterilized flies exported to Capri

The first stage of an international operation to rid the world's citrus groves of fruit flies began in May with shipment of four million sterilized males via air freight to Rome. The flies, sterilized by atomic radiation, will be released on the Isle of Capri to mate with healthy female flies without reproducing.

The experiment is being conducted jointly by the International Atomic Energy Agency in Vienna, the Italian and Israeli Atomic Energy Commissions, and the Italian Ministry of Agriculture—Tel Aviv.

Mexico to produce colour TV sets

Mexico is expected to start producing colour TV sets shortly. Mexican content will initially be 45 per cent, rising eventually to 90 per cent. At least four firms will manufacture these sets for the domestic market—Mexico, D.F.

Mexico expands chemical industry

Petróleos Mexicanos (PEMEX) will build a 51,000-ton-per year polyethylene plant at Poza Rica and purchase two tankers, using a credit of 119 million pesos from a British banking consortium. PEMEX will also invest independently 300 million pesos at Salamanca in a 24,000-ton isopropyl alcohol plant and an extension to the anhydrous ammonia plant which will increase capacity from 240 to 340 tons per day—Mexico, D.F.

West German national debt increases

Since 1961, public indebtedness of various West German spending authorities has risen to 81,000 million DM, a 47 per cent increase. At 1,407 DM per capita, this surpasses indebetedness in Italy (850 DM), Switzerland (754 DM, 1965 figure) and France (1,394 DM), but is less than in Holland (1,932 DM), Sweden (2,179 DM, 1965 figure), Belgium (4,097 DM), Britain (6,414 DM) and the United States (6,533 DM) —Bad Godesberg.

Chile authorizes commercial vehicles plant

The Chilean Ministry of Economy is reported to have authorized a plant in Arica to assemble General Motors' lorry and bus chassis for an initial period of 18 months. The plant is owned by Industria Automotora del Pacifico and is to integrate fully with the motor industries of Mexico, Brazil and Argentina, and is to use a substantial proportion of parts manufactured in Chile. After 18 months, the company will submit plans for a permanent plant—Santiago.

British review boys' wear sizing methods

The Men's Wear Association of Britain is using a questionnaire to gather ideas on suitable sizing arrangements for boys' wear. Questions included are: "Should boys' shirts be marked in inches only (collar size)?" "Should overcoats and raincoats have chest and length marked in inches?" "Should jackets be marked in chest inches?" "Should pyjamas be marked in chest inches?" "Should swim-wear indicate a waist measurement fitting?"—London.

Brazil gets loan for hydro plant

The Inter-American Development Bank has granted a loan of U.S.$34 million to the Centrais Eletricas de São Paulo (CESP) to help finance work on the first stage of the Ilha Solteira hydroelectric plant. The first stage will have a capacity of 1.76 million kw. capacity and eventually will be expanded to 2.56 million kw. This brings the Inter-American Development Bank's loans for electric power projects in Brazil to U.S.$125.2 million. (An article on Brazil's hydro resources appeared in *Foreign Trade* of June 10, 1967)—São Paulo.

Israel's fur industry relies on exports

The fur industry in Israel depends almost entirely on exports. Furs worth Can.$1.6 million were exported in 1966, mainly to Germany, Switzerland and Italy. Tourists visiting the country spent Can.$750,000 on furs to take home—Tel Aviv.

Beet sugar plant opened in Chile

The National Sugar Industry Company Ltd. (IANSA) has opened its fourth refinery. The plant, in the province of Nuble, is said to be the largest of its kind in Latin America and will turn out 44,000 tons of refined sugar a year from 280,000 tons of beet. By-products will be 140,000 tons of green forage and 14,000 tons of dry pressed forage—Santiago.

South Africa plans aluminum smelter

An aluminum smelting industry will be started at Richard's Bay, Natal, near the proposed new harbour and with eventual rail links to Durban and Johannesburg. The initial capital of R.40 million will be provided by the South African Industrial Development Corporation and the plant will be in operation by

1970. At present, the country's consumption of aluminum is running at 46,000 tons a year—Cape Town.

Sales of folding bicycles treble in Holland

In the first quarter of 1967, the number of folding bicycles sold was three times as great as in the corresponding quarter of last year. Police are using this type of bicycle. Sales of all types of bicycles reached 600,000 units in 1966 and may go higher this year—The Hague.

Germany wants to employ more women

In 1967, the percentage of jobs offered for which women were sought rose to 56.4 from 47.8 the previous year and 41 in the early 1960's, according to the *Economic Report from Germany*—Bad Godesberg.

Connaught exports polio vaccine

The Connaught Medical Research Laboratories have now distributed over 150 million doses of Sabin live oral poliomyelitis vaccine to more than 40 countries. This is nearly double the number of doses of Salk (killed) vaccine, given by injection, which have been distributed by the institution. The Food and Drug Directorate has granted CMRL a licence to distribute an improved form of the Salk vaccine—Toronto.

Whitefish industry planned for South West Africa

A fish processing plant is being built at Luderitz which will be served by specially designed stern trawlers. One of the features of the plant is the minimum use of fresh water. Fish will be delivered from the trawlers' chilled sea-water tanks into chilled sea-water tanks at the factory—Cape Town.

Germany has larger trade surplus

This April, West Germany had its second highest trade surplus since 1948. Imports totalled $1,406 million (4.8 per cent less than the previous April) and exports $1,867 million (19.7 per cent better than in April 1966). In the first four months of 1967, imports, at $5,525 million, were down 8.1 per cent and exports, at $7,050 million, were up 12.1 per cent—Duesseldorf.

Steel exports to Spain expected to decline

Spanish steel production climbed to 3.8 million tons in 1966, a 9 per cent increase over 1965. Spain's largest steel company, ENSIDESA, is expanding its rolling capacity and tinplate mill and the Government is studying the establishment of a fourth large steel mill. These additions to local capacity, and pressure from industry in favour of import controls on steel, spell a declining market for foreign steel in Spain (2.3 million tons in 1966). Local manufacturers have complained of low import prices, aggravated by the credit freeze in Spain which enabled foreign suppliers to offer credit terms unavailable in that country. It is believed that the Spanish Government would look favourably upon some form of import control should the situation worsen—Madrid.

Israel produces commercial computer

The ELBIT 100 has gone into regular production and is priced for export at U.S.$5,000. A very compact digital computer, it is aimed at that section of the market which finds a general-purpose computer too expensive—Tel Aviv.

Trade Commissioners on Tour

Temporary Duty in Ottawa

The following officers will be on temporary duty in Ottawa. Anyone who wishes to see them should contact the Trade Commissioner Service, phone: 992-1366.

A. B. Brodie, Consul General and Trade Commissioner in Milan, Italy, August 24-31.

C. M. Forsyth-Smith, Commercial Counsellor in Rio de Janeiro, Brazil, September 11-15.

Geo. Hazen, Consul and Trade Commissioner in New York, August 21-September 1.

Y. C. Jauron, Commercial Secretary in Moscow, U.S.S.R., August 14-25.

H. M. Maddick, Commercial Counsellor in London, England, September 15-29.

D. A. B. Marshall, Commercial Counsellor in The Hague, Netherlands, August 21-26.

S. B. McDowall, Assistant Trade Commissioner in Johannesburg, South Africa, September 12-18.

J. A. Stiles, Commercial Counsellor in Sydney, Australia, September 4-8.

In Territory

United States—R. M. Dawson, Consul and Trade Commissioner in San Francisco, will visit Seattle, Washington, September 11-13, and Portland, Oregon, September 14 and 15.

Businessmen who would like this officer to undertake assignments for them should write to him at his post as soon as possible.

Soviet Chemical Industry Buys Knowhow

The new emphasis on consumer products has created a demand for chemicals which Soviet industry has difficulty in supplying. Turnkey projects and foreign knowhow are being sought to bridge the gap.

YVON JAURON,
Assistant Commercial Secretary, Moscow.

THE SOVIET chemical industry has had a phenomenal growth since the Second World War. It took shape originally in the 1920's, mainly in the area around Moscow. Under the 1928-32 Plan, it was shifted to the Urals, where it remains. New chemical plants, however, have been more widely scattered.

By the early 1940's the Soviet chemical industry was able to supply industrial needs for heavy chemicals. The war created intense demand and led to the development of new types of chemicals. Despite this rapid growth, the industry is still relatively small and specialized compared with the enormously expanded sector in Western countries. In 1958 the chemical sector employed only 3 per cent of the labour force and accounted for approximately 5 per cent of capital investment in industry, but since then it has received an increasing share of capital investment. Under the last Seven Year Plan (1959-65) the annual rate of growth in chemicals averaged 14 per cent, higher than for industry as a whole. Products ranged from heavy chemicals such as sulphuric acid, nitric acid and fertilizers to synthetic rubbers, plastics, artificial fibres, paints, dyes and detergents.

Fertilizers—Production of mineral fertilizers expanded rather slowly at first. The U.S.S.R. produced 3.5 million tons of fertilizers in 1939 and did not regain this figure until 1948 because of war devastation. Production reached 12.5 million tons in 1958 and 30 million in 1966 (compared with approximately 36 million tons in the United States). It is believed that phosphatic fertilizers account for approximately 40 per cent and potash 20 per cent of fertilizer output. No slackening of demand by Soviet agriculture is evident and this indicates continuing emphasis on fertilizer production. The current Five Year Plan calls for 65 million metric tons a year of mineral fertilizers by 1970, mostly in granular form.

Plastics—As one might expect, the highest growth rates in the industry recently were in synthetic chemicals such as plastics, synthetic rubber, artificial fibres, paints and detergents.

The U.S.S.R. ranks sixth in the world in the production of synthetic resins and plastics. Soviet output of all plastics rose from 258,000 tons in 1958 to 783,000 in 1965, with an eighty-fold increase in the output of polyethylene, which overshadows all other plastics. According to Soviet sources, the production of plastic materials has increased thirty times since the end of the war. The current Five Year Plan calls for new plants to produce polyvinyl polychloride (P.V.C.), polystyrene, polyethylene, polyesters and melamine. By 1970 the U.S.S.R. will turn out 2.2 million metric tons of plastics and synthetic resins, compared with 971,000 in 1966.

Synthetic Fibres—The output of synthetic fibres is reported to have trebled between 1959 and 1965 and the U.S.S.R. is now the world's fifth largest producer. Synthetic fibres are highly valued because of their durability, strength and labour-saving properties and production is still insufficient to satisfy the requirements of the Soviet population. The output of manmade fibres, 458,000 metric tons in 1966, will reach 830,000 metric tons by 1970. Synthetic fibres seem likely to become an indispensable part of the modern Soviet way of life.

Soviet leaders have admitted setbacks in the development of the chemical industry. Targets of the previous Seven Year Plan for some of the industry's major products were not fulfilled. Soviet planners realize that their chemical industry still lags behind that of the most developed Western countries and they are determined to expand it still faster. The current Five Year Plan gives prominence to chemical production, which is to double between 1965 and 1970. During 1966 output is reported to have increased by 12 per cent, compared with an 8.7 per cent increase for the industrial sector as a whole.

The most rapid rate of growth within the chemical industry will be to support the production of consumer goods with such products as synthetic fibres, plastics, dyes and detergents slated for priority.

Soviet planners acknowledge that Western participation must play a large role in the implementation of their ambitious expansion program, and recent contracts for plant and equipment granted to foreign firms bear this out. The demand for chemical plants in the U.S.S.R. has been highlighted in the last few years by the award of huge contracts. The Italian firm of Montecatini has supplied plant and equipment for the production of fertilizers, synthetic fibres and melamine worth several million dollars. French firms have also been successful in obtaining substantial orders for fertilizer plant. British and Japanese firms were recently awarded contracts to supply capital equipment for the production of synthetic fibres.

The opportunities for Canadian manufacturers are probably limited to specialized equipment and technical knowhow but the Soviet market warrants investigation, especially by firms whose ability to compete with European suppliers has already been proved. ●

Foreign Exchange Rates

These nominal quotations may help exporters in checking prices, but they should consult their banks before making any firm commimtents. When more than one rate is shown, the one to be used depends on the commodity traded. Information on the rate for any specific commodity may be obtained from the Office of Trade Relations, Department of Trade and Commerce, Ottawa.

The mid market rates only are quoted, except when buying and selling rates are specified. The buying rate is that at which banks purchase exchange from exporters; the selling rate is that at which banks sell exchange to importers.

Rates used exclusively in non-merchandise trading are *not* included in this table.

For conversion of column one to the U.S. dollar equivalent, *multiply* by .93 To convert column two, *divide* by .93.

Country and Currency	Value of Foreign Currency unit in Canadian dollars at August 3	Value of Canadian dollar in foreign currency units at August 3
Algeria		
Dinar	.2196	4.55
Argentina		
Peso (free)	.0031	322.58
Australia		
Dollar	1.20	.8333
Austria		
Schilling	.0417	23.98
Bahamas		
Dollar	1.049	.9514
Belgium and Luxembourg		
Franc	.0217	46.25
Bermuda		
Pound	2.998	.33
Bolivia		
Peso	.0896	11.16
Brazil		
Cruzeiro (official free)	.3984	2.51
Britain		
Pound	2.998	.33
British Honduras		
Dollar	.7495	1.33
Burma		
Kyat	.2261	4.41
Ceylon		
Rupee	.2249	4.44
Chile		
Escudo (bank rate)	.2208	4.53
(free)	.1869	5.35
China, Republic of		
New Taiwan Dollar (official)	.0233	42.92
Colombia		
Peso (intermediate)	.066	14.95
Congo, Republic of[1]		
Franc	.0072	139.50
Costa Rica		
Colon	.1625	6.15
Cuba[2]		
Peso	……..	……..
Czechoslovakia		
Koruna	.1495	6.68
Denmark		
Krone	.1550	6.45
Dominican Republic		
Peso	1.077	.93
Ecuador		
Sucre (official)	.0598	16.67
(free)	.0549	18.35
El Salvador		
Colon	.4306	2.32
Fiji		
Pound	2.701	.38
Finland		
Markka	.3364	2.97
France, Monaco, etc.[3]		
Franc	.2196	4.55
Franco-African Republics[4]		
Franc	.0044	227.79
French Pacific[5]		
Franc	.0121	82.64
Germany		
D Mark	.2689	3.72
Ghana		
New Cedi	1.055	.95
Greece		
Drachma	.0359	27.86
Guatemala		
Quetzal	1.077	.93
Guyana		
Dollar	.6247	1.60
Haiti		
Gourde	.2153	4.64
Honduras		
Lempira	.5383	1.86
Hong Kong		
Dollar	.1874	5.33
Hungary		
Forint (official)	.0921	10.86
Iceland		
Krona (official)	.0250	40.00
India		
Rupee	.1426	7.00

Country and Currency	Value of Foreign Currency unit in Canadian dollars at August 3	Value of Canadian dollar in foreign currency units at August 3
Indonesia[6]		
Rupiah	....	....
Iran		
Rial	.0142	69.93
Iraq		
Dinar	3.014	.33
Ireland		
Pound	2.998	.33
Israel		
Pound	.3589	2.79
Italy		
Lira	.0017	581.86
Japan		
Yen	.0030	335.37
Kenya		
Shilling	.1402	7.13
Lebanon		
Pound (free)	.3353	2.98
Malaysia		
Dollar	.3517	2.84
Mexico		
Peso	.0861	11.61
Morocco		
Dirham	.2135	4.68
Netherlands		
Florin	.2991	3.34
Netherlands Antilles		
Florin	.5709	1.75
New Zealand		
Dollar	1.494	.67
Nicaragua		
Cordoba	.1538	6.49
Nigeria		
Pound	3.002	.33
Norway		
Krone	.1505	6.63
Pakistan		
Rupee	.2249	4.44
Panama		
Balboa	1.077	.93
Paraguay		
Guarani (free)	.0089	112.36
Peru		
Sol (free)	.0401	24.94
Philippines		
Peso (free)	.2750	3.63
Poland		
Zloty (fixed basic rate)	.2691	3.72
Portugal & Colonies[7]		
Escudo	.0375	26.66
Saudi Arabia		
Riyal	.2066	4.84
Sierra Leone		
Leone	1.499	.66
South Africa		
Rand	1.499	.66
Spain & Dependencies		
Peseta	.0180	55.55
Sweden		
Krona	.2091	4.78
Switzerland		
Franc	.2486	4.00
Syria		
Pound (free)	.2818	3.55
Thailand[1]		
Baht (free)	.0521	19.25
Tunisia		
Dinar	2.067	.49
Turkey		
Lira	.1196	8.36
United Arab Republic		
Pound (official)	2.476	.40
United States		
Dollar	1.077	.93
Uruguay		
Peso (free)	.0108	92.59
Venezuela		
Bolivar (official free)	.2396	4.17
West Indies		
Dollar[8]	.6247	1.60
Pound[9]	2.998	.33
Yugoslavia		
Dinar (official)	.0861	11.63

1. Additional rates are in effect.
2. There is no trading in Cuban pesos in U.S. or Canadian banks at present.
3. Franc is also used in French Guiana, Guadeloupe and Martinique.
4. Chad, Central African Republic, Congo, Dahomey, Gabon, Ivory Coast, Mali, Islamic Republic of Mauritania, Niger, Senegal, Upper Volta, Cameroons, Togoland, and Malagasy. Also Reunion, Comoro Islands, St. Pierre and Miquelon.
5. New Caledonia, New Hebrides, French Polynesia.
6. Because of the complexity of the Indonesian exchange rate system, it is impractical to quote a single representative rate for the rupiah.
7. Approximately same rate for Portuguese territories in Africa.
8. Barbados, Trinidad and Tobago, Leeward and Windward Islands.
9. Jamaica.

Marketing Data Sheet

KENYA

Area

225,000 square miles.

Climate

Mean temperature varies from 80°F at coast to 55°F inland at 9,000 feet. Seasons are marked by periods of rainfall rather than by temperature variations. Centigrade scale is used.

Population

Total in 1966, 9,643,000. By race, African 9,370,000, Indo-Pakistani 188,000, and European 43,000.

Income

Gross Domestic Product in 1966 was K£368.24 million (Can.$1,031.1 million) monetary and non-monetary, and GDP per capita K£38.2 (Can.$107).

Motor Vehicles

In 1964, 70,600 passenger cars, 8,800 trucks, 1,800 buses, 5,200 motorcycles and 8,000 tractors, graders, rollers, etc.

Telephones

51,000 in 1964 or five per 1,000 persons.

Radio and Television

Total radio licences issued, 142,221 in 1966. Total television licences, 10,940 (625 lines per picture). Actual number of sets in use is unknown. Radio and TV facilities are publicly owned.

Water Supply

Safe to drink. Pressure varies.

Electric Power

50 cycle a.c. 220/415 volts. Three-phase, four-wire system. Cost ranges from K10.6 cents/kwh. for industrial users to K13.8 cents/kwh. domestic. Rates are slightly higher outside the Nairobi area and the central province. Production in 1964 was 323.1 million kwh. and consumption 425.6 million kwh.

Coal

None produced or consumed in Kenya. Wood and petroleum fuels are consumed.

Gas

No natural gas is available. The major oil companies market LPG but consumption for domestic use is limited by the high cost of cylinders.

Petroleum Products

Exploration for oil is being carried out but as yet Kenya has no petroleum deposits. Imported crude is refined at Mombasa and a portion of the output is exported. Consumption in 1964 was 154 million gallons, including turbo fuel (18 million) diesel fuel (31 million), gasoline (92 million). Total sales of lubricants was 2.5 million gallons and of greases 1.9 million pounds. Several major oil companies are represented and market their products through licensed distributors who own their own facilities.

Weights and Measures

Imperial system in use but conversion to metric system expected by 1971.

Screw Thread

No standard currently in use.

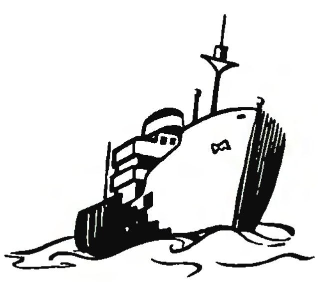
Standards

No mandatory approval required for imported gas, electric or other fuel appliances.

If undelivered return to:
The Queen's Printer, Ottawa, Canada

CANADA
POSTAGE PAID
PORT PAYÉ

underwriting your export credit needs



Insurance or financing?

EXPORT CREDITS INSURANCE

enables you to increase sales abroad by insuring against non-payment due to such risks as a buyer's inability to pay, foreign exchange restrictions, and changes in import licensing regulations. This insurance helps to solve many financing problems.

LONG-TERM EXPORT FINANCING

enables you to compete for foreign business in the capital goods field. It is available for export sales of sophisticated capital projects where extended credit terms are clearly necessary and justifiable, and where substantial sums are involved.

EXPORT CREDITS INSURANCE CORPORATION

For complete information:

P.O. BOX 655, OTTAWA, CANADA   BRANCHES—MONTREAL, TORONTO

Represented by the Department of Trade and Commerce in

Halifax   Winnipeg   Edmonton   Vancouver