JANUARY 18. 69

FOREIGN TRADE

DEPARTMENT OF TRADE AND COMMERCE, OTTAWA

Upstate New York Beckons You

IN THIS ISSUE

VOL. 131 NO. 2

The impressive-looking city on our cover is Rochester, with the Genesee River flowing through it. With Buffalo and Syracuse, the two other large cities in Upstate New York, it forms a big market, consuming many types of products. One of the Trade Commissioners in our New York office has been exploring this area personally with an eye to its potential for Canadian exporters. He will follow his general discussion of the area in this issue with a report on the Upstate market for consumer products and one on the market for industrial goods.

Soviet plans for the development of the automobile industry have been described from time to time in the Western press. Some of these descriptions, says the author of the article on page six, have been "based on incomplete or unevaluated information and have grossly over-rated the potential Soviet competition as a car exporter on Western markets, as they have under-rated the real long-term potential for the sale of Western automotive equipment and technology to the Soviet Union to develop domestic car output." Mr. Turcotte, in writing about this industry, has endeavored to set the record straight without over-emphasizing the opportunities or under-estimating the problems.

Italy too is a possible market for some automotive products—a market outlined in this issue. Last June an Automotive Parts Analysis Mission visited Italy, Germany and Sweden. The author of our report undertook preliminary research for this mission in the Milan territory and participated in its sessions. He has based his article on this research and experience and it deserves close attention.

Accompanying the article on the aerospace industry in New York, New Jersey and Connecticut were more charts and directories than we could find room for. The large number of companies in Canada active in the aerospace field will find much preliminary information here and are welcome to write to the author in our New York office for further information and assistance.

FOREIGN TRADE

Established in 1904. Published fortnightly by the Departments of Industry and Trade and Cammerce.
The Han. JEAN-LUC PEPIN, Minister; the Han. OTTO LANG, Minister withaut Portfalio; J. H. WARREN, Deputy Minister

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Address carrespandence to the Editar, "Fareign Trade", Trade and Cammerce Building, Wellington and Lyon Streets, Ottawa, Canada.

JANUARY 18, 1969

ARTICLES

DEPARTMENTS

SUBSCRIPTIONS

$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.

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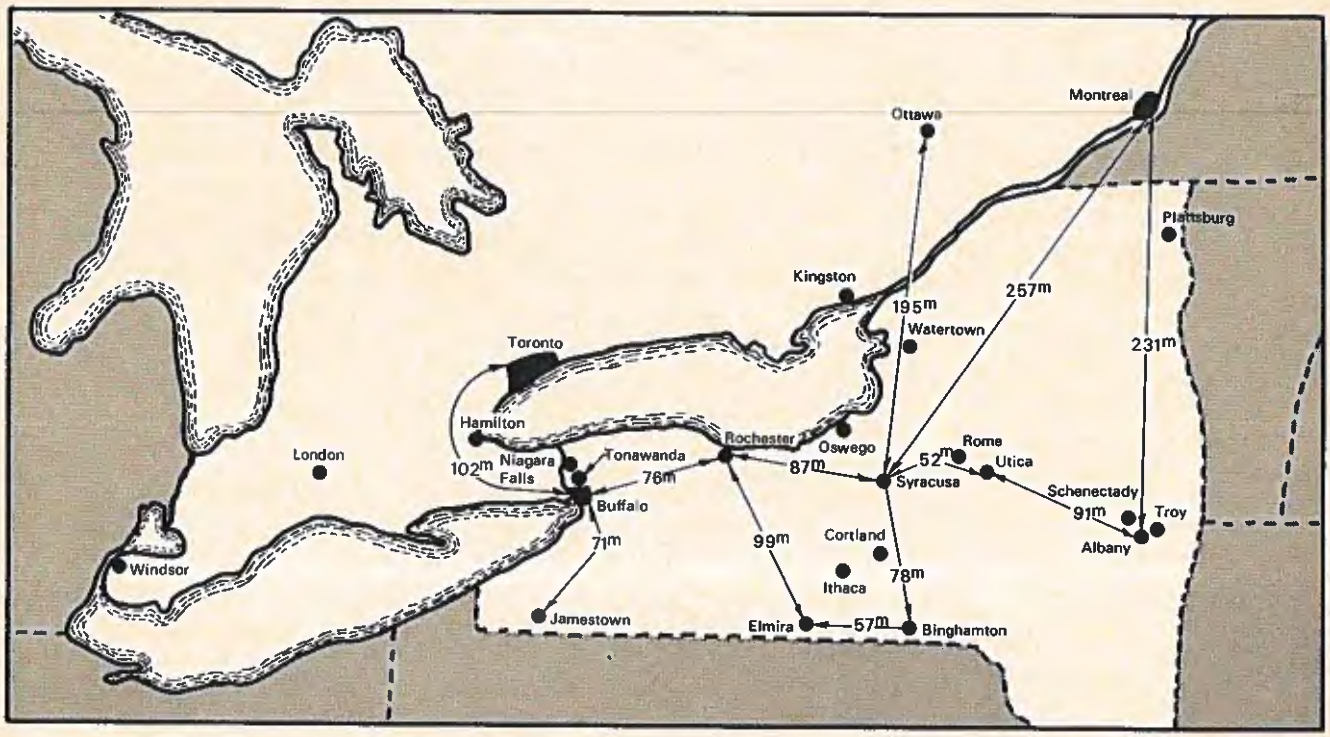
Upstate New York Beckons You



The Buffalo-Rochester-Syracuse economic belt offers a rich nearby market that your company should explore.

C. K. MARCHANT,
Vice Consul and Assistant Trade Commissioner, New York

■ Right on Canada's doorstep lies an export market which most Canadian companies have barely touched, probably because of a desire to tackle the "big" markets in New York City, Chicago or Los Angeles. These facts about Upstate New York may change their views.

1. Only eight entire states exceed this segment of New York State in value added by manufacturing and wholesale sales and only seven entire states can boast higher retail sales.

2. Ratios of new capital expenditure indicate that the area is growing much more rapidly than metropolitan New York.

3. Taken together, Buffalo-Rochester-Syracuse represent a consumer market larger than San Francisco, Oakland, Detroit, Cleveland or Washington.

4. Buffalo alone ranks thirteenth among U.S. cities in women's ready-to-wear sales.

5. All three cities are growing rapidly, as a visit to any of the downtown areas shows.

Just as important as the size of this market is the congenial atmosphere for Canadian goods. In our chats with a wide range of Upstate businessmen we have without exception encountered a friendly feeling towards Canada. Sometimes, as in department stores, it reflects in part the practical consideration that the stores enjoy a fair amount of Canadian traffic. Always it reflects their pleasant associations with our country and with Canadians.

I hope that you, as a Canadian exporter, will take a good look at this market. There may well be some promising accounts which you could develop in this area, no matter what your product line. Upstate New York is an important area in manufacturing, research, and wholesale and retail trade.

One further point to bear in mind is that Upstate New York is not, by and large, a market dominated by New

York City. For most purposes—and particularly in the retail and wholesale trade—it operates as an independent unit (subject, of course, to the corporate purchasing policies of individual companies).

To give you some guidance in examining this market, here is a brief rundown on its industrial and commercial structure.

Buffalo Leads in Manufacturing

Primary metals is Buffalo's leading manufacturing industry. Close to Pennsylvania coal and with access via the Great Lakes and the St. Lawrence Seaway to iron ore and limestone, it is one of the largest steel-producing centers in the U.S. The Bethlehem Steel Corporation operates the country's fourth largest steel mill and has in the last five years doubled its capacity with the addition of three basic oxygen furnaces. Other major steel producers in the Buffalo region include Buffalo Steel and Allegheny-Ludlum. Other important primary metals companies are Western Electric (aluminum and copper conductors), Symington-Wayne Corporation (steel castings for railroad equipment), Anaconda American Brass Company (copper and copper alloy in sheets, strips and tubes), and Union Carbide (ferro-alloys and other metals).

Transportation equipment, principally parts for motor vehicles, is the second most important Buffalo industry. Plants of the Chevrolet Motor Division of General Motors produce motors and gears and axles. General Motors' Harrison Radiator Division has three plants producing automotive radiators, heaters and air conditioners. Trico Products is a large independent producer of windshield washers, wiper arms and other automobile accessories.

Aerospace equipment industry turns out field rocket engines, space vehicles, avionics equipment and experimental aircraft components at the Bell-Aerospace Corporation plant and Curtiss-Wright and the Twin Industries Division of Wheelabrator Corporation both produce aircraft parts and components.

Non-electrical machinery group includes Clark Brothers, a division of Dresser Industries, the Linde Division of Union Carbide, Worthington Corporation, the AVM Corporation and Marlin Rockwell Division of TRW. Their products include turbines, diesel and gas engines, cryogenic equipment, machine tools, compressors, fans, blowers and air-conditioning equipment, and voting machines.

Electrical machinery producers include Westinghouse, the Buffalo area's largest employer, making motors, rectifier welders, power sources and numerical controls. Sylvania Electric specializes in defence electronics and communications systems and the Wurlitzer Company manufactures musical equipment.

The food processing industry in the Buffalo area is dominated by grain milling and bakery products companies, notably General Mills.

Furniture manufacture—Jamestown, New York, is a major center for furniture manufacturing, including hospital, household and metal office furniture.

Rochester—Kodak Leads

Photographic equipment and supplies form the most significant product group in the Rochester area. Eastman-Kodak is a well-known producer of cameras, films, projectors, photocopying machines and other specialized photographic materials and apparatus. Xerox is one of the leading U.S. producers of electrostatic photocopying machines.

Instrument manufactures are the second important Rochester manufacturing group. Taylor Instrument Company is a leading producer of process control instruments and of instruments for home and medical use. Ritter-Pfaudler is a leading producer of medical and dental patient-handling and treatment equipment. (These two firms were recently merged under the name Sybron.)

Optical and professional instruments produced in the Rochester area include microscopes, telescopic and eyeglass and contact lenses, lens machinery and opthalmic chairs and stands. Firms in this category include Bausch and Lomb, Shuron-Continental (a division of Textron), Wollensack (a division of 3M) and the Art Craft and Rochester Optical companies.

Electrical machinery industry in Rochester is led by General Dynamics. Stromberg-Carlson, its subsidiary, produces electronics and communications equipment, notably telephones, switchboards and related equipment. The Electronics Division of General Dynamics builds and tests communications equipment for defence purposes. In addition, Sylvania Electric Products, a subsidiary of General Telephone, makes television sets, radios, high fidelity equipment and television monitors, as well as television picture tubes and colored cathode ray tubes.

General Electric produces small electric appliances at Brockport, near Rochester, and Fasco Industries in Rochester is one of the world's largest producers of fractional horsepower motors as well as a leading manufacturer of automotive switches and circuit breakers.

Food processing in Rochester is diversified, reflecting the importance of locally grown agricultural products. Bird's Eye Division of General Foods has two food-freezing plants and Duffy-Mott produces apple products in three locations. In addition, there is the Tobin Packing Company (meat products), the R. T. French Company (mustard, spices and pet food), and Gerber Products (baby foods).

Apparel—Rochester is New York State's leading producer of apparel outside of New York City, particularly men's clothing.

Syracuse: Electrical Machinery

Electrical machinery is the leading industry in the Syracuse area largely because of the General Electric Company. Among General Electric products are television sets, tubes, transistors, radar and sonar equipment and military and aerospace systems. Crouse-Hinds, another large electrical concern, manufactures a full line of industrial electrical equipment, outdoor and aviation lighting and traffic control products.

The non-electric machinery industry produces in or near Syracuse air conditioning and refrigeration equipment (Carrier), typewriters (Smith-Corona-Marchant), and diesel and stationary marine engines (Alco Products, a subsidiary of Worthington Corporation).

Primary metals producers include Crucible Steel, turning out a large variety of types and shapes of steel. There are also a variety of other producers of ferrous and non-ferrous products.

Transportation equipment—notable in this field are the New Process Gear Division of Chrysler (automotive gears, transmissions and differentials), Ternstedt Division of General Motors (hub caps, wheel discs, radiator grilles and other ornamental automotive products), Brockway Division of Mack Trucks and Lipe-Rollway (heavy-duty clutches).

Wholesale and Retail Trade

Buffalo is the major wholesale distribution center in Upstate New York. This is illustrated by the ratio of wholesale sales to retail sales in the city of Buffalo: $106.00 wholesale sales per $100.00 of retail sales, compared with $44.00 per $100.00 for Upstate New York as a whole. Not surprisingly, of the three centers Buffalo leads in all categories but one, electrical goods.

That Buffalo has a well established wholesale trade is indicated by the percentage of Upstate distribution of various products handled from Buffalo:

	(per cent)
Groceries and related products	29
Motor vehicles automotive equipment	56
Machinery equipment and supplies	26
Electrical goods	18
Metals and minerals	61
Drugs and chemicals	40
Lumber and construction materials	33
Hardware, plumbing and heating equipment	24
Paper and paper products	38
Farm products	47

As a retail market, the Buffalo area has a population of a million to a million and a half and annual retail sales total close to two billion dollars. Much of the retail trade, particularly in consumer goods, is handled by the larger department stores in Buffalo—William Hengerer & Co., Hens & Kelly, Adam, Meldrum & Anderson, and The Sample Inc.

Syracuse is the second most important wholesale distribution point in Upstate New York but handles less than half the wholesale volume of Buffalo. It is a leading wholesale ccnter for electrical goods (29 per cent of the Upstate market), and is second to Buffalo in groceries and related products (14 per cent), motor vehicles and automotive equipment (24 per cent), drugs and chemicals (20 per cent), and lumber and construction materials (14 per cent).

Retail sales in Syracuse are close to a billion dollars a year. With a metropolitan population of almost 600,000, it is larger than Winnipeg. The major department stores in Syracuse include Chappell's, Dey Brothers, E. W. Edwards and Witherill's.

As a wholesale market, Rochester ranks slightly behind Syracuse in total trade at this level. However, in four categories it is the second most important distribution point in Upstate New York: machinery equipment and supplies (22 per cent of the Upstate market); metals and minerals (20 per cent); hardware, plumbing and heating equipment (14 per cent); and paper and paper products (16 per cent).

As a retail market Rochester merits particular attention. Rochester reportedly has the highest per capita income of any industrial center in the United States and this is reflected in the high per capita retail sales. Among the better quality department stores and chains which operate in and out of Rochester are Sidley, Lindsay & Curr, Forman's, McCurdy's, and E. W. Edwards.

Research Ranks High

An important activity in Upstate New York is industrial research. There are 294 commercial and institutional industrial research laboratories in Buffalo, Rochester and Syracuse. In addition, there are a number of educational and government research operations, particularly those connected with the many colleges, universities and technical institutes in Upstate New York. Combined with a large number of medical and therapeutic treatment and research centers (the most famous is Rochester's Mayo Clinic) Upstate New York could be a promising market for Canadian scientific, medical and educational instruments.

Something for You?

Perhaps this brief outline has prompted some questions about where your company's products could sell in Upstate New York or possibly even suggested the names of some potential customers. In either event, can we at the Commercial Division of the Canadian Consulate in New York be of help to you? To take three examples, if you would like to know which purchasing agent at Eastman-Kodak in Rochester you should see, what manufacturers' representatives handle screw machine products in Syracuse, or even the name of the Ookpik buyer at Adam, Meldrum & Anderson in Buffalo, please give us a call. We would be delighted to discuss your product's market prospects, point out useful sales contacts, and help you follow up and generate repeat orders in this rich—and, for Canada, very neighborly—Upstate New York market.

This article will be followed by two others by Mr. Marchant, dealing specifically with the market for consumer goods and the market for industrial products—Editor.

A Progressive Step Back

■ The Intermediate Technology Development Group in Britain has produced a catalogue of 6,000 low-cost tools that are particularly suitable for use in the developing countries, according to the London *Financial Times*. It includes simple Hoffman kilns and hand-operated formers and pressers for ceramics, steam-pipe ovens for bakeries, and horse-drawn agricultural implements—all of them made obsolete by automated equipment and new tecbniques in the parts of the world where labor is scarce and expensive but ideal for places where labor is abundant and trained maintenance men are difficult to find.

Because most countries in Africa and Asia suffer from external payments problems, tbe vital question for their economic planners is not how much profit a new factory makes or even how far it raises labor productivity but what return it gives on the foreign currency spent. A combination of botb modern and intermediate machinery and a mix of both sophisticated and simple products is probably the ideal.

Enterprising Exporters

Suits for the Small Fry

■ One morning in April 1967, Monsieur and Madame Gerard Rousseau of Montreal took themselves down to the Queen Elizabeth Hotel. "Operation Export", a project that carried 67 Canadian Trade Commissioners across Canada to talk with exporters or potential exporters, was in full swing and the Rousseaus were on a voyage of discovery.

Monsieur Rousseau owns a 14-year-old business in Montreal's north end, Ko-Kette Novelty Company, producing clothes for children from birth to three years, mainly tiny suits and "crawler" sets. With an established market in Canada, the firm was ready to weigh its chances of selling overseas.

Had Ko-Kette ever sold anything abroad? they were asked, as one appointment followed another. No. Did they know anything about exporting? Nothing. Had they ever calculated their c.i.f. prices? Never. Did they understand customs tariffs? No.

Most of the Trade Commissioners to whom the Rousseaus talked were sceptical. The Canadian prices that they quoted seemed high. It would take at least a year to sell anything, they pointed out. But our man in London suggested politely that they send samples of their line to his office; so did the Trade Commissioner in Johannesburg and a number of others.

In assessing Ko-Kette's chances, they reckoned without the Rousseaus' drive and determination. Madame Rousseau didn't know anything about exporting but she did know a lot about children and about selling. Off to London went 34 gay, fresh-looking samples of her suits and crawler sets. They took the fancy of a good agent, who had orders for her in six weeks. On August 20, 1967—Madame Rousseau remembers the exact date because it marked a milestone for Ko-Kette—she sent off the first orders, just four months after they took the plunge by going down to the Queen E. In the month of September 1968, one half of the plant's production went to the British market.

With the first shipments off, husband and wife crossed the ocean to study the market for themselves. With the agent, they called on customers and prospective buyers. They roamed through the stores to see what was offered for small children. They found the colors darker than in Canada and the designs different from theirs.

This all sounds easy but a talk with Madame Rousseau soon sets the record straight. Learning how to calculate c.i.f. prices was a struggle. So was the documentation—and she does it all herself, just as she designs all the models that the firm sells both in Canada and overseas. And this means a completely new spring and summer and fall and winter line each year.

She soon discovered that some of the models would have to be adapted to meet British conditions. All-cotton garments enter Britain duty-free but synthetic materials are dutiable. That wasn't too much of a problem; the nylon blouse in the suits and sets was replaced by a cotton one. And because British homes aren't as warm as Canadian, long sleeves replaced short in the fall and winter models.

Eye appeal attracts customers; speedy delivery of orders helps to keep them. That's why Ko-Kette orders move to Britain by air. (In addition, Madame Rousseau explains, this gives them two to three weeks' more production time.) The tiny suits and sets, on hangers, go into 12-foot corrugated board containers that can hold 20 dozen crawler sets or 22 to 23 dozen suits. These containers are secured with steel strapping, delivered to Montreal airport in late afternoon or early evening, and arrive in Britain next morning. A customs broker at London airport delivers them to the wholesalers. Shipments to Ireland—Cassidy's in Dublin is one of their customers—go by parcel post.

Ko-Kette is also making progress in South Africa, though at a slower pace. Samples sent to the Trade Commissioner in Johannesburg aroused interest and he found the firm a good agent. By Christmas of 1967 he had secured five or six orders and a big department store has since become a regular customer. Shipments to South Africa go forward by parcel post in 72-inch-square boxes. For this market Madame quotes prices f.o.b. in U.S. dollars, not c.i.f. as in Britain.

Not all markets have fallen to this skilful attack. In Sweden the duty is too high and Switzerland has not yet provided firm orders. Last March Madame exhibited in the International Fair for the Child at Cologne and herself manned the stand. The results, she admits, were disappointing. She did attract a potential customer from France and he asked for samples. And touring the fair provided her with some ideas and a chance to assess the competition.

Where next? At the moment Ko-Kette has about all the business it can handle but soon it will be resuming the search for new export customers. It's a never-ending business for this designer-cum export manager-cum business manager.

Sometimes she and her husband (who concentrates mainly on production) take time off at Christmas to go and sit in the sun at Acapulco. This year? Madame shrugs. "If we are not too busy," she answers.

—O. MARY HILL
Editor, "Foreign Trade"

U.S.S.R. Will Make More Cars

. . . and in the process may need modern equipment that Canadians can supply.

R. F. TURCOTTE
Commercial Secretary, Moscow

■ The green light has been given for accelerated development and modernization of Soviet passenger car output, after decades of concentration on truck and bus production. Plans now under way call for rapid expansion to boost car output from 200,000 units in 1965 to 800,000 in 1970—(surpassing for the first time that of trucks) and to well over one million units by 1975 (see Table I).

With all-out effort concentrated on heavy industry over the years, Soviet car production remained at best a small-scale industry, supplying virtually custom-made cars for official government use only. Despite steady increases over the last decade, car production in 1968 will only reach 280,000. With no significant imports and exports running at close to 30 per cent of production in 1967, annual new domestic supply was less than 200,000 units. In comparison Canada produces about 800,000 a year.

Current Projects

Realizing that to multiply output six times in the ten years (1966-75) would strain already taut domestic resources unduly, and particularly those for specialized equipment, the Soviet authorities decided to sign major co-operation agreements with leading Western firms to set up new plants in the Soviet Union and completely rebuild others. Basically, foreign firms sell advanced technology to the Soviets, plus specialized equipment not easily available in the U.S.S.R. The Soviets put up the physical plant, look after ancillary projects and supply all basic equipment readily obtainable from domestic sources.

By far the biggest increase in production will come from a $840 million plant being built at Togliatti on the Volga under a contract with the Italian Fiat Company (see Table II). Fiat technology and foreign equipment to an estimated value of one-third of the total project cost will be imported. At full capacity, the plant will supply 660,000 cars per year. Called "Zhiguli", the car will be new to the Soviet market and in fact will be the Fiat-124 and Fiat-125 adapted for the rigorous Soviet climate and road conditions. Excavations began in the winter of 1967 and all main objects will be completed early this year. Original plans calling for a total capacity of 600,000 a year to be reached by 1970 have slipped somewhat; limited production is now expected to begin this year, with all construction completed by 1970 and final capacity reached by 1972-73.

Another major $180 million project agreement was signed in October 1966 with the French (state-owned) Renault Company—working in association with Peugeot—for modernization and reconstruction of "Moskvich" production facilities in the Soviet Union. The Moscow Small Car Works will see its capacity trebled by 1969. Also under the contract a brand new factory at Izhevsk to produce the "Moskvich" was to come on stream by late 1968. The contract guaranteed a minimum $55 million of orders to Renault and/or its suppliers and had already been 85 per cent covered by early 1968.

No other major foreign projects are currently being constructed or openly negotiated. Apparently the Toyota Company in 1966 was asked to bid on a factory with an initial output of 300,000 Japanese-designed cars per year and an ultimate capacity of 500,000, but nothing further has been announced. British Leyland Motors has shown interest in Soviet heavy vehicle manufacturing (including buses) but so far without visible results. However, the British Government has signed an agreement with the U.S.S.R. setting up a Motor Transportation Working Group at the scientific and technical exchange level, and hopefully this will give an impetus to future project contracts.

The Gorky and, to a lesser extent, Zaporozhye Motor Works—each of which has this year put out an elegant and entirely new model—are also being modernized but using essentially domestic resources.

Obtaining Equipment

Imported equipment, especially for the Fiat but also partly for the Renault projects (except for very special equipment and dies produced by these two prime contractors), is purchased (after consultation with them on suitability) by competitive bidding directly from the suppliers by the Soviet Foreign Trade Corporation set up especially for this purpose, V/O Avtopromimport. This firm, with headquarters in Moscow, has established special commercial-technical divisions in Turin, Italy, for the Fiat project and in Paris for the Renault.

Some impressive equipment contracts have already been signed. Italian Innocenti landed a $30 million order for 142 cold-stamping presses for the Togliatti-Fiat Works. These presses will be equipped with automatic devices manufactured by Innocenti in collaboration with USI-Clearing of Chicago. Recently the first Japanese firm to get in on the Togliatti project won a $2.25 million contract for an automobile engine filter plant. A British firm obtained £2.6 million worth of contracts for machine tools for use in several of the major projects. A French firm has won a $1 million contract for supply of a complete plant for producing headlights. The first British firm to land a contract on the Fiat project will supply a £1 million complete plant capable of manufacturing a finished fender

every five seconds, and a Swedish firm has received a $1.2 million order for 11 stationary rotary screw compressors. The Italian firm Pirelli is constructing a $50 million rubber plant at Bukalovo to supply rubber car components for the Togliatti factory and has also been involved with development of the Soviet tire industry.

Future Prospects

Despite official silence so far on future plans for the automotive industry under the forthcoming Five Year Plan (1971-75), current projects now under way (accountable against the 1966-70 Plan) are only a modest beginning. An annual car production of 1.25 million by 1975 remains insignificant for a country the size of the U.S.S.R. with a 238 million population and twice the area of the U.S. Estimated Soviet car population in 1966 was about one million, or one car per 250 Soviet inhabitants compared with one for every four in Canada and for every three in the United States. Under known projects at present the total stock of cars can be expected at best to rise by 1975 to four or five million.

With such a minimal stock, the state can and will absorb the bulk of new output for its own use for years to come. Moreover, prospects are that at least 30 per cent of production will continue to be exported over the long term either to earn hard currency or to satisfy commitments to other Communist countries or as foreign aid. The Soviet authorities must therefore expect to be under increasing pressure to augment the supply of private cars for the population through acceleration of production.

TABLE I

SOVIET PRODUCTION OF MOTOR VEHICLES

	1938	*1945*	*1950*	*1960*	*1965*	*1967*	*1968**	*(Plan) 1970*	*Canada 8/67-7/68*
	(thousands of units)								
Automobiles	27	5	65	139	201	251	280	700–800	788
Trucks	184	69	298	362	380	437	513	600–650	246
Buses		1		23	35	40		60	7
Total	211	75	363	524	616	728	793	1360–1510	1041

*1968 based on projected nine-month actual production figures.

TABLE II

SOVIET TIRE PRODUCTION

	1960	*1965*	*1966*	*1967*	*1968**	*1970*
	(million units)					
Total tires	17.2	26.4	27.7	29.6	31.5	38–40
Auto tires**	2.0	3.0	4.0	4.5	5.5	7.0

*Projection of 1968 first nine-month actual production figure.
**Estimate.

TABLE III

CURRENT PLANS FOR SOVIET CAR OUTPUT

Plant	*Auto Output Begins*	*Current Model*	*HP*	*Production 1965[3]*	*1968[3]*	*1975 (Proposed)*
				(units '000)		
Zaporozhye	1960	"Zaporozhets" "Yalta"	30–40	45	70	100
Moscow Small Car (Renault)	1940's	"Moskvich"	55 & 75	70	90	200
Izhevsk (Renault)	1968	"Moskvich"	55 & 75	—	20	150
Togliatti (Fiat)	1969	"Zhiguli"	60	—	—	660
Gorki[1]	1930	"Volga"	75 & 98	55	70	70
		"Chaika"[2]	180	0.1	0.1	0.1
Moscow ZIL	1924	ZIL-111[2]	280	—	0.1	0.2
		ZIL-114[2]	300			
Yulianovsk	1930's	GAZ-69 Jeep	n.a.	30	30	30
Total				200	280	1,210

[1]Gorki Auto Works built in 1930 with assistance of Henry Ford, initially to put out modified version of Model A, called GAZ-A.

[2]ZIL and Chaika are virtually hand-made prestige automobiles—about 300 units a year in all—for top Soviet official use.

[3]Breakdown by model for 1965 and 1968 estimated but annual total output figures are actual (1968 based on projected nine-month production).

Other Investments

Soviet tire production, at 29.6 million last year, has been keeping fairly good pace with current auto stock and projected output. By this late date it does not appear, however, that 1970 goals will be met. Quality may not always be up to desirable levels but quantity appears to make up for it and one does not see too many dangerously worn tires on vehicles. Rayon cord is mainly used rather than nylon.

A more serious problem has been supply of suitable fuel because most of the gasoline is below the 85 octane considered a minimum for cars in Western countries. The basic supply has now been raised to 72 and 76 octane by using aromatic rapid-evaporation fractions, but these cause operating difficulties even with Soviet low-compression engines. The 85- and 93-octane gasolines are available only through a coupon rationing system.

One area where important foreign participation can be expected in coming years is auto repair and servicing equipment. There are only about 12 filling stations in all of Moscow (population 6½ million) and four or five in Leningrad (3¾ million). Lesser cities content themselves with fewer. On the most travelled major tourist highways there is a filling station every 150 to

90520—2½

250 miles and the need is patent. Repair stations are a fraction of this again and it is estimated that one vehicle in five (trucks and cars) is normally idle waiting for service and parts. The Soviet authorities have recently shown considerable interest in increasing servicing facilities and equipment and have already imported some but only on an ad hoc basis. Earlier talk of a major contract with Renault or Fiat to set up a country-wide servicing network seems to have come to nothing for the time being. Perhaps the recent contract with Fiat to build two large service stations in Moscow is the beginning.

The biggest Soviet headache will soon be the road network. The highway network currently totals about 800,000 miles, of which 25 per cent is surfaced and 10 per cent hard-surfaced. For Canada the comparable figures are 450,000 miles, of which 75 per cent is surfaced and 16 per cent hard-surfaced. The roadbuilding investment which Soviet authorities must soon make to solve the mounting problems already apparent must be daunting.

Traffic density—70 per cent trucks and only 30 per cent cars compared with 20 and 80 per cent respectively for the West—over some of the major inter-city highways is several times the 6,000 vehicles daily for which the roads were planned. Soviet data indicate an annual loss to the economy of over $3 billion because of under-employment of transport equipment in difficult traffic conditions and damage to vehicles from bad roads, particularly in rural areas.

The current Five Year Plan (1966-70) called for 38,000 miles of new hard-surfaced road, a one third increase. Sooner or later a serious effort will have to be made and there should be interest in foreign devices that will save labor, time, materials, and money and for machines adaptable to Soviet conditions.

Trade in Finished Cars

As a matter of principle the Soviet Union does not import passenger cars commercially, and this policy cannot be expected to change in the foreseeable future. The same goes for auto accessories and gadgets.

The Soviet Union has developed steadily its car exports to convertible-currency countries over the last five years, first to Scandinavia, but also to Benelux countries and, beginning in 1968, to Switzerland, West Germany and perhaps other Western European countries.

In Sweden the U.S.S.R. has formed the Matreko Bill Ab, a car-retailing company with 70 per cent Soviet capital. Exports, though modest, have risen steadily and in 1967 the company opened a $500,000 four-storey, 6,000-square-meter showroom and service center in Stockholm. Its total investment in Sweden in this field is now said to run over $2 million.

Similarly, the Soviet-Belgian Scaldia-Volga Company was formed in Belgium in 1964 to serve the Benelux countries; annual sales rose to 4,000 by 1967. In 1968, a new 13,000-square-meter showroom-servicing center was built in Brussels. An agreement was concluded in the fall of 1967 between Renault, Scaldia-Volga and the Soviet V/O Avtoexport for assembly of the "Moskvich" and "Yalta" (a version of the Zaporozhets) in Renault's Brussels plant. Renault 1,100 and 1,500 c.c. engines, suitable to European standards, will be used and assembly was to begin early this year.

To service the Swiss market a branch of the Scaldia-Volga has been formed and the first batch of probably 200 automobiles is to be shipped soon. In West Germany, marketing of the "Moskvich" began early in 1967 with a total contract for 500 vehicles and 2,000 would be sold in 1968 it was expected. The basic advantage of the Soviet car in the West is its low price.

Selling to U.S.S.R.

All foreign trade in the Soviet Union is a state monopoly vested in state foreign trade corporations closely associated with the Ministry of Foreign Trade. For the automotive industry, two of these corporations have virtually exclusive competence. V/O Avtoexport deals with both the import and export of finished vehicles, parts and accessories and complete servicing equipment. The newly established V/O Avtopromimport, was set up specifically to import capital goods, equipment and technology for the Soviet domestic motor vehicle industry, as outlined in this article.

Interested Canadian firms should contact one or both of these firms, according to the type of equipment or goods they have to offer, directly at their Moscow addresses:

V/O Avtoexport, 32/34, Smolenskaja-Sennaja Square, Moscow G-200, U.S.S.R. Attention: V. M. Petrov, President.

V/O Avtopromimport, 32/34, Smolenskaja-Sennaja Square, Moscow G-200, U.S.S.R. Attention: A. A. Butko, President.

They may also find it useful to approach the Turin and Paris offices of V/O Avtopromimport (get their address from the nearest Trade Commissioner) for subcontracts under the Fiat and Renault projects respectively.

Businessmen should make sure to send copies of their correspondence and of any replies to the Commercial Counsellor, Canadian Embassy, 23 Starokonyushenny Pereulok, Moscow, so that he can do proper follow-up and obtain any further information or advice on the market.

Lumbermen Meet Wholesalers in Boston

■ Last November for the fourth successive year an informal Canadian lumber mission went to Boston to meet members of the New England Wholesale Lumber Association. The event was organized jointly by the Canadian Consulate General in Boston and by NEWLA. It provided an opportunity to renew acquaintances and to talk business.

Don Lockhart, Secretary-Manager of the Canadian Lumbermen's Association, was the guest speaker at dinner. He pointed out that North America will need new homes for 80 million people in the next ten years. This is a challenge of vast proportions; the lumber industry has a wonderful opportunity to help solve the housing problem by innovation and new product development.

Among those present were T. M. Stephenson, President of the CLA, W. A. Bray, Advertising and Promotion Manager of the B.C. Lumber Manufacturing Division of the Council of Forest Industries, Paul Krihak, President, and Lou Davis, Executive Secretary, of NEWLA, and W. H. Whippen, Past President, and J. J. Mulrooney, Executive Vice-President, National American Wholesale Lumbermen's Association.

What's the market for . . .

Furniture in Michigan

JOANNE KIRBY
Commercial Officer, Detroit

■ There are real opportunities for the sale of good quality Canadian-made household and office furniture in the United States. Naturally, because of the freight factor, the best opportunities are in the more densely populated areas adjacent to the Canadian border, such as the State of Michigan. It in itself offers a market about one-half the size of the entire Canadian market.

At the present time the demand for furniture in the United States is buoyant. Projections show a continuing rise in consumer spending and residential construction which promises well for larger furniture sales. The U.S. Department of Commerce reports that manufacturers' domestic shipments are expected to reach $4.1 billion in 1968, a 3.5 per cent increase over 1967. This prospect, and the fact that U.S. furniture manufacturers have already raised their prices 3 to 5 per cent, presents the Canadian manufacturer with an unprecedented opportunity for export sales.

And this is not all. January 1968 brought the first in a series of U.S. tariff cuts negotiated during the Kennedy Round. Over the next five years, duty rates will be reduced by half. In the first cut, for example, the following reductions were made:

	Reduced from	to
	(per cent)	
Wooden chairs	17	15
Sofas, component of chief value wood	10½	9
Upholstery		
of which:		
Other than cotton	35	31
Chief value, cotton	20	18
Chief value, leather	20	19
Rubber or plastic, reinforced or laminated	30	27
Plastic, not reinforced or laminated	12½	11

Thus with the recent price increases by U.S. manufacturers and the decreases in U.S. tariff rates, Canadian manufacturers should find it easier to compete than ever before. The market is bound to expand but it is still one of the "hard sell".

The trend over the past three years has been toward the heavier, more detailed look in both upholstered and case goods. Currently, Spanish is still the front runner in total sales of wood furniture. There are indications, however, that buying tastes are turning towards a cleaner, less ornate look of which designers should take note. Down-to-the-floor pieces in case goods (credenza) are still most popular in the better price ranges, while the "leg look" remains dominant in the promotion areas. The preferred finishes for all furniture articles are pecan, walnut, and oak.

The traditional look is also favored in upholstered furniture. Loose cushions, seat and backs, giving a luxurious, fluffy look, and printed fabrics with bright colors are the order of the day for living rooms. For family rooms, the trend is toward contemporary or overdone modern covered in nubby weave and heavily woven impregnated fabrics. Occasional chairs, including recliners and over-stuffed men's chairs, continue to be important on every sales floor.

Although the basic construction of upholstered furniture is similar in Canada and the United States, the American market favors the following:

Base Construction—no-sag spring, drop-in coil, flexolator, four or eight-way hand-tied coil with strip or full webbing.

Cushioning—polyfoam, foam rubber, polydacron wrap and foam, spring.

Frame—hardwood, e.g. maple, birch, aspen. This can be double or triple dowelled, glued, or corner blocked.

The Canadian manufacturer wishing to enter this market should first determine whether his styling, construction and finishes are acceptable and whether his prices are competitive. It is possible to view the market in toto by visiting the furniture market exhibits in January and June at Chicago, and in April and October at High Point, North Carolina.

Labelling Requirements

Manufacturers of upholstered furniture should acquaint themselves with both federal and state labelling regulations. Those in force in the State of Michigan are typical. A few of the more important labelling procedures are set out below in abbreviated form:

- At least two copies of each type of label proposed to describe articles shall be submitted to the Department of Health for approval. The required label must be made of substantial cloth or other suitable material which will not flake when abraded, and shall be two inches by three inches in size. Upon it shall be legibly and indelibly stamped or printed in ink, in English, all of the information required under the following heads.

- The name and address of the manufacturer, jobber, distributor, or vendor, and the registration number of the manufacturer.

- If "All New Material" is used, then the article must be labelled as such in letters at least one-eighth inch high in bold, block type. If the article of bedding contains secondhand material, it must be labelled in letters at least one-eighth inch high in bold, block type, "Made of Secondhand Material". The body of labels bearing the descriptive words "All New Material" shall be white; the body of labels bearing the descriptive words "Made of Secondhand Material" shall be yellow.

- The label on any article of bedding containing foam shall state whether it is rubber or synthetic foam and whether it is in the mold, sheet, flake, shredded, ground or crushed form. The label shall also state the thickness of rubber or synthetic foam pads or sheets. If it contains second-grade rubber this shall be stated on the label.

- Feather mixtures shall be designated by the name, character and percentage of each material used, or the entire mixture shall be designated by the name of the lowest grade of material used. For example, material labelled "Down" shall contain at least 90 per cent pure down. Ten per cent tolerances are generally allowed in mixtures but the terms "Pure", "100

per cent", or terms of similar import shall be used only if the material is exactly as stated.

Further information on labelling, stamps, permits, and registration can be obtained by writing to or calling the Department of Health, Bedding and Upholstered Furniture Inspection Division, 8809 John C. Lodge, Building No. 4, Detroit, Michigan 48202, telephone area code 313, 965-4200, extension 7229.

Channels of Distribution

There are several methods of distribution. These include the use of a Canadian sales representative, an American sales agent, or an American sales agent in a jobbing capacity, or shipping in large quantities on consignment to a public warehouse.

If the manufacturer chooses a Canadian sales representative, he should bear in mind that buyers must be canvassed as often as twice a month. Alternatively, many Canadian manufacturers have found it beneficial to appoint a Michigan representative because of his extensive contacts in and knowledge of the market.

Shipments made factory-to-dealer direct by individual representation as described above could prove uneconomic because of the small quantities involved. It may be advantageous therefore to consider using a representative jobber, who buys the merchandise outright and is allowed a 5 per cent or more discount. This discount is often more than offset by making shipments in carload and truckload quantities.

Another possibility is shipping on consignment to a public warehouse. Although it is true that transportation can be made at carload and truckload rates, if the goods do not sell readily (say within 30 days) there may be recurring storage charges which in most cases are prohibitive. In addition, it opens the door to mass distribution, thereby limiting your exclusive appeal, which is important to the Michigan dealer.

Consultation with people in the trade has revealed that the most feasible channel of distribution is the use of a local representative, either in the capacity of sales representative or representative jobber. The choice can best be made only after a fairly extensive market survey.

Additional Sales Tips

The normal terms of payment in the trade are 2 per cent 30 days, net 60. Landed prices should be quoted which include U.S. duty, brokerage, and transportation charges, though it is important to note that the f.o.b. price should also be given.

A point often overlooked is advertising. An offer on the part of the Canadian manufacturer to absorb the total or part of the cost of a "kick-off" ad or a series of small ads could prove mutually beneficial.

The export sales representative must know the extent of his principal's capabilities in deliveries, back-up stock and service. It is desirable therefore to have him or the prospective buyer visit the plant.

The Canadian Consulate in Detroit covers the State of Michigan and Toledo, Ohio. In this area there are upwards of 400 retail furniture dealers, including more than 50 in the greater Detroit area. We maintain an up-to-date list of approximately 800 Michigan and Toledo manufacturers' representatives, jobbers, and distributors, who are constantly seeking connections with Canadian suppliers of almost every conceivable product. We also have a complete and comprehensive set of Canadian and United States directories, not to mention the hundreds of personal contacts that we have established. We are happy to say that an ever increasing number of Canadian firms are taking advantage of the services we can offer.

Oilfield Equipment in the Middle East

N. W. BOYD
Commercial Counsellor, Beirut

■ The Middle East is the largest crude oil producing area in the world, with over 60 per cent of the proven oil reserves, and its dominant role in world oil supply seems assured. It follows that there is an excellent market for all types of oilfield equipment and supplies. In Saudi Arabia the Arabian American Oil Co. (ARAMCO), the country's principal operator and sole producer, purchases equipment and supplies from North America to the tune of $35 to $40 million a year. Canadian participation in this market has been relatively small and Canadian firms successfully selling goods and services to oil companies in North America would do well to explore the market opportunities here more fully.

To put the development of this industry in perspective, crude oil production in 1967 in the producing countries with which the Beirut office is concerned (Saudi Arabia, Kuwait, Iraq, Abu Dhabi, Qatar, Bahrain and Oman) amounted to 7,363 thousand barrels a day, or double the production in Venezuela and seven times that in Canada. Indicative of the spectacular growth in this industry over the past ten years is the fact that in 1957 crude oil production by these Middle Eastern countries totalled only 2,810 thousand barrels per day.

Future growth seems inevitable. In Saudi Arabia alone, now the world's fourth largest crude oil producer, it is predicted that the current production of about three million barrels per day will double by 1980. And according to conservative estimates, Saudi Arabia's crude oil reserves are not far from the 100 billion mark.

Seven Companies Participate

Development of the oil resources in these Middle East countries has been undertaken for the most part by the seven major international oil companies—Standard of New Jersey, Standard of California, Texaco, Mobil, Shell, Gulf and British Petroleum. Although there may be some variations in their purchasing policies for their Middle East operations, two rules of thumb apply: the need for prior approval of most types of oilfield equipment and supplies by the head offices located in the United States, Britain and Europe, and the need for an agent resident in each country in which sales are sought.

Selling to ARAMCO

By way of illustration, the Arabian American Oil Co. (ARAMCO), makes major purchases of equipment and supplies in consultation with its own engineering and purchasing offices which for the most part confine their request for offers to "approved sources". Accordingly, Canadian manufacturers who wish to establish their credentials for ARAMCO's "List of Approved Suppliers" should approach C. C. Watson, Manager, Purchasing & Traffic Department, 505 Park Avenue, New York. Mr. Watson is responsible for purchases from prime manufacturers located in the United States and Canada.

Once this first step has been taken, the next one is to appoint a local agent in Saudi Arabia. As a matter of policy, for all North American purchases of $5,000 or more the Aramco purchasing department asks Saudi Arabian traders to quote. It is company policy to procure as much as possible through local agents, even highly specialized items on which the local merchant may do little more than pass the paper and collect his commission. The same situation is found in most oil-producing countries in the Middle East where laws specify that all goods or services for use in the country must go through the hands of a resident national or a company with at least 51 per cent national ownership.

Consortium Suggested

A technique that many U.S., British and European oilfield equipment manufacturers employ successfully is to share the services of an office, frequently located in Beirut, staffed by engineers and technicians experienced in the petroleum field. These representatives travel throughout the Middle East and even to North and West Africa on the firms' behalf. There are five principal companies in Beirut doing this work at present and some now represent Canadian manufacturers. Because of the technical nature of some of the oilfield equipment and supplies, more Canadian firms should consider this avenue of approach. In fact, they might even consider forming a consortium of Canadian firms making products complementing each other to establish on a cost-sharing basis a technical office in the field. The service such an office could give speaks for itself.

Because there is little local industry in many of the oil-producing countries in the Middle East, imports by the oil companies extend beyond oilfield equipment. ARAMCO, in addition to its requests for petroleum exploration and development equipment (including such items as geophysical equipment and services, valves, pipes and fittings of many types, hardware and drilling supplies) also has substantial needs for innumerable other items associated with the administration and operation of an integrated oil complex—things like telecommunications equipment, aircraft, vehicles, electrical products, air-conditioning equipment, packaged foodstuffs, construction materials and services, marine and harbor equipment, portable buildings and safety clothing. It is evident that ARAMCO and the other oil companies operating in the Middle East offer a market for a wide range of imported products and services and one which Canadian companies would be well advised to explore.

Lumber in the Caribbean

■ Most of the Caribbean islands are forested and at one time they provided all the timber their inhabitants required. Now, because the species are not suitable for the needs of the booming construction industry, the islands import some 70 million board feet of softwood each year. Pitch pine is the most popular. It comes from the Republic of Honduras and the southern United States but before Hurricane Hattie destroyed the industry there, British Honduras was the main source of supply. Pitch pine is preferred because of its hardness and its resistance to termites. The heartwood used in the old days had a good natural resistance; today's grades are apparently less resistant but they are suited to chemical treatment.

Concrete forming and construction falsework are the main uses for softwoods. There is comparatively little timber used for building homes or institutional structures on most islands. The modern West Indian house tends to have cement block walls, tile floors, metal window frames, and often flat concrete roofs. Chalets and summer cottages and higher-priced homes do, however, provide a market for lumber and for cedar shingles. In Barbados the traditional timber frame house is still popular. Counter tops, trim and cupboards are made from a variety of woods. Boatbuilding is another outlet.

Until quite recently, the lumber importing trade tended to be concentrated in the hands of a few firms. This was particularly true of Jamaica, where four firms had a virtual monopoly and interests in the shipping companies and the Honduran lumber producers as well. Now there is more competition and importers can bring in supplies over wharves not owned by their rivals. Overseas producers have representatives in the island and sell direct to merchants.

A peculiarity of the trade in some islands is that timber merchants will finance wood and hardware materials and associated labor during the construction of a house. The builder is naturally inclined to deal with a merchant who offers such terms.

Out of the area's total softwood imports from all sources of some 70 million board feet, Jamaica takes 25 million, Puerto Rico 22 million, Trinidad and Tobago 18 million, and smaller markets about 5 million.

In 1967, Canada exported to Jamaica Cdn.$92,000 worth of softwood lumber (mostly white pine), Cdn.$234,000 worth of western red cedar shingles, and Cdn.$242,000 worth of Douglas fir plywood. In the same year, Puerto Rico took Cdn. $1,170,000 worth of Douglas fir lumber, Cdn.$2,445,000 of hemlock, and about Cdn.$58,000 of pine and spruce. Trinidad and Tobago bought Cdn.$398,000 worth of western red cedar, Cdn.$37,000 of Douglas fir, Cdn.$100,000 of softwood lumber (mostly white pine), and Cdn.$83,000 of Douglas fir plywood. Barbados spent Cdn.$231,000 on Douglas fir

PRINCIPAL CANADIAN LUMBER AND PLYWOOD EXPORTS TO THE CARIBBEAN 1967

	Jamaica	Trinidad and Tobago	Puerto Rico	Barbados	Windward and Leeward Is.	Bermuda	Bahamas
			(Canadian dollars)				
Western red cedar	.....	398,000	.....	.....	10,000	.....	.....
Douglas fir	19,000	37,000	1,170,000	231,000	10,000	.....	.....
Hemlock	.....	.....	2,445,000	.....	.....	.....	.....
White pine	61,000	91,000	10,000	376,000	496,000	87,000	.....
Other pine	12,000	7,000	18,000	.....	.....	.....	.....
Western white spruce	.....	.....	.....	.....	29,000	45,000	.....
Other spruce	.....	.....	30,000	92,000	26,000	76,000	.....
Western red cedar shingles	234,000	10,000	.....	.....	.....	.....	.....
Other shingles	.....	.....	.....	18,000	.....	.....	.....
Hardwood plywood	10,000	26,000	.....	.....	19,000	.....	10,000
Douglas fir plywood	242,000	83,000	.....	27,000	16,000	47,000	.....
Other softwood plywood	.....	.....	.....	.....	.....	17,000	.....

Source: DBS

from Canada, Cdn.$376,000 on white pine, and Cdn.$92,000 on spruce. The Windward and Leeward Islands bought Cdn.$87,000 worth of white pine, Cdn.$121,000 of spruce, and Cdn.$64,000 worth of plywood.

Over a period of years, the Caribbean Free Trade Association will bring some changes to the lumber trade in the area. Teak and Honduran pine from Trinidad and Tobago will enter the wider market, and so will Guyana's hardwoods and lumber from the Canadian-owned operation in Dominica. Better inter-island transportation may also encourage the use of competitive materials, such as clay and concrete blocks. Already Trinidad has made a shipment of 150,000 blocks to Grenada. If Canada is to maintain and expand its markets in the islands, we must promote new building techniques and new uses for our timber.

The articles which follow give a brief description of the lumber market in individual islands. More details are available from the Wood Products Branch, Departments of Industry and Trade and Commerce, Ottawa, and from the Trade Commissioners in Kingston, Jamaica, in Port-of-Spain, Trinidad, or in San Juan, Puerto Rico.

Jamaica

■ Before the war, Jamaica obtained 85 per cent of its lumber requirements from New Orleans, Pensacola and Mobile. This was nearly all better heart pitch pine. When the war disrupted the established trading pattern, Jamaica turned to Central America and also purchased red cedar, hemlock and Douglas fir from British Columbia and smaller quantities of spruce and pine from Eastern Canada. Pitch pine from British Honduras was popular because it was considered harder than pine from Canada and the Southern U.S. In 1955, however, hurricanes devastated the industry in British Honduras and Jamaica had to switch to the Republic of Honduras for supplies.

Lumber prices remained fairly stable for fifteen years until devaluation and rising labor costs caused a 14 per cent increase early in 196g. Some of the sugar estates import for their own use and a few contractors make occasional spot purchases. The market is dominated by four large companies and import licensing has helped to preserve the status quo. New importers who have succeeded in getting licences have found that most of the Central American production is already committed and buyers from the Dominican Republic are willing to pay cash for lumber. The large Jamaican companies will finance contractors for 90 and often 180 days, but the producers give only 30 to 60 days' credit.

Hardware and Lumber Limited is the largest firm and handles about half of the lumber sold in Jamaica. The next in size is Leonard DeCordova Limited. Both have their own wharves and large modern yards. D. C. Henderson Limited is another big importer and is a partner with the other two in a pressure-treating plant which treats about 20 per cent of lumber imported into Jamaica. The group is contemplating building another pressure-treating plant at Montego Bay to serve that rapidly developing area. Imports of pressure-treated wood into Jamaica are not allowed.

Wherry Wharf Limited has entered the market in recent years, bringing grain and lumber from Central America. Georgia Pacific Incorporated in Florida has its own ship. It plans to build a treatment plant using the osmosis process. Firms such as Creighton Bros. in Montego Bay and Webster Company Limited are dealers buying from the larger firms.

The quality of Central American lumber is reported to be quite high and No. 1 and No. 2 are the grades bought. As examples of prices, in May 196g dressed pitch pine was quoted c.i.f. Kingston at Cdn.$176.60 per thousand board feet to the stockist for up to ten inches wide, Cdn.$187.00 to the contractor, and Cdn.$200.00 retail. The figures for wolmanized pitch pine were Cdn. $210.00, Cdn.$232.80, and Cdn. $241.30. Canadian Lumber Standards, however, are known and generally accepted.

There is a big building program in Jamaica—50 new junior secondary

schools are being put up, several low-cost housing schemes are being prepared and the recent amendments to the Jamaica Hotels Aid Law could mean as much as Cdn.$200 million of hotel construction in the next ten years. This is surely the time to promote Canadian lumber and carve out a sizable share of the growing market.

Dominican Republic

■ The island has been stripped of its forest cover. Buildings are usually made of local cement, but lumber and plywood are imported to the value of some $300,000 a year. Tropical pine boards are bought from Central America. Plywood comes mainly from Surinam, Spain and Japan which sell at very low prices. Canada sold $4,000 worth of lumber to the Dominican Republic in 1965, according to DBS statistics, and none at all in 1966 and 1967.

Lumber exporters in Eastern Canada who are interested in the market should get in touch with these importers in Santo Domingo: Ferreteria Americana C por A, Ave. San Martin 175; Mercantil del Caribe C por A, Calle Barahona 305; Madrera Vives C por A, Dr. Tejeda Florentino 34; and Manuel Fernandez G. C por A, Ave. Espana 5.

Puerto Rico

■ Once well forested, Puerto Rico has been almost entirely denuded of trees. Because it is a United States Commonwealth, products from the U.S. enter free of duty. In point of fact, however, the United States is only a leading supplier of plywood, redwood, rough pine, and hardboard. The Republic of Honduras provides 57 million board feet of Douglas fir, 20 million board feet of dressed pine, and six million pounds of hardboard. Brazil supplies 11 million board feet of Parana pine.

There are good prospects for increasing the already substantial sales of Canadian lumber in Puerto Rico because of the island's economic progress and expanding construction industry. The main importers are the Caribe Lumber y Trading Corp., Garcia Comercial Inc., Pacific Agencies Inc., Rio Piedras Comercial Inc., and Rio Piedras Lumber Yard.

Trinidad and Tobago

■ Forestry has been encouraged by the Government. There are 17,000 acres of teak plantation which is increased at the rate of 700 acres per year. Home-grown teak is used for flooring, window frames and cupboards. The thinnings provide posts and fencing. Pitch pine was introduced experimentally from Honduras in 1948 and has proved successful; a substantial acreage is being planted.

In 1966, Trinidad imported 11.5 million board feet of pitch pine, of which the United States and the Republic of Honduras each supplied approximately half. Canada sold almost a million board feet of white pine and 4.8 million board feet of western red cedar.

The Islands import spruce and white pine lumber for cupboards and boatbuilding. The market is price-conscious and critical if there are too many knots. Cedar is being used more and more for cupboards and counter tops because it is cheaper than pine. In Trinidad, Canadian cedar sells at retail for TT$330 per thousand board feet, white pine for TT$490, and spruce for TT$670. Red pine is not imported at present.

Trinidad has four wolmanizing plants with a total capacity of about 3.5 million board feet a year. Concrete blocks, however, are an increasingly popular building material (the three main producers turn out 20 million blocks a year between them) and Cinvaram blocks, made from a mixture of earth and cement, are being used in low-cost government housing. Precast concrete flooring is used more and more in multi-storey buildings.

Barbados

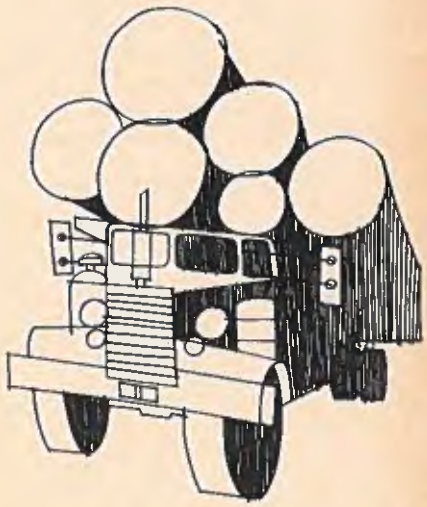
■ Barbados has been rather slower than the other islands in adopting concrete block construction. Timber houses are common and wood siding is still popular. Builders work closely with lumber importers who help to finance their operations. There is a small wolmanizing plant.

Canada supplied 3.2 million board feet of Douglas fir in 1967, 2.2 million board feet of white pine, 600,000 board feet of spruce, and some plywood. Spruce is largely used for concrete forming and for cupboards and has shown a small increase over the years. White pine is used for cupboards. Barbados imports about three million board feet of pitch pine from the Republic of Honduras each year.

Other Caribbean Markets

■ The French Antilles — Martinique, Guadeloupe and French Guiana—have a relatively high standard of living and a growing need for construction lumber. Most of the demand, however, is met by European suppliers.

Surinam has its own plywood industry and exports to Europe. Guyana, on the other hand, imports lumber, mainly from Canada. DBS statistics for 1967 show that we exported about Cdn.$170,000 worth of lumber to Guyana, most of it white pine.



The Rio Grande plant near Medellin contributes 84,000 kw. to the power supply.

Colombia Evaluates Its Power Potential

Here is a brief description of planned power projects and possible Canadian opportunities.

G. D. VALENTINE
Commercial Secretary, Bogota

■ In many Latin American countries, the population is concentrated in one or two large centers. In Colombia, however, there are twelve major centers, three of them with over a million inhabitants. All are busy industrializing and, until recently, each looked after its own power requirements.

Colombia is fortunate to have rivers flowing down from the Andes for hydroelectric power generation. It is also the third largest petroleum producer in South America and has ample supplies of oil, coal and natural gas for its thermal plants in the low-lying parts of the country. At present, it has a generating capacity of 1.2 million kw. with a further 0.8 million kw. capacity under construction.

In 1944, the Colombian Government created the Institute for Water Utilization and Electric Power Development (Electraguas) to bring order to the maze of independent companies, plan future development and make better use of power resources. Electraguas comes under the Ministry of Development. Its authority extends to all parts of the country except the Bogota, Medellin and Cali municipal systems. Apart from these, almost all other power programs are planned and implemented by Electraguas but, once completed, plants are considered to be capital contributions to the various affiliate corporations in 14 provinces or departments of Colombia. Thus financing, etc., is usually arranged through a central body instead of by some 20 smaller entities.

Power Grid Planned

Two recent developments have special significance for Canadian contractors and equipment suppliers. The first is the formation of Interconexion Electrica S.A. which brings together Electraguas and the power companies of Bogota, Medellin, Cali and Manizales. These last four companies account for over 60 per cent of total installed capacity and they are planning to build a grid which will permit the transfer of up to 300,000 kw. of power from any one section to any other. The area covered includes over 75 per cent of the country's manufacturing and the center of its coffee cultivation.

Construction of the 535-kilometer 220-kv. transmission line was to begin in 1968. Other lines are currently under construction. The project is partly financed by the World Bank, which has approved a loan of $26 million. Tenders have already been called for the design, supply and installation of the line transformers, switchgear and substations. The tender for the line carrier communications system was announced last July. The intention is eventually to link up the whole country and it is estimated that by that time (approximately 1980) Colombia's total generating capacity will be over 2.5 million kw.

Ambitious Choco Development

The second big development is known as the Choco Plan. This scheme envisions a waterway through the Department of Choco connecting the Atlantic and the Pacific. It would have a potential of 3 million kw., twice the power now generated in Colombia. Although power is the chief reason for developing the Choco, there would be additional benefits in transportation, forestry, agriculture, mineral development, etc.

In May 1968, the Government created the Choco Development Corporation and it was announced that work

would begin on studies of the San Juan River. This is the first step in the over-all project and involves building a dam at Malaguita (near the port of Buenaventura on the Pacific) which would form a lake 120 kilometers long. Preliminary studies indicate a potential of 1.1 million kw. from this section alone which could be fed into the grid that Interconexion is now planning.

Future Power Projects

Aside from plans for the Choco, these developments are to take place in the course of the next ten years:

Atlantic Coast Electrification Program—This important project is planned to be completed by 1975. It consists of 232,000 kw. for Barranquilla, 10,000 kw. for Cartagena, smaller emergency units in both cities, and a 15,000 kw. plant in Chinu. All will be thermal units. Transmission lines will connect the three cities. The coastal development is now out to tender and some Canadian firms have shown interest in the first phase of two 66 mw. units at Barranquilla. The costs of the first phase are estimated to be: 15,000 kw. turbo gas emergency unit—$1.7 million; 132,000 kw. thermal unit—$16.1 million, and 220 kv. transmission line Barranquilla-Cartagena—$7.3 million. This is a total of $25.2 million with local costs estimated at an additional $5.1 million. The first phase is to be completed by mid-1971.

The second phase is 100,000 kw. at Cartagena and 220 kv. transmission lines from Cartagena to Sincelejo and from Sabanalarga to Santa Maria. The cost is put at $40 million and the work is scheduled for 1971-1975. The third phase is to begin in 1975 and will be another 100,000 kw. at Barranquilla and the subsequent hookup of the whole system to the national grid.

Upper Anchicaya Hydroelectric Plant—This project will come under the direction of Interconexion and the CVC in Cali and is for a hydro plant some 40 kilometers northwest of Cali. A 130-meter dam will be built near the confluence of the Rio Anchicaya and the Rio Verde. It is expected to generate 340,000 kw. The total cost is estimated to be $72 million.

Rio Bata (Chivor)—Phase One. Interconexion is expected to undertake the hydro project on the Rio Bata near Chivor, east of Bogota. This will include a 180-meter dam, a tunnel six kilometers long and nine meters in diameter, and two pressure tunnels 2,200 meters long which will permit the use of a head of 800 meters. The first phase is expected to develop 500,000 kw. and prefeasibility studies indicate an ultimate potential of 1,750,000 kw. The total cost is put at between $140 million and $200 million.

Guatape—Phase Two. This is under the jurisdiction of the Medellin Power Company. It consists of enlarging the present dam to hold 1,200 million cubic meters of water, and the installation of six additional 70,000 kw. units. The studies have been completed and the cost is estimated to be $87 million. When phase one is finished this year, the Guatape will produce 280,000 kw. and the addition will bring it up to 700,000 kw.

Rio Patia—The Rio Patia is in the Department of Narino on the Ecuadorian border, a relatively undeveloped area. The port of Tumaco, however, will be the terminal of the oil pipeline from the Putumayo where large deposits were recently discovered and are now being exploited. Because of this (and also because there is a remote possibility of exporting power to Ecuador), the Rio Patia project is creating more and more interest. It will be under the control of Interconexion and a prefeasibility study done by a Japanese firm puts the potential at between 1.2 and 2 million kw. Many officials feel it could be up to 4 million. The project as now envisioned consists of two 160-meter dams, 110 meters in height. Cost estimates have varied from $80 million to $320 million.

Rio San Juan—The Rio San Juan flows southward through the Choco to the Pacific. The power development would be at the mouth of the river near Malaguita. It will be relatively easy to feed the estimated 800,000 to 1.1 million kw. into the grid at Cali. The project will probably be undertaken by Interconexion.

It is expected to consist of a 30-meter dam, 750 meters long, and would incorporate four units of 200,000 to 250,000 kw. each. Estimated cost is $130 million. Only a preliminary study has so far been made. U.S. AID has offered to finance a complete study, expected to cost U.S.$1,300,000.

Samana—The Samana hydro project is still in the initial planning stages. If developed, it will produce 1,500,000 kw.

Other Projects—The power potential of Colombia could be as high as 50 million kw. Other projects which might be tackled before the turn of the century are: Timba (60,000 kw.), Calima II (200,000 kw.), Calima III (180,000 kw.), Malaguita (1,110,000 kw.), Atrato (1,500,000 kw.), Inmarco (1,500,000 kw.).

Transmission Lines

To interconnect power sources and to bring power from the dams and generating plants to the centers of population will require hundreds of miles of transmission lines of from 13.2 kv. to 380 kv. The most immediate of the higher voltage lines is the Bogota-Cali-Medellin 220 kv. line which will be 535 kilometers long. Other 220 kv. lines being planned are: Medellin-Monteria (250 km), Cartagena - Sabanalarga - Fundacion - Santa Marta (230 km.), Santa Marta-Valledupar (200 km.), Cartagena-Sincelejo (150 km.), Medellin-Barrancabermeja 200 km.), Guatape-Miraflores (100 km.), Paipa-San Gil-Cucuta (240 km.), Bucaramanga-Paipa (280 km.), and Chivor-Paipa (195 km.). It is also hoped eventually to connect the central region and the north coast by building 380 kv. lines from Sincelejo to Medellin (340 km.) and Barrancabmerja to Sabanalargo (500 km.).

Sources of Financing

Although the public utilities try to cover new installations from local tariffs, expansion has been too rapid and the need for new power sources is too urgent. Most present and future schemes will depend on both foreign financing and income from the sale of power.

Under the Alliance for Progress, the United States has lent Colombia large sums of money in the past to finance hundreds of projects, principally in

agriculture, education, and housing, and for imports of raw materials and foodstuffs. In the field of electric power, money is chiefly loaned for feasibility studies and rural electric co-operatives.

The World Bank has concentrated on the four companies involved in the interconnection project and over the years has lent over $125 million. At present, it is participating in a loan to the Empresa de Energia Electrica de Bogota of $18 million and Interconexion Electrica S.A. of $25 million.

Since its first loan in February 1961, IADB has lent over $150 million to Colombia, of which $22.6 million was to increase electric power generating capacity and to expand power distribution systems. IADB made no loans in this field in 1967.

Suppliers' credits are the latest method used in financing projects and are being requested for the thermal plant in Barranquilla as well as other installations. Although sometimes more expensive for the Colombian entity, they usually limit the number of bidders and make the choice of a supplier easier. They are usually employed for turnkey projects.

Foreign governments besides the U.S. have on occasion lent money to Colombia on a long-term basis for the development of power resources. Recently France lent approximately $15 million to be used in the northern part of Colombia for emergency units at Barranquilla, a thermal unit in Sincelejo, and the construction of a transmission line.

Opportunities for Canadians

Canada has joined with a number of other countries in helping to finance the Colombian power interconnection schemes and the Bogota third power expansion program. There is joint financing with the World Bank through ECIC Section 21-A for these two. Normal World Bank international tendering procedures apply and the successful bidder will be paid in cash by the World Bank for the work. More details can be obtained from the Electrical and Electronics Branch, Departments of Industry and Trade and Commerce, Ottawa.

A Canadian loan of Cdn.$1,080,000 for preinvestment studies in Colombia was announced in April 1968. It is part of the Cdn.$40 million fund which Canada placed under the Inter-American Development Bank's administration for development in Latin America. Credits will be extended from the fund to finance the preparation of the following types of studies:

- Technical and economic feasibility of specific development projects and programs.
- Supplementary studies of projects whose technical and economic feasibility has been shown but which require additional information for their evaluation and financing.
- Sectoral and subsectoral studies needed to prepare specific projects or to quantify investments in a sector of the national economy.
- General studies of manpower and natural resources, aerial photogrammetric surveys or similar studies needed to prepare specific projects and programs.
- Studies of projects included in programs concerned with general economic integration and Colombian-Venezuelan and Colombian-Ecuadorian border integration, particularly on a multi-national level.
- Studies of specific projects relating to sub-regional integration of the Andean Group.

At least 90 per cent of Colombia's preinvestment program will be devoted to the preparation of specific development projects, particularly in such areas as hydroelectric power development, roadbuilding, communications, steel and paper production, oil refining, fisheries and agriculture.

To participate in most tenders, it is necessary for foreign firms to be represented by a local Colombian firm or agent. The Commercial Secretary in Bogota is always ready to assist interested Canadian manufacturers in obtaining good representation.

CANADIAN EXPORTS OF ELECTRICAL COMPONENTS TO COLOMBIA

	1962	1963	1964	1965	1966	1967	Jan.-April 1968
			(Canadian dollars)				
Transformers and parts	390,890	63,905	18,793	16,184	110	1,701	.....
Switchgear and protective equipment	965	.....	60,461	156,862	10,072	6,264	.....
Electricity measuring equipment and instruments	70,254	27,415	75,213	21,681	90,710	45,526	6,800
Power boilers, equipment and parts	26,624	1,260,289	44,975	135,145	763,521	14,717	475
High-tension insulators	.....	15,654	12,898	7,367	31,242	3,964	2,170
Non-current-carrying wiring and materials	4,655	.....	.....	2,046	.....	5,920	.....
Engines, turbines and parts	900	2,139	7,000	4,931	723	.....	535
Generators and parts	25,283	.....	9,135	138	12,462	267	.....
Wire n.e.s.	.....	898	4,407	7,963	15,653	8,638	3,709
Copper wire and cable	7,392	952	67,657	50,310	1,992	1,435	.....
Copper alloy wire and cable	13,526	5,783	.....	8,845	13,017	1,558	10,216
Insulated wire and cable	1,850	28,563	5,257	.....	5,847	3,487	.....
Commercial communications equipment	.....	.....	.....	143,258	60,219	236,040	288,341
Components for commercial communications equipment	4,831	657	.....	6,617	10,139	114,613	37,368

Source: DBS

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Cable: CANADIAN *Phone*: 834-6521
Telex: 7189 (DOMCAN J 7189)
Territory: Provinces of Natal, Orange Free State, Transvaal. Other countries: Angola, Botswana, Lesotho, Malagasy, Mauritius, Mozambique, Reunion, Swaziland

Canadian Government Trade Commissioner
P.O. Box 683
African Life Centre, 13th Floor
St. George's Street
Cape Town, South Africa

H. W. Richardson, Trade Commissioner

Coble: CANADIAN *Phone*: 2-5134/5
Telex: 7060 (5-7060 CT)
Territory: Cape Province. Other countries: St. Helena, South West Africa

SPAIN

Commercial Counsellor
Canadian Embassy
Apartado 117
Edificio Espana
Avenida de Jose Antonio 88
Madrid, Spain

L. A. Campeau, Commercial Counsellor
F. M. Mulkern, Assistant Commercial Secretary

Coble: CANADIAN *Phone*: 247-54-00
Telex: 27347 (DOMCA E)
Territory: Provinces outside the peninsula—Balearic Islands, Canary Islands, Spanish Sahara. Other countries: Equatorial Guinea.

SWEDEN

Commercial Counsellor
Canadian Embassy
P.O. Box 14042
Kungsgatan 24
S-104 40 Stockholm, Sweden

D. S. Armstrong, Commercial Counsellor
E. C. H. Shelly, Assistant Commercial Secretary

Coble: CANADIAN *Phone*: 23-79-20
Telex: 10687 (DOMCAN STHLM)
Territory: Finland

SWITZERLAND

Commercial Secretary
Canadian Embassy
Kirchenfeldstrasse 88
3000 Berne, Switzerland

G. E. Blackstock, Commercial Secretary
D. T. Johnston, Assistant Commercial Secretary

Cable: CANADIAN *Phone*: 44-63-81
Telex: 32489 (DMCNB CH)
Territory: Liechtenstein, Tunisia

TRINIDAD AND TOBAGO

Commercial Counsellor
Office of the High Commissioner for Canada
P.O. Box 1246
Colonial Building
72 South Quay
Port-of-Spain, Trinidad

K. G. Ramsay, Commercial Counsellor
D. J. McJanet, Commercial Secretary
J. J. M. C. Lavoie, Assistant Commercial Secretary

Coble: CANADIAN *Phone*: 34787
Telex: 31314 (POS 31314)
Territory: Barbados, French Guiana, Guadeloupe, Guyana, Leeward and Windward Islands, Martinique, Surinam

UNION OF SOVIET SOCIALIST REPUBLICS

Commercial Counsellor
Canadian Embassy
23 Starokonyusbenny Pereulok
Moscow, U.S.S.R.

R. A. Bull, Commercial Counsellor
R. F. Turcotte, Commercial Secretary

Coble: CANAD *Phone*: 241-90-34, 241-91-55
Telex: 945 (DOMCAN MSK)

UNITED ARAB REPUBLIC

Commercial Division
Canadian Embassy
Kasr el Doubara Post Office
6 Sharia Rouston Pasha
Garden City
Cairo, Egypt

Cable: CANAOIAN *Phone*: 23110
Territory: Ethiopia, Somali Republic, Sudan

UNITED NATIONS

Permanent Mission of Canada to the United Nations
866 United Nations Plaza, Suite 250
New York, N.Y. 10017

R. D. Lucas, Second Secretary

Cable: CANINUN NYK *Phone*: 751-5600 (Area Code 212)
Telex: 126228 (CANINUN NYK)

UNITED STATES

Commercial Counsellor
Canadian Embassy
1746 Massachusetts Avenue, N.W.
Washington, D.C. 20036

W. G. Pybus, Commercial Counsellor
G. W. Green, Commercial Counsellor
W. F. Hillhouse, Commercial Counsellor (Agriculture)
H. C. Armstrong, Commercial Counsellor
G. H. Musgrove, Assistant Commercial Secretary (Agriculture)
J. D. Belisle, Assistant Commercial Secretary

Cable: CANADIAN *Phone*: 332-1011 (Area Code 202)
Telex: 0089664 (DOMCAN WSH)
Territory: District of Columbia

Deputy Consul General (Commercial)
Canadian Consulate General
680 Fifth Avenue
New York City, N.Y. 10019

C. J. Van Tighem, Deputy Consul General (Commercial)
S. B. McDowall, Consul and Assistant Trade Commissioner
W. G. Roberts, Consul and Assistant Trade Commissioner
R. J. G. Ledoux, Vice Consul and Assistant Trade Commissioner
D. Keddie, Vice Consul and Assistant Trade Commissioner
C. K. Marchant, Vice Consul and Assistant Trade Commissioner
D. J. V. Bachand, Vice Consul and Assistant Trade Commissioner

Cables CANTRACOM *Phone*: 586-2400 (Area Code 212)
Night Line: 586-2321
Telex: 00126242 (DOMCAN NYK)
Territory: States of Connecticut, New Jersey (twelve northern counties), New York. Other countries: Bermuda.

Consul and Trade Commissioner
Canadian Consulate General
500 Boylston Street
Boston, Massachusetts 02116

R. C. Anderson, Consul and Trade Commissioner
C. A. Carruthers, Consul and Assistant Trade Commissioner
J. N. R. Ferland, Vice Consul and Assistant Trade Commissioner

Phone: 262-3760 (Area Code 617)
Telex: 0094567 (DOMCAN BSN)
Territory: States of Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. Other countries: St. Pierre and Miquelon.

Consul and Senior Trade Commissioner
Canadian Consulate General
310 South Michigan Avenue, Suite 2000
Chicago, Illinois 60604

R. D. Sirrs, Consul and Senior Trade Commissioner
J. A. Doyle, Consul and Trade Commissioner
P. D. Donohue, Consul and Assistant Trade Commissioner
K. G. DeWolf, Vice Consul and Assistant Trade Commissioner
A. J. G. Dallaire, Vice Consul and Assistant Trade Commissioner

Phone: 427-1031 (Area Code 312)
Telex: 00254171 (DOMCAN CGO)
Territory: States of Illinois, Indiana, Iowa, Kentucky, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin

Consul and Trade Commissioner
Canadian Consulate
Illuminating Building
55 Public Square
Cleveland, Ohio 44113

D. A. B. Marshall, Consul and Trade Commissioner
J. C. Bradford, Consul and Assistant Trade Commissioner
J.-G. M. Tardif, Vice Consul and Assistant Trade Commissioner

Phone: 861-1660 (Area Code 216)
Telex: 00985364 (DOMCAN CLV)
Territory: State of Ohio.

Consul and Trade Commissioner
Canadian Consulate
2100 Adolphus Tower
1412 Main Street
Dallas, Texas 75202

C. M. Forsyth-Smith, Consul and Trade Commissioner
J. A. Langley, Vice-Consul and Assistant Trade Commissioner
R. C. Lee, Vice Consul and Assistant Trade Commissioner

Phone: 742-8031 (Area Code 214)
Telex: 00732637 (DOMCAN DAL)
Territory: States of Texas, Arkansas, Kansas, New Mexico, Oklahoma

Consul and Trade Commissioner
Canadian Consulate
1920 First Federal Building
1001 Woodward Avenue
Detroit, Michigan 48226

J. D. Blackwood, Consul and Trade Commissioner
V. G. Lotto, Consul and Assistant Trade Commissioner
R. J. P. Archambault, Vice Consul and Assistant Trade Commissioner

Phone: 965-2811 (Area Code 313)
Telex: 0023445 (DOMCAN DET)
Territory: States of Michigan and Indiana

Consul and Trade Commissioner
Canadian Consulate General
510 West Sixth Street
Los Angeles, California 90014

V. B. Chew, Consul and Trade Commissioner
R. B. Blake, Vice Consul and Assistant Trade Commissioner
D. M. Lawson, Vice Consul and Assistant Trade Commissioner

Phone: MAdison 2-2233 (Area Code 213)
Telex: 00674119 (DOMCAN LSA)
Territory: States of Arizona, California (ten southern counties), Clark County in Nevada

Consul and Trade Commissioner
Commercial Division
Canadian Consulate General
2110 International Trade Mart
2 Canal Street
New Orleans, Louisiana 70130

W. J. Millyard, Consul and Trade Commissioner
W. M. Maybee, Vice Consul and Assistant Trade Commissioner

Phone: JAckson 5-2136, 5-2137 (Area Code 504)
Telex: 0058237 (DOMCAN NLN)
Territory: States of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee

(continued)

UNITED STATES

Consul and Trade Commissioner
Canadian Consulate
3 Penn Center Plaza
Philadelphia, Pennsylvania 19102

R. V. N. Gordon, Consul and Trade Commissioner
R. D. P. Lee, Consul and Assistant Trade Commissioner
J. N. Grantham, Vice Consul and Assistant Trade Commissioner

Cable: CANADIAN *Phone*: LOcust 35838 (Area Code 215)
Telex: 00845266 (DOMCAN PHA)
Territory: States of Delaware, Maryland, New Jersey (nine southern counties), Pennsylvania, Virginia, West Virginia

Consul and Trade Commissioner
Commercial Division
Canadian Consulate General
One Maritime Plaza
Golden Gate Center
San Francisco, California 94111

R. M. Dawson, Consul and Trade Commissioner
J. D. R. Roy, Vice Consul and Assistant Trade Commissioner

Phone: 981-2670 (Area Code 415)
Telex: 0034321 (DOMCAN SFO)
Territory: States of California (except the ten southern counties), Colorado, Hawaii, Nevada (except Clark County), Utah, Wyoming

Consul and Trade Commissioner
Canadian Consulate General
1305 Tower Building
Seventh Avenue and Olive Way
Seattle, Washington 98101

E. E. Price, Consul and Trade Commissioner

Phone: MUtual 2-3515 (Area Code 206)
Telex: 0032462 (DOMCAN SEA)
Territory: States of Alaska, Idaho, Montana, Oregon, Washington

URUGUAY

Commercial Division
Canadian Embassy
Casilla Postal 852
1005 Calle Prudencia Vasquez y Vega
Montevideo, Uruguay

Cable: CANADIAN *Phone*: 7 68 18
Telex: 398078 (DOMCAN MVD)
Territory: Falkland Islands

VENEZUELA

Commercial Counsellor
Canadian Embassy
Apartado del Este 62320
Avenida La Estancia No. 10
Ciudad Comercial Tamanaco
Caracas, Venezuela

J. H. Bailey, Commercial Counsellor
D. G. Nelson, Assistant Commercial Secretary
F. M. G. Sullivan, Assistant Commercial Secretary

Cable: CANADIAN *Phone*: 32.40.41/44
Telex: 877 (877 DOMCAN)
Territory: Netherlands Antilles

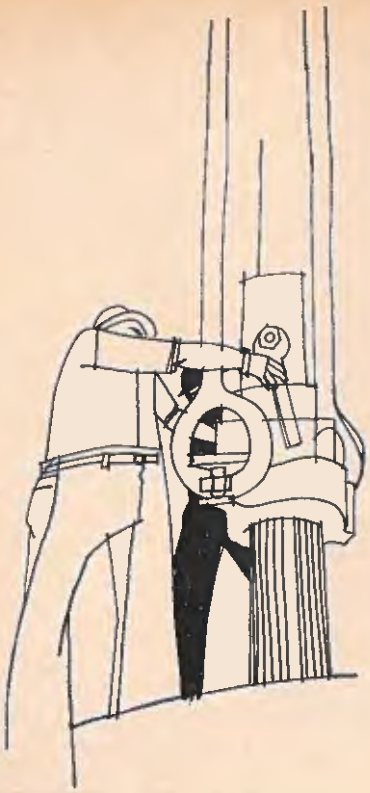
YUGOSLAVIA

Commercial Secretary
Canadian Embassy
Proleterskih Brigada 69
Belgrade, Yugoslavia

Z. W. Burianyk, Commercial Secretary

Phone: 44-301 *Telex*: 11137 (YU DOMCA)

This authentic figurehead of Britannia, carved in the old manner from Canadian yellow pine, graces the entrance to the luxury restaurant, the "Britannia", on the new Cunard liner, "Queen Elizabeth II". Lloyd's of London commissioned Charles Moore, one of the two remaining true woodcarvers specializing in figureheads, to produce the figure of Britannia for this purpose. Mr. Moore bought a quantity of one to one-and-a-half inch boards, six to twelve inches wide, of Quebec yellow pine and glued them up in his workshop near Truro in Cornwall. The photograph shows the finished figurehead being inspected by Lord Mancroft (left), Deputy Chairman of Cunard, and Ralph Hiscox, Chairman of Lloyd's of London.



India Gets Cracking on Petrochemicals

■ The nucleus of an Indian petrochemical industry has sprung up near Bombay. The oil-rich hinterland and two big refineries capable of producing a million metric tons of naphtha a year made it the logical location.

It was only a year ago that the first small naphtha cracker was commissioned; a larger integrated complex came on stream in January 1968 and a third started up a month later. Chemical intermediates, solvents, monomers and plastics covering a wide range are beginning to flow from this region to the rest of India and this is spurring activity in industries in which these are essential raw materials.

Two things that influenced the setting up of the petrochemical industry are rapidly growing refining capacity creating surplus naphtha and the rising demand for organic chemicals, plastics, rubber, detergents and solvents.

There are six refineries in India today with a total capacity of 12 million metric tons of crude a year. Two already have expansion programs under way and three new ones are proposed; refining capacity should rise to 25 million tons a year. With the demand for kerosene and heavier diesel oil, this should result in a supply of some 3.4 million tons of naphtha.

Present estimates are that 2.8 million tons of naphtha will go into the manufacture of gasoline, fertilizers and pharmaceuticals; this should still leave a surplus for the manufacture of other products.

India's demand in the immediate future for synthetic products and petrochemicals has been under study for some time. Here is what, according to one report, demand will be in the next two years:

	(metric tons)
Thermoplastics	196,000
Synthetic rubber	50,000
Synthetic fibers	58,000
Ethylene	175,000
Propylene	90,000
Benzene	174.000
Xylenes	42,000
Phthalic anhydride	25,000
Phenol	20,000
Caprolactam	20,000
Acrylonitrile	16,000
Dimethyl terephthalate	19,000
Synthetic delergent alkylate	15,000

The estimated demand for organic chemicals is 835,000 metric tons, most of which can be derived from petroleum feedstock. At present, however, these chemicals are produced from other raw materials (molasses and coal, for example) but these sources can only provide a third of anticipated demand. Refinery feedstock will thus go a long way toward bridging the gap.

The first petrochemical plant to come on stream was the 60,000 tons/year naphtha cracker set up by Union Carbide and commissioned in December 1966. It is designed to produce ethylene, propylene, acetylene, benzene, etc.

The second one, commissioned in January 1968, is the larger integrated complex of the National Organic and Chemical Industries Limited (NOCIL). It was set up by the leading Indian industrial house of Mafatlals in association with the Royal Dutch/Shell group of companies which has a refinery 27 miles away. Its naphtha cracker has a capacity of 225,000 metric tons. When in full production, the complex will turn out 60,000 metric tons of ethylene, 35,000 of propylene, 14,000 of benzene and 7,200 of butadiene. Most of these will be used by manufacturers of polyethylene, polystyrene, phenol, dyestuffs and synthetic rubber; the remainder NOCIL itself will use to produce a variety of products such as PVC resins, PVC compounds, vinyl chloride monomer, ethylene dichloride, ethylene glycol and acetone.

Herdillia Chemicals, the third unit which went on stream in February 1968, is a joint venture between EID-Parry of India on the one hand and Hercules Inc., of the United States and BP Chemicals of Britain on the other. It will produce 10,000 metric tons of phenol, 14,500 of cumene, 6,000 of acetone, and 3,000 each of phthalic anhydride and phthalates.

In Gujarat (north of Bombay) which has rich oilfields and a refinery, another large complex is being planned. Already there is a large fertilizer factory using some of the naphtha from the refinery. The proposed petrochemical complex, with a 350,000 metric tons/year cracker, will be the largest in India and is designed to produce polyethylene, butadiene, vinyl acetate, vinyl chloride, PVC, ethyl benzene, acrylonitrile, caustic soda, DDT, BHC, and other products.

It will be some time before the impact of these developments really begins to be felt. The start of a petrochemical industry has considerable significance for India which expects to be spending about $300 million a year on imported petrochemicals, not including fertilizers.

—T. V. SUBRAMANIAN
Commercial Officer, New Delhi

The U. S. Aerospace Industry

. . . in New York, New Jersey and Connecticut can offer Canadian companies subcontract opportunities if they make the right approach.

D. KEDDIE, *Vice Consul and Assistant Trade Commissioner, New York*

■ The aerospace industry in the last seven years has kept pace with the growing U.S. economy and in the future may even exceed the economy's 6.6 per cent average growth rate. The industry's sales during this period have typically accounted for 3.3 per cent of the U.S. gross national product and employment exceeded 1.4 million in 1967, making it the nation's largest single employer in the manufacturing field. Many indicators seem to point to an even higher rate of growth. The value of civil aircraft shipments in 1967 rose 30 per cent over 1966 and an increase of 75 per cent for 1968 appears feasible. In addition, the current order backlog is at an all-time high; by the quarter ended March 31, 1968, the backlog of orders held by 59 aerospace manufacturers stood at $33.6 billion, $18.7 billion of which the U.S. Government accounted for.

Other indicators are equally bullish. Commercial aerospace sales, which include civil aircraft, spare parts and engines, advanced by 34.6 per cent in 1967, an increase equal to that made by shipments in the same year. In 1966, industry spending on capital equipment increased 88 per cent to reach $770 million. The full impact of this was undoubtedly not felt until 1967, when there was a significant rise in aircraft shipments. Furthermore, it is estimated that the same level of spending in the industry will continue through 1968 and 1969 and that the number of production workers will continue to mount. It must be kept in mind, however, that with the rapid diversification of this industry, it is impossible to determine exactly the distribution of the new capital and manpower. It may be that the increasing backlog, irrespective of the high level of capital spending, indicates a need for more subcontracting.

Commercial Aerospace Spending

During the past two years, the greatest contribution to the order backlog has come from the commercial aerospace sector, where unfilled orders rose from $6.7 billion in December 1965 to $13.0 billion in December 1967, which represents increases of 76 per cent in 1966 and 11 per cent in 1967. Jet transports in particular have accounted for a great deal of this growth. By the end of 1967 the value of jet transports on order amounted to $8.1 billion, a 23 per cent increase over the previous year, and foreign orders for them had reached $2.6 billion, up 27 per cent. The most rapid growth occurred during 1966 when the jet transport backlog jumped 50 per cent and foreign orders 70 per cent. The foreign market, with its rising per capita income and demand for air travel, holds great promise for U.S. manufacturers, and will undoubtedly become more important in the future.

R and D Stressed

It is important to realize that the aerospace industry operates in a dynamic and competitive environment where technological gains must be continuous if a company is to remain viable. The industry is not marketing a product but an attitude. This becomes evident when one realizes that it employs nearly one-third of all the U.S. scientists and engineers engaged in industrial research and development. Its products and straight research and development contracts embrace such diverse fields as aircraft, missile systems, astronautics, oceanography, communications, medicine, water desalination, air and water pollution control, waste management, and surface transportation systems for both land and water. The degree of emphasis on any particular area has varied in the past and has for the most part depended upon expenditures by the Department of Defense (DOD), the National Aeronautics and Space Administration (NASA), and the Atomic Energy Commission (AEC), which have traditionally underwritten much of the original research and development cost of any project, directly or indirectly. The expenditures, of course, reflect the needs of the agencies at any particular time and their relative priority. There is no indication that this pattern will change significantly in the future, although the commercial market for the technology is broadening rapidly and this may affect future development.

Vietnam was undoubtedly a factor in the estimated 24 per cent increase in aircraft sales to DOD, and the decrease of approximately 16 per cent in sales to NASA and AEC. Nevertheless, it is estimated that less than 15 per cent of the industry's present sales can be attributed to Vietnam.

Market Picture

The leading companies in the aerospace industry can be classified by total sales, but because so many of them are active in several markets and in some instances do not make the majority of their sales in the aerospace field, they are more commonly rated by their sales to DOD and NASA—80 per cent of all sales have typically been made to these two agencies. Of the top ten companies which collectively account for 32 per cent of all contracts awarded, two have the majority of their manufacturing facilities in the states of New York, Connecticut and New Jersey, and two have substantial facilities in the three states. The companies and

their divisions in the above states are shown in the accompanying box feature on page 28.

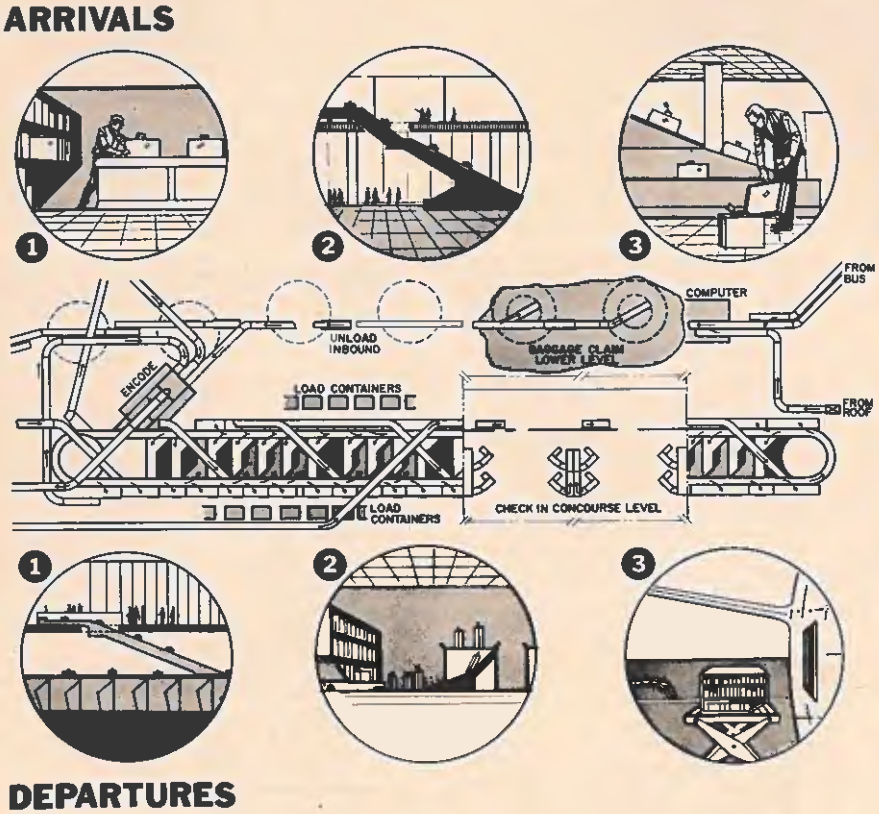
To discover the characteristics of the subcontract market in this industry it is helpful to analyze the nature and size of the manufacturing and research activity in each geographical area. Employment and payroll statistics afford one good indication. The employment statistics for the New England and Middle Atlantic area by activity and type of job clearly indicates that during March 1968 the emphasis in this area was on aircraft work and in particular, because of the relatively high percentage of technicians, on aircraft development work or assembly activities requiring a large input of technology. The latter is also true of the missile and space work being done in this area, although it is apparent that this type of work is not as significant as the aircraft work. Forecasts for the month of September 1968 do not indicate any appreciable change.

Purchasing Power

The size of the subcontract market is best indicated by the purchasing power of the industry which in turn can be derived from payroll statistics and industry ratios. If one accepts an industry purchases-to-payroll ratio of 0.91, and a projected 1968 industry payroll of $12.8 billion, the purchasing power indicated for the U.S. aerospace industry is $11.5 billion and that for the New England and Middle Atlantic segment is $2.2 billion. This figure, of course, is a gross value, representing all materials and subassemblies purchased, based on the industry average. It is therefore necessary to approximate the mix of products purchased to determine the market for any particular commodity group. As a guideline, one can use the typical mix of a major manufacturer, drawing on statistics from the Aerospace Industries Association of America Inc., and not including all overhead items or engines.

	Per Cent of Total Purchases
Forgings and castings	5
Airborne mechanical equipment	9
Machine parts	14
Avionics	5
Airframe assemblies	5
Standard parts	3
Raw materials	3
Subcontracts	15
Ground support equipment	4
Subsystems	8
Technical services	5
Machines, equipment and tooling	9
Total	**85**

The mix will vary somewhat with each manufacturer, depending on the degree and type of "in-house" manufacturing, but the example is still a useful guide. It is also important to remember that a significant amount of the aerospace firm's purchasing will be directed to local companies and consequently there will be many selling opportunities at a lower subcontract level. Identifying the businesses which



Pan American Wnrld Airways new passenger terminal at Jnhn F. Kennedy Internatinnal Airpnrt in New Ynrk will include an autnmated haggage system capable nf handling 6,500 pieces nf luggage during a peak traffic hour. Passenger luggage on arriving flights is placed nn a cnnveyor system nn the grnund level (1); is fed tn nne nf fnur haggage-claim areas on the lnwer level (2); and is claimed hy passengers from carnusel type devices (3). Passengers on departing flights may check their luggage at any nne nf 56 check-in pnsitinns nn the cnncourse level. Luggage is then fed intn a cnnveyor system (1), and brnken down intn nne nf 80 sorts. After heing snrted, luggage is placed in containers (2), and then lnaded ahoard the aircraft (3). The schematic drawing in the center shnws the rnuting nf luggage nn the cnnveyor system after hags are checked in nn the cnncnurse level. Agents at the check-in cnunters will cnde luggage for a cnmputer wbich ensures that haggage is fed into the prnper sort fnr eventual lnading nn the aircraft.

are supplying the aerospace industry but would not themselves be classified in this industry group is more difficult. The best source of information on this group is company buyers but there are also lists available which show most of the companies with sales of over one million dollars located in the New England States and New Jersey*. The percentage of the sales of any of these companies which could be classified as aerospace varies considerably but they all have an interest in this market.

Is Distance a Factor?

In 1966, United Aircraft Corporation, which has 91 per cent of its employees in Connecticut, made only 57 per cent of its total U.S. purchases in the New England and Middle Atlantic area, and this distribution does not seem to have changed in 1967. A look at the complete 1966 listing of its purchasing by state confirms that aerospace companies seek out competent suppliers and that distance is not an over-riding factor. The unimportance of distance is even more evident with firms oriented to airframe fabrication, where the technology seems to be more regionally concentrated and firms must typically reach farther. Under these circumstances, it is not uncommon for an East Coast firm to place a significant amount in subcontracts with West Coast firms.

When the buying patterns are analyzed, it is evident that the majority of Canadian aerospace firms, or aerospace-oriented firms, are closer to the above firms than nearly 50 per cent of their present suppliers are, so that Canadian firms in general are in a favorable position. In 1967, Canadian firms received orders worth approximately $21 million from United Aircraft, including purchases from United Aircraft of Canada Ltd. This was less than 2 per cent of its total U.S. purchases and the figure is similar for other firms. Although one must recognize the fact that it is desirable for corporations of this size to spread their expenditures nationally, Canadian companies should be capable of capturing a larger share of this mar-

*For this list, which appeared in the Marketing Directory issue of *Aviation Week and Space Technology*, write to the Editor at McGraw Hill Bldg., 330 W. 42nd Street, New York 10036.

Leading Aerospace Manufacturers in New York, New Jersey, Connecticut and Massachusetts

Corporations and Their Divisions

General Dynamics Corp.,
One Rockefeller Plaza,
New York City, N.Y. 10020.

Electric Boat Division,
Groton, Conn. 06340.

Electro Dynamic Division,
150 Avenel Street,
Avenel, N.J. 07001.

Electronics Division,
1400 N. Goodman Street,
Rochester, N.Y. 14601.

Stromberg-Carlson Corp.,
P.O. Box 788,
Rochester, N.Y. 14603.

North American Rockwell Corp.,

Boston Gear Division,
14 Hayward Street,
Quincy, Mass. 02171.

Acme Chain Division,
821 Main Street,
Holyoke, Mass. 01040.

General Electric Co.,
570 Lexington Avenue,
New York City, N.Y. 10022.

Corporate Functional Components,
570 Lexington Avenue,
New York City, N.Y. 10022.

Eastern Region, Operation,
1000 Westem Avenue,
West Lynn, Mass. 01905.

Aircraft Equipment Division,
French Road,
Utica, N.Y. 13503.

Aerospace Electrical Equipment Department,
Court Street,
Syracuse, N.Y. 13201.

Aerospace Electronics Department,
French Road,
Utica, N.Y. 13503.

Avionic Controls Department
P.O. Box 5000,
Binghamton, N.Y. 13902.

Advanced Systems and Planning Operation,
French Road,
Utica, N.Y. 13503.

Legal Operation,
French Road,
Utica, N.Y. 13503.

Electronic Systems Division,
Court Street,
Syracuse, N.Y. 13201.

Heavy Military Electronics Department,
Court Street,
Syracuse, N.Y. 13201,

Electronic Laboratory,
Electronics Park,
Syracuse, N.Y. 13201.

Advanced Systems and Requirements Operation,
Court Street,
Syracuse, N.Y. 13201.

United Aircraft Corp.,
400 Main Street,
East Hartford, Conn. 06108.

Pratt and Whitney Aircraft Division,
400 Main Street,
East Hartford, Conn. 06108.

Hamilton Standard Division,
Bradley Field Road,
Windsor Locks, Conn. 06096.

Sikorsky Aircraft Division,
Stratford, Conn. 06602.

Norden Division,
Helen Street,
Norwalk, Conn. 06856.

United Aircraft Research Laboratories,
400 Main Street,
East Hartford, Conn. 06108.

United Aircraft International Inc.,
400 Main Street,
East Hartford, Conn. 06108.

Grumman Aircraft Engineering Corp.,

Bethpage, Long Island,
New York 11714.

General Motors Corp.,
1775 Broadway,
New York City, N.Y. 10019.

Harrison Radiator Division,
Washburn & Walnut Streets,
Lockport, N.Y. 14094.

Hyatt Bearings Division,
Harrison, N.J. 07029.

New Departure Division,
269 Main Street, N.,
Bristol, Conn. 06010.

American Telephone and Telegraph Co.,

Western Electric Co., Inc.,
Kearny Works,
100 Central Avenue,
Kearny, N.J.

ket. Many of the senior buyers in the large aerospace corporations are aware of Canadian capabilities, but the educational process is by no means complete.

Influencing the Buyer

Canadian representatives must be prepared to resolve the typical problems a buyer may visualize in relation to a foreign supplier—distance, additional administration, and tariff barriers (if the items qualify under the Defence Production Sharing Agreement, this last problem does not exist). The answers to the normal questions on suppliers' technical competence, financial stability, and managerial competence may seem much more difficult to obtain and additional obstacles appear—customs tariff and documentation.

The Canadian supplier can best present his case by making it as easy as possible for the buyer to obtain the information necessary to appraise the first three points and by removing as far as possible the additional workload suggested by the last two points. The information demanded to answer the first three questions will differ and it is wise to learn the approach of each company to the purchasing function. Usually, it will be necessary to start by supplying literature on facilities and a list of your present customers and ensuring that it reaches the proper buyer. The customer list can be valuable if the buyer can associate your company as a supplier with a known name. The literature should, where possible, be followed up by a personal visit, because many buyers receive more literature than they can ever hope to read. At the time of the visit, it is wise to be prepared to discuss the present and projected load on your company's facilities. If any interest develops at this point, it is probable that the buyer's company will place a trial order or conduct a survey of facilities. In either case, it is essential that the supplier appreciate in advance what standards the purchasing company expects of its suppliers and what information they will require.

It may be necessary for a company to generate new information systems and introduce different management techniques, the implementation of which could be very demanding in terms of its resources. It is therefore advisable for the firm to appraise the impact of any necessary changes and adopt a timetable that will permit it to accommodate the changes without unreasonable strain.

These problems, in fact, differ little from those any U.S. company may face, except for the last two, customs tariff and documentation. The most direct solution to this problem is to take it out of the buyer's hands; quote f.o.b. his plant and arrange for all documentation. It is suggested that prices be quoted "f.o.b. including customs". However, prices should also be quoted f.o.b. factory; otherwise duty may be assessed by U.S. Customs on the landed duty-paid price. It may not be necessary to go quite that far, but where the buyer has no experience with foreign suppliers, it may be the only alternative.

Another factor that affects purchasing is the amount of "in-house" manufacturing which the firm undertakes. The variations are considerable. The industry as a whole spends 41 per cent of its sales dollar on purchases but Grumman and the United Aircraft Corporation each spend approximately 53 per cent. The industry as a whole spends some 45.5 per cent on payroll, compared with 28.3 per cent for Grumman and 40 per cent for the United Aircraft Corporation. The opportunity for selling complete systems or major subassemblies will be greater where the labor input by a company is relatively low, and there is likely to be a bigger need for raw materials and components where the labor input is relatively high. Despite the differences between the various firms, the industry average can be a useful indicator of a firm's purchasing power where only the annual sales or employee statistics are available.

For corporate divisions, where the sales figure is often not available, the payroll, which can be approximated from the number of employees, will give some indication. Consider the case of United Aircraft. If one uses the industry wage average, the known number of employees and the industry average purchase to payroll ratio (purchases=0.9 payroll) the purchasing power indicated is $630 million. Where the number of employees or the payroll is abnormally small for a corporation, it will be necessary to make a corresponding adjustment in the purchasing power that industry averages indicate.

Method of Purchosing

The manner in which the purchasing function is carried out in any company depends on two principal factors: the size of the company (which determines the degree of specialization of the buyers) and the nature of the purchase. Is it a common stock item, unique and one of a kind, or a system? For the latter two, where the supplier may be considered a major subcontractor, liaison with the engineering staff and program managers will be necessary to prove competence. The development of this liaison often begins when the prime contractor is preparing his bid, which implies that early intelligence or continuous contact is necessary. The degree to which it is necessary to prove competence depends upon the company's experience with the vendor and the vendor's experience with the type of project he wishes to bid on. In minor subcontracts, once the vendor has been approved as a source, he can generally bid continuously on similar work, although the buyers will want to monitor his situation.

Because most aerospace firms are largely assemblers, subcontracted parts or assemblies are critical to production schedules. Thus the two most important factors are delivery and quality. Price is certainly significant, but there is little incentive to encourage a buyer to gamble on delivery or quality if that is the alternative; for the buyer, the consequences of poor judgment far outweigh the rewards he can expect for achieving any cost reduction. Therefore, it falls to the vendor to convince the buyer and supporting technical staff of his competence.

Fortunately some of the experienced buyers in the aerospace industry are well acquainted with Canadian capabilities and have an open mind on the subject. However, Canadian vendors are often at an immediate disadvantage because of a buyer's natural inclination to avoid the potential problems referred to earlier. The Canadian supplier must therefore be prepared to extend himself if his product is to be evaluated on an equal basis with domestic ones.

Selling Automotive Parts in Italy

Yes, there are limited but clearly defined opportunities to market Canadian OEM components.

C. E. RUFELDS, *Consul and Assistant Trade Commissioner, Milan*

■ Few Canadians appear to be aware of the growth, size and dynamism of the Italian automotive industry and still fewer Canadian businessmen realize what this could mean to them in export sales.

There may be some justification for this oversight for it was not until 1966 that Italian automobile registrations exceeded Canadian (see Table I). But the Italian growth rate has been and will continue to be much faster, primarily because of an unsaturated domestic market of approximately one vehicle per seven people compared with one vehicle for four in Canada. Conservative estimates place Italian automobile population at approximately 12 million by 1972. Another indication of the rapid rise in the number of cars on the road is the fact that fewer than 14 per cent were made before 1957, with the period 1958-60 accounting for 13, 1961-63 for 32 and 1964-66 for over 41 per cent.

Only about 12 per cent of all cars registered are foreign makes and when one considers that the term includes French, German and Dutch models (from Italy's Common Market partners) it is apparent that Italians prefer to buy Italian. Only 307 cars were imported from the United States and Canada in 1967 and most of these were probably brought into the country by businessmen, diplomats and others assigned to Italy by their companies or Governments. Higher tariffs and astronomically higher yearly licensing fees inhibit the direct import of Canadian or U.S. automobiles for sale to the general public.

In 1958, Italian automotive production passed Canadian at full gallop and there has been no looking back (see Table II). In 1967, over 1.5 million vehicles rolled off Italian assembly lines, approximately 65 per cent more than the 939,000 turned out in Canada. Italian automotive-plant expansions under way or planned are expected to boost annual production to 2 million units by 1972. And everyone agrees that the future of the Italian automotive industry looks rosy.

Investments by automobile producing companies have averaged over $150 million a year over the past five years. Automotive exports are rising and last year earned over $575 million in foreign exchange, providing about 6½ per cent of total exports.

Smaller Sizes Preferred

Table III illustrates an interesting and important point for potential

TABLE I

VEHICLES IN CIRCULATION*

Year	*Canada*	*Italy*
	(thousands)	
1930	1,223.1	245.5
1950	2,557.0	577.1
1955	3,912.4	1,196.4
1960	5,221.9	2,431.2
1961	5,482.7	2,952.8
1962	5,741.7	3,580.2
1963	6,037.5	4,521.6
1964	6,334.9	5,319.3
1965	6,555.4	6,137.0
1966	6,762.0	7,002.8
1967	7,560.8	8,164.2
Projected 1972	—	12,000.0

* Source: Italian Automobile Club.

TABLE II

VEHICLE PRODUCTION*

Year	*Canada*	*Italy*
	(thousands)	
1930	153.4	46.4
1950	390.1	127.8
1955	452.1	268.8
1960	397.7	644.6
1961	386.9	759.1
1962	505.2	946.8
1963	631.4	1,180.5
1964	670.3	1,090.1
1965	855.5	1,175.5
1966	896.1	1,365.9
1967	939.6	1,542.6

TABLE III

ITALIAN AUTO PRODUCTION BY ENGINE SIZES*

	Engine Size			
	Up to 500 c.c.	*From 501-1,000 c.c.*	*From 1,001-1,500 c.c.*	*Over 1,500 c.c.*
		(thousands)		
1960	125.7	244.6	188.1	37.5
1961	147.3	273.2	252.2	21.0
1962	176.5	304.1	343.2	54.0
1963	254.3	370.9	404.1	75.9
1964	249.0	388.9	324.0	66.9
1965	296.6	456.1	291.1	60.0
1966	324.8	471.0	440.9	45.8
1967	398.9	440.5	475.7	124.1

* Source: Italian Automobile Club.

Canadian exporters of automotive parts and accessories: the engine displacement or size of motor vehicles produced in Italy. In 1967, over 90 per cent of Italian production was comprised of models under 1,500 c.c. displacement. In other words, over 1.3 million cars were produced smaller in size than Canadian-made Volvos or Renaults, and something under a quarter of the size of a standard Chevrolet or Ford V-8. This small-car factor, coupled with the overwhelming predominance of European makes and models on Italian roads, limits the market for off-shelf components because North American OEM equipment is in most cases too large or unsuited in other ways. Only Canadian firms which produce or are willing to produce to the specifications and requirements of each Italian automotive producer can hope to break into the market.

Italy also produces about 1,500 high-performance cars a year—makes such as Ferrari, Maserati, Lamborghini, and so on. However, they form such a minute part of the Italian market and offer so little promise to Canadian exporters that they will not be considered in detail in this report. If we ignore these smaller high-performance manufacturers, the Italian automotive industry consists of five major companies: FIAT, Alfa Romeo, Innocenti, Lancia and Autobianchi.

FIAT—Highly Integrated

FIAT (Fabbricazione Italiana Automobili Torino) manufactured 1,341,000 vehicles in 1967 and dominates the Italian auto industry. Its output makes it the largest single automotive manufacturer in Europe and the fourth largest in the world (behind General Motors, Ford and Chrysler). About 73 per cent of all cars now on Italian highways are Fiats and in 1967, three of every four cars sold in Italy were Fiats.

Fiat is unique in its degree of integration. The company has traditionally been self-sufficient and this policy was reinforced during a rapid postwar expansion. Not only does it (or its subsidiaries or affiliates) make electrical parts, brakes, carburetors and diesel injectors and injection pumps (sometimes of its own design but often under foreign licence) but more significantly, it has a more elaborate setup for metalmaking and shaping than any other motor manufacturer in the world. This applies not only to steel but to castings, sheets and wires in a variety of metals. It was this expertise which was so attractive to the Russians and enabled Fiat to obtain the contract for a completely new automotive plant in the Soviet Union.

With its high degree of integration Fiat is not a potentially large customer for OEM components. Of the small number of parts it does not produce itself, 90 per cent are sourced in Italy from about 6,000 suppliers, most of whom have established plants near Fiat's Mirafiori Works in Turin. Of the remaining 10 per cent at least 8 per cent is sourced from European suppliers, leaving a negligible amount for purchases offshore. The situation is complicated by Fiat's policy of reducing the number of its suppliers and having them as close as possible to its plant because, like most of the world's automakers, it refuses to stock parts but relies on its suppliers to meet daily production schedules.

It was apparent from our discussions with Fiat management that it sees little likelihood of Canadian component suppliers being able to supply anything competitively for its full production run requirements. However, the company showed considerable interest in Canadian equipment capable of meeting the U.S. Government's auto-safety requirements. From 10,000 to 15,000 Fiats are exported to North America each year and all must meet the new safety regulations and requirements. Although safety-sensitive equipment is essential on models for North America, there is the distinct possibility that it may also bc applied to Fiat models in general. This considerably broadens and brightens the sales potential. One item of immediate interest is a window washer which can deliver the U.S. standard requirement of 15 c.c. per stroke. At the moment no Italian window washer can meet this specification.

Fiat management also showed interest in those OEM accessories which require after sales service, such as sealed-beam headlamps and batteries. These items would only be mounted on Canadian and U.S. export models and Fiat made it clear that the major prerequisite for purchase was a far-reaching North American servicing organization.

Lancia Buys Components

LANCIA, the other major Italian automobile producer in Turin, is also privately owned and has established a name for quality, elegance and performance and a standard of technical development and innovation that places it in the forefront of the world's motor industry. Lancia's yearly production of approximately 50,000 to 60,000 units is made up of six basic models, some carburetor type and others fuel injection. Because Lancia's production of a specific model line is measured in hundreds, not thousands, per week, the company cannot support an integrated component industry and purchases the bulk of its OEM parts and components from Italian and European sources. Thus there are more opportunities for the sale of Canadian-made components. However, Lancia's chief purchasing agent foresaw several major obstacles—freight costs, tariffs (customs and clearing charges are estimated to add approximately 30 per cent to c.i.f. values) and exacting delivery schedules. Over the years these difficulties have prevented Lancia from placing orders with U.S. component manufacturers and its experience with British suppliers has not been uniformly successful. Nevertheless, some of the items Lancia now purchases from Germany, France and Britain are disc brakes, clutch plates, fluid-assist steering boxes, cast iron piston rings, seat adjusters, stainless steel bumpers, heated glass, shock absorbers, alternators and locking devices. The firm would be glad to review Canadian offers on the above.

As with Fiat, Lancia must meet the U.S. auto-safety requirements and one item which came up during our discussions was collapsible steering columns. In Lancia's case "safety equipment" would be adopted for all models because total yearly output is limited and it would be uneconomic to mount safety equipment only on export models.

Alfa Romeo Needs Parts

Alfa Romeo, Italy's second largest car manufacturer, is part of the giant

government-owned Istituto Ricostruzioni Italiano (IRT), an industrial holding company. Alfa Romeo turned out about 80,000 automobiles in 1967, up some 32 per cent over the previous year and more than double the national percentage increase. This is a remarkable growth because only in the past ten years has the company been able to meet public demand through expansion of its production facilities. The firm is gunning for an output of 100,000 units in 1968 and expects soon to reach the 150,000 "intermediate" target set for its Arese factory on the outskirts of Milan.

Even more ambitious is the Alfa Sud plant, which calls for a completely new car to be built in a completely new factory. Work on the plant has recently begun at Pomigliano d'Arco, just outside Naples. The factory will employ 18,000 workers and turn out 1,000 cars a day or 250,000 to 300,000 a year. The basic model programmed is a high-performance 1,000 to 1,200 c.c. engine car in sedan, convertible and sports models and aimed primarily at export markets. Production is not scheduled for another four years but five versions are being evaluated, with the first prototype due in late 1968 or early 1969. The prototype will not be revealed to the public until the summer of 1969 because the intervening six months are required to finalize design and exact part and component specifications.

Although Alfa Romeo is a state-owned corporation and its basic policy is to produce or buy as much as possible in Italy, it does purchase a great deal from outside and there are exciting possibilities for the sale of Canadian-made OEM parts and components. Alfa Romeo is not, and has no intention of becoming, as fully integrated as Fiat and therefore turns to outside OEM suppliers. In addition, Alfa Romeo and the Italian OEM industry are not capable of meeting the demands which will be put on them by 1971 when the Alfa Sud plant goes on stream and the entire company's output reaches 400,000 to 500,000 units a year—an increase of roughly 400 to 500 per cent over 1968 production.

For Alfa Romeo the Canadian parts and component manufacturer has three marketing possibilities:

1. He can make offers on OEM components for currently produced vehicles which, according to Alfa Romeo's Purchasing Department, includes such items as springs, alternators and regulators, carburetors, magnesium wheels, wiring harness, heaters and conditioners, starting motors and locking equipment.

2. He can participate at the design stage of the entirely new Alfa Sud car in the hope of having Canadian parts specified and mounted as original equipment from the inception of the model. Some of the OEM components Alfa Sud says that it will require from outside sources are alternators, carburetors, magnesium wheels, locking equipment and springs.

3. He can, because of Canadian familiarity with U.S. Government Safety Standards, offer safety-sensitive equipment for current production models as well as the new Alfa Sud model which, because it is being designed with export markets in mind, will include all U.S. safety equipment as standard.

Any Canadian component manufacturing company hoping to capitalize on the Alfa Romeo potential should bear in mind that as a state-owned group, Alfa Romeo would logically expect that when sales reach a major volume, some form of direct local manufacture or manufacturing licensing agreement would evolve. However, the change from direct sales to local manufacture could be phased over a period of time and mean substantial initial export orders.

Autobianchi and Innocenti

Both Autobianchi and Innocenti, the two remaining Italian automobile producers, also have plants in the Milan area. Autobianchi until recently was jointly owned by Pirelli (the large Italian rubber manufacturing company) and Fiat, but the Pirelli interests were bought out by Fiat in 1967. Now that Autobianchi is a fully fledged member of the Fiat family, Fiat's purchasing policies apply and the comments on the possibilities for the sale of Canadian components given under the Fiat section also apply to Autobianchi purchases.

Innocenti is unique among Italian automotive companies in that its entire production of 55,000 to 60,000 units a year consists of BMC models made under a licensing agreement with the British firm. Innocenti, noted primarily for its large sophisticated presses and machine tools, produces most of the parts and equipment required for incorporation in its automobiles. Those components which they do not make, notably the engine and electrical system, are supplied by BMC. Because of the terms of the licensing agreement, Innocenti cannot look to outside sources for OEM parts and components, which eliminates it as a potential customer for Canadian parts.

Marketing Approach

Canadian OEM companies familiar with the methods of supplying the North American automotive industry may have to adjust their marketing approach for Italy. Manufacturers' agents do not play a prominent role in this country. In our discussions with Fiat, Alfa Romeo and Lancia, we found that they prefer to deal directly with their suppliers. This may be just as well because there are few qualified manufacturers' agents in Italy. The major companies also handle their own after-market parts sales as there are few or no independent after-market suppliers. The after-market parts requirements of the automotive firms are usually placed with their OEM orders but separate spare-parts-for-stock orders are sometimes given to their suppliers. The cost and mechanics of shipping and distribution to Italy to assure uninterrupted supply of any orders will also be more of a problem than in North America. Some form of central warehousing will likely be required and the selection of the ideal location can depend on several factors unique to Italy or Europe in general.

Considering the purchasing preferences of the local motor companies, the peculiarities of distribution and marketing in Italy, and the slim profit margins on OEM parts, we believe the best way to make initial offers to the companies is through this office. Italy's automotive industry is centered in the north and the Trade Commissioners and Commercial Assistants in Milan have made a point of becoming

acquainted with the management and buying officers of the major companies. We would be pleased to establish and develop the first contact. If serious negotiations arise, then a business trip to the country by the Canadian supplier is essential.

At the same time we can draw on our local marketing experience and advise on shipping and distribution. For example, several Canadian manufacturers since the inception of the Common Market find it less costly, faster and simpler to export their manufactured goods to Italy through a Northern European port such as Rotterdam rather than the traditional routing through an Italian Mediterranean port. We can provide guidance on why this is being done.

To be realistic, the number of different items which the Canadian auto parts industry is capable of offering at competitive prices is bound to be limited. The Automotive Parts Manufacturing Association (Canada) has a good insight into what constitutes a "reasonably competitive offer" on a particular component, and we suggest that Canadian suppliers interested in this market first seek the advice of their association. Hopefully, by doing this, a great deal of effort will not be expended on those products the prices of which are so far above current offers that there is no chance of negotiating an acceptable final price.

In 1967 Canada exported about $9,000 worth of auto parts and components to Italy. The potential market warrants a much better performance. It will not be easy to increase sales but the rewards make the effort worthwhile. If only one Canadian item worth one dollar were incorporated into each FIAT model, it would mean an additional $1.4 million a year of Canadian exports to Italy—and sizable profits for the successful Canadian supplier.

Honolulu Promotes Foreign Trade Zone

■ Hawaii is undertaking a vigorous promotion of the Honolulu Foreign Trade Zone #9 which has been operating for two years. Promotion emphasizes Honolulu's central location at the crossroads of the Pacific and its accessibility to markets on the rim of the Pacific basin. Canadian exporters interested in expanding markets in Asia might consider using this facility for repacking, reconsigning and relabelling merchandise for trans-Pacific trade in the same manner as the Colon Free Trade Zone is used for shipments to South America.

Hawaiians responsible for establishing the Foreign Trade Zone feel that Hawaii's central location will cast it in an important economic role. The western parts of Canada and the U.S., Japan, Australia and New Zealand form the nucleus of an area that, with the exception of the countries named, is relatively under-developed. However, much of this area is rich in natural resources. Reorientation of British Commonwealth trade, coupled with developments in the European Common Market, could result in increased trade among nations bordering on the Pacific rim.

A recent study by the University of Hawaii reviewed the potential of Hawaii as a transshipment center for Pacific trade. It indicated that shipping services between Asia and North America could be improved if ships would load from single ports on the Canadian and U.S. west coasts and Asian ports and converge on Hawaii to restow cargoes for single port destinations in either North America or Asia. Such a practice would cut down the amount of uneconomic travel from one port to another to pick up or unload small amounts of cargo. This concept was one of the main reasons for establishing the Honolulu Zone #9.

This Canadian newsprint being unloaded will be stored for a local newspaper agency.

Importers using the Zone are able to reduce their cash outlays for imported goods and to improve their turnover based on capital investment. A theoretical example is a car importer who to take advantage of lower freight rates imports one thousand units which perhaps would be dutiable at about $100 a unit. Using the Zone's facilities, he could warehouse the cars and only pay import duties as the cars are withdrawn rather than pay $100,000 worth of duties under normal import.

Interested Canadians might give some thought to using this facility. The wharfage fees and storage charges for cargo are much lower than the charges for the use of and storage at a domestic wharf. The Foreign Trade Zone offers better storage facilities and security because less cargo enters and security guards are always on the premises. One importer of Canadian merchandise has chosen to use the Zone because of its many advantages even though the product is not subject to U.S. import duties.

Additional information on Honolulu's Foreign Trade Zone #9 (including rates, charges, rules and regulations) can be obtained by writing to the United States Division, Office of Area Relations, Departments of Industry and Trade and Commerce, Ottawa.

—R. M. DAWSON
Consul and Trade Commissioner
San Francisco

foreign tariffs and trade regulations

Argentina

DUTIES ON IMPORTED FERTILIZERS—Now that local production of fertilizers has begun, the following ad valorem duties have been imposed on imported products:

Brussels Nomenclature Item number	*Description*	*Import Duty (per cent)*
31.02.02.04	Ammonium sulphate	20
31.02.02.08	Urea	20
31.05.01.90	Compound fertilizers (in pellet or other forms)	40

Chile

AGRICULTURAL IMPORT TENDERS—Periodically the Chilean Agency, "Empresa de Comercio Agricola", calls for tenders to meet national requirements when various foodstuffs are in short supply due to insufficient local production. The range of products and the quantities imported vary greatly but often include wheat, powdered milk, canned milk, butter, cheese, frozen meat, burlap bags. In the past year, tenders have also been called for imports of table potatoes and corn.

Because the regulations require registration of all bidders with the ECA before a bid will be considered for any tender, and because the time span between the opening and closing dates of tenders is normally too short to allow registration at that time, it is a virtual necessity to be preregistered in order to qualify for a tender. For this reason, copies of the general regulations governing bidding in ECA import tenders are now available to interested Canadian exporters from the Office of Area Relations, Department of Trade and Commerce, Ottawa.

Rhodesia

NEW CANADIAN MEASURES AGAINST RHODESIA—The following press release issued by the Department of External Affairs on December 31, 1968, is reproduced for the information of Canadian businessmen.

The Department of External Affairs announced today the adoption under the United Nations Act, 1947, of the Order-in-Council PC 1968-2339, dated December 20, which will implement United Nations Security Council resolution 253 of May 29, 1968. The resolution which provided for comprehensive sanctions against trade and financial relations with Rhodesia was adopted by the Security Council under Chapter VII of the United Nations Charter. Compliance with its mandatory provisions is an international legal obligation on all United Nations members. The sanctions are intended to persuade, through pressure on Rhodesia's economy, the illegal regime of Mr. Ian Smith and his associates to give up their rebellion and permit a return to constitutional government.

The resolution of May 29 imposed few new obligations on Canada which has had a complete trade embargo (with certain humanitarian exceptions) against Rhodesia since February 1966. In response to a Security Council resolution of December 16, 1966, a set of regulations governing trade with Rhodesia and certain extraterritorial activities of Canadian citizens was established under Order-in-Council PC 1967-323 of February 21, 1967.

The Rhodesia Regulations which have now been adopted maintain these features of the previous ones. A new aspect involves financial transactions. It is now illegal for Canadians to send money to Rhodesia unless it is for the purpose of a pension or annuity benefit or for medical, educational or humanitarian purposes. Another provision of the new Regulations is designed to prevent flights by Canadian aircraft to Rhodesia and the co-ordination of air services between Canadian and Rhodesian aircraft.

The Government also intends, by administrative action for which it already has legislative authority, to implement the Security Council's prohibition on the entry to Canada of persons travelling on Rhodesian passports and of persons, other than Canadians, who have assisted, or may assist, the unlawful actions of the illegal regime.

The Regulations provide for application to the Minister of Trade and Commerce for a ruling whether, in borderline cases, a particular act is prohibited.

The new Regulations will be published in the next issue of Part II of the *Canada Gazette*. Steps are being taken to bring Canada's compliance to the attention of the Secretary-General of the United Nations. At the same time, details of the new Regulations are being brought to the attention of Canadian business firms and financial institutions.

Trinidad and Tobago

BUDGET CHANGES—The Trinidad and Tobago Budget brought down on December 6, 1968, contains a number of changes in import duties and purchase

tax which are reported in more detail below. No changes in income tax rates were proposed but the Government announced its intention to reduce the present tax holiday under Pioneer Industry Legislatio from up to ten years to three years. (No changes are to be made in pioneer industry agreements already signed.)

Import duties are to be increased on chicken pies, fish cakes and caviar from 15 per cent (preferential) and 25 per cent (general) to 25 per cent and 35 per cent respectively; whole trout and prepared trout from Cdn.$0.54 (preferential) and Cdn.$1.08 (general) per 100 pounds to 25 per cent and 35 per cent respectively; strawberries from free (preferential) and 5 per cent (general) to 25 and 35 per cent respectively.

Import duties are to be reduced on unrefined gold from 20 per cent (preferential) and 30 per cent (general) to 5 per cent and 15 per cent respectively; partly refined gold from 30 per cent (preferential) and 40 per cent (general) to 15 per cent and 25 per cent respectively.

The Budget contains several changes in rates of purchase tax, including a new tax of 10 per cent on furniture, an increase from 15 per cent to 20 per cent on deep freezers and refrigerators, and an increase from 15 per cent to 20 per cent on purchase tax applying to stoves and ranges valued at Cdn.$135 and over.

Full details may be obtained from the Commonwealth Division, Office of Area Relations, Department of Trade and Commerce, Ottawa, and from the Commercial Counsellor, Office of the High Commissioner for Canada, P.O. Box 1246, Port-of-Spain, Trinidad.

Canadian Jewellery Takes to Travel

■ A cross between a trade mission and a trade fair—that's the best way of describing a venture in which the Canadian Jewellers Association and the Department of Trade and Commerce collaborated last summer. Fourteen jewellery firms put together a display of samples of jewellery and silverware and took off for Australia, Soutb Africa, and Britain. In the next five weeks they set up their displays in Sydney and Melbourne, Australia, Johannesburg and Cape Town, South Africa, and London, England. They then invited leading jewellers in each city to come and see what they had to offer.

The jewellers came, inspected, and bought, after convincing themselves that the Canadians offered attractive designs at competitive prices. In addition to sales concluded on the spot, future orders were negotiated and a number of agency arrangements concluded. Here are some of the results achieved in each country.

This Australian model has rings on her fingers and they all come from the Canadian jewellery display "down under". On the left, two memhers of the mission confer.

Australia—Orders written during the displays in Melbourne and Sydney totalled about $151,000 and those for the next twelve months are estimated at about $800,000. The 14 Canadian companies established buying connections with about 70 firms and nine appointed agents. At least one plant has since expanded on the basis of its Australian orders.

South Africa—The recent relaxation of import controls on jewellery have improved opportunities. On-the-spot orders reached $82,650 and estimated ones for the next twelve months total about $500,000. The Canadian firms made 60 buying connections and six of them appointed agents. Many of the South African buyers, however, had already committed their 1968 import quotas to other suppliers and were not free to buy from Canada. This situation will change in 1969.

Britain—In what is traditionally Canada's best market for jewellery, the mission ran into some problems. The display opened on the day after Bank Holiday and amid rumors of new import controls to be imposed, and this affected the attendance. Yet orders reached $65,000 and future ones were estimated at $420,000. Nine firms established buying connections and three appointed agents.

When they and their 800-pound display worth $500,000 returned to Canada in September, the mission members felt well satisfied with the results. They had proved beyond doubt that the mere mailing out of catalogues won't sell jewellery. The buyer must see for himself. With a travelling display he can do just that.

Markets in Brief

U.S.S.R.

Area: 8.64 million square miles; stretches 5,500 miles east-west and 2,700 miles north-south; 11 time zones.

Population: 238 million (July 1968).

Climate: continental; hot summers, very cold winters.

Topography: borders on 12 countries—Norway, Finland, Poland, Czechoslovakia, Hungary, Rumania, Turkey, Iran, Afghanistan, Mongolia, China, Korea; 12 seas of the Atlantic, Pacific, and Arctic Oceans.

National state: a union of fourteen Republics.

Language: each Republic has its own official language as well as Russian; of these, the Russian Federative Republic (official language: Russian) covers 76 per cent of U.S.S.R. land area and 54 per cent of population.

Currency: rouble; one rouble equals Cdn.$1.20 (official exchange rate). Soviet currency may not be taken into or out of the U.S.S.R.

Weights and measures: metric system.

Electricity supply (domestic): 220 volts, 50 cycles in most areas; 127 volts, 50 cycles in some older centers.

Capital: Moscow.

Marketing centers: Moscow (population July 1968) 6.5 million, Leningrad 3.7 million, Kiev 1.5 million, Baku 1.2 million, Kharkov, Gorki, Novosibirsk 1.1 million, Kuibyshev 1.0 million.

Chief ports: Baltic Sea—Venspils, Kleipedi (both in Lithuania), Leningrad; Black Sea—Odessa, Novorossisk, Batumi; Pacific Ocean—Vladivostok, Khabarovsk, Nakhodka; White Sea (Arctic Ocean)—Murmansk, Arkhangelsk.

Economy: wealthy in raw materials but short of extractive and productive capacity. State economic and commercial monopoly prevails.

Conditions of trade: all foreign trade nationalized under state monopoly and is conducted through some forty specialized state foreign trade corporations associated closely with Ministry of Foreign Trade.

Total imports: (roubles) 1967—7,683 million; 1966—7,122 million.

Chief imports: (per cent of total) machinery and equipment 34.2; consumer goods 19.6; food and food raw materials 15.8; ores and concentrates, and metals and metal products 8.8; chemicals, fertilizers and rubber 6.1; textile materials and goods 4.0.

Chief suppliers: (per cent of total) Communist countries 69.7; non-Communist developing countries 9.1; industrialized capitalist countries 21.2 (thereunder Finland 3.1, Britain 2.3, France 2.2, Japan 1.9, West Germany 1.9, Italy 1.8, Canada 1.6, Netherlands 1.1).

Value of imports from Canada: 1967—Cdn.$128.7 million; 1966—Cdn.$320.6 million.

Chief imports from Canada: (per cent of total) 1967—wheat and flour 92.9, raw cattle hides 3.1, sulphur 1.5, plastic and synthetic rubber 1.2.

Total exports: (roubles) 1967—8,684 million; 1966—7,957 million.

Chief exports: (per cent of total) machinery and equipment 21.1; ores and concentrates, and metals and metal products 18.7; fuel and electricity 16.1; food and food raw materials 11.8; forest products 6.5; textile materials and goods 4.7; chemicals, fertilizers and rubber 4.0; consumer goods 2.6.

Chief markets: (per cent of total exports) Communist countries 66.0; non-Communist developing countries 14.0; industrialized capitalist countries 20.0 (thereunder Japan 3.7, Britain 3.1, Finland 2.5, Italy 2.4, West Germany 2.0, France 1.5, Canada 0.2).

Value of Canadian purchases: 1967—Cdn.$23.0 million; 1966—Cdn.$11.7 million.

Chief Canadian purchases: (per cent of total) 1967—raw cotton 55.5, cotton cloth 6.7, furs and skins 3.9, metalworking machinery 3.4, pig iron 2.9, plywood and board 2.8.

Prices: quote in U.S. or Canadian dollars or other hard Western currency. Quotations should be f.o.b. Canadian port; a c.i.f. North European port quotation can also be useful.

Usual terms of payment: letter of credit subject to normal commercial terms.

Samples: to be declared on entry and listed by Customs. This list, produced at port of exit, serves as the export permit. If the samples are sold to the authorized foreign trade corporation, the latter's receipt should be attached and given to Customs.

Visa: business or tourist visas may be obtained from the U.S.S.R. Embassy, Ottawa. If travelling to other countries before entering the Soviet Union, it is advisable to obtain a Soviet visa before leaving Canada.

Correspondence: major Western languages acceptable, although use of Russian facilitates and speeds exchanges.

Customs tariff: Customs duties and foreign exchange regulations need not concern the exporter because all importations are made by state trading enterprises.

For detailed information on this market write to: European Division, Office of Area Relations, Department of Trade and Commerce, Ottawa, or

Commercial Counsellor, Canadian Embassy, 23 Starokonyushenny Pereulok, Moscow, U.S.S.R.

CZECHOSLOVAKIA

Area: 49,367 square miles.

Population: 14,330,000 (1966); Czech lands 9,876,000, Slovakia 4,454,000.

Climate: moderate, middle-European.

Language: Czech and Slovak; sales literature in German, English or French.

Currency: koruna; non-convertible. Official rate: one koruna equals Cdn.$0.1490 (December 1968). Tourist rate: 16 korunas equal U.S.$1.00.

Foreign exchange and import controls: import authorization necessary; importing foreign trade corporations are responsible for securing allocation of necessary foreign exchange.

Weights and measures: metric system.

Capital: federal capital is Prague. Capital of Slovakia is Bratislava.

Chief ports: none. Canadian exports to Czechoslovakia are normally routed through Northern European ports (Hamburg, Rotterdam, Gdynia).

Marketing centers: Prague (population) 1,030,000, Brno 333,000, Bratislava 277,000, Ostrava 270,000.

Economy: production and trading facilities are state-owned and operated through various Ministries on the basis of general five-year and more detailed one-year plans. Foreign trade is conducted by some 30 foreign trade corporations, most of which act as agents for manufacturers.

Total Czech imports: 1967—Cdn.$3,275 million (official rate).

Chief imports: (per cent) 1967—fuels and raw materials 47.5; machinery, tools and equipment 30.6; foodstuffs 16.4; consumer goods 5.5.

Chief suppliers: Socialist countries (72 per cent of total)—U.S.S.R., East Germany, Poland, Hungary, Rumania, Bulgaria; Western countries (20 per cent of total)—West Germany, Britain, Switzerland, Austria, Italy, France.

Value of imports from Canada: 1967—Cdn.$10.9 million; 1966—Cdn.$5.1 million.

Chief imports from Canada: (Cdn.$'000) 1967—wheat 7,383, flaxseed 1,223, cattle hides 1,223, molybdenum 317, sulphur 290, textile machinery and parts 289.

Total Czech exports: 1967—Cdn.$3,500 million (official rate).

Chief exports: (per cent) 1967—machinery, tools and equipment 48.6; fuels and raw materials 28.6; consumer durables 18.3; foodstuffs 4.4.

Chief markets: Socialist countries (71.6 per cent of total)—U.S.S.R., East Germany, Poland, Hungary, Bulgaria, Rumania; Western countries (19.1 per cent of total)—West Germany, Britain, Italy, Austria, France.

Value of Canadian purchases: 1967—Cdn.$28.5 million; 1966—Cdn.$21.7 million.

Chief Canadian purchases: (Cdn.$'000) 1967—iron and steel bars, rods and shapes 7,340; textiles, textile products, sundry and clothing 6,325; footwear 3,714; tableware, glass, ceramics, china 2,550; industrial machinery 1,600; bicycles, motorcycles and parts 900.

Prices: quote in Canadian or U.S. dollars, preferably both f.o.b. and c.i.f. Hamburg or other north European port.

Usual terms of payment: varies according to commodity and competition from cash against documents to letter of credit often with three to six months' terms. Negotiated extended credit terms are common for large capital equipment sales.

Samples: if of commercial value a bond is required equal to value of sample, bond recoverable on re-export of sample. Those of no commercial value are duty-free.

Visas: visa required. At time of writing (December 1968) this must be obtained from Czechoslovak representatives abroad but can also be obtained at airport, provided businessman is in possession of letter from Czechoslovak foreign trade corporation indicating purpose of visit is business. **Inoculations:** as in Canada.

Correspondence: in English, German or French; airmail only, 15 cents per half ounce.

Documentation, customs tariffs, marking and labelling: consult the Office of Area Relations, Department of Trade and Commerce, Ottawa.

For detailed information on this market write to: European Division, Office of Area Relations, Department of Trade and Commerce, Ottawa, or

Commercial Secretary, Canadian Embassy, Mickiewiczova 6, Prague VI, Czechoslovakia.

Foreign Exchange Rates

These nominal quotations may help exporters in checking prices, but tbey should consult tbeir ba before making any firm commitments. When more than one rate is shown, the one to be used depe on the commodity traded. Information on the rate for any specific commodity may be obtained fr the Office of Area Relations, Department of Trade and Commerce, Ottawa.

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

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

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

Country and Currency	Value of Foreign currency unit in Canadian dollars	Value of Canadian dollar in foreign currency units
	at January 3	
Algeria		
Dinar	.2167	4.61
Argentina		
Peso (free)	.0031	322.58
Australia		
Dollar	1.193	.8340
Austria		
Schilling	.0415	23.98
Bahamas		
Dollar	1.051	.9506
Belgium and Luxemhourg		
Franc	.0214	46.25
Bermuda		
Pound	2.567	.39
Bolivia		
Peso	.0901	10.97
Brazil		
Cruzeiro (official free)	.2809	3.56
Britain		
Pound	2.557	.39
British Honduras		
Dollar	.6395	1.56
Burma		
Kyat	.2252	4.43
Ceylon		
Rupee	.1802	5.54
Chile		
Escudo (bank rate)	.1400	7.14
(free)	.1234	8.10
China, Repuhlic of		
New Taiwan Dollar (official)	.027	37.04
Colombia		
Peso (fixed)	.063	14.95
Congo, Repuhlic of[1]		
Franc	2.149	.4653
Costa Rica		
Colon	.1619	6.12
Cuha[2]		
Peso	.....	.....
Czechoslovakia		
Koruna	.1489	6.70
Denmark		
Krone	.1430	6.98
Dominican Repuhlic		
Peso	1.073	.93
Ecuador		
Sucre (official)	.0596	16.50
(free)	.0534	18.45
El Salvador		
Colon	.4290	2.35
Fiji		
Pound	2.463	.41
Finland		
Markka	.2554	3.91
France, Monaco, etc.[3]		
Franc	.2167	4.61
Franco-African Repuhlics[4]		
Franc	.0043	235
French Paclfic[5]		
Franc	.0119	84.24
Germany		
D Mark	.2680	3.71
Ghana		
New Cedi	1.051	.95
Greece		
Drachma	.0358	27.93
Guatemala		
Quetzal	1.073	.93
Guyana		
Dollar	.5363	1.85
Haiti		
Gourde	.2145	4.65
Honduras		
Lempira	.5363	1.86
Hong Kong		
Dollar	.1770	5.64
Hungary		
Forint (official)	.0921	10.86
Iceland		
Krona (official)	.0122	81.96
India		
Rupee	.1421	7.02

Country and Currency	Value of Foreign currency unit in Canadian dollars at January 3	Value of Canadian dollar in foreign currency units at January 3
Indonesia[6]		
Rupiah	.....	.....
Iran		
Rial	.0142	70.42
Iraq		
Dinar	3.003	.33
Ireland		
Pound	2.557	.39
Israel		
Pound	.3064	3.23
Italy		
Lira	.0017	581.86
Jamaica		
Pound	2.557	.39
Japan		
Yen	.0030	333.33
Kenya		
Shilling	.1526	6.55
Lebanon		
Pound (free)	.3325	3.00
Malaysia		
Dollar	.3504	2.85
Mexico		
Peso	.0858	11.64
Morocco		
Dirham	.2119	4.72
Netherlands		
Florin	.2969	3.37
Netherlands Antilles		
Florin	.5687	1.76
New Zealand		
Dollar	1.197	.83
Nicaragua		
Cordoba	.1532	6.51
Nigeria		
Pound	2.990	.33
Norway		
Krone	.1502	6.64
Pakistan		
Rupee	.2252	4.43
Panama		
Balboa	1.073	.93
Paraguay		
Guarani (free)	.0086	116.28
Peru		
Sol (free)	.0242	41.66
Philippines		
Peso (free)	.2748	3.63
Poland		
Zloty (fixed basic rate)	.2685	3.72
Portugal & Colonies[7]		
Escudo	.0373	26.80
Saudi Arabia		
Riyal	.2066	4.84
Sierra Leone		
Leone	1.502	.66
Singapore		
Dollar	.3504	2.85
South Africa		
Rand	1.502	.66
Spain & Dependencies		
Peseta	.0154	64.25
Sweden		
Krona	.2489	4.01
Switzerland		
Franc	.2497	4.00
Syria		
Pound (free)	.2812	3.55
Thailand		
Baht (free)	.0520	19.19
Trinidad & Tobago[8]		
Dollar	.5392	1.85
Tunisia		
Dinar	2.043	.48
Turkey		
Lira	.1192	8.38
United Arab Republic		
Pound (official)	2.467	.40
United States		
Dollar	1.073	.93
Uruguay		
Peso (free)	.0043	232.55
Venezuela		
Bolivar (official free)	.2390	4.18
Yugoslavia		
Dinar (official)	.0858	11.64

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

Trade Commissioners on Tour

In Canada

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

Ottawa—Department of Trade and Commerce

St. John's, Halifax, Montreal, Winnipeg, Edmnnton and Vancnuver—Reginnal Office, Department of Trade and Commerce

Tornnto—Canadian Manufacturers Association

Windsor, Ontario—Greater Windsor Industrial Cnmmission

Fredericton, New Brunswick—Department of Industry

All other centers—Board of Trade or Chamber nf Commerce

Hnng Knng—R. G. Godson, Trade Commissioner in Hong Kong:

Quebec City, Levis—January 21
Toronto—January 22-28
Ajax, Port Perry—January 29
Acton, Stratford—January 30
Sarnia—January 31
Niagara Falls, Welland—February 3
Hamilton, Oakville—February 4
Winnipeg—February 5-6
Edmonton—February 7
Lethbridge—February 10
Calgary—February 11
Kelowna—February 12
Vancouver—February 13-14

In Territory

Afghanistan—B. Northgrave, Assistant Commercial Secretary in Islamabad, Pakistan, will visit Kabul March 16-21.

Austria—C. R. D. Kelly, Assistant Commercial Secretary, and L. Decrinis, Commercial Officer, in Vienna, will visit the western provinces of Tyrol and Vorarlberg January 16-24.

Barbados—D. J. McJanet, Assistant Commercial Secretary in Port-of-Spain, Trinidad, will visit Barbados February 12-13.

Britain—Trade Commissioners in the Liverponl office will make periodic visits during January tn business centers in their territory, including Birmingham, Leeds and Manchester.

Bulgaria, Hungary, Rumania—Trade Commissioners in the Vienna, Austria, office make frequent visits to these countries, but often there is nnt time to publish their itineraries in advance. Therefore, Canadian businessmen who wnuld like the Trade Commissioners to undertake assignments for them in these East European cnuntries are advised to write to the Vienna office immediately.

French West Indies—K. G. Ramsay, Commercial Counsellor in Port-of-Spain, Trinidad, will visit Martinique and Guadeloupe February 22-March 3.

Guyana—K. G. Ramsay, Commercial Counsellor in Port-of-Spain, Trinidad, will visit Guyana January 18-27.

D. Hobson-Garcia, Commercial Officer in Port-of-Spain, Trinidad, will visit Georgetown February 4-6.

Leewards—J. A. Ahow, Commercial Officer in Port-of-Spain, Trinidad, will visit Antigua, Montserrat and St. Kitts January 20-24.

Pakistan—Karachi will be visited February 10-14 by J. E. G. Gibson, Assistant Commercial Secretary, and March 10-14 by M. Y. Farooqi, Commercial Officer, from the Islamabad office.

Dacca will be visited January 22-31 by Mr. Gibson.

Lahore will be visited February 17-20 by M. H. Jafri, Commercial Officer in Islamabad.

Spain—L. A. Campeau, Commercial Counsellor in Madrid, will visit Barcelona January 19-24.

Surinam—K. G. Ramsay, Commercial Counsellor in Port-of-Spain, Trinidad, will visit Surinam January 18-27.

Taiwan—R. A. Fairweather, Vice Consul and Assistant Trade Commissioner in Manila, Philippines, will visit Taiwan January 20-24.

Thailand—A Trade Commissioner from Singapore will be making a monthly visit to Thailand throughout 1969. Correspondence shnuld normally be addressed tn the Singapore office although cnntact can alsn be made thrnugh the Canadian Embassy in Bangkok, P.O. Box 2090 (telex: 2277; cable: DOMCAN, Bangkok; phnne 32-956).

Tnbago—J. A. Ahow, Commercial Officer in Port-of-Spain, Trinidad, will visit Tobago February 24-25.

Trinidad—D. Hobson-Garcia, Commercial Officer, Pnrt-of-Spain, will visit South Trinidad January 28.

J. M. C. Lavoie, Assistant Commercial Secretary in Port-of-Spain, will visit South Trinidad February 13.

Turkey—Trade Commissinners in the Athens, Greece, office visit Istanbul and Ankara approximately every six weeks.

United States—R. M. Dawson, Consul and Trade Commissioner in San Francisco, will visit Denver, Colorado, Salt Lake City, Utah, and Wyoming January 20-31.

Windwards—J. M. C. Lavoie, Assistant Commercial Secretary in Port-of-Spain, Trinidad, will visit Dominica, St. Lucia and St. Vincent February 2-8.

Businessmen who would like the above to undertake assignments for them should write to the post as soon as pnssible.

About "Foreign Trade"

The editor is always pleased to receive photographs of Canadian products in use or on display in export markets. These should not merely show the product itself but preferably have some action in them or local color. Please also supply captions. Black and white glossy prints reproduce well in the magazine; we are not equipped to use color photographs or transparencies.

Would These Statistics Help You?

Statistics af Canadian exports to the United States on a regianal basis are naw being prepared by the Dominian Bureau of Statistics. The tabulatian will be made quarterly and shaw the cumulative tatals of exparts far the calendar year to date, cross-classified by:

Commodity group — 230 in all

U.S. Census subdivision to which the goods are cansigned — 18 subdivisians, each consisting of twa or more contiguaus U.S. states

Region af lading in Canada — Atlantic, Quebec, Ontario, Prairies, Pacific

Price: $100 a year. Companies who want several capies pay $100 a year far the first and $25 a year for each additional set.

For more infarmation: write ta G.A. Richardsan, Directar, External Trade Divisian, Dominion Bureau af Statistics, Tunney's Pasture, Ottawa.

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