

foreign trade

The Greater Los Angeles
Market

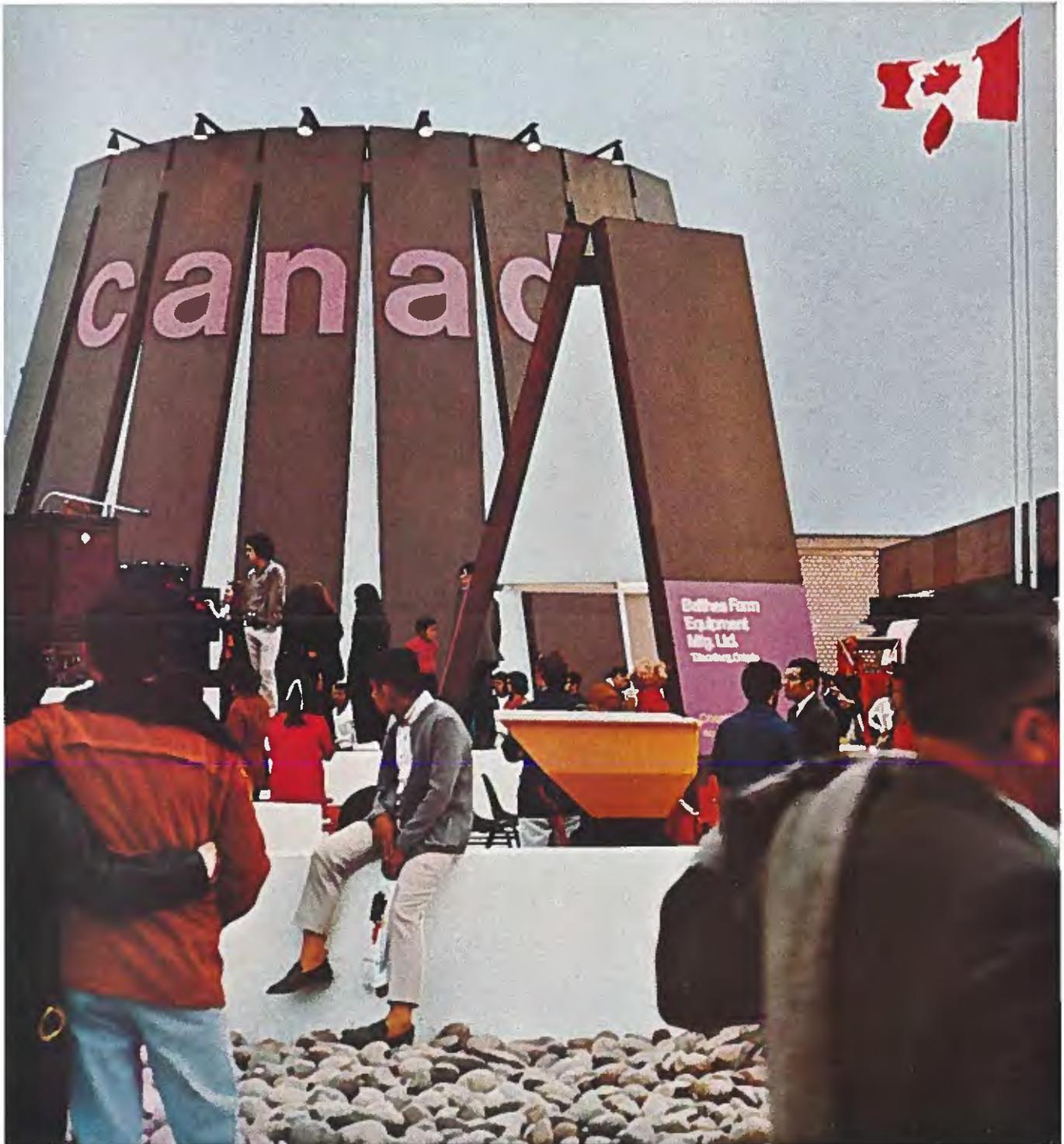
Selling Canadian at the
Lima Fair

Head Office Directory



Department of Industry, Trade and Commerce, Canada

January 17/70



In This Issue

One of the important trade fairs in which Canada took part last year was the Pacific International Trade Fair in Lima, Peru. The Hon. Jean-Luc Pepin, the Minister of Industry, Trade and Commerce, was among the visitors, as the pictures on pages 10 and 11 show. Our cover shot, the exterior of the Canadian Pavilion (which was built in 1967) was taken by the Director of the Publicity Branch of our Department, J. A. Murphy, who also went to Lima; he photographed some of the scenes that appear in our picture story on page 10.

Many Canadian suppliers persist in thinking of the Los Angeles market as too far off and too competitive to be worthwhile. A number of Canadians, however, undeterred by this, have made sales, as a group of articles in this issue from our Los Angeles office makes clear. Take the enormous aerospace industry in Southern California; it buys extensively from outside suppliers and firms in Fort Erie, Montreal, Edmonton and Winnipeg have ob-

tained orders from it. On page 9 you will find a success story about pollution control—and what could be more topical? A Montreal company manufactures equipment that is coping successfully with the polluted waters in one section of Los Angeles Harbor.

The article on the market for consumer goods in Los Angeles concentrates largely on two fields: apparel and food products. There are plenty of gourmets with the money to satisfy their expensive tastes for fiddlehead greens, maple syrup, wines, and Canadian cheddars, and other customers to buy what the supermarkets stock. As for apparel, the Canadian Consulate General in Los Angeles considers the prospects so good that it has recently employed a Commercial Officer with long experience in the industry to exploit more fully the opportunities for Canadian-made clothing.

Our Consul and Trade Commissioner in Cleveland feels that Canadian firms are not alive to the possibilities of the mar-

ket in Ohio—not just in Los Angeles. He sent us an open letter that we have reproduced on pages 14 and 15 just as it came in.

Like most private businesses today, the Department of Industry, Trade and Commerce is perpetually experiencing changes in personnel. Eventually most of the Department will be concentrated in Tower B, Place de Ville, but many Branches, including ourselves, are still working in the old Trade and Commerce Building. **The revised Head Office Directory on pages 25 to 31** provides the latest information on personnel and location.

What's coming? On January 31, the entire issue will be devoted to the international financing organizations and the business they provide for engineers and equipment suppliers. Just to prove the point, we have interviewed a number of Canadian firms that have succeeded in getting some of this business and we will tell you how they went about it.

foreign trade



Established in 1904. Published fortnightly by the Department of Industry, Trade and Commerce.

Copyright. Material appearing in this magazine may be reprinted with credit to "Foreign Trade".

The Hon. Jean-Luc Pepin, Minister

The Hon. Otto Lang,
Minister without Portfolio

J. H. Warren, Deputy Minister

Address correspondence to the Editor, "Foreign Trade", Trade and Commerce Building, Wellington and Lyon Streets, Ottawa, Canada.

O. Mary Hill, Editor

Vol. 133 No. 2

January 17/70

Los Angeles Market

Greater Los Angeles	2
Consumer Products	4
Tapping Aerospace Potential	7
Polcon Fights Pollution	9

Articles

Selling Canadian at the Lima Fair	10
R and D and Spar	12
Come Down and Sell in Ohio	14
Canada Aids Jamaica	16
Plastic Raw Materials in Hong Kong	19
Containerization: Scotland	22

Departments

Head Office Directory	25
Foreign Tariffs and Trade Regulations	31
Trade Lines	32
Trade Commissioners on Tour	33
Foreign Exchange Rates	34
Marketing Data Sheet: South Korea	36

Subscription

\$5.00 a year in Canada, \$7.00 abroad.
Single copies 25 cents each.
Please forward all orders, with cheque

or money order made out to the
Receiver General of Canada, to the
Queen's Printer, Ottawa, Canada.

GREATER LOS ANGELES

Ten million people with above average incomes, booming aerospace and electrical industries, brisk pace of building—it all adds up to big potential for Canadian exports.

V. BRIAN CHEW, Consul and Trade Commissioner, Los Angeles

On August 17, 1968, the population of the Los Angeles five-county area passed the ten million mark. It has continued to rise at the rate of 520 a day. This heavily developed urban area that centers on Los Angeles comprises Orange, Ventura, Riverside, Los Angeles and San Bernardino counties. It represents the second largest concentration of population, industry and business in the United States, with a gross value of production of approximately \$58 billion in 1968. Economists forecast that by 1980 the figure will exceed \$100 billion.

The five-county area has the greatest concentration in the U.S. of the advanced technology industries such as scientific research and development, electronics, aerospace, scientific instruments and oceanography. And of course it has the entertainment industry, playing a leading role in all phases of television, radio, motion pictures and musical recordings.

In fact, many California businessmen appraise the five counties as a separate country and if one were to compare its manufacturing with that of other countries, it would rank as the eleventh largest manufacturing nation. The following are some of the major manufacturing groups, with production forecasts for 1969:

U.S. \$ billion	
Machinery 1.36	Apparel .48
Electric equipment 2.06	Chemical products .72
Transportation 8.30	Fabricated products 1.08
(auto & aerospace)	
Food processing 2.18	Printing and publishing .82

The largest industry in the area is aerospace, with such giant corporations as Lockheed, McDonnell Douglas, Hughes, Northrop and General Dynamics all with more than one major plant here. Its growth to a great extent was stimulated by the fact that for the last ten years the Pasadena Jet Propulsion Laboratory has been the western headquarters for the National Aeronautics and Space Administration. In addition to the aircraft companies themselves, there are hundreds of component and subassembly companies catering to the industry as a whole.

Up to 1940 practically all the electronics and electrical plants were located in New England and the Great Lakes area. Today the five-county area accounts for 15 per cent of total U.S. production in this field.

The construction industry is also booming. In 1968, approximately 126,000 housing units were built in the five counties and were valued at \$1.4 billion. In spite of this activity, the construction industry cannot meet the demand for housing and the backlog of demand is growing. In the non-residential sector the value of contracts for 1969 is estimated at about \$1.6 billion, with the main thrust supplied by the building of offices and stores.

To bring this fantastic rate of construction into focus, every year a city the size of London, Ontario, must be built in the five-county area merely to take care of normal growth.



Canadian wines in California? Brian Chew, Consul and Trade Commissioner in Los Angeles, is photographed beside a display of wines from London Wineries that was featured at the Consulate recently. The company has since made arrangements for the distribution of its wines in the state. In 1968 Californians drank 160 million gallons of wine; 10.4 per cent of this consisted of imports from foreign countries.



Here is the city of Los Angeles—the second largest concentration of population, business and industry in the entire U.S.

Personal income in the five-county area totalled \$38.3 billion in 1967 and is expected to double to \$80 billion by 1980. The average family income reached \$11,500 in 1968 and in ten years it will be approximately \$23,500, or 24 per cent higher than the forecast average for the rest of the country. As a result, this area is now the second largest consolidated buying center, outranked only by New York.

The Los Angeles area is the wholesale hub of the southwestern United States, with the head offices and main distribution warehouses for approximately 80 per cent of wholesale activity in a region that extends north to Bakersfield, east to Las Vegas and Phoenix, south to San Diego.

In an enormous market like this there is a great deal of specialization, with wholesalers, agents, brokers, warehousemen, sales offices, field promoters and data centers all performing their functions within over-all wholesale operations. The products handled by these firms run the gamut from basic consumer goods to sophisticated electronic components for the aerospace industry.

Retail sales in the five counties totalled some \$23.9 billion in 1968; by 1975 they will reach an estimated \$36.6 billion.

The largest single retail field is motor vehicles, sales of which totalled \$3.3 billion in 1967. There are, in fact, more

automobiles registered in the five-county area (4.59 million) than in 15 other states combined.

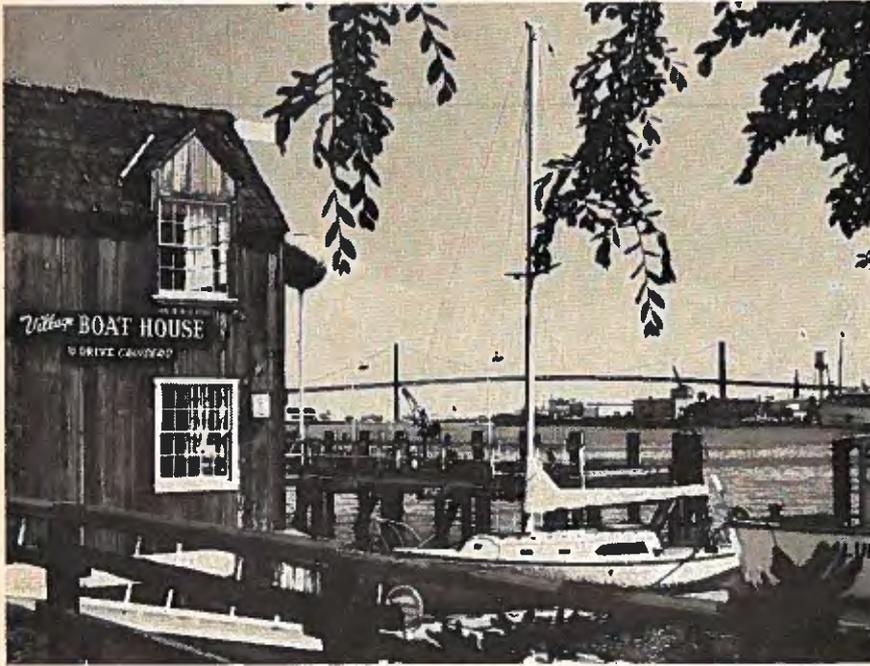
For the Canadian exporter, Los Angeles and the surrounding area represent a tremendous market, and one that is receptive to Canadian products. In fact, numerous large industrial companies want to increase their purchases from Canada, in some instances up to 25 per cent of their total requirements, in return for their sales to Canada.

There are excellent opportunities for sales of manufactured goods such as giftware; housewares; recreational, sporting and outdoor equipment; electronic and electrical components; apparel, leatherwear and accessories; wood furniture and industrial components; hardwood lumber and veneers; gourmet foods; vegetable and animal products; fish and shellfish; machinery; instruments and research equipment. These are only a few of the many promising fields.

Some of these market opportunities are covered more fully in two articles that follow: one on the aerospace industry and the other on selling consumer goods. In these and other fields the Los Angeles office stands ready to serve you. We can evaluate the competitive position of your product in this market, locate a suitable distributor or agent, and introduce you to the procurement officers of the huge avionics industry or to department-store buyers and merchandisers.

LOS ANGELES

CONSUMER PRODUCTS



This is the Village Boat House at the Ports of Call and Whalers Wharf complex by Los Angeles Harbor. It draws more than three million visitors a year. Figures like these explain why there is a market for colorful, well-designed imported products that catch the eye or appeal to the appetite of the Californian customer and tourist alike.

Californians snap up imports if they are novel, of good quality and well presented. Canadians with apparel, food or fisheries products to sell should find customers.

D. M. LAWSON

Vice Consul and Assistant Trade Commissioner, Los Angeles

An important characteristic of the Westerner as consumer is his responsiveness to a new idea or to renewed emphasis on the familiar. This is illustrated by his more rapid acceptance of most new products and services than other market areas can show. The list is a long one but includes products shown in the accompanying box. This receptiveness creates an atmosphere in which imported consumer products can and do enjoy a \$3 billion market of their own.

The competition for any Canadian producer or manufacturer is stiff—mainly from Japanese, British, Australian, Eu-

ropean, and Mexican suppliers, in addition to domestic firms. The product that he presents must have intrinsic merit superior to products already on the market; not “as good as” but “better than”.

California wholesalers, brokers, etc., disdain the “in-and-out” approach that foreign firms often try. The amount of expense involved when a huge distribution network makes a commitment to accept a certain product has to be amortized over the long run. Canadian manufacturers must, on approaching the market, be prepared to provide backup for

They Bought These First

When they were first introduced, these products were accepted more rapidly by consumers in the West than anywhere else in the country.

Cartridge tape recorders
Imported cars
Auto leasing
Color TV
Family rooms
Sliding glass doors

Built-in ranges
Dishwashers
Eye makeup
Wide tread tires
King-size beds
Electric blankets
Electric carving knives
Hi-intensity lamps
Pentel pens
Zoom lenses
Recreational vehicles

Container gardening
Bright-colored apparel
Chinese food
Hair coloring
Frozen foods
Cake mixes
Dietetic foods
Garden lighting
Metal skis
Triple garages
Indoor barbecues

the wholesaler on sustained or repeat orders which will naturally increase through time with market penetration.

Because of the size of the market, most consumer products pass through a complex distribution channel. The flow is usually manufacturer to broker to wholesaler or stocking distributor, to salesman, to retail store. Some but not all retailers have integrated backward and perform these services themselves or through "captive" firms.

Canadians appear to have a good potential in three particular lines: apparel, food products, and fisheries products and these are discussed in detail below.

Southern California has become one of the world's largest manufacturing and exporting centers for wearing apparel as well as an enormous market for it. Retail sales of apparel in Southern California in 1968 totalled approximately \$1.2 billion, of which imports represented \$50 million at retail prices. Canadian sales are estimated fairly accurately at \$2.5 million at wholesale prices, roughly one-half retail prices. Only a very few Canadian companies have ventured into this market yet we feel that there is great potential.

California is exerting a proportionally greater influence on the industry every year. With the trend to less "seasonality" in products over North America and to lighter all-year fabric weights, innovations in apparel now depend on "image seasonality" achieved through silhouette and color. CALIFORNIA IS COLOR. Canadian manufacturers must stay abreast of color research with the fabric mills to determine what bright new shades are demanded in West Coast merchandise. The functional dark tones simply won't do. Ask any colleague who knows this market.

The middle- to upper-class Southern Californian who represents the bulk of the purchasing power tends to have a tanned skin and wants to set off that natural healthy look or contrast with it. This is true in the men's field as well as the women's.

The Los Angeles office uses the following formula in cultivating this market:

1. Identify Canadian firms with a desirable product and ample production capacity or with the inclination and potential to expand.
2. Interest firms in sending us their spring or fall collections, depending on the time of year, in order to assess reception by local buyers.
3. Line up commission salesmen who will participate in regional Travellers' Shows and who go on the road within an agreed-upon territory. Ideally, prospective salesmen have permanent showrooms in the California Mart as well, and are affiliated with NAWCAS or MAGIC/BAGIC.*
4. Arrange and carry out fashion shows on Consulate premises to gain media, resident buying office, buyer exposure.

* NAWCAS is the National Association of Women's, Children's and Associated Salesmen. MAGIC/BAGIC is the Men's Apparel Guild in California and the Boy's Apparel Guild in California.

5. Assist Canadian firm in export pricing and in quoting both a U.S. dollar c.i.f. duty-paid delivered Los Angeles price on 8 per cent E.O.M. terms and an f.o.b. plant price.

We have had an excellent response from merchandisers to the lines which we have introduced so far, and we at the post now know personally all buyers of consequence. They are keen to learn more about the exciting fashion ideas that Canadians have to offer. As well, we maintain close liaison with a number of reputable salesmen who want to represent Canadian manufacturers. It is impossible to cover the market in any depth without a salesman.

In view of the tremendous potential, we recently engaged Mrs. Ellen Mosler as a Commercial Officer to specialize in apparel. She brings with her some 20 years' experience in all facets of the industry. In addition, we have recently negotiated a package deal with Air Canada and a local customs broker, effective January 1, 1970, that provides plant-to-store delivery within a maximum of 48 hours specifically for wearing apparel. In some instances the per-unit cost is less than the conventional mode of transport. Canadian West Coast manufacturers will derive the same benefits via another connecting airline. Contact us for information.

We want any Canadian manufacturer of men's or women's wear who feels that he has the right styling and competitive prices and who wants to expand his sales to know that we are in a position to make his entry into the lucrative Southern California market pleasant and expeditious.

Sales at retail of grocery products in Southern California in 1968 totalled \$5 billion. It is impossible to identify accurately what portion of these sales represented Canadian products. Comparisons by commodity with U.S. averages show that Californians lead the nation in per capita consumption of frozen foods, diet foods, beef, wine, and imported foods, and that they also eat out more than the average U.S. family. In fact, the public eating establishments in Southern California gross about \$2 billion annually, although tourism accounts for a fair share of this figure. It is our experience that the gourmet or finer-food trade is one area that has good immediate potential for Canadian food processors.

We have introduced maple syrup, wild rice, cheddar cheese, biscuits, fiddlehead greens, wines, jams and meat specialties, among others, to the local market. Some products enjoy close to 100 per cent distribution, by which we mean that almost all stores in the supermarket chains carry the product.

Most food products are marketed initially through a broker. The exception is the Certified Grocers network which is a purchasing, warehousing, and distributing co-operative which generally buys in such large volume that food processors treat it as a house account. The broker is your contact man who knocks on the door of the chain buyers. Naturally in a competitive market there is considerable "in fighting" when a new food product attempts to replace an established line. Products vie with each other for 6 to 12 or 24 inches of shelf space in the particular chain being approached. The average chain has 100 stores in Southern California, although eight chains are larger and there are numerous smaller ones. In addition, over 600 new items are presented to chain buyers each week!

It is not only difficult to get a product on the shelves, but also to keep it on. The deals and concessions that have to be arranged are sometimes staggering. Here is one reason for having a broker. It took two years for one Canadian product to move from presentation to becoming a listed stock item. But the rewards are great.

Ordinary supermarket items will be sold as they are in Canada. Gourmet items or higher-priced foods will be sold either in the "Foreign Foods" section or the "Deli" section, or quite probably both. The composition of the "Deli" section varies greatly from store to store. An important market for gourmet items is the small-chain, better food store or the completely independent single gourmet shop. Another good bet is the cheese shop which often has a wine section and a "Deli" counter. The person responsible for identifying the most suitable prospects is the broker.

The post has close relations with reputable food brokers, usually members of the National Food Brokers Association, many of whom already handle a Canadian line. They are receptive to new products and are willing to run panel testing for product evaluation. If a product has merit, they will certainly listen to any proposition from the producer or processor.

The Los Angeles area also comprises one of the largest food processing centers in the U.S. This makes possible three other approaches to this market.

1. Bulk shipments of food commodities for processing or packaging by a local firm. This may be arranged on contract or as a straight sale.
2. Subcontracting with Canadian firms, which may be closer to the raw materials, to do private-label consumer packaging for Los Angeles firms.
3. The relatively specialized field of food additives and ingredients. This includes essences and aromatics as well as caseinates and hydrolyzed proteins from vegetable, animal, or fish sources.

Although point (1) above would tend to diminish the value-added or Canadian content of shipments to the area, it is certainly a viable alternative to not shipping at all.

At present, California represents the largest single seafood market in the U.S. For certain species, California currently absorbs up to 80 per cent of Canadian production. Independent California brokers, fish processors, distributors, wholesalers, and quite often chain supermarkets, are in a position to buy in as large quantities as Boston brokers do. They will provide bank letters of credit, arrange cartage if necessary, and even negotiate contractual sustained open orders with Canadian fish producers.

With few exceptions, the California buyer has had to buy fisheries products via Eastern U.S. brokers. Leads directed to the Canadian fish industry are simply referred to the established broker, in spite of the fact that the buyer wishes to source direct. In an effort to satisfy this apparent need to source directly, the Los Angeles office made a two-pronged approach.

1. Organization of an informal incoming mission October 1 to 10, 1969, to introduce a few California buyers and the post to fish producers who would be willing to work directly with California clients.
2. Generating interest on the part of Air Canada in acting as a carrier of fisheries products. It has been sufficiently motivated to file for a special commodity/route rate that is fully commensurate with the type and volume of traffic envisaged. Air freight certainly opens up the possibility of introducing fresh fisheries products to this market.

Officers at the Los Angeles post stand ready and willing to counsel Canadian fish producers on product form, timing, packaging and handling, shipping, competition and all elements that will assist them in entering this market. Additional producers who are or will be in a position to cater to this large market should contact us before commitments are made on 1970's pack, which starts on May 1, 1970.

Canadian Firms Have These Advantages in U.S. Apparel Market

1. The prestige of an "Import" label.
 2. The generally smaller production runs in Canada, and/or better engineered than their American counterpart. Thus Canadian houses have greater flexibility in responding to fashion shifts and to variegated orders, reorders and special orders.
 3. Lower labor wage rate.
 4. The poor European deliveries in the last two years, with the inevitable result that American stores are looking for alternative import lines that are more dependable.
 5. Ability to shop in the world market for fabrics, if necessary, and have the added bonus of a duty drawback on the cloth when exporting the finished garment to the U.S. The American manufacturer does not have drawback advantage.
 6. The fact that the U.S. house usually contracts out various assembly functions for a flat fee. In order to maximize profit, the contractor will perform the basic function in the least expensive manner. Hence, the phenomenon known in the trade as "stolen stitches." Canadian production is usually under one roof and the manufacturer has control of every function, from cloth to shipped garment.
 7. Exchange premium on the U.S. dollar.
-

LOS ANGELES



This is the DC 9 assembly line at the huge Douglas aircraft plant in Los Angeles. Douglas buys from over 22,000 outside suppliers, including Canadian firms. The wings of the aircraft in the picture were completely fabricated in a Canadian factory.

TAPPING AEROSPACE POTENTIAL

The aerospace industry in the U.S. is continually seeking new sources of supply for a variety of products. Quality-conscious Canadian firms should contact company buyers.

S. F. PATTEE, Vice-Consul and Assistant Trade Commissioner, Los Angeles

The aerospace industry in Southern California has annual sales equal to one seventh of Canada's gross national product, which totalled \$71.45 billion in 1968. Since 1940 the growth of the aerospace industry has been the most important single force in the development of the economy of Southern California. It has resulted in the creation of tremendous industrial complexes in several centers, with investments running into billions of dollars.

The industry divides into four component sectors: ordnance and accessories, electrical machinery, aircraft and parts, and instruments. It provides jobs directly for half a million people and indirectly for many thousands more.

Many of the largest corporations—such as North American Rockwell, Douglas Aircraft, Lockheed Aircraft and Litton Industries—have their headquarters in the Los Angeles area. These four companies alone employ over 300,000 people and have sales of over \$7 billion.

Although the prime contracts for the major firms often lie in the defence field, there are large commercial interests such as the Hughes Comsat II Satellite program, the Douglas DC-10 airbus and the Lockheed L-1011, to name only a few.

There is a substantial potential market for Canadian companies in this field. How do they go about gaining entry into it? The following example of how one of the largest companies operates in the area of procurement may answer that question.

Douglas Aircraft Company employs 50,000 people and last year had sales of over \$1 billion. Like most other large businesses, Douglas relies heavily on outside sources of supply. About 22,000 suppliers are needed every year to fill the various contract and subcontract requirements.

The products purchased by a company such as Douglas range from abrasives to zippers. They include such obvious

items as automatic flight-control systems, hydraulic pumps and presses and oscillators, and some not-so-obvious items such as draperies, polish and wax, advertising literature and flash bulbs.

There are three departments in the Douglas procurement organization. The purchasing department issues the major portion of all purchase awards, including raw materials, mechanical and electrical equipment items, purchased parts, and maintenance, repair and operating supplies. The Outside Manufacturing Department also issues purchase orders (but in fewer numbers) for the procurement of machine time, processing, welding, sheet metal fabrication and the manufacturing skills for which Douglas usually furnishes the material and the tooling.

The Major Subcontract Department administers the more sophisticated type of subcontract, purchase contracts and procurement of complex equipment items and the subcontracting of major systems, study, research and development programs.

Whenever possible, a minimum of five bids is sought for the procurement of new items and on repeat items a minimum of three. On repeat items the three bids include the two low bidders on the last purchase and one new bidder. Thus new sources of supply are continually required and opportunities for new suppliers are continually being opened up.

Douglas Aircraft also has a policy of using the capabilities of small businesses and encourages its buyers to do business with small companies which demonstrate their willingness and ability to meet the requirements. These firms must meet applicable government regulations for military production contracts. Redetermination, renegotiation, cost analysis, audit review and other Armed Services Procurement Regulation requirements may apply to any particular order.

A personal visit to the Douglas Aircraft offices in the Los Angeles area is the best method of soliciting business. Officials from the Department of Industry, Trade and Commerce will make appointments for you and will escort you there. They will contact the purchasing agent responsible for the product you are selling to determine the qualifications you must meet in order to be able to supply Douglas.

If you represent a small business, the purchasing agent will introduce you to the Small Business Co-ordinator for the division. He will furnish you with a "supplier questionnaire" form and show you how to complete it, as well as the other documents required to properly inform the buyer of your company's capabilities.

A facilities survey of your company may also be required. A team from Douglas, including purchasing, engineering, manufacturing and financial people, may visit your plant. The more intricate the work you perform, the more likely it is that this survey will be necessary. To facilitate the processing of your documents, it is important that as much relevant information as possible be given on the form.

In 1968 small manufacturers and suppliers received 142,398 purchase orders, 76 per cent of the total orders placed by

AEROSPACE COMPANIES IN LOS ANGELES AREA

	Sales U.S.\$'000
North American Rockwell Corp.	2,649,871
Lockheed Aircraft Corp.	2,217,366
Litton Industries	1,855,007
Douglas Aircraft Co.	1,048,012
Teledyne Inc.	806,747
Northrop Corp.	485,504
Lear Siegler Inc.	477,546
Aerojet General Corp.	444,803



These are fuselage components for the wide-bodied L-1011 TriStar jetliner made by Lockheed. They consist of forward and midship underfloor pressure bulkheads and a four-piece section of the forward main cabin floor. Supplier was Northwest Industries of Edmonton—right on the deadline. Northwest is a division of CAE Industries Ltd. of Montreal.

Douglas. This represents \$180,731,264 of the \$778,071,085 spent on purchases from suppliers. During fiscal year 1968, 1,847 new suppliers were added; 91 per cent were small business organizations. These new sources brought the total of Douglas suppliers to 22,257.

Most of the large companies operate in much the same way. **It is important that, as a first step, your products be made known to the procurement officials of each company,** usually by filling out a questionnaire obtained from the Procurement Division.

A personal visit will accomplish more than a long exchange of correspondence. Officials of the Department of Industry, Trade and Commerce will help you find your way around.

Canadian companies are already selling magnesium and aluminum castings, hydraulics, fuel tanks, brakes, etc. But the surface has barely been scratched and there is a tremendous market waiting to be explored by quality-conscious Canadian companies.

Do you have something that can be sold to this huge specialized market? Contact the Commercial Division, Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014.

LOS ANGELES

POLCON FIGHTS POLLUTION

V. BRIAN CHEW

Consul and Trade Commissioner, Los Angeles

Thirty years ago, Los Angeles Harbor was relatively clean. Children could swim off its docks and weekend fishermen could be assured of a catch. But, like so many great harbors during the last three decades, it has become a smelly, black, unhealthy body of water. The only creature that enjoys this environment is the seagull—the flying garbage can.

To compound the pollution problem, there are industrial plants and refineries located on a number of its wharves that, in spite of good housekeeping, add their daily contribution of pollution to its waters.

One of these industries took steps to solve the problem in its area last July by adopting a basic and economic method developed by a Canadian company, Polcon Corp. of Montreal, for the treatment of this pollution. Basically, this induces the decomposition of waste by oxidation and turbulence created by jets of air surging up from specially engineered aerating units. These units are linked together in a grid system according to the size of the treatment area and the volume of water.



Polcon installed 91 oxidation units on the harbor floor under the wharf about 15 feet apart at a cost of \$120,000. The picture at the left shows some of these aeration tubes ready to be installed adjacent to the pilings of Wilmington Harbor Pier in Los Angeles. The picture above shows the turbulence created by forced air bubbles moving up through convoluted inner chambers in these tubes to oxidize pollutants. The units are connected by hoses in series to a compressor which supplies the flow of air to generate the oxidation and turbulence in the water. Six million gallons of water pass through each of the aeration units each day.

The system was installed in late July 1969 and within one month the changed appearance of the water within a five-acre area adjacent to the wharf was obvious. More striking still, after thirty years, fish once more have found their way into this section of Los Angeles harbor. Children in search of a place to swim may soon follow.

The Los Angeles office was pleased to help Polcon Corp. to meet the challenge of one of society's greatest problems—pollution control.

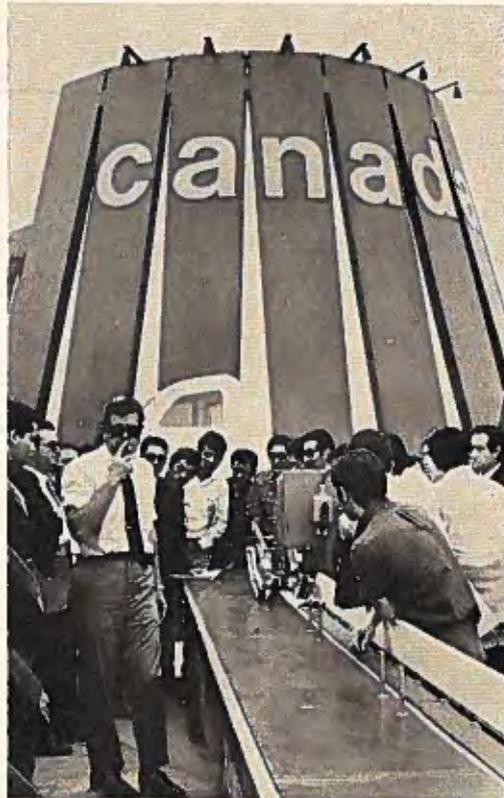
Selling Canadian at the Lima Fair

Opening day at the Sixth Pacific International Trade Fair, November 14, brought the President of Peru, General Juan Velasco Alvarado, to the Canadian Pavilion. There, with the Minister of Industry, Trade and Commerce, the Hon. Jean-Luc Pepin, at his side, he cut a ceremonial white ribbon and declared the Pavilion open. Later he accepted a maple leaf pin from one of the young ladies on duty, listened with a Latin's appreciation to the music of the Marshmallow Soup Group, and examined some of the exhibits.

In the seventeen days of the Fair, close to 600,000 visitors streamed onto the site and thousands of them came to the Canadian Pavilion, built in 1967. There thirty Canadian companies displayed industrial and agricultural machinery, electronic instruments and equipment, special-type vehicles, camping accessories, tires, and a few other products. At the close of the Fair they reported \$800,000 worth of business concluded on the spot and estimated their future orders at \$1.25 million.

A number of special events drew visitors to the Canadian Pavilion. The most important was Canada Day, November 17, attended by the Ambassador of Canada to Peru, His Excellency J. F. X. Houde, and by Mrs. Jean-Luc Pepin. Ambassadors of Canada in a very different sense were the Marshmallow Soup Group from the Ottawa Valley, whose music delighted Peruvians and Fair visitors alike. The group performed three times a day every weekday and four times each Sunday.

The Lima Fair, as it is generally known, has been held every two years since 1959. A general fair with the emphasis on machinery and equipment for industry, it attracted displays from 30 different countries this year, including five in Eastern Europe. Of the thirty Canadian firms participating, 19 came from Ontario, four from Quebec, three from Alberta, three from B. C. and one from Saskatchewan.



In the outdoor exhibit area, Eagle Machine Company Limited, London, Ontario, set up one of its tobacco harvesting products, the Hawk tying machine. Eagle's Peruvian agent, Oscar Orlandini (left in white shirt) is describing how the equipment is used to a group of students from La Malina agriculture and forestry school who visited his exhibit.



The Minister of Industry, Trade and Commerce presents to the President of Peru, General Juan Velasco Alvarado, the latest in dial telephones made by the Northern Electric Company, one of the exhibitors.

At Canada Day ceremonies on November 17, the Commercial Secretary in Peru, Michael R. Bell, welcomes visitors. The three women on his right are (left to right) Mrs. Houde, wife of the Canadian Ambassador to Peru, Mrs. Bell, and Mrs. Jean-Luc Pepin, wife of the Minister. Next to Mrs. Pepin is Mr. Houde.



Students from La Molina, the leading agricultural school in Peru, came to the Canadian Pavilion to study the machinery displayed there. Here they are examining a machine made by Balthes Farm Equipment of Tillsonburg which can undertake with ease a number of varied farm operations.



Most of the machinery exhibited was fully demonstrated either within the Canadian Pavilion or at a nearby site. Here the Amphicat, made by Bee-Hoo Industries of Streetsville, Ontario, is being put through its paces to demonstrate its versatility.

R and D and Spar

"Foreign Trade" visited Spar Aerospace Limited a short time ago—a firm which has been outstandingly successful in commercializing Canadian inventions and turning ideas into saleable products.



Using the "Hotspotter", a miniature infrared heat detector developed by Spar Aerospace Ltd., a fireman is finding out whether, in the burnt-out ruins of a house, invisible fires are still smouldering. Whenever it is pointed at a heat source of any type, the Hotspotter emits an audible signal. Fire brigades throughout North America have been buying and using it.

M. A. JOHNSTON

Spar Aerospace Products Limited is a Canadian company largely owned by its senior staff. Its history mirrors the successive changes that have taken place in the aircraft industry since World War II. Originally part of the de Havilland organization, it developed a family of products (many of them based on Canadian inventions) whose applications went far beyond conventional aircraft. When the parent company followed the world-wide trend and shed its interest in components in favor of intensified effort in STOL aircraft, the fate of Spar hung in the balance. L. D. Clarke, who was de Havilland's Vice-President, Administration, set about raising the necessary capital and was able to buy the division from de Havilland as a going concern.

The first tasks were to provide enough bread-and-butter business to support the long-range product development effort and to create a thoroughly sales-oriented team. As time went on Mr. Clarke added products as diverse as stereo projectors, mobile X-ray units and hand-held fire spotters. Some of them were a spin-off from the aerospace side and

some were acquired by takeovers and through licensing arrangements. The common element was that Spar had the necessary management skills and production facilities.

The most prestigious of Spar's products is STEM (Storable Tubular Extendible Member.) The principle was invented at the National Research Council shortly after World War II. It is simple enough—a flat strip of spring metal is unwound from a coil and forms itself into a tube—but it took many years of work to convert the idea into a dependable piece of space hardware. John MacNaughton, Vice President of Marketing, told *Foreign Trade* that over 350 antennas, masts and other STEM devices had gone aloft since 1961. This adds up to over seven miles of tube. Besides the United States, Japan and France have bought STEM and Canada has used it in its own space program. Export business has already passed the Cdn. \$8 million mark.

The exploration of space promises to keep Spar busy making STEM for some time. Its light weight and compactness

are unrivalled and the knowhow which goes with it is not matched by competitors. The Soviets took a very close look at STEM during the Paris Air Show. But Spar is not neglecting other possible uses of the principle. "There's no gravity in space so you can unfurl two or three hundred yards of tube, if you wish, without it bending. On earth, you have to consider wind resistance on even fifteen or twenty feet. You get into a completely different set of problems." In space work, cost comes after quality and reliability (the Japanese, for example, will only buy components that have been proved in actual service). In more mundane applications, however, price is a big consideration.

Spar's most promising commercial development of the STEM principle is the "Spar-Lite" flashing beacon for emergency vehicles. If you have ever crossed the brow of a hill and come upon a tangle of cars in the dead ground beyond, you will appreciate the value of a warning signal that is not hidden in a hollow. At the touch of a button, the driver of the emergency vehicle can hoist his flasher some ten feet above pavement level to where it can be easily seen from a distance. When *Foreign Trade* visited Spar late last year, the production engineers were busy evaluating the materials and processes which would be used to turn out "Spar-Lite" in quantity. "Once we get these things settled," David Dalzell, the export sales manager, explained, "we will be able to decide on prices. We may tell our prospects as often as we like that we are working on something interesting but they don't really pay much attention until we can give them a price and delivery."

"Spar-Lite" is an example of the type of production which the Department of Industry, Trade and Commerce has helped under the PAIT program. The basic criteria for assistance are that the project should be technically innovative and have a commercial potential. The Government underwrites 50 per cent of the development costs. Without such support, a company like Spar might find it very difficult to convert a good idea into a saleable product.

The "Hotspotter" infrared fire detector is a spin-off from Spar's work on military target acquisition systems. It can locate the heart of a fire in a smoke-filled room, spot still-smouldering wood behind a pile of rubble, or trace the course of steam pipes along a wall. The main customers are fire brigades throughout North America. "Spar has a firefighting equipment distributor in Canada and the United States selling to users," Ralph Abbott, Director of Commercial Products, informed *Foreign Trade*. "Elsewhere we use manufacturers' agents. We hope to do substantial business in Europe and the market in Australia is opening up nicely. Our product is light—it only weighs two pounds—and operates for up to ten hours on batteries which can be recharged from a 12-volt car battery in an emergency. Believe me, you have to have a technical advantage, aggressive salesmen and a competitive price to stay in this game."

As well as having an infrared capability, Spar is deeply involved in electro-optics. The Dominion Observatory in Ottawa has a meteorite tracking system which the company

built. When a meteorite comes into view, a camera starts to take pictures (in the scientists' jargon it is known as an event detector) and from the pictures the place where the meteorite hit the ground can be pinpointed.

Also in the optics area is a stereo projector invented by Professor Jackson, formerly of the University of Toronto, and developed by Spar. The unique feature is a floating mark which enables the teacher to point in depth to objects within the three-dimensional image. The Jackson projector can be used to teach physical geography in high schools and polytechnical institutes to classes of up to 200 pupils. As a result of exposure at trade fairs and technical conferences, it is steadily gaining recognition in the United States, the main export market. Besides geography instruction in schools, the projector can be used by surgeons and medical students to view X-ray pictures three-dimensionally.

Spar, like many other aerospace companies, is turning its attention to oceanology. There is a considerable similarity between the problems of navigation in the two elements and in both man has to be protected against an unfriendly environment. Spar's major contribution to Canada's underwater capability is a decompression computer based on a joint Defence Research Board/Department of National Defence invention. Spar licensed the patent rights from Canadian Patents and Developments Limited, a Crown corporation set up to commercialize inventions developed by government employees. The computer continuously monitors the pressure in the diver's breathing apparatus and calculates a safe rate of decompression. It even takes into account the nitrogen buildup in the bloodstream when the diver makes repeated descents. The Canadian Armed Forces have taken delivery of the first evaluation models. These will cut divers' ascent times and allow them to spend longer on the job. They will provide accurate measurements instead of the former approximate calculations, and safety margins will be more realistic. Spar is planning to sell the computer worldwide and has just received an allocation of funds from the Department of Industry, Trade and Commerce to refine the product further. The firm is also working closely with other Canadian companies in the oceanology field on marketing aspects.

After being shown these and half a dozen more products of a highly technical nature, *Foreign Trade's* representative had a quick look at Canada's next satellite structure being built. Just along the passage there was a moulding shop where urethane radomes were being made, another National Research Council development.

Since we visited Spar, the company has taken over York Gears Limited, a firm mainly engaged in the manufacture of gears for helicopters and other aircraft applications and intends to move from Malton to York's premises on Caledonia Road, Toronto. The merger of the two operations will permit some streamlining of management and product lines so that in the new organization the most promising products will continue to get the maximum emphasis.

AN OPEN LETTER TO CANADIAN BUSINESSMEN

December, 1969

Dear Mr. Businessman:

What does Ohio signify to you? - just another State? Do you know that of all the 50 it is the third most industrialized, with the fourth highest personal income; it may well be an ideal market for your products. Many Canadian manufacturers have discovered this, but too many are still unaware of Ohio's potential for them.

Easy of access from Canada, Ohio offers a market of 12 million people at your doorstep. In Columbus, Cleveland, Cincinnati, Dayton, Akron or Canton are the headquarters of many major United States firms. Procter & Gamble, Eaton, Yale & Towne, Sherwin Williams, Goodyear, National Cash Register, Hoover, Firestone, Midland Ross, General Tire - the list is long and formidable.

Many Ohioans know Canada as their vacation land, but there are too many who do not yet recognize it as a source of the products they need or desire. More than 60% of Ohio's exports go to Canada, but imports from Canada are far from comparable. With your help my colleagues and I can correct this.

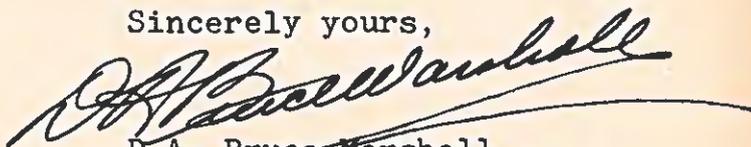
In a current survey of 292 Ohio importers and distributors, 173 have expressed a definite interest in specific Canadian products. These are too numerous to set forth here, but there is a good chance that your product is on the list.

We will be detailing in future issues of Foreign Trade, the requirements and opportunities in specific sections of the Ohio Market.

But why wait? Don't delay until we search you out; send us your brochures, sample if practical, and prices C.I.F. Cleveland and we will put you in touch with potential representatives. Then pay us a visit. We are only 45 minutes from Toronto, London or Hamilton - less than 3 hours from Montreal. Phone or write and we will make hotel reservations and business appointments for you.

Two slogans are current in Ohio - "Go Brown's Go" and "Profit Is Not A Dirty Word". We may not be able to get you tickets for the first, but we can help you share in the second. Don't delay - write us immediately!

Sincerely yours,



D.A. Bruce Marshall
Consul and Trade Commissioner

Canadian Consulate
Suite 1008, 55 Public Square
Cleveland, Ohio 44113

Canada Aids Jamaica

Consulting firms and suppliers of materials and equipment should look into opportunities provided by Canada's aid program for Jamaica and into how CIDA handles procurement.

DONALD H. LEAVITT, Assistant Trade Commissioner, Kingston

Canadian aid to Jamaica is increasing and Canadian exporters and consultants can participate profitably in this program and at the same time make a meaningful contribution to Jamaican development.

Our help to Jamaica should not be looked upon in isolation but as part of our aid program, both in the Caribbean and worldwide. Specifically, the Canadian Development Aid Program for the Caribbean area was introduced in 1958, when the West Indies Federation, comprised of Jamaica, Trinidad and Tobago, Barbados, and the Leeward and Windward Islands, was in the process of formation. Canada's original aid allocation was \$10 million over five years and was intended primarily for projects to benefit the Federation generally rather than any one unit. It was continued after the dissolution of the Federation in 1962 as a series of individual programs for the former units of the Federation.

On the conclusion of the original five-year allocation on March 31, 1963, funds for the succeeding fiscal year amounting to \$2.1 million were made available to the Commonwealth Caribbean area, including British Honduras and British Guiana (Guyana). Based on the approved allocation of funds and acting on the requests and priorities submitted by the recipient governments, the Canadian program of aid to the Commonwealth Caribbean for the first six years was involved primarily with one major project—the provision of two ships, the *Federal Palm* and the *Federal Maple*, for inter-island commerce. In addition, there was educational and technical aid.

With the introduction of an expanded aid program in the fiscal year 1964-65, substantially increased assistance for the Commonwealth Caribbean area was approved, with a planned allocation of \$9 million. This included \$3.5 million in grant aid and \$5.5 million in special development loans, the

first such loans Canada had offered. For the first time also, these development funds were made non-lapsing, permitting unexpended funds to be carried forward into succeeding fiscal years to meet existing commitments. Canada made \$10 million available for 1965/66, including \$4.5 million in grants and \$5.5 million in development loans.

In July 1966, a conference of the heads of government of Canada and all the Commonwealth territories in the Caribbean area was held in Ottawa, at which time it was announced that Canadian assistance to the area would be further expanded. (This included a separate grant of \$5 million made to the University of the West Indies to be disbursed over a period of five years (1966/71) and which was to finance postgraduate studies in Canada, the provision of Canadian professors and lecturers for the UWI, undergraduate scholarships from the whole of the West Indies region tenable at the UWI, and the construction of various campus facilities.) For the fiscal year 1966/67, this involved the allocation to the area of \$13.1 million, including \$6.1 million in grants and \$7 million in loans. Canada also informed the Caribbean Governments that during the next five years, a minimum of \$75.2 million would be made available for the area. For 1967/68, the allocation was \$9.2 million in grants and \$8 million in development loans, for a total of \$17.2 million. In 1968/69, the corresponding figures were \$9.5 million in grants and \$12.5 million in loans, plus \$100,000 in food aid, a total of \$22.1 million.

Since the Ottawa conference, discussions have taken place with Barbados and the Leeward and Windward Islands about the establishment of a Regional Development Agency to review development plans and assign priorities for regional projects within the area. The first meeting of this agency took place in February 1968

and Canada participated. Discussions about a Regional Development Bank have culminated successfully in an agreement to establish a Caribbean Development Bank and it is expected to begin operations early in 1970. Canada and Britain are to become non-regional members.

As in other countries participating in Canada's world-wide aid programs, aid to Jamaica and the Caribbean takes two forms—capital aid and technical assistance. Capital aid is the provision of materials, goods, equipment, machinery, and the services of consulting firms for projects to which the Government of Jamaica attaches high priority because of their contribution to the economic and social development of the island. Because the specified Canadian content in all capital aid is 66 $\frac{2}{3}$ per cent, a large number of Canadian suppliers and engineering firms can participate in these projects. Technical assistance, which is also given in response to requests from the Jamaican Government, includes scholarships for Jamaicans to study in Canada and the provision of Canadian teachers and advisers to serve in various educational and development projects throughout the island.

It should be stressed that Canadian aid, either through grants or development loans, is provided only in response to requests made by the Jamaican Government, based on the priorities attached to the various development sectors in Jamaica. Grant funds are normally reserved for the technical assistance program although some capital items may be financed in this form. Conditions for the disbursement of either grants or loans are identical; the basic difference between the two is the repayment obligation attached to development loans.

Canadian aid to the Caribbean region is the highest per capita compared with all other areas of the world and

Canada is the largest bilateral donor to Jamaica. This, coupled with the traditional affinity of Canada for the Caribbean and its proximity, makes it a logical area for Canadian firms to seek business. **The main difficulty which faces the prospective participant is how to tackle the seeming multiplicity of agencies and departments involved.** We provide in the following paragraphs a few helpful suggestions with particular reference to Jamaica.

Before aid financing is made available, the Canadian Government must receive an official request from the Government of Jamaica outlining the scope of the project for which assistance is required. If this request is accepted by Canada, a public announcement is issued by the Canadian International Development Agency. Different procedures are followed for engaging of Canadian consulting firms and for procurement of materials and equipment required for a project.

Selection of Consultants—For grant aid projects where the cost is \$100,000 or less, the usual practice is for CIDA to draw up a list of qualified firms from which one firm is selected by the

designated authority for the Government of Canada. A contract is then negotiated and signed by CIDA.

For grant aid projects where the cost exceeds \$100,000, a list of qualified firms will be drawn up by CIDA, three or four firms selected by the designated authority, and proposals invited from these firms. CIDA will recommend to the designated authority award of the contract to one firm based on the proposals received and will subsequently negotiate and sign the contract.

For loan aid projects where the cost is \$100,000 or less, the usual procedure is, subject to the prior approval of CIDA, for the borrower to invite proposals from three or four qualified firms, to recommend award of contract to one firm and, with CIDA concurrence, to negotiate and sign a contract, subject to CIDA's approval.

For loan aid projects where the cost exceeds \$100,000, the borrower may suggest the names of Canadian firms which would like to be considered. CIDA reserves the right to add further firms to the list and in collaboration with the borrower will then reduce the

number of firms to an acceptable short list of three or four. These firms will then be asked by the borrower to submit proposals and the procedure followed is that given in the preceding paragraph.

Supply of Materials and Equipment—The Canadian Commercial Corporation (CCC), operating under its Memorandum of Understanding with the Government of Jamaica, now acts as the latter's Canadian agent for the calling of tenders, purchase, implementation, inspection and delivery of all materials and equipment being financed by Jamaica from development loans made available by CIDA. Purchases against these loans are, of course, subject to the prior approval of CIDA. Similarly, when CIDA wishes to procure materials and equipment for Jamaica from funds made available as outright grants, it uses the services offered by CCC for the calling of tenders, etc.

Canadian firms interested in projects of this type should make representation to some or all of the following in order to secure information on projects in which they might be interested and to



Over 300 young Jamaicans will be educated in this new Mount Olivet school, one of 100 prefabricated schools that Canada is building on the island under a development loan. It has eight classrooms, office space, and a lunchroom at one end.

place on record their interests and capabilities:

1. A Regional Office of the Department of Industry, Trade and Commerce.
2. Department of Industry, Trade and Commerce, Ottawa.
3. Commercial Division, Office of the High Commissioner for Canada, P.O. Box 1500, Kingston 10, Jamaica.
4. The Canadian International Development Agency, Capital Assistance Division, Ottawa.
5. The Second Secretary (Development), Office of the High Commissioner for Canada, P.O. Box 1500, Kingston 10, Jamaica.
6. The Canadian Commercial Corporation, Ottawa.
7. The Jamaican Ministry of Finance, 24 East Race Course, Kingston 4,

Jamaica. The Ministry is responsible for the co-ordinating and approving of aid-financed projects. The Co-ordinating Officer is R. I. Mason, Assistant Under Secretary.

8. The appropriate Jamaican Ministry or executing agency (directly or through a local affiliate).

The Commercial Division of the Office of the High Commissioner for Canada, Kingston, maintains records of Canadian firms which have written to us expressing an interest in securing work of this type in specific fields. As projects are developed, the Commercial Division endeavors to alert Canadian firms according to the sector or type of service involved. This, however, is no substitute for maintaining a close and active contact with the Canadian International Development Agency in Ottawa, which is responsible for developing the programs and ultimately deciding upon the technical capability of the firms selected.

Canadian firms planning to send a representative to pursue project opportunities should write to the Jamaican Ministry of Finance well in advance of such a visit and at the same time advise our Commercial Division and the local CIDA representative. It is frequently difficult to obtain appointments on short notice for visiting Canadian businessmen with senior government officials and a crash program of this type may hamper effective representation.

An on-the-spot visit can often be useful in meeting the key individuals and learning about the project at first hand. But it should be considered whether a firm cannot accomplish almost as much by writing to the agencies concerned and supplying them with details of its technical competence and ensuring that the administering officials in Ottawa are equally aware of its field of specialization.

Current Capital Assistance Program for Jamaica

The following projects were in active status as of July 1969.

Harbor View Sewerage, (loan: \$825,000)

—This project to provide installation of a sewerage system was designed and constructed by Jamaicans with materials and supervision provided by Canada. The loan was signed in September 1965 and completion is expected in 1970.

Prefabricated School Buildings, (loan \$1,550,000)

—This program was financed under two loans signed in July 1966 and April 1968, and was designed to provide from Canadian sources a total of 108 prefabricated school buildings for the primary school system. The program is almost completed, with only 24 units yet to be erected in rural and some urban areas. Approximately 25,000 to 30,000 places are provided for pupils in these structures.

Radio/Telephone Project, (loan \$760,000)

—Under this program, VHF and UHF communications equipment was provided to link various government agencies around the island, including the Ministry of Health and Jamaican Railways. The loan

was signed in March 1966 and the project was to be completed before the end of 1969.

Small Bridges, (loan \$300,000)—This project involves the financing of Canadian building materials to construct five bridges for which engineering was provided from Jamaican sources. The loan was signed in October 1968 and procurement is under way.

Hospital Equipment, (loan \$700,000)

—This loan, signed in April 1969, will provide various items of Canadian hospital equipment for the Montego Bay Hospital, now under construction.

Pre-Investment and Feasibility Studies, (loan \$1 million)

—In August 1967 this loan was signed, designed to finance miscellaneous feasibility studies. Thus far Jamaica has indicated interest in undertaking an aerial survey, a transportation study, a sewerage study, and a fisheries feasibility study. The aerial survey was completed in May 1968 and the island-wide transportation study in September 1969. The St. Andrew sewerage study

began in June 1969 and the fisheries project has yet to be agreed upon.

Eastern St. Mary Water Distribution Scheme, (loan \$1.2 million)

—This loan, which was signed in August 1967, will be used to finance pipe, fittings, pumps, motors and related materials for the construction of a water supply system in the eastern part of the Parish of St. Mary. Procurement is now taking place.

Low-Cost Housing, (loan \$575,000)

—A loan agreement was signed in February 1967 to finance Canadian building materials for the construction of rural and urban housing. Procurement of these materials is still continuing.

Water Supply Program, (loan \$1.25 million)

—A loan agreement was signed in August 1969 to provide for the financing of Canadian consulting services for the final design of the Montego Bay water-supply project and the four water-supply schemes for Spanish Town, Savanna-La-Mar, Grange Hill/Little London/Dornock, and Morant Bay. General consulting services are also being made available to the National Water Authority.

Plastic Raw Materials

Plastic products has become one of Hong Kong's largest industries and all needed resins must be imported. Canada's sales have fluctuated but prospects good in certain lines.

BERNARD YEUNG
Commercial Officer, Hong Kong

The manufacture of plastic products in Hong Kong is one of the major industries, with over 1,500 registered factories employing some 60,000 workers. Currently over 100 different types and grades of plastic raw materials are used in manufacturing a wide variety of products.

Most of the finished articles are exported, mainly to the United States, Britain, Canada and Australia, though increasing quantities are going to European countries, Africa and adjacent Southeast Asian markets, particularly Singapore. In 1968 exports of plastic manufactured products amounted to Cdn.\$210 million, representing approximately 14 per cent of Hong Kong's total domestic exports. Toys and flowers topped the list.

The success of the plastic industry in Hong Kong has resulted in no small measure from the availability of locally manufactured machinery for converting plastic raw materials into finished products. Although very sophisticated machinery for highly specialized operations may still have to be imported, the bulk of the machines employed are made in Hong Kong. These are injection moulding, blow-moulding, compression moulding, rotational moulding, vacuum forming, and extrusion machines.

Besides the machines, Hong Kong also designs and produces its own moulds.

Hong Kong does not produce plastic raw materials and all resins have to be imported. During the calendar year 1968, purchases from all countries of plastic raw materials of all types totalled Cdn.\$55 million. Canada supplied Cdn.\$2.5 million or 4.5 per cent. Hong Kong is a free port and so all plastic raw materials used in moulding and extrusion, irrespective of origin, are free from import duties. On the other hand, because an appreciable proportion of the output is

exported to Commonwealth markets, the subsequent importer can claim preferential rates of duty, provided there is sufficient Commonwealth content. The industry thus has a considerable advantage when it uses raw materials from Britain, Canada, Australia and other Commonwealth suppliers. For imports of plastic toys, electrical goods and fittings, buttons and toothbrushes into Britain, for example, the required Commonwealth content is 50 per cent and for virtually all other plastic goods 25 per cent.

The accompanying table gives statistics covering imports by sources of a number of plastic raw materials into Hong Kong for 1967 and 1968. The following paragraphs cover some of the main imports.

Polythene Moulding Compound—This is imported in greater volume than any other plastic raw material. It is widely used in making flowers, artificial fruit, toys, bottles, film, bags and cups. In 1968 imports of polythene totalled some 77,000 long tons. Japan was the largest supplier, providing 65 per cent of requirements, followed by the United States (16 per cent) and Britain (5 per cent). Canada's

share has dropped sharply since 1964. Up to the end of that period, it was the second largest supplier after the United States, with sales totalling Cdn.\$5 million compared with only Cdn.\$253,000 in 1968. Expansion of Japanese productive capacity during that period, plus a severe drop in polythene prices, were the reasons for this decrease. In the earlier days of the industry when the price differential for raw materials was not too significant and when importing countries offering preferential tariffs enjoyed a price advantage, large quantities of Commonwealth materials were used. Today, with cheap supplies plus long-term credit facilities offered by some non-Commonwealth exporters, the value of the Commonwealth preference is not as great as it used to be. As long as this situation prevails, Canadian exports will probably not rise appreciably.

Polystyrene Moulding Compound—This comes second in importance and in 1968 imports amounted to over 40,000 long tons valued at Cdn.\$12.5 million. It is used extensively in moulding a wide range of plastic products, including toys, chopsticks, kitchen and household ware, combs, tooth-



Some of the plastic raw materials that Canada supplies go into the moulding of dolls' heads and bodies, a part of Hong Kong's important toy industry.

HONG KONG IMPORTS OF PLASTIC RAW MATERIALS

Polythene Moulding and Extrusion Compounds

Main Suppliers	1967		1968	
	Volume lb'000	Value HK\$'000	Volume lb'000	Value HK\$'000
Canada	3,886	3,225	1,664	1,419
United States	21,432	21,930	22,640	15,589
West Germany	2,191	1,981	3,819	2,746
Netherlands	634	542	—	—
Belgium	—	—	70	125
India	136	118	939	775
Italy	3,971	2,865	1,122	626
Britain	6,624	5,127	7,203	3,907
Taiwan	—	—	7,585	4,179
Japan	85,822	62,528	99,508	60,233
Australia	3,376	2,502	5,432	3,370
New Zealand	—	—	67	140
Total, including all others	128,072	100,818	150,049	93,109

Polystyrene Moulding and Extrusion Compounds

Main Suppliers	1967		1968	
	Volume lb'000	Value HK\$'000	Volume lb'000	Value HK\$'000
Canada	15,348	13,445	14,272	12,223
United States	7,264	6,077	25,620	20,168
West Germany	4,886	4,480	7,631	6,188
Netherlands	251	152	132	105
Belgium	—	—	28	15
Italy	7,192	4,802	5,605	3,864
Britain	10,895	8,565	5,457	4,417
Japan	12,731	9,115	27,497	18,721
Australia	3,766	3,422	1,403	1,212
France	1,349	1,046	1,088	937
Colombia	551	551	—	—
Taiwan	859	563	1,766	1,167
Spain	2,650	2,075	924	806
Argentina	—	—	400	382
Total, including all others	68,065	54,598	91,823	70,205

Urea Formaldehyde Moulding Compounds

Main Suppliers	1967		1968	
	Volume lb'000	Value HK\$'000	Volume lb'000	Value HK\$'000
Britain	1,007	1,181	1,335	1,607
Japan	129	103	103	105
China (People's Republic of)	22	26	81	91
Australia	—	—	101	128
Total	1,158	1,310	1,620	1,931

Polymerization Product, n.e.s., Waste and Scrap

Main Suppliers	1967		1968	
	Volume lb'000	Value HK\$'000	Volume lb'000	Value HK\$'000
Canada	44	17	75	32
United States	1,859	927	512	335
Sweden	556	216	1,199	373
Denmark	1,073	398	2,409	748
Switzerland	176	67	421	152
West Germany	91	33	697	228
Netherlands	5,184	1,796	9,176	2,832
Britain	8,495	3,299	8,749	2,692
Japan	4	5	236	92
Singapore	—	—	24	9
South Africa	754	292	351	122
Australia	489	178	293	97
New Zealand	422	124	191	51
Belgium	445	163	1,817	563
Poland	12	3	24	10
Total, including all others	19,634	7,524	26,181	8,339

Phenol Cresol Formaldehyde Moulding and Extrusion Compounds

Main Suppliers	1967		1968	
	Volume lb'000	Value HK\$'000	Volume lb'000	Value HK\$'000
Canada	180	136	—	—
United States	51	51	250	174
Britain	963	768	1,382	1,114
Taiwan	176	120	583	394
Japan	36	23	22	14
China (People's Republic of)	398	271	360	252
Australia	53	43	28	26
Total, including all others	1,857	1,412	2,629	1,978

Phenolics, Cresylics, Resins

Main Suppliers	1967		1968	
	Volume lb'000	Value HK\$'000	Volume lb'000	Value HK\$'000
Canada	20	13	—	—
United States	147	271	478	762
West Germany	93	111	20	78
Netherlands	108	127	53	63
Britain	1	2	26	60
Taiwan	—	—	2	2
Japan	1	3	4	7
Total, including all others	381	541	583	972

brushes and hairbrushes. Japan and the United States together supply approximately 60 per cent of Hong Kong's requirements, followed by Canada with sales at Cdn.\$2.2 million.

PVC Resin—This is being compounded in Hong Kong and is used for toys, particularly soft toys, footwear, belting, rattanware, coating and electrical wire insulation. Japan is the principal supplier with 67 per cent of the market; the remainder is supplied by Taiwan, Britain, and the United States. In addition to polyvinyl chloride resin, Hong Kong also imports substantial amounts of sheeting and film. The sheeting is used for footwear, upholstery, tablecloths, travelling bags and

wallets and the film mainly for rainwear and shower curtains. Total imports of sheeting and film in 1968 amounted to over 14,000 long tons. Taiwan holds the majority of this business (58 per cent), outselling Japan (39 per cent) because of competitive prices. Canada's exports of these materials are negligible and are not expected to rise because of the keen prices and quick deliveries that enable Taiwan and Japan to dominate the market.

Thermosetting Resins—These include phenol, cresol, urea and melamine formaldehyde moulding compounds. They are used for electric light fittings and electrical accessories, cases

for thermos flasks and jugs, bottles and bottle caps, and many other articles that can be adapted to compression moulding. Imports of all resins in this group amounted to 3,000 long tons in 1968. Britain is the biggest supplier with 52 per cent of total imports, followed by the United States (23 per cent). Smaller quantities come from Taiwan, People's Republic of China, Japan and Australia. Canada made no sales in 1968.

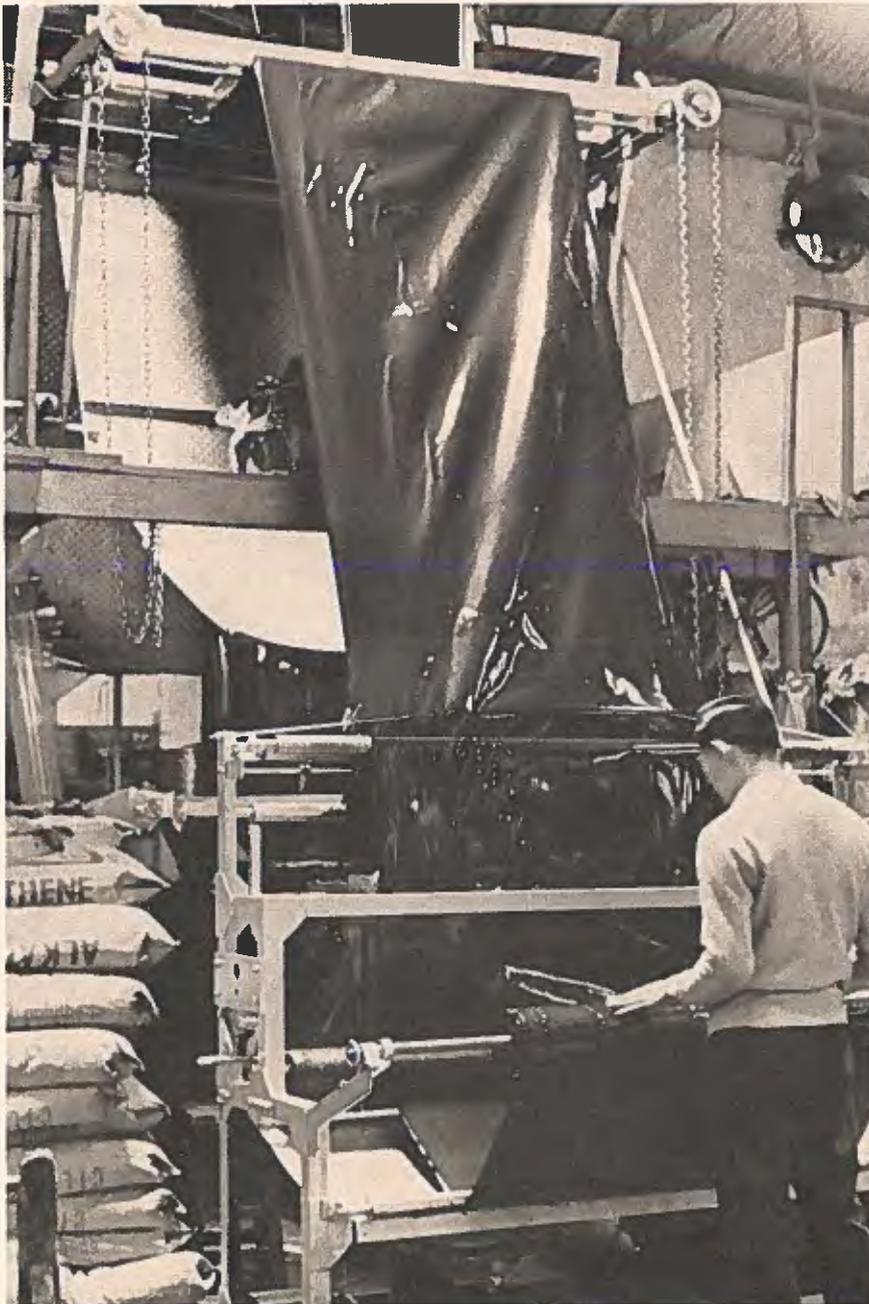
Acrylic Resins—Imports are largely in sheet form and are used primarily to make mahjong tiles and umbrella handles. The principal sources are Taiwan, Britain and Japan.

Cellulose Film—Forty per cent of this is supplied by Japan, 20 per cent by Britain, and 13 per cent by the United States; the remainder comes from Taiwan, People's Republic of China, Belgium, France and West Germany. Canada supplied 32,000 pounds out of total 1968 imports of 3 million pounds.

Polymerization Product, n.e.s., Waste and Scrap—These waste materials are converted in Hong Kong. They come principally from the Netherlands, Britain, Denmark, Belgium and Sweden. Canada's participation in this trade is insignificant.

The future of the Hong Kong plastic industry continues to be bright. Over the years it has acquired new knowledge and techniques in the use of various raw materials and has developed new items. Through hard work and constant improvements, it has gained a reputation for high quality goods in overseas markets. Prospects for continued expansion are excellent and this should lead to a parallel increase in the volume of imports of plastic raw materials.

This Hong Kong machine uses polythene moulding compound supplied by a Canadian firm. It ranks first among the imported plastic raw materials but Canada's share of the market has fallen off recently and Japan has become the largest supplier.



Containerization

Scottish ports on the Clyde and the Firth of Forth are already handling containers; they are also putting in latest equipment, deepening port approaches to handle larger ships.

R. BANKS
Commercial Officer, Glasgow

The ports on Scotland's Clyde and Forth Rivers have long served both Scottish and foreign traders. Today the men who administer these ports are modernizing them to meet the needs of bigger vessels and of container traffic.

The Clyde Port Authority, set up in 1966, administers the ports of Glasgow, Greenock, and the estuarial port of Ardrossan as one unit, known as Clydeport. It has within its jurisdiction 300 square miles of water and intends to promote legislation to extend the area of its authority by a further 150 square miles. On a tonnage basis, Clydeport handles almost two-thirds of all foreign seaborne trade through Scottish ports. Last year almost 9,000 vessels totalling some 10 million net register tons used the port. Of these, about 2,000 ships totalling 7 million

net register tons were engaged in foreign trade. The remainder handled coastwise traffic.

Since its creation three years ago, the Clyde Port Authority has embarked on a large-scale development program to rationalize and improve existing port facilities and to create new ones. The largest single project it has so far undertaken has been the recently completed \$6.5 million container terminal at Greenock. The 850-foot berth has a low-water depth of 42 feet and will be dredged as required to provide a depth of 50 feet. Two 160-foot-high container transportation cranes with a 105-foot outreach from the quay edge handle containers up to 35 tons at a rate of 40 an hour. Straddle carriers with automatic lifting frames transport the containers between stacking area and quayside.

The terminal can handle one million tons of cargo a year.

Much has also been done to modernize the facilities in the upper reaches at Glasgow, where most of the Authority's docks and quays are concentrated. This includes the re-equipment of Yorkhill Quay and the extension of silo facilities at Meadowside Granary. Yorkhill Quay can now handle conventional vessels carrying containers as well as loose general cargo. Meadowside Granary is now the largest single grain storage unit in Britain, with a capacity of 176,000 tons. Late last year at Meadowside, the bulk carrier *Kirriemoor* discharged 27,335 tons of corn—the biggest grain shipment ever made to Britain—at an average rate of 830 tons an hour. The complete discharge was accomplished in just over three working days and a national



At the Grangemouth Docks, two 32-ton transporter cranes are making short work of loading a containerized deepsea vessel.

record was set when 10,150 tons were discharged from the same vessel in one day.

Ardrossan, the most recent addition to Clydeport, also has container-handling facilities and is well placed to serve the short-sea trades and coast-wise traffic. It may figure in the Authority's plans to exploit the shipping potential of the deep waters of the estuary.

On the eastern side of Scotland, scarcely 30 miles distant from Clydeport, the younger **Forth Ports Authority, set up in 1968, combines the ports of Leith, Grangemouth, Granton, Burntisland, Methil, and Kirkcaldy.** Last year these ports received more than 5,700 vessels totalling almost 4.5 million net register tons. They handled over a quarter of all foreign seaborne trade through Scottish ports.

Like its sister Authority on the Clyde, Forth Ports has been caught up since its inception in extensive modernization and construction. Chief among the schemes completed or in process are the provision of larger and deeper entrances at Leith and Grangemouth, the principal ports of the group. (Leith is bigger than Grangemouth but the latter handles almost three times as much traffic.)

At Leith, a newly completed \$18 million development (begun under the old Leith Dock Commission), incorporating a new entrance lock and a wider and deeper entrance to the Imperial Dock, will permit the passage of ships up to 30,000 dwt. The largest vessel to enter the new port so far has been the German passenger liner *Europa* of 21,514 tons.

The north side of Leith's Albert Dock has been adapted for container operations on the short-sea trades to Holland and Belgium. Towards the end of last year, a 30-ton capacity traverser gantry crane replaced a shore-based derrick, greatly improving facilities for that type of trade. **The Authority intends to provide handling facilities for deepsea container ships at a new deep-water quay yet to be built.**

Grangemouth was the first port in Britain to start a regular deepsea specialized container service. That was in 1966. The port added other

firsts to its credit in 1967 and 1968 when it became the first in Britain to employ a transporter crane and then first in Europe to use two of these massive cranes on one quay. The Authority plans a new approach channel and an entrance lock that will accommodate vessels up to 24,000 dwt. Though some preparatory work has been done for the new lock, the Ministry of Transport has yet to authorize actual construction. The lock scheme is expected to cost \$18 million.

Developments in the smaller Forth ports—Granton, Kirkcaldy, Methil, and Burntisland—tend to be overshadowed by those in Grangemouth and Leith. Moreover, the Authority has yet to present clear plans for the

future of the smaller ports. Improvements so far include new cranes at Burntisland and Methil; an extension and overhaul of the Shell & BF (Scotland) oil terminal at Granton; a roll-on/roll-off facility for heavy machinery, also at Granton, and a new dock gate at Kirkcaldy.

Grangemouth—earmarked in a growth area report as the Forth's growth point for Scotland's central belt—awaits anxiously for Ministry of Transport approval for an ambitious new dock scheme, which is the key to further expansion of the port and its hinterland. However, Grangemouth and the other Authority ports (with the possible exception of Granton) can be pleased with the performance of their improved facilities so far.

CLYDE PORT AUTHORITY

TRAFFIC BY PRINCIPAL COMMODITIES, 1968

Imports, tons '000
Petroleum and petroleum products 6,000
Ores and scrap 2,000
Cereals 800
Fertilizers and minerals (excluding fuels) 500
Fruits and vegetables 100
Sugar 300

Exports, tons '000
Petroleum and petroleum products 500
Beverages (mainly whisky) 200
Iron and steel manufactures 200
Machinery 90
Vehicles 50
Chemicals 50
Other manufactured goods 150

CARGO LINER SERVICE FROM THE CLYDE TO NORTH AMERICA

Canada (east)
Donaldson Line, every 10 days

Canada and United States (west coast)
North Pacific Coast Line, fortnightly
Blue Star Line, monthly
East Asiatic Co., monthly

Great Lakes
Donaldson Line (Canadian ports)/
Head Line (Canadian and United States ports), every 10 days

United States (New York)
Anchor Line/
Cunard Line, fortnightly
United States Line (Greenock Container Terminal), weekly

FORTH PORTS AUTHORITY

TRAFFIC BY PRINCIPAL COMMODITIES IN 1968

Imports, tons '000
Petroleum and petroleum products 1,600
Cereals 410
Wood, lumber and cork 400
Pulp and waste paper 280
Chemicals 280
Fertilizers and minerals 220

Exports, tons '000
Petroleum and petroleum products 1,700
Coal 1,000
Chemicals 390
Beverages (mainly whisky) 200
Iron and steel 110
Non-metallic mineral manufactures other than cement 50

CARGO LINER SERVICES FROM THE FORTH TO NORTH AMERICA

Great Lakes
Hamburg/Amerika
Nord Deutscher Lloyd
Ernst Russ
fortnightly (March - November)

New York
Sea Land Services Inc., every 5 days

Boston
Boston Line, every 3 weeks



The container ship "American Liberty", owned by the United States Lines, alongside the large Clydeport container terminal.

Cargoes handled during 1968 totalled 7.7 million tons, an increase of 415,000 over 1967.

A recent Government White Paper on the nationalization of British ports proposed a Scottish Port Authority comprising Clydeport and Forth Ports. In view of the Government's declared conviction that the port industry suffers from a lack of central planning and division of responsibilities and interests, it seems reasonable to expect that the proposed merger will become a reality. Other considerations also point to the desirability if not the inevitability of an amalgamation of the two present Authorities.

The establishment of the container terminal at Greenock was indicative of the shifting of emphasis by the Clyde Port Authority from the upper reaches of the Clyde to the deep waters of the middle estuary. But this was only a beginning. The Authority, supported by leading Scots, is pressing for the

exploitation of the entire estuary as a marine industrial development area linked to the establishment of Clydeport as an ocean terminal. This, by incorporating the Forth Ports in one back-to-back ports complex, would rival or even surpass Rotterdam's Europort as the gateway to Europe.

The Clyde and Forth Ports occupy a strategic position between Europe and the Atlantic. **Container services between North America and Greenock, the shortest Atlantic sea route, not only fan out through Britain but flow onward across the narrow waist of Scotland—** Britain's shortest east-west land passage—to Europe via the Forth container ports of Grangemouth and Leith. Although approaches by ocean to the Clyde can be made with ease, the North Sea is already presenting difficulties for the entry of today's big ships into its ports. If the economics of long-distance bulk transportation points to even larger vessels—and many think it does—the advan-

tages of the deep estuarial waters of the Clyde become clear. Nature has made possible there an ocean terminal almost readymade where vessels over 500,000 tons can be accommodated without maintenance dredging.

A previous article on Scotland in *Foreign Trade*, August 16, 1969, page 15, outlined the major oil and iron-ore projects proposed for the Clyde. These are port-based or port-associated industries whose economics are determined by their ability to ship in bulk. They are the possible first fruits of a hoped-for Scottish industrial magnet, whose poles of attraction are a Clyde ocean terminal facing the world, backed by a Forth transshipment terminal facing Europe—in short, Scotland astride one of the world's major trade routes. It only remains to be seen whether the men who conceived this new role for Scotland can sell the idea to critics, government, industry, and above all, to the world's shippers.

Head Office Directory

Most of the offices of the Department of Industry, Trade and Commerce are in Tower B, Place de Ville, 112 Kent Street, Ottawa. A few are still in other locations and the Directory makes this clear. It is updated and republished from time to time.

		Dial 99 and	Location	Floor
Minister	The Hon. Jean-Luc Pepin..	6-1880	Tower B.....	22...
Executive Assistant	S. Mizgala.....	6-1880	.....	.....
Deputy Minister	J. H. Warren.....	6-3560	Tower B.....	22...
Executive Assistant	A. A. Lomas.....	6-3560	.....	.....
Senior Assistant Deputy Minister (Industry and Trade Development)	Andrew G. Kniewasser.....	2-1037	Tower B.....	22...
Executive Assistant	Ian Wood.....	2-7428	.....	.....
Assistant Deputy Minister (Trade and Industrial Policy)	Maurice Schwarzmann.....	2-2649, 2-4042	Tower B.....	19...
Liaison Officer	R. A. Kilpatrick.....	2-6980	.....	.....
Assistant Deputy Minister (Operations)	Robson G. Head.....	5-6277	Tower B.....	12...
Executive Assistant	J. L. Delorimier.....	5-6580	.....	.....
Assistant Deputy Minister (External Services)	D. B. Mundy.....	2-0581, 2-5969	Tower B.....	7...
Executive Assistant	H. Wilson.....	2-0933	.....	.....
Assistant Deputy Minister (Administration)	A. Senecal.....	2-0056	Tower B.....	22...

Trade and Industrial Policy

Assistant Deputy Minister	Maurice Schwarzmann.....	2-2649	Tower B.....	19...
Office of General Relations				
General Director	M. G. Clark.....	5-7119, 5-7110	T and C Bldg..	2....
General Trade Policy Branch				
Director	P. T. Eastham.....	2-4100	T and C Bldg..	2....
Commodity Trade Policy Branch				
Director	W. M. Miner.....	6-1917	T and C Bldg..	2....
International Financing Branch				
Director	B. C. Steers.....	2-6143, 6-3995	T and C Bldg..	2....
Office of Area Relations				
General Director	T. M. Burns.....	2-4815	Tower B.....	19...
United States Division Director	J. H. Stone.....	2-5176	Tower B.....	19...
European Division Director	A. W. A. Lane.....	2-2250, 2-2981	Tower B.....	19...
Commonwealth Division Director	R. B. Nickson.....	2-2421	Tower B.....	19...
Latin American Division Acting Director	G. W. Green.....	2-7641	Tower B.....	19...
Asia and Middle East Division Acting Director	G. W. Green.....	2-5642	Tower B.....	19...
Office of Industrial Policy Adviser				
General Director	L. F. Drahotsky.....	2-7788	Tower B.....	21...
Industrial Policy Division Acting Director	J. M. Belanger.....	6-3070	Tower B.....	21...
Programs Division Acting Director	B. S. Barewal.....	6-1408	Tower B.....	21...

		Dial 99 and	Location	Floor
Office of Economics				
General Director.....	V. J. Macklin.....	2-5658	T and C Bldg...	5.....
Executive Co-ordinator.....	T. E. Bocking.....	6-5390	Tower B.....	21.....
General Analysis Branch				
Director.....	C. Schwartz.....	2-8900	T and C Bldg...	5.....
Canada and United States Division Acting Chief.....	D. F. McKinley.....	2-8900	T and C Bldg...	5.....
General Assignments Division Chief.....	H. R. Smale.....	2-5266	T and C Bldg...	5.....
Overseas Analysis Division Chief.....	F. A. Piscopo.....	2-7667	T and C Bldg...	5.....
Investment Analysis Branch				
Director.....	J. H. Latimer.....	2-3847	T and C Bldg...	5.....
Capital Expenditure Division Chief.....	A. N. Polianski.....	5-6384	T and C Bldg...	5.....
Corporation Returns Division Chief.....	N. S. Hutchinson.....	5-7722	T and C Bldg...	5.....
Foreign Investment Division Chief.....	R. J. Loosmore.....	6-5884	T and C Bldg...	3.....
International Companies Division Chief.....	T. R. Vout.....	2-5701	T and C Bldg...	5.....
Market Analysis Branch				
Director.....	A. M. Coll.....	2-7408	T and C Bldg...	5.....
Co-ordinator Special Projects.....	A. C. Kilbank.....	2-5711	T and C Bldg...	5.....
Manufactured Products Division Chief.....	W. L. Posthumus.....	2-5466	T and C Bldg...	5.....
Regional Trade Patterns.....	H. D. Henderson.....	2-8780	T and C Bldg...	5.....
Resources Commodities Division Chief.....	R. J. Konecny.....	2-5753	T and C Bldg...	5.....
Productivity Branch				
Director.....	I. Bernolak.....	2-1722	Tower B.....	21.....
Inter-Firm Comparisons Division Chief.....	G. G. McLeod.....	6-5144	Tower B.....	21.....
Research and Development Division Chief.....	J. G. Snaauw.....	6-5299	Tower B.....	21.....
Consultant, Economics of Technology.....	G. H. O. Dines.....	6-5298	Tower B.....	21.....
Consultant, Economics of Management.....	L. E. Turner.....	2-1303	Tower B.....	21.....
Industry and Trade Development				
Senior Assistant Deputy Minister.....	Andrew G. Kniewasser.....	2-1037	Tower B.....	22.....
Office of Science and Technology				
General Director.....	Sydney Wagner.....	5-7151, 5-7152	Tower B.....	21.....
Director (Programs).....	H. C. Douglas.....	2-4143	Tower B.....	21.....
Director (Scientific).....	R. K. Brown.....	2-0406	Tower B.....	21.....
Office of Design				
General Director.....	E. P. Weiss.....	2-0341	Tower B.....	20.....
Director.....	J. H. Swann.....	2-1696	Tower B.....	20.....
Office of Promotional Services				
General Director.....	L. J. Rodger.....	2-7411, 2-2262	T and C Bldg...	4.....
Special Assistant.....	R. B. Fournier.....	6-3210	T and C Bldg...	4.....
World Exhibitions Liaison.....	G. P. O'Keefe.....	6-3210	T and C Bldg...	4.....
Industry, Trade and Traffic Services Branch				
Director.....	G. M. Schuthe.....	2-6236	T and C Bldg...	3.....
Deputy Director.....	C. Varkaris.....	2-7163	T and C Bldg...	3.....
Export and Import Permits Division Chief.....	S. G. Barkley.....	2-5670	T and C Bldg...	3.....
	R. Traversy.....	2-3640	T and C Bldg...	3.....
Industrial Traffic Services Division Chief.....	H. A. Hadskis.....	2-2737	T and C Bldg...	3.....
Market Analysis (Import) Division Chief.....	J. G. MacKinnon.....	2-4446	T and C Bldg...	3.....
Industrial and Trade Inquiries Division Chief.....	K. E. Hacker.....	2-4441	T and C Bldg...	1.....
Directories.....	J. Y. Lafleche.....	2-6681	T and C Bldg...	3.....

		Dial 99 and	Location	Floor
Publicity Branch				
Director.....	J. A. Murphy.....	2-2479	T and C Bldg..	2....
Assistant Director, International Operations.....	K. A. Prittie.....	2-6435	T and C Bldg..	2....
Assistant Director, Canadian Operations.....	R. H. Tippet.....	2-3186	T and C Bldg..	2....
International Operations Division Chief.....	K. V. D. Gardner.....	2-7372	T and C Bldg..	2....
"Canada Courier" Division Chief.....	P. Bomford.....	2-1295	T and C Bldg..	1....
Graphics Division Chief.....	R. Williamson.....	2-8922	T and C Bldg..	2....
Special Publications Division Chief.....	K. Purvis.....	2-1259	T and C Bldg..	2....
Program Publicity Division Acting Chief.....	B. T. McLaughlin.....	2-1436	T and C Bldg..	2....
Media Relations Division Chief.....	R. M. Shaw.....	2-2186	T and C Bldg..	2....
"Foreign Trade"/"Commerce extérieur" Division Chief.....	O. M. Hill.....	2-6588	T and C Bldg..	2....
Special Assistant, Canadian Operations.....	C. Bruyere.....	6-1537	T and C Bldg..	2....
Administrative Services Manager.....	D. J. McLewin.....	2-6897	T and C Bldg..	2....
Production Planning Division Chief.....	E. Plummer.....	2-4098	T and C Bldg..	2....
Fairs and Missions Branch				
Director.....	D. A. W. Olliver.....	2-8269	T and C Bldg..	3....
Fairs Division Chief.....	W. P. Schutte.....	2-8855	T and C Bldg..	3....
Missions Division Acting Chief.....	B. Choquette.....	2-8069	T and C Bldg..	3....
Grain Division				
Chief.....	R. M. Esdale.....	2-2109	T and C Bldg..	5....
Operations				
Assistant Deputy Minister.....	Robson G. Head.....	5-6277	Tower B.....	12....
Chemicals Branch				
General Director.....	J. J. Tennier.....	2-9456, 2-5760	Tower B.....	14....
Director.....	A. M. Tedford.....	2-6905	Tower B.....	14....
Industrial Chemicals Division Chief.....	G. E. McCormack.....	2-1071	Tower B.....	14....
Plastics and Rubber Division Chief.....	A. G. Pinard.....	2-1054	Tower B.....	14....
Chemical Specialties Division Chief.....	Dr. H. A. Showalter.....	2-1591	Tower B.....	14....
Tourist, Hospital and Education Division Chief.....	G. W. J. Rahm.....	2-1068	Tower B.....	14....
Programs Division Assistant Director.....	W. D. Dawson.....	2-1758	Tower B.....	14....
Electrical and Electronics Branch				
General Director.....	E. A. Booth.....	2-8160	Tower B.....	10....
Director.....	T. C. Jones.....	2-2243	Tower B.....	10....
Assistant Director Program Management.....	G. R. Logan.....	2-8366	Tower B.....	10....
Marketing Adviser.....	R. Sangster.....	2-8897	Tower B.....	10....
Electronics Division Chief.....	C. D. Quarterman.....	2-1091	Tower B.....	10....
Electrical Division Chief.....	V. E. Tant.....	2-9043	Tower B.....	10....
Consumer Products and Components Division Acting Chief.....	P. U. Aasgaard.....	2-9084	Tower B.....	10....
Special Projects Division Chief.....	R. Sangster.....	2-8897	Tower B.....	10....
Agriculture, Fisheries and Food Products Branch				
General Director.....	A. H. Mathieu.....	2-1289, 2-1489	Tower B.....	15....
Director.....	D. B. Laughton.....	2-1100	Tower B.....	15....
Assistant Director.....	M. J. Heney.....	2-1873	Tower B.....	15....
Livestock, Meat and Dairy Products Division Chief.....	L. H. McMillan.....	2-0001	Tower B.....	15....
Cereals, Bakery and Edible Oils Division Chief.....	L. G. Rupert.....	2-0015	Tower B.....	15....
Fruit, Vegetables and Special Crops Division Chief.....	A. J. Stanton.....	5-8245	Tower B.....	15....
International Commodities Division Chief.....	J. MacNaught.....	2-0012	Tower B.....	15....
Programs Division Chief.....	W. R. Parkinson.....	2-0012	Tower B.....	15....
Fisheries and Fish Products Division Chief.....	A. J. Hemming.....	5-8107	Tower B.....	15....

		Dial 99 and	Location	Floor
Machinery Branch				
General Director.....	J. J. McKennirey.....	2-7181, 2-1129	Tower B.....	11...
Director.....	J. C. Stavert.....	2-4737	Tower B.....	11...
Director and Secretary, Machinery Equip. Advisory Board....	W. H. Chandler.....	2-5800	Tower B.....	11...
Mechanical Products Division Chief.....	J. H. O'Connell.....	2-0324	Tower B.....	11...
Mechanical Equipment Division Chief.....	A. Chiperzak.....	2-0321	Tower B.....	11...
Industry Machines and Engineering Services Division Chief....	R. C. Wallace.....	2-4082	Tower B.....	11...
Machinery Program Analysis Division Chief.....	S. A. Radley.....	2-1359	Tower B.....	11...
General Programs Division.....	R. K. McGregor.....	2-0371	Tower B.....	11...
Specialist Staff Division Chief.....	F. K. Gardner.....	2-0347	Tower B.....	11...
General Analysis and Development.....	J. P. Reny.....	2-0039	Tower B.....	11...
Materials Branch				
General Director.....	R. D. Hindson.....	2-1113	Tower B.....	12...
Director.....	H. R. Pinault.....	2-5672	Tower B.....	12...
Iron and Steel Division Chief.....	E. J. Davis.....	2-0025	Tower B.....	12...
Non-Ferrous Metals Division Chief.....	S. H. Rochester.....	2-0088	Tower B.....	12...
Industrial Minerals Division Chief.....	R. J. Jones.....	2-1581	Tower B.....	12...
Construction Division Chief.....	D. G. Laplante.....	2-0028	Tower B.....	12...
Programs Division Chief.....	H. E. Wilson.....	2-1015	Tower B.....	12...
Aerospace, Marine and Rail Branch				
General Director.....	J. C. Rutledge.....	2-7318, 6-1288	Tower B.....	9....
Industry and Trade Development Programs				
Director.....	G. E. Hughes-Adams.....	2-0605	Tower B.....	9....
Air Chief.....	J. L. Harrison.....	2-1001	Tower B.....	9....
Marine Chief.....	M. J. Colpitts.....	2-0036	Tower B.....	9....
Rail and Propulsion Chief.....	E. P. Bishop.....	2-0051	Tower B.....	9....
Company and Support Programs				
Director.....	H. R. Footit.....	6-2035	Tower B.....	9....
Aircraft Chief.....	H. A. Staneland.....	5-6405	Tower B.....	9....
Propulsion, Marine and Rail Chief.....	H. Roberts.....	2-1569	Tower B.....	9....
Ship Subsidies Chief.....	H. K. McIntosh.....	2-7830	Tower B.....	9....
Wood Products Branch				
General Director.....	K. O. Roos.....	2-1116	Tower B.....	13...
Director.....	T. C. Arnold.....	2-1493	Tower B.....	13...
Deputy Director.....	P. L. MacDougall.....	2-7128	Tower B.....	13...
Pulp and Paper Division Chief.....	G. C. Campbell.....	2-0065	Tower B.....	13...
Lumber, Plywood and Panel Products Division Chief.....	E. W. Smith.....	2-0068	Tower B.....	13...
Furniture and Secondary Wood Products Division Chief.....	M. N. Murphy.....	2-1545	Tower B.....	13...
Printing and Publishing Division Chief.....	.....	2-0093	Tower B.....	13...
Programs Division Head.....	R. H. McGee.....	2-0095	Tower B.....	13...
Apparel and Textiles Branch				
General Director.....	A. M. Guerin.....	2-4078	Tower B.....	8....
Director.....	L. C. Howey.....	2-1207	Tower B.....	8....
Fashion Adviser and Co-ordinator.....	Mrs. D. E. L. Taylor.....	5-6287	Tower B.....	8....
Programs Division Assistant Director.....	A. C. Fairweather.....	2-6197	Tower B.....	8....
Clothing Division Chief.....	H. Sherman.....	2-1048	Tower B.....	8....
Textiles Division Chief.....	P. A. Barker.....	2-1045	Tower B.....	8....
Leather and Footwear Division Acting Chief.....	L. J. Henderson.....	2-1051	Tower B.....	8....
Mechanical Transport Branch				
General Director.....	E. A. McIntyre.....	6-4122	Tower B.....	9....
Agricultural and Construction Equipment Division and Special Products Division Acting Chief.....				
.....	K. R. Burgess.....	2-1027	Tower B.....	8....
Technological Assistance Division Acting Chief.....	J. W. Harrison.....	2-1024	Tower B.....	9....
Motor Vehicles Division Chief.....	J. A. McMillan.....	2-4478	Tower B.....	8....
Adjustment Assistance Board Secretariat Acting Secretary.....	F. Wanko.....	2-0021	Tower B.....	8....

		Dial 99 and	Location	Floor
Office of Tourism				
General Director.....	T. R. G. Fletcher.....	6-5651	150 Kent Street	9S....
Travel Industry Branch				
Director.....	F. B. Clark.....	6-5651	150 Kent Street	9.....
Research & Development Division Chief.....	J. W. Gibson.....	5-8426	150 Kent Street	9.....
Industry Evaluation Division Chief.....	L. C. Munn.....	5-6367	150 Kent Street	9.....
Canadian Government Travel Bureau				
Director.....	Dan Wallace.....	2-3166	150 Kent Street	2.....
Deputy Director.....	Roland Boire.....	2-5256	150 Kent Street	2.....
Offices Abroad Assistant Director.....	O. Tiessen.....	2-1384	150 Kent Street	2.....
Support Services Assistant Director.....	R. D. Palmer.....	2-1680	150 Kent Street	2.....
Marketing Assistant Director.....	D. C. Bythell.....	5-8127	150 Kent Street	2.....
Operations Manager.....	M. E. Campeau.....	2-7355	150 Kent Street	2.....
Publicity Services Manager.....	J. A. Carman.....	2-6373	150 Kent Street	3.....
Travel Trade Relations Manager.....	G. Tawse-Smith.....	2-2077	150 Kent Street	2.....
Administration Manager.....	D. J. Molloy.....	2-1491	150 Kent Street	2.....
Travel Information Services Acting Manager.....	R. Dunse.....	2-3334	150 Kent Street	4.....
External Services				
Assistant Deputy Minister.....	D. B. Mundy.....	2-0581, 2-5969	Tower B.....	7.....
Trade Commissioner Service				
General Director.....	H. M. Maddick.....	5-8337, 5-8338	Tower B.....	6.....
Finance and Administration Director.....	W. J. Collett.....	2-5669	Tower B.....	6.....
Personnel Director.....	R. C. Anderson.....	2-6800	Tower B.....	6.....
Operations and Development Director.....	H. S. Hay.....	2-5456	Tower B.....	6.....
Regional Co-ordinators				
Asia, Africa and Australasia.....	R. W. Burchill.....	2-5461	Tower B.....	6.....
Europe.....	E. L. Bobinski.....	2-1655	Tower B.....	6.....
Latin America and Caribbean.....	A. T. Eyton.....	2-3058	Tower B.....	6.....
United States.....	N. L. Currie.....	6-5140	Tower B.....	6.....
International Defence Programs Branch				
General Director.....	D. H. Gilchrist.....	2-4864	Tower B.....	7.....
Director.....	D. J. Janigan.....	2-8584	Tower B.....	7.....
Market Research and Analysis Division Acting Chief.....	F. H. Horner.....	6-2572	Tower B.....	7.....
Project Marketing Division Chief.....	F. Dugal.....	2-1679	Tower B.....	7.....
U. S. Market Development Division Chief.....	W. E. Grant.....	2-3456	Tower B.....	7.....
Overseas Market Development Division Chief.....	J. C. Oliver.....	2-8626	Tower B.....	7.....

		Dial 99 and	Location	Floor
Administration				
Assistant Deputy Minister.....	A. Senecal.....	2-0056	Tower B.....	22...
Personnel Branch				
General Director.....	E. J. Fitzpatrick.....	6-1530	Tower B.....	16...
Financial Services Branch				
General Director.....	W. R. Teschke.....	5-6126	Tower B.....	18...
Financial Analysis Director.....	J. G. Sheldrick.....	2-2888	Tower B.....	18...
Comptroller.....	R. M. Hammond.....	6-3639	Tower B.....	18...
Professional and Administrative Services Branch				
General Director.....	V. J. Walton.....	6-4010	Tower B.....	17...

Regional Offices in Canada*		Telex	Phone
St. John's, Newfoundland, Regional Officer..... Room 601, Sir Humphrey Gilbert Building Duckworth Street P.O. Box 5849	B. E. Baker.....	0164582.....	722-6074 (area code 709)
Halifax, Nova Scotia, Regional Manager..... Sir John Thomson Building 1256 Barrington Street	D. J. Packman.....	014-422829.....	422-3851 (area code 902)
Montreal 128, Quebec, Regional Manager..... Floor 17, Commerce House 1080 Beaver Hall Hill	J. G. Touchette.....	0120280.....	879-6254 (area code 514)
Toronto 111, Ontario, Regional Manager..... Suite 3001, Toronto-Dominion Centre P.O. Box 114	R. Campbell Smith.....	0221691.....	369-3711 (area code 416)
Winnipeg 1, Manitoba, Regional Manager..... Room 521, Federal Building 269 Main Street	G. A. Gillespie.....	035287.....	985-2386 (area code 204)
Regina, Saskatchewan, Regional Manager..... Suite 651, Saskatchewan Wheat Pool Building 2625 Victoria Avenue	G. A. Cooper.....	0312745.....	525-9814 (area code 306)
Edmonton 15, Alberta, Regional Manager..... 802 Chancery Hall 3 Sir Winston Churchill Square	W. Mackenzie Hall.....	0372762.....	422-7178 (area code 403)
Vancouver 1, British Columbia, Regional Manager..... 2003 Board of Trade Tower 1177 West Hastings Street	J. F. Murray.....	045391.....	666-1434 (area code 604)

*These offices operate under the direction of the Industry, Trade and Traffic Services Branch.

Foreign Tariffs and Trade Regulations

The Government of Ceylon has announced concessionary rates of duty on a large number of commodities when imported for the construction of and use in hotels and rest houses approved by the Ceylon Tourist Board.

Included in the list of goods which will be admitted duty-free (from all sources) are air conditioners and air-conditioning equipment, construction equipment, contractors' equipment, commercial kitchen and laundry equipment, office machines and intercommunication systems.

Some of the goods on which concessionary rates of duty, (5 per cent preferential tariff or 15 per cent general tariff), will apply are tableware, electric appliances, bed linens, glassware, table linens, cleaning agents, uniforms for hotel staff, light fittings, office stationery, radios and TV sets, advertising and publicity material.

Commodities on which concessionary rates of duty of 25 per cent (preferential) or 35 per cent (general) will apply include electric appliances, apparatus and accessories for sports and outdoor games, first aid equipment, plumbers' and carpenters' tools.

Further information may be obtained from the Commonwealth Division, Office of Area Relations, Department of Industry, Trade and Commerce, Ottawa.

Israel reduced tariffs on January 1, 1970, from 5 to 15 per cent on over 300 classifications, including metals, electrical goods, textiles, chemicals, food, rubber, plastics, paper, wood and vehicle components. This is the first of a planned five-year annual tariff-cutting program, which is part of the trade liberalization initiated in 1969 with the removal of restricted import licensing. Details may be obtained from the Asia and Middle East Division, Office of Area Relations, Department of Industry, Trade and Commerce.

Japan now prohibits imports of foodstuffs containing sodium cyclamate and calcium cyclamate. This amendment to the regulations under Japan's Food Sanitation Law came into effect on November 10, 1969. However, soft drinks already produced prior to the amendment will not come under the new regulations until January 31, 1970. Other foodstuffs produced prior to the amendment will be exempt from the regulations until February 28, 1970.

New Zealand has exempted the following commodities from import licensing requirements, effective November 13, 1969.

Tariff Item	Classes of Goods
29.03.00	Sulphonated, nitrated or nitrosated derivatives of hydrocarbons.
60.03.02 to 60.03.04	Women's and girls' full length stockings wholly or principally of silk, or wool, or of cotton, knitted or crocheted, not elastic nor rubberised.
Ex 60.06.05	Elastic stockings.
Ex 70.08.00	Safety glass consisting of laminated glass, shaped or not.
73.40.45	Mouse and rat traps; other animal and vermin traps of iron or steel.
Ex 82.02.11	Circular saw blades exceeding 12 in. in diameter (other than tungsten carbide tipped blades).
Ex 82.02.12	
82.02.13	Bandsaw blades and toothed bandsaw strip, over 4 in. in width, for wood sawing.
Ex 82.02.19	Other blades for hand or machine saws (excluding bandsaw blades and blading, toothed, sharpened or set, 4 in. or under in width, and chain saw blades).
Ex 82.14.01	Blanks of stainless steel or brass for making butter-knives and fish-eaters, and blanks of brass for making spoons and forks.
Ex 82.14.09	
Ex 83.09.15	Buckles, buckle-clasps and the like (excluding buckles and buckle-clasps of base metal designed for use with clothing, headwear or footwear and having an f.o.b. value of not less than 50c per dozen, and base metal buckles for car seat belts).
83.09.16	Hooks, eyes, eyelets and the like, of base metal.
83.09.17	
83.09.18	Rivets, tubular and bifurcated, of base metal.

- 90.10.01 Apparatus and equipment of a kind
 90.10.02 used in photographic or cinemato-
 Ex 90.10.09 graphic laboratories (other than
 screens for projectors); photo-
 copying apparatus (contact type);
 spools or reels for film (other than
 cinematographic spools and cans for
 8 mm. and 16 mm. film of sizes 200
 to 2,000 ft).

Canada is the main supplier of saw blades (item 82.02) and second supplier of rivets (item 83.09.18).

Further information is available from the Commonwealth Division, Department of Industry, Trade and Commerce.

The Spanish Government has decided to require importers to make an advance deposit of 20 per cent of the c.i.f. value of goods that they import. This became effective immediately and will continue until the end of 1970. This deposit will be held for six months. Further details on the range of products included, etc., are expected from our Madrid office shortly and will be published in *Foreign Trade*.

Trade Lines

A Soviet scientist has recently developed a multidimensional control system for oil extraction, using a model that simulated a small oilfield of 40 wells. Optimum operating conditions were determined for all wells; some were closed and the working of others changed. Output of the field increased by 10 per cent. Next year the plan is to apply the method to a 300-well field. Hopefully it may help develop optimum methods of operation for power, metallurgical and chemical industries—Moscow.

A \$13.5 million hotel in the Cable Beach area of the Bahamas is under construction. With eight stories and 400 rooms, it is expected to be completed by December 1970. To be known as the Sonesta Beach Hotel, it will be operated by Hotel Corporation of America which also manages the well-known Balmoral Club—Kingston.

A Cdn. \$10.7 million highly-automated plant in Aalter, Belgium, to produce compound feedstuffs for animals recently began production. The Boerenbond, Belgium's chief farmers' organization, owns the plant which is expected to have an output of 250,000 tons a year. This could be increased to 500,000 tons. The Boerenbond has a large factory at Merxem near Antwerp, which produced more than 600,000 tons of compound feedstuffs last year—The Hague.

A Cdn. \$13.4 million grain transshipment and storage complex will be built in the Europort area west of Rotterdam. Graan Elevator Maatschappij (GEM) will start on the new facilities by the end of 1970 and the project is expected to be partly operational by 1973. The new complex will have a transshipment capacity of over 2,000 metric tons per hour and a storage capacity of some 50,000 tons. It will handle ocean-going vessels of up to 150,000 tons and will be able to adapt the facilities for even larger vessels. GEM has a modern grain

transshipment and storage complex in the Botlek area near Rotterdam which handles vessels of over 95,000 tons—The Hague.

Air Canada will operate one weekly flight from Montreal to Prague, Czechoslovakia, beginning in May 1970. The flight will leave Montreal on Fridays and arrive in Prague via Brussels on Saturdays. The Czechoslovak national airline (CSA) will also operate a Prague-Montreal service using its newly acquired IL-62 Soviet jets. CSA has not yet announced its schedule—Prague.

A 913-foot high, 49-storey, circular concrete building in Dallas, Texas, will be under construction in May 1970. The building, said to be the world's tallest, is part of a 32-acre, \$200 million private development in downtown Dallas adjacent to the Convention Center and the proposed new City Hall. Offices will occupy the lower 21 floors and a 600-room Fred Harvey hotel the top 28—Dallas.

A \$3 million, fresh-frozen food plant is being built in Ashdod, Israel. The plant will be in operation by spring. Some 10,000 tons of food, mainly fruits and vegetables, will be prepared in its first year of production and will be sold at home and in Europe—Tel Aviv.

Tourism in Czechoslovakia has dropped by over 33 per cent in the first half of 1969, according to a report issued recently—Prague.

The Bahama Islands could welcome nearly two million tourists a year by 1972, according to the Director of Tourism. This would require a capital expenditure of some \$200 million in Nassau and \$19 million in the Out Islands for each additional one million tourists. Some 64,000 workers are needed in all sectors of the economy—Kingston.

Trade Commissioners on Tour

In Canada

If you wish to meet the officers whose itineraries are listed below, get in touch with—

In Ottawa—
Department of Industry, Trade and Commerce

In St. John's, Halifax, Montreal, Winnipeg, Regina, Edmonton, Vancouver—

Regional Office, Department of Industry, Trade and Commerce

In Toronto—
Canadian Manufacturers Association

In Windsor, Ontario—
Greater Windsor Industrial Commission

In Fredericton, New Brunswick—
Department of Industry

In all other centers—
Board of Trade or Chamber of Commerce

Germany

C. D. Caldwell, Assistant Commercial Secretary in Bonn, Germany:

Montreal: January 19-20

Toronto and Ontario: January 21-26

Winnipeg: January 27-30

Calgary: January 31-February 3

Vancouver: February 4-6

Temporary Duty in Ottawa

Trade Commissioners on temporary duty in Ottawa may be contacted through the Trade Commissioner Service, phone 992-9930 (area code 613).

M. A. Brault

Assistant Trade Commissioner
Johannesburg, South Africa
February 1-7

In Territory

Businessmen who would like Trade Commissioners to undertake assignments for them should write to the post as soon as possible.

Afghanistan

H. W. Guy, Assistant Commercial Secretary in Islamabad, Pakistan, will visit Kabul March 23-27.

Bulgaria, Hungary, Romania

Trade Commissioners in the Vienna, Austria, office make frequent visits to these countries, but often there is not time to publish their itineraries in advance. Therefore, Canadian businessmen who would like the Trade Commissioners to undertake assignments for them in these East European countries are advised to write to the Vienna office immediately.

Chile

J. D. Leach, Assistant Commercial Secretary in Santiago, will visit Concepcion March 23-27.

Colombia

J. A. Elliott, Commercial Secretary in Bogota, will visit Cartagena, Barranquilla and Santa Marta January 26-30.

Costa Rica

A. L. Lyons, Assistant Commercial Secretary in Guatemala City, will visit Costa Rica February 2-7.

Cyprus

An officer from the Tel Aviv, Israel, office will visit Cyprus every month for at least three days, usually in the second half of the month.

El Salvador

J. D. Tennant, Assistant Commercial Secretary in Guatemala City, will visit El Salvador March 16-20.

Guyana

Officers of the Port-of-Spain, Trinidad, office will visit Guyana as follows:

J. M. C. Lavoie, Assistant Commercial Secretary, February 16-20.

D. Hobson-Garcia, Commercial Officer, March 16-20.

Honduras

S. G. Tregaskes, Commercial Counsellor in Guatemala City, will visit Honduras February 23-28.

Nicaragua

W. Kuhn, Commercial Officer in Guatemala City, will visit Nicaragua January 26-31.

Pakistan

Officers at the Islamabad office will make the following visits:

Karachi—M. Y. Farooqui, Commercial Officer, January 19-23.

Lahore—J. E. G. Gibson, Commercial Secretary, March 2-4.

Dacca—H. W. Guy, Assistant Commercial Secretary, March 9-13.

Taiwan

D. S. Baker, Consul and Assistant Trade Commissioner in Manila, Philippines, will visit Taiwan February 22-March 8.

Trinidad

Officers of the Port-of-Spain office will visit North and South Trinidad as follows:

North Trinidad

J. A. Ahow, Commercial Officer, February 25.

South Trinidad

J. A. Ahow, Commercial Officer, March 25.

Foreign Exchange Rates

These nominal quotations may help exporters in checking prices, but they should consult their banks before making any firm commitments. 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 Area

Relations, Department of Industry, 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 .92.

To convert column two, divide by .92.

Country and Currency	Value of		Country and Currency	Value of	
	foreign currency unit in Canadian dollars at December 30	Canadian dollar in foreign currency units		foreign currency unit in Canadian dollars at December 30	Canadian dollar in foreign currency units
Algeria Dinar	.1931	5.17	Denmark Krone	.1434	6.98
Argentina Peso (free)	.0030	333.33	Dominican Republic Peso	1.078	.93
Australia Dollar	1.204	.8340	Ecuador Sucre (official) (free)	.0599 .0536	16.72 18.65
Austria Schilling	.0415	24.03	El Salvador Colon	.4295	2.32
Bahamas Dollar	1.054	.94	Fiji Pound	1.232	.81
Belgium and Luxembourg Franc	.0216	46.72	Finland Markka	.2557	3.91
Bermuda Pound	2.572	.39	France, Monaco, etc. ² Franc	.1931	5.17
Bolivia Peso	.0906	11.06	Franco-African Republics ³ Franc	.0039	256.4
Brazil Cruzeiro (official free)	.2474	4.04	French Pacific ⁴ Franc	.0107	93.44
Britain Pound	2.572	.38	Germany D Mark	.2909	3.43
British Honduras Dollar	.5369	1.86	Ghana New Cedi	1.056	.94
Burma Kyat	.2255	4.43	Greece Drachma	.0359	27.93
Ceylon Rupee	.1804	5.54	Guatemala Quetzal	1.073	.93
Chile Escudo (bank rate) (free)	.1076 .0932	9.29 10.72	Guyana Dollar	.5395	1.85
China, Republic of New Taiwan Dollar (official)	.027	37.04	Haiti Gourde	.2148	4.65
Colombia Peso (fixed)	.062	15.87	Honduras Lempira	.5369	1.86
Congo (Kinshasa) Zaire	2.154	.4651	Hong Kong Dollar	.1772	5.64
Costa Rica Colon	.1620	6.17	Hungary Forint (official)	.0921	10.85
Cuba ¹ Peso	.....	.....	Iceland Krona (official)	.0122	81.96
Czechoslovakia Koruna	.1491	6.70	India Rupee	.1425	7.01
			Indonesia ⁵ Rupiah	.....	.....

Country and Currency	Value of		Country and Currency	Value of	
	foreign currency unit in Canadian dollars at December 30	Canadian dollar in foreign currency units		foreign currency unit in Canadian dollars at December 30	Canadian dollar in foreign currency units
Iran Rial	.0142	70.42	Peru Sol (free)	.0248	40.65
Iraq Dinar	3.006	.33	Philippines Peso (free)	.2741	3.63
Ireland Pound	2.577	.38	Poland Zloty (fixed basic rate)	.2700	3.71
Israel Pound	.3068	3.25	Portugal & Colonies ⁶ Escudo	.0375	26.66
Italy Lira	.0017	588.23	Saudi Arabia Riyal	.2066	4.84
Jamaica Dollar	1.286	.77	Sierra Leone Leone	1.502	.66
Japan Yen	.0030	333.33	Singapore Dollar	.3506	2.85
Kenya Shilling	.1526	6.55	South Africa Rand	1.502	.66
Lebanon Pound (free)	.3329	3.00	Spain & Dependencies Peseta	.0155	64.93
Malaysia Dollar	.3508	2.85	Sweden Krona	.2083	4.80
Mexico Peso	.0859	11.64	Switzerland Franc	.2481	4.01
Morocco Dirham	.2218	4.50	Syria Pound (free)	.2819	3.55
Netherlands Florin	.2959	3.37	Thailand Baht (free)	.0523	19.15
Netherlands Antilles Florin	.5694	1.75	Trinidad & Tobago ⁷ Dollar	.5392	1.85
New Zealand Dollar	1.204	.82	Tunisia Dinar	2.044	.48
Nicaragua Cordoba	.1534	6.51	Turkey Lira	.1199	8.35
Nigeria Pound	3.017	.33	United Arab Republic Pound (official)	2.468	.40
Norway Krone	.1502	6.65	United States Dollar	1.073	.92
Pakistan Rupee	.2255	4.43	Uruguay Peso (free)	.0043	232.56
Panama Balboa	1.073	.93	Venezuela Bolivar (official free)	.2389	4.18
Paraguay Guarani (free)	.0086	116.28	Yugoslavia Dinar (official)	.0863	11.61

1. There is no trading in Cuban pesos in U.S. or Canadian banks at present.

2. Franc is also used in French Guiana, Guadeloupe and Martinique.

3. Chad, Central African Republic, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Islamic Republic of Mauretania, Niger, Senegal, Upper Volta, Camerouns, Togoland. and Malagasy. Also Reunion, Comoro Islands, St. Pierre and Miquelon.

4. New Caledonia, New Hebrides, French Polynesia.

5. Because of the complexity of the Indonesian exchange rate system, it is impractical to quote a single representative rate for the rupiah.

6. Approximately same rate for Portuguese territories in Africa.

7. Also used in Barbados, Leeward and Windward Islands.

Marketing Data Sheet

South Korea

Area

38,007 square miles.

Climate

Moderate, high temperatures and humidity in summer, normally dry September to May, with main precipitation June to August. Monthly average temperatures in Seoul range from -4.9°C in January to 25.4°C in August; in Pusan from 1.8°C in January to 25.4°C in August. Centigrade scale is used.

Population

1966 census, 29.2 million—14.7 million males and 14.5 million females. Estimated population in mid-1968, 30.5 million—15.4 million males and 15.1 million females.

Households

1966 census, 5.2 million families. In December 1968 there were 5.3 million households, 3.9 million dwellings, 203 apartments (9,067 families). There is a shortage of 1.3 million dwellings.

Income

National income, 1968, Cdn.\$5,072.7 million. Per capita income Cdn.\$149. Average monthly wage in mining industry Cdn.\$47, manufacturing industry Cdn.\$32.

Bank Accounts

March 1969, 3.8 million bank accounts. Assets of commercial banks Cdn.\$1,143.4 million.

Motor Vehicles

December 1968, 80,951 registrations not including military and diplomatic vehicles: 33,112 passenger cars, 31,582 trucks, 12,786 buses, 2,188 small models, 1,283 special models.

Telephones

Telephone subscribers, 1968, 384,514 or 12.5 per thousand persons.

Radio and Television

December 1968, 2.0 million households had radios and 152,100 television sets were registered. Radio and television broadcasting facilities (525 lines per picture) are both publicly and privately owned.

Water Supply

Safe to drink. Water production, 1968, 511 million cubic meters and water supplied 380 million cubic meters. Pressure varies but minimum requirement is 1.5 kg. per square centimeter.

Electric Power

60-cycle a.c., single- and three-phase, 100 and 200 volts for domestic use, and 200 volts for small industry. A grounding conductor is not required in the cord attached to an appliance. There are 1.5 million domestic customers, 45,000 industrial customers and 122,000 commercial customers. National capacity July 1969, 1.6 million kw. Average domestic rate Cdn.\$0.0468 per kwh., average industrial rate Cdn.\$0.0189 per kwh. Average cost including operating and general administrative expenses Cdn. \$0.0180 per kwh.

Coal

Production, 1968, 10.2 million metric tons of anthracite of which 226,266 tons were exported. Reserves are put at 1.1 million metric tons. Imports included bituminous coal 51,633 tons, coke and semi-coke 51,153 tons.

Gas

Production, 1968, 2,042 kl. butane and 26,909 kl. propane.

Petroleum

All refined products available. Production and reserves of crude practically nil. Production of refined products, 1968, included crude oil discharged 5.6 million kl., bunker C 2.2 million kl., diesel oil 1.2 million kl., gasoline 626,400 kl.

Weights and Measures

Metric.

Screw Thread

Metric, right hand.

Standards

Standards for electrical appliances, oil and gas stoves and furnaces, and general machinery are established by the Bureau of Standards, Ministry of Commerce and Industry, Seoul, South Korea. These are not compulsory except for safety measures applying to electrical appliances and heating equipment.



Selling exclusively under a "Canada in Europe" theme, an Amsterdam-based sales organization, J. Haring Textile Imports, has rung up first-year sales in Europe of about \$175,000 for eight Canadian clothing manufacturers. It has exhibited a collection of Canadian garments, mainly coats and jackets for young men and women, at various trade and fashion shows in the Netherlands and West Germany.

The eight Canadian companies represented by Haring are United Garments Limited, Canadian Garment Company, Canadian Sportswear Sales, Rice Sportswear, Olympic Pant and Sportswear, all of Winnipeg; Craft Sportswear of Toronto, and Bantamac and Blue Style Garment, Montreal.

The interest in the Canadian garments has been stimulated by distinctive style and design and the willingness of manufacturers to sell on terms common in Europe and at competitive prices. Haring made extensive market tests of a wide range of Canadian garments to determine which had sufficient potential for further promotion. The introductory sales effort under the "Canada in Europe" theme represents a good start for the Canadian manufacturers and future sales look promising.

Mr. Haring will visit Canada again in February to view the collections of Canadian clothing manufacturers, particularly sports clothing and outerwear.

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

CANADA
POSTAGE PAID
PORT PAYÉ

