

1981
June

CANADA COMMERCE

June 1981



Silicon Valley High Tech Market — Page 8

Canadian Machinery Industry — Page 14

Canada Commerce
June, 1981

**Published by the Department of
Industry, Trade and Commerce**
Established 1904

Editor:
Anna Hibberd

Contributing editors:
Don Wight
Bob McDonell
Shirley Plowman

Designer:
Stephen Shewchuk

Correspondence to:
Canada Commerce (98)
Department of Industry, Trade and
Commerce
Ottawa, Ontario. K1A 0H5

Telephone:
(613) 995-7489

Copyright:
Material appearing in this magazine may
be reproduced with credit to Canada
Commerce.

Photo credits:
Image Bank of Canada

Gar Lunney
page 3

Don Carroll
page 10

**Please note that Canada Commerce is
available free of charge in Canada only
to interested Canadian manufacturers
and business persons.**

Publié aussi en français

The Honourable Herb Gray
Minister of Industry, Trade and Commerce

The Honourable Charles Lapointe
Minister of State
for Small Business and Tourism

The Honourable Edward C. Lumley
Minister of State
for Trade

Content

	Page
Spotlight on Sweden	1
The USSR — A Guided Tour for Canadian Exporters	4
Pocket Primer to U.S. High Tech Market	8
Cracking the \$900 Million Nest Egg (Canada's Health Care Products Industry)	12
Canadian Machinery Industry — An Overview	14
CCC — Its Aim is Increased Exports	17
Economists' Corner	18
Plain Horse Sense	21
Trade Fair Round-Up	24
Trade Fairs	25

Editorially Speaking.

The importance of consultation in the international trade arena is emphasized for Canadians this year with two events hosted in Ottawa by this country: The first is the Western Economic Summit, July 20-21, which will focus on major economic matters confronting Western nations, including inflation, unemployment and energy, as well as North/South issues. The second is the Eighth International Symposium on Small Business, October 19-22.

While the second may not have the high profile of the first, both events will impact on the Canadian business community in the long term. Through consultation and discussion at the Summit or less lofty levels, one can look to an expansion of world trade with attending benefits for all concerned.

The 1981 Small Business Symposium, with IT&C as the host country's sponsoring department, will be attended by delegates from 40 to 50 countries. The international organization's overall goal is to strengthen and support the development of small and medium-size enterprises as a recognized economic force in all countries.

Future issues of Canada Commerce will cover the Symposium program and presentations. Meanwhile further information can be had by contacting the International Symposium on Small Business Task Force, Small Business Secretariat (63), Department of Industry, Trade and Commerce, Ottawa, Ont. K1A 0H5.

A.H.

To those who have heard of Sweden's tradition and reputation in the field of machinery it may sound like trying to sell ice to Greenland. Nevertheless, the question posed here is a fair one. The answers, too, are encouraging.

Can We Sell Machinery and Equipment to Sweden?

by Claes Bonde, Commercial Officer

It is of course true that Sweden has an iron and steel industry that goes back several hundred years. The lumber and pulp and paper industries are also old and important parts of Sweden's economy. Naturally the Swedes have developed sophisticated techniques and machinery over the years and earned a world reputation in certain areas: mining equipment, iron and steel process equipment, metalworking machinery, pulp and paper processors and machinery.

In many ways Canada and Sweden are similar and so are their basic industries — pulp and paper, and the mining and metal industries. Even though Swedish machinery in these sectors is generally quite advanced there is a market for Canadian equipment that will improve productivity, reduce servicing, save labour and increase quality. Several Canadian manufacturers have been successful in entering this market over the past few years with ingenious pieces of machinery and equipment for the production line.

Sweden's energy has traditionally been produced from hydro power and more lately from nuclear power and imported oil. Canadian suppliers have exported components for both nuclear and other utilities. With the increasing cost and delivery problems of petroleum a renewed interest in coal burning facilities has appeared. Although Sweden will probably supply a major part of necessary conversion equipment there is a strong interest in Canadian technology and hardware related to coal: handling, processing, burning and environmental control (both exhausts and ashes).

Sweden does not have any oil reserves but the recent formation of international exploration groups, including Swedish companies such as Volvo, should open new possibilities in the coming years for Canadian suppliers of drilling and related equipment. Swedish companies have ordered oil rigs in Sweden but also in other countries including Canada.

Very advanced metal-cutting machinery is made in Sweden but is costly enough to give opportunities to foreign suppliers. Canada's prospects may be

good in attachments and custom-made production machines. A market should also exist for selected Canadian makers of custom tools and dies.

In the category of process machinery and equipment there is particular interest in monitoring and packaging systems. Production and service equipment for chemical, rubber and food industries have also found a market in Sweden.

The Swedish farmer is traditionally supplied by a number of Scandinavian manufacturers of tractors and farming equipment. However, several other countries have captured a sizeable share of the market, particularly for tractors and combines. New farming equipment often has to prove itself through the National Swedish Testing Institute for Agricultural Machinery to be recognized and Swedish farm fields are usually too small to make use of the large prairie-type equipment.

Specific safety and labour environment regulations may necessitate some modifi-

cations and thus inflict extra costs for Canadian exporters of construction equipment such as cranes, fork lifts, motor graders, etc. These problems, rarely insurmountable, are usually overcome in co-operation with a local distributor.

While heating and plumbing equipment often differ too much in standards and principles to be readily marketable, there is definitely a demand for new machinery in the service industry sector: commercial cleaning, vending and restaurant equipment. Canadian manufacturers of sophisticated hospital and laboratory equipment can find a small but worthwhile number of customers in Sweden.

The do-it-yourself concept is getting more popular every year as labour rates increase and leisure time is becoming more plentiful. Hence tools, machines and materials for the home, garden, automobile, boat and summer cottage are in great demand. This includes capital goods such as chain saws, snow-blowers and garden tractors.

These examples cover only a small part of the products that either are, or could be, selling successfully in Sweden. The currency rates have been very favourable to Canadian exporters over the past couple of years and in many instances they have been able to take the place of other foreign suppliers. Canada's share of Swedish imports is less than 1 per cent. Therefore, with determination and persistence there are excellent chances for a number of Canadian manufacturers to get a fair share of the more than \$40 billion a year of Swedish imports.

Swedish Imports of Selected Products (\$ million)

Product	From Canada (Jan-Nov 80)	Total Imports 1979
Valves	0,147	169
Industrial furnaces	0,649	7
Pumps and parts	0,2	192
Heat exchangers	0,155	10
Excavating and dredging machinery	0,527	69
Construction machinery, equipment and parts	1,7	66
Machine tools and parts (metalworking)	0,298	151
Chain saws	0,234	4
Chain saw parts	2,935	5
Sawmill equipment	0,586	49
Woodworking machinery	0,155	30
Printing and bookbinding machinery & parts	0,74	65
Textile industry machinery and parts	0,106	23
Soil preparation and seeding machines & parts	0,144	28
Airconditioning and refrigeration equipment	0,122	7
Vending machines and parts	0,238	5
Home garden and park equipment	0,745	13

Sweden's Stainless Steel Image

Sweden's industry has its place in the sun as a home of high technology and engineering brilliance highlighted by the products of companies like Volvo and L.M. Ericsson. And then there's the sparkle of Sweden's crystal. Swedish products are welcomed as standards of excellence and admired around the world.

A closer look, however, shows a Canadian presence behind the Swedish image.

If there is a secret to Sweden's burgeoning export trade, it is shrewd incorporation of the best of Swedish and foreign components to produce high quality goods — the wise acceptance of the best from abroad and a genius at putting the package together.

Canadians find it surprising to learn that only 30 per cent of the components for the internationally known Volvo car are made in Sweden, or that Swedish crystal is made from imported sand.

Swedes often look on Canada as a vast northern territory sharing the burden of interminable winters and cold, endless forests and vibrant cities. However, for the businessman, Canada is quickly emerging as a reliable supplier of high quality products at a price that has been constantly declining compared with more traditional suppliers.

Although the low value of the Canadian dollar has greatly increased the cost for Canadians visiting Sweden — hotels

are \$140 a night and a drink is \$8 — it has also greatly reduced the price of Canadian products on the Swedish market.

Over the past three or four years the value of the Canadian dollar has dropped some 35 per cent against the Swedish krona. In the same period the German Mark, for example, has appreciated almost 65 per cent. The net result has been the dramatic reduction in the costs of Canadian goods while more traditional suppliers have become increasingly more expensive.

This large cost change has not been lost on the Swedish buyer and in 1980 Swedish purchases from Canada increased in value by 56 per cent. This trend is expected to continue.

Low tariffs

For the small Canadian company Sweden has many attractions as a place to devote marketing effort. Sweden has a long tradition of open international trade and tariffs are low. More importantly, the absence of import barriers and exchange controls and the well deserved Swedish reputation for prompt payment make Sweden a good place to work among world markets.

Concerns about shipping and transportation that often inhibit exports are virtually non-existent in Sweden. Regular shipping services from both coasts are available and they are cheap.

Recently a Canadian businessman observed: "I can ship from Toronto to Sweden for less than the cost of shipping from Toronto to Vancouver."

This same businessman went on to tell of his experiences in setting up a distribution network in Western Canada and offered the advice that he found his marketing in Sweden "much easier and at a higher profit level, without any additional headaches."

The message for the Canadian exporter is clear — there is a market in Sweden that needs imports of high quality products and Canada is recognized as a country that can fulfill this requirement.

- **Canadian prices are declining against Sweden's traditional suppliers;**
- **It is easy to sell in Sweden, to get your goods there and to get your money back.**

The next time you look into the stainless steel shine of Swedish industry, you may find a little Canadiana hidden there.

Commercial Division

Canadian Embassy

P.O. Box 16129
S-103 23 Stockholm 16,
Sweden

or

European Bureau (27)

Dept. of Industry, Trade and Commerce

Ottawa, Ont. K1A 0H5
Tel: (613) 995-9401

Canadian seafood is already highly regarded and well established in Sweden — but there's room for further sales in many categories. And if a company has a new type of fish product, Sweden might be just the place to take a marketing plunge!

Sweden — An Excellent Seafood Market by Ulla Hansson, Commercial Officer

Sweden, a highly industrialized country with a population of 8.2 million, has a high per capita consumption of seafood — 28.0 kg (of which 18.2 kg represent fresh and frozen seafood and 9.8 kg preserved and processed). Seafood consumption increased rapidly in the 60s and early 70s and has been fairly stable in the past couple of years.

Sweden has an extensive coastline along the Baltic Sea and the country's west coast faces the North Sea, making Swedish fishery a traditionally coastal one with very few vessels operating on

the high seas. The fishing fleet is entirely privately owned by the fishermen and there are no "factory" ships servicing these vessels.

The domestic catch ranges from 146,000 tons (landed weight) to 168,000 tons annually. About 65-75 per cent of the local catch consists of Atlantic and Baltic herring (the latter is a small landlocked Atlantic herring); 10-14 per cent cod; 12-20 per cent industrial fish; 1-2 per cent mackerel. Annual catches of salmon average 450 tons; eel 950 tons; lobster 20 tons; shrimp 1500 tons. About

60 per cent of the shrimp is cooked on board and then sold fresh, shell-on.

The local catch cannot adequately meet the demand for several seafood items, especially shellfish. The market, therefore, relies heavily on imports. In 1979 these imports totalled \$282 million, an increase of 12 per cent over the previous year. The total imported volume increased by 8 per cent. Of the total 1979 seafood imports, 41 per cent represented fresh and frozen seafood, 34 per cent fish and shellfish preserves, 16 per cent shellfish, 9 per cent salt-cured and dried fish. Shellfish showed the largest increase in imports, rising by 22 per cent and 30 per cent in volume and value respectively as against the previous year.

By tradition the predominant foreign suppliers of seafood are the neighbouring countries of Norway and Denmark, providing 31 per cent and 28 per cent respectively of Sweden's total seafood imports. The market in Sweden for Canadian seafood has expanded tremendously during the past decade, making Canada Sweden's number three foreign supplier and corresponding in 1979 to a 10 per cent share of total Swedish seafood imports. The USA and Iceland supplied



6 per cent and 5 per cent respectively.

Several Canadian seafood items — most notably frozen Pacific salmon, with Canadian sales to Sweden totalling \$10.8 million — already enjoy an excellent market. Depending on price and rate of exchange there could still be further sales opportunities for this salmon, which is mostly used for further processing locally (smoking and raw-pickling).

Salt-sugar-spice and vinegar-cured Atlantic herring (whole head-off or fillets) in barrels represent another major import item from Canada with export sales totalling about \$5.4 million. Marinated herring is by tradition a very popular Swedish dish. Salt-cured herring is used widely for home-marinating which has decreased somewhat during the past decade but has been compensated for by increased industrial marinating. By far the leading local canners are ABBA and Foodia, owned by the Swedish Consumer's Co-op. About 90 per cent of herring products in cans or glass jars on the Swedish market is produced locally: Canada is one of the major suppliers of the raw material. ABBA and Foodia buy barrelled herring from Canada jointly. They have indicated that their annual requirements of Canadian herring is seldom met and that they would welcome additional supplies.

Shellfish in general is very popular in Sweden. The local catch, if any, does not by any means meet the demand. As far as imports are concerned the leading item in volume and value is shrimp (*Pandalus borealis*). Imports of frozen IQF cooked shell-on shrimp totalled 6,480 tons at \$24.8 million and those of frozen (IQF or block) shell-off shrimp 3,990 tons at \$29 million. Local importers/buyers are looking for supplies from Canada and the potential to expand Canada's exports of

shrimp to Sweden (now \$3.7 million) should be excellent.

Canadian snowcrab meat — frozen as well as canned — has become extremely well established here. There should be room for expanded sales provided increased prices do not create buyer resistance. The same situation prevails for canned crabmeat where Canada supplied 179 tons of the total 657 tons imported in 1979, only surpassed by Malaysia (289 tons) and closely followed by Thailand (151 tons).

Canadian cooked lobster (frozen in brine) has really enjoyed a sales boom in this market since the introduction a few years ago. The peak was probably reached in 1979 when Canada supplied 182 of the total 199 tons imported. Other suppliers were the USA, 14 tons; Norway and Denmark, 2 tons each. The market then tapered off somewhat due to local stocks carried over into new seasons but it is considered that the market has now reached a "normal" level. The canned lobster market is more stable with Canada as the only foreign source and selling about 50 tons annually to Sweden.

The catering/institutional sector is growing steadily in Sweden as more housewives work outside their homes. The number of luncheon canteens is constantly growing. Importers would therefore welcome quotations for portion-controlled fish products such as fillets of greysole, cod, mackerel and haddock. More exclusive species such as turbot and halibut are also of interest to this market.

There could also be opportunities for cod blocks and cod fillets packed in Canada under customers' own labels for retail as well as the institutional sectors.

Frozen freshwater fish roe (mostly lake herring, cisco) from Canada has gained excellent acceptance in the past couple

of years and there should be good prospects for further expansion. Another type of roe which is highly in demand due to decreasing supplies from nearby sources is cod roe, which is used in large volumes to make a very popular caviar spread packaged in a toothpaste type of tube. Local processors are looking to Canada for supplies.

Sales of Canadian freshwater fish species, especially white fish and lake trout, have been very successful and could be more so. This fish is mainly used for further processing locally (smoking).

There is a demand for Canadian eels — preferably silver eels but summer eels will also be accepted. The Swedes want large eels — 1.36 to 2.27 kg — although some buyers will take smaller ones. About 95 per cent of the imported as well as local eels are used for smoking. There is no interest in buying smoked eels from Canada.

Seafood can be marketed through the usual channels — import agents (this refers especially to branded and specialty items), importers, or direct to the large retail chains and caterers. There has been a strong concentration in the food trade with a small number of concerns dominating the market. This is true especially at the retail end where large central buying units have been established. Many mergers have also taken place in the fish wholesale sector.

Nearly all agents and importers cover the whole country. Most of the main customers (retail and institutional) are found in Gothenburg, Stockholm or Malmö. Fish processors and canners (large consumers of Canadian fish and shellfish as raw material) are more scattered but mostly found in the southern part of Sweden.

Seafood imports from Canada are handled primarily on a container basis. Gothenburg is the main import harbour, followed by Stockholm.

Customs duties on imported seafood are practically non-existent with the exception of canned items. Import levies are imposed on some fish species but these are so marginal as to constitute no obstacle to trading with Sweden.

As can be seen Sweden is a very attractive market for Canadian seafood which already is well established and enjoys a good reputation. Further export potential exists in many species and the prospects for "new" items are good.

The Swedish firms interested in Canadian seafood are too numerous to be listed here. Interested companies should get in touch with the Commercial Division of the Canadian Embassy in Stockholm, and we will put you in touch with a selected number of local firms. However, if you are entering the market for the first time, a visit to Gothenburg and Stockholm is a must!

The Canada Commerce series of articles on Canada/Eastern European trade, begun in the April 1981 issue, continues here and deals particularly with the implications of the new five-year plans of these countries. The series has been prepared by Industry Trade and Commerce representatives at the posts concerned in co-operation with the department's Eastern Europe Division.

USSR — A Guided Tour for Canadian Exporters



The Soviet Union constitutes a sizeable market for "western" suppliers and if you are an exporter, particularly one serving certain select industrial sectors, you should be aware of some of the "sign posts" than the XI plan contains — broad sector and general priorities in most cases, but very specific project indications in others.

In considering these "sign posts" and what they suggest in terms of trade opportunity, it is perhaps useful first to note a few basic characteristics about the Soviet Union and its economy:

- there is growing concern about a shortage of labour as population growth has slackened, particularly in the industrialized, European areas. There is, therefore, a pressing need to improve labour productivity and hence to automate and mechanize industry;
- a significant and growing proportion of the USSR's hard currency

income is attributable to exports of natural resources — particularly oil and gas — but new sources are proving harder to find and are inevitably further away and much more expensive to develop. As a result the fuel-energy sector has a priority all of its own and absorbs the lion's share of incremental capital investment;

- agricultural imports conversely, are becoming a significant drain on the balance of payments and therefore also have a high priority. However, the problems of development in agriculture cannot simply be resolved through large capital expenditures;
- the experience of the high technology and grain embargoes has reinforced longstanding Russian desire to avoid dependence wherever possible on those it cannot control. Hence imports from the Capitalist countries will

always be something of a last resort;

- traditional Soviet emphasis on category 'A' industries — military, heavy industry and basic infrastructure — has created a situation in which too much money is chasing too few consumer goods. While this problem is acknowledged in Plan Guidelines, in the last Plan it was given priority, but subsequently lost out to more pressing demands elsewhere;
- the explosive expansion of earlier plans was more than the industrial structure could manage at times. Projects have fallen behind schedule; indeed, some were never put into operation. The XI Plan Guidelines response to this is to shift to "intensive" development with heavy emphasis on upgrading and re-equipment of existing enterprises.



The Eleven Five Year Plans — General Guidelines

The four "main tasks" and three broad priority sectors identified in the Eleventh Five Year Plan are:

1. continued emphasis on science and technology for the mechanization, automation and technical re-equipment of factories;
2. selective intensification of **capital construction**, in other words, fewer projects but with better quality and more rapid commissioning plus a higher priority on reconstruction and re-equipment of existing plants;
3. **regional development** emphasis on fuel-energy and **raw materials** projects in the east and north with corresponding de-emphasis of existing big cities and industrial complexes in the European part of the country;

4. expansion and improvement of foreign economic, scientific-technical and cultural ties.

The broad sector priorities included: (1) **the fuel-energy complex** — a continuing priority from the last plan when this sector was allocated more than half of all incremental capital investment funding; (2) **the agro-industrial/food complex** — again a continuation from the last plan, but one which was not followed through in practice; and (3) **consumer goods** — more production and better quality, again a repetition from the last plan which lost out to the fuel-energy sector in the battle for resources.

Opportunities for Canadian Exporters

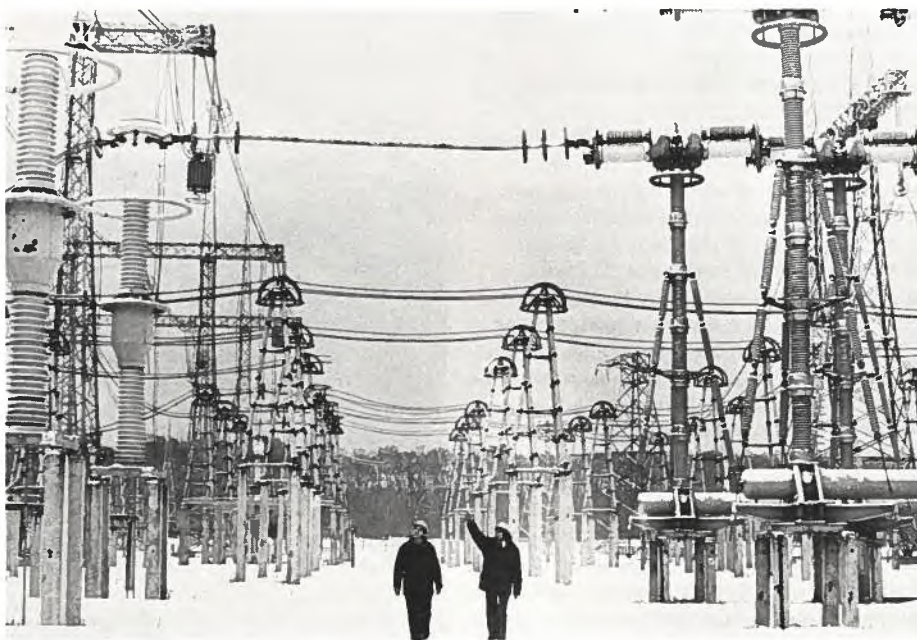
In its section on foreign economic relations, the XI Plan Guidelines give their blessing to continued trade with the

Capitalist countries and call for new agreements relating to "large scale projects in the fuel, metallurgical and chemical industries. . ." Setting aside grain sales, these sectors have traditionally been the leading customers for Canadian exports so their continued priority is good news. In addition, some other sectors like **forest products** and the **agro-industrial** complex would also seem interesting based on Canadian capabilities and indications in the guidelines.

Fuel-energy sectors: Although the Soviet oil target of 620-642 million tons by 1985 involves only a fractional increase above current production levels, depleting output from existing wells will necessitate a high level of exploration and exploitation activity. The XI Plan calls for accelerated technical re-equipment of the drilling industry, for rapid development in Western Siberia, Kazakhstan and the North European USSR and for expanded use of secondary recovery — gas lift, deep-well electric pumps, etc.

In the **gas industry**, the 1985 target will require the addition of 165-205 billion cu metres to produce levels. Keystone of this program is the \$18 billion project to develop gasfields in the Yam-borg peninsula and to deliver 40 billion cu metres of gas per year from it to Western Europe. A smaller project, a \$1 billion sour gas development at Astrakhan in the Caspian Sea, is also rated as a priority under the Plan, but in this case at least partly because of the country's need for sulphur. The bulk of hard currency business relating to these projects is accounted for by imports of large diameter pipe and by the compressor stations.

The Soviet **Coal Industry** has suffered from falling production for several years now. The XI Plan target for 1985 of 770-800 million tons aims to reverse this



decline and to add 54-84 million tons of output to 1980 levels. Priority is assigned to the development of open cast mines using "progressive processes and large capacity mining transport equipment." New projects are planned to feed major minesite thermal power plants in Kansk Achinsk and Ekibastuz. Further development of underground mines is also planned and special emphasis is placed on hydraulic mining, on coal slurry pipelines and on expanded use of automation.

Metallurgical Sectors: speeches at the recent 26th Congress and in XI Plan Guidelines all call for a major technical re-equipment of **iron and steelmaking**. In addition to an overall increase of 14-17 million tons of rolled products, the guidelines specify increases of 50-150 per cent in the output of cold-rolled sheet and strip, hot-rolled steel, coated products and high precision shapes. "**Accelerated development**" is indicated in the



production of threaded pipe for the oil industry, threaded joints, anti-corrosion coatings, pipe for nuclear power stations and for high pressure boilers, and multi-layer pipe for the gas industry. Priority is also assigned to the development of raw materials supplies and to the construction of "**small capacity metallurgical plants**" at locations where ferrous scrap accumulates.

Improvement of mining and processing techniques is also a feature of the guidelines for the **nonferrous** sector, along with an acceleration of construction of mining-concentrating complexes at rich new deposits. The XI Plan calls for increases of 15-20 per cent in output of aluminum, 20-25 per cent for copper and "at least 30 per cent" for nickel and cobalt. Special priority is given to the development of production of precision alloys, semi-conducting super pure and other special materials.



Geology: This sector, in which Canada has had some previous success, is selected in the guidelines for accelerated development with special emphasis again on fuel and energy resources. Development of "progressive methods of geophysical and geochemical exploration" are called for by the XI Plan with more extensive use of space and aerial observation supported by further technical re-equipment of geological survey organizations with the latest equipment and means of transport.

Chemical and Petrochemical sectors: Of particular interest to Canada is the heavy emphasis on mineral fertilizers, pesticides and insecticides. This is another area of shortfall in the past and one which is critical to the realization of agricultural growth targets. Output of mineral fertilizers under the XI Plan therefore is to rise by more than 50 per cent, or 50 million tons per year, and, in the case of potash-based fertilizers, it is specified that these be "only in granulated or large crystal form."

Timber, Pulp and Paper and Woodworking: Recently reorganized in the face of a steady drop in output over the period of the last Plan, this sector is targeting a 17-19 per cent increase during the next five years and is believed to be budgeting \$1 billion or more to make it all come true. Timber-felling, road-building and loading and unloading are

all noted for further development while chipboard production is called on to increase by 50 per cent, wood fibreboard and cardboard by 30-50 per cent, pulp by 30-40 per cent, and paper by 20-25 per cent.

This sector has been disappointing for Canada in the past from the point of view of new business as it appeared to have a rather low priority in the battle for funding. The fact that its targets were recent-



ly raised sharply from those published in draft guidelines last December could be an indicator, however, that the industry's poor performance is now of enough concern to gain it some precedence in budget allocations.

Agro-Industrial Complex: It is no secret that Soviet agriculture has been perhaps the greatest stumbling block of Soviet economic planners. Again in the XI Plan guidelines the objective is clearly set out: "to ensure a reliable supply of food and agricultural raw materials." Grain, fodder and meat are at the top of the priority list and the guidelines list a variety of measures to be taken:

- to increase soil fertility and yield capacity through more rational use of chemicals in crop farming and livestock breeding;

- to augment refrigeration and storage facilities, procurement centres, processing plants and shops;
- to make wider use of intensive methods of cattle breeding and fattening.

Although there is no doubt that massive amounts of funding will be earmarked for agriculture — Cdn \$27 billion was mentioned by the Chairman of the Soviet Council of Ministers for capital investments in "granaries, refrigeration, vegetable and feed storage, and other facilities" — it is uncertain how much of this will be available for hard currency purchases. The largest proportion of Soviet imports of agricultural equipment in recent years has come from neighbouring countries of Eastern Europe and this seems likely to continue.

More details on Soviet industrial projects and import plans will be emerging over the next few months. If the 'sign posts' above suggest to you that there could be an opportunity, write for more details to:

**Minister-Counsellor (Commercial)
Canadian Embassy**
Starokonyushenny Per. 23
Moscow, U.S.S.R.
OR
Department of Industry, Trade and Commerce
Bureau of European Affairs
Eastern Europe Division (27)
235 Queen Street
Ottawa, Ontario
K1A 0H5
Tel: (613) 593-4884

What Canada Sells to the USSR

Canada's exports to the USSR have grown from Cdn \$291 million* in 1973 to around \$1.5 billion in 1980. Non-grain exports in the same period grew from \$6 million to more than \$150 million and were as high as \$156 million in 1979. Successful sellers have included off-highway vehicles, pipeline compressors, forestry and woodworking equipment, geophysical exploration equipment, wave soldering machines, textile machinery, industrial valves and specialty chemicals. Metal ores are sold occasionally and in significant quantities.

Source: Statistics Canada
*export results are shown net of uranium sold to third countries but shipped to the USSR for enrichment.

USSR Imports, 1979

	Total Imports of USSR \$Cdn Million		Imports of Equipment and Means of Transportation \$Cdn Million
West Germany	4,034	16.9%	1,757
France	2,156	9.0%	1,253
Finland	2,048	8.6%	1,103
Japan	2,990	12.5%	1,166
USA	2,880	12.1%	616
Italy	1,553	6.5%	727
Britain	1,460	6.1%	479
Benelux	974	4.1%	79
Scandinavia (Sweden, Denmark, Norway)	623	2.6%	268
Canada	815	3.4%	112
Rest	4,325	18.1%	—
Total	23,859		—

Source: USSR Foreign Trade Journal

Interested in Selling to the USSR?

The first step toward successfully breaking into the Soviet market is to **identify a pressing need** of the Soviets which, of course, is why one looks so closely at the Five Year Plan. It is possible to **create** a need in the planners mind, but that is a long, drawn-out process.

Remembering that Soviets generally import from the West only as a last resort, the **level of technology** or the **uniqueness** of the product in some other area are important. In this latter respect, for example, **proven cold weather capability** is often an important selling point for

Canadian equipment. Strong product characteristics are also important vis-a-vis Western European competitors who have an important geographical advantage over Canadians. The attractiveness of these two advantages combined is now resulting in more Canadian-European joint ventures in the Soviet market.

Establishing oneself in the Soviet market and gaining that first sale take time and **patience**. For small firms this can be too much of a burden. In fact, **size** can be a factor in itself in winning acceptance from the Soviets who often consider

it important in judging supplier reliability. It is also recommended that Canadian firms cut their teeth on a few other export markets before turning to the Soviet Union. Previous **overseas experience** will stand them in good stead in negotiations with Soviet Foreign Trade Organizations and a track record, in Eastern or Western Europe in particular, is considered as evidence to the Soviets of competitive prices and technology.

An alternative is to use one of the many **manufacturers' representatives** who specialize in Eastern Europe. The Embassy works closely with agents who have expressed interest in representing Canadian firms and can provide a short list to interested exporters.

Silicon Valley and Satellite Areas High Tech Markets of the Western States

Continued opportunities for alert Canadian suppliers in a broad range of products and technical skills exist in the western United States high technology industry sector. Do not be daunted by the fast pace of change or intense competition in quality and price — these very factors assure an enthusiastic hearing for the bearer of the better mousetrap! That's the advice given in the following. . .

Report from San Francisco

by G.N. Larson, Commercial Officer

The Commercial Division of Canada's Consulate General in San Francisco welcomes the opportunity to assist capable Canadian companies in exploiting this vigorous market. It is hoped that the "pocket primer" presented here on conditions and prospects in the post territory will help to identify possible sales opportunities in the commercial and defence-related high technology industries.

The San Francisco post territory includes all or major portions of six western states: Colorado, Wyoming, Utah, Hawaii, Nevada (except Clark County), and California (excluding the 10 southern counties, which are serviced by the Consulate offices in Los Angeles). While the predominance of the high technology and defence-related business in this territory is located in California and, to a lesser extent, Colorado, isolated opportunities exist in the other states as well.

California — The very large and sophisticated industrial base in California requires a certain compartmentalizing to properly focus on relevant business sectors (as an individual economic entity, the State's equivalent GNP would rank it ninth in the world). In very broad terms, the aerospace airframe and powerplant companies are located in the southern portion of the State, while the space communications and electronics firms tend to be found in the northern portion. In the San Francisco region the most prominent area of activity is centered around the Santa Clara County some 50 miles south of San Francisco, commonly referred to as "Silicon Valley." This area hosts the densest concentration of high technology companies in the world, and is the source



of about one-third of all semiconductors produced in the U.S. as well as approximately one-fourth of all U.S.-produced guided missiles and space vehicles. While defence-related activity prevails in most of the systems-oriented companies, it accounts for only about seven per cent of sales by the semiconductor manufacturers. Suppliers qualified to commercial specs are therefore eligible to compete on a significant portion of the area's service/material requirements, particularly with regards to materials, techniques, or process control equipment serving the semiconductor industry. A glance at some of the more conspicuous companies in the region reveals the heavy emphasis on leading-edge technology found here:

Ford Aerospace and Communications, Lockheed Missiles and Space Company, Intel, Hewlett-Packard, IBM, National Semiconductor, FMC — Ordnance Division; it should, however, also be noted that the industry support base co-located here often provides less exotic requirements and should be addressed in attempting to fully exploit the market.

With the density of the high-tech companies in the Silicon Valley nearing the saturation point, "satellite" production areas are emerging. Sacramento promises to be the site of considerable branching, with approximately 17 companies committed to opening new plants there as of this writing, and an even more vigor-



Space Operations Center there in 1982. As a footnote, the relatively recent emergence of this region as an important one in the industry has spawned moderate local shortfalls in support industry capacity — shortfalls that have enabled alert new-entry suppliers to effectively penetrate the market. Major companies with facilities here include **Hewlett-Packard** (four plants), **TRW Electronics** (two plants), **Digital Equipment Corp.**, **Kaman Sciences Corp.**, **Inmos Corp.**, **Rolm Corp.**, and nearby, **Martin Marietta Aerospace Systems Division** (Denver), **Ball Aerospace** (Boulder), and **Storage Technology Corp.** (Louisville).

Utah — Another site of branch activity, though on a reduced scale, is Salt Lake City. Recent attempts to identify and exploit deposits of coal and commercial ores provide the focus of most of the State's industrial expansion, but the electronics sector is also receiving considerable attention. Firms of potential interest to suppliers and subcontractors include: **National Semiconductor**, **Thiokol**, and **Sperry — Defence Systems Division**.

Wyoming, Nevada, Hawaii — These three states offer relatively limited opportunities for suppliers in the aerospace and electronics sectors. While isolated instances of requirements in these areas do appear, the agriculture, energy, and minerals extraction industries provide the basis for most commercial activity in Wyoming and Utah. The Hawaii market is (lamentably) limited mostly to tourism and agriculturally-oriented industries, with occasional requirements identified in the areas of marine electronics and military supply.

United States Department of Defense Agencies — Under the terms of the Canada-U.S. Defence Production Sharing Agreement, Canadian firms are entitled to compete on an equal basis with their American counterparts. Although certain U.S. socio-economic enhancement programs have increasingly superseded

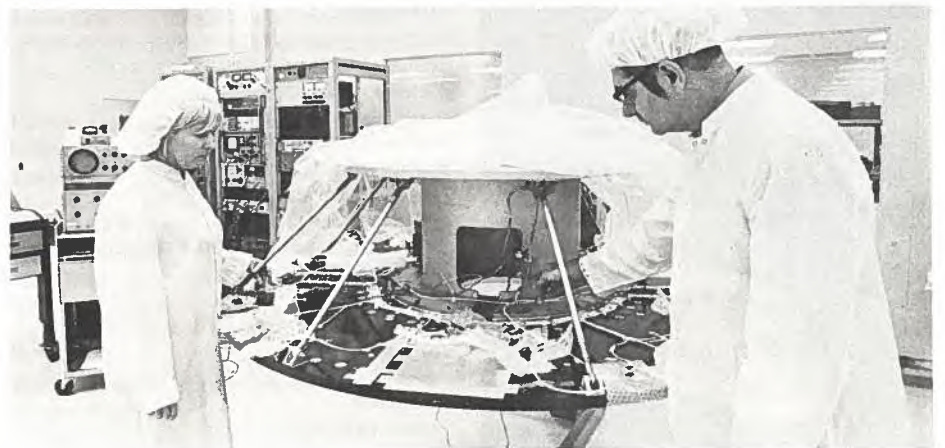
available contract competitions to Canadian companies, attentive and responsive efforts in identifying those military procurements not set aside can still justify a successful sales effort. This is a particularly good opportunity to utilize a locally-based manufacturer's representative or a good bid reporting service effectively.

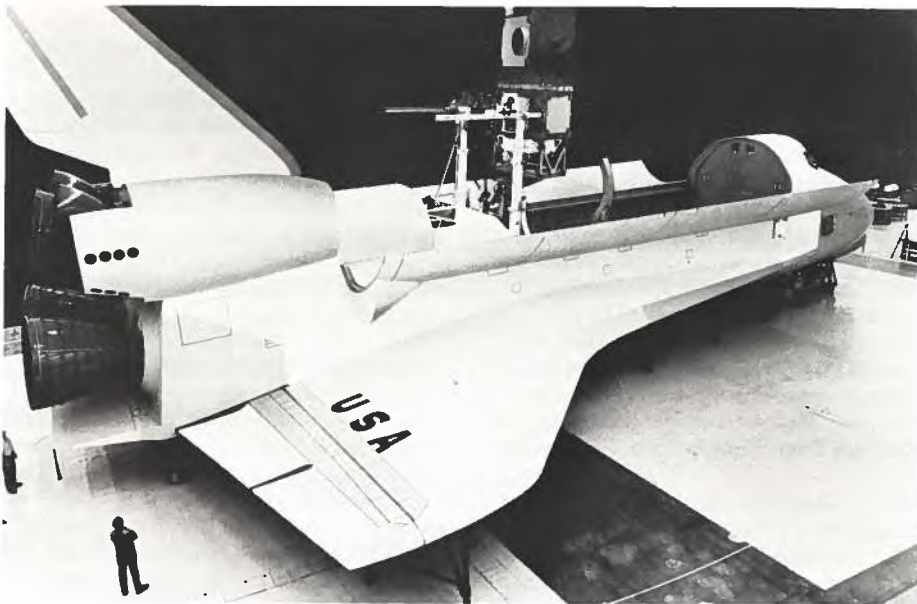
Several military supply/logistics centers are located in the San Francisco post area of responsibility, with three being of particular importance. First, the Sacramento Air Logistics Center has primary support responsibility for the F-111 and A-10 aircraft, as well as serving as a primary electronics systems and components procurement center. Next, the Oakland Naval Supply Center is the primary supply center for the U.S. Navy fleet in the Western Pacific region, with associated agencies located at the Mare Island Naval Facility (Calif.) for nuclear submarine requirements, and the Pearl Harbor Naval Supply Center (Hawaii) for home-port servicing requirements. Third, the Ogden Air Logistics Center (Utah) has responsibility for primary support of the F-4 and the F-16 aircraft, as well as specific responsibility for landing gear component overhaul and supply for most USAF aircraft. Additional installations with military procurement activity include the Sacramento Army Depot (specified electronic components, and ground communications systems), Rocky Mountain Arsenal (ordnance and ordnance storage equipment), and Sharpe Army Depot (logistics center for Army common-item supply network).

As with most U.S. military procurement centers, the key to successful participation at these installations is persistent scanning of bid opportunities, establishing your firm on the appropriate bidders list and/or qualified product listing, and prompt response to all applicable RFPs and RFQs. The San Francisco post can provide the necessary applications for each of the appropriate installations and would welcome questions concerning potential sales and contracting opportunities.

ous growth area is already evident in Colorado Springs, at the easternmost stretch of the San Francisco post territory.

Colorado — The range of industrial activity here has traditionally centered around the energy and mining sectors, supplementing the primary base in agriculture. The Colorado Springs area, however, has recently established itself as a major branch facility area with the establishment of 14 major plants which, significantly, generally act autonomously in their procurement activities. Continued growth in the industry and attractive industrial conditions in the area suggest that development will continue, spurred on by the establishment of the new USAF





Doing Business in the Local High Tech Market

• Recognizing that circumstances vary, most Canadian participants in the local high technology marketplace have nonetheless found it necessary to establish a local sales presence to be effective and successful. Most often this has been in the form of a manufacturer's representative, but occasionally large sales volume prospects, unique service requirements, and/or incompatible commission structures have warranted establishing a local office. Consideration should be given to just how much of your company's marketing resources you will need to expend.

• If bidding on products or services requiring military specifications, have

your certification process complete and documented prior to active entry into the competition. Prime contractors are not receptive to "in-process" claims when they are facing a short suspense material requirement, which is about 90 per cent of the time.

• If bidding on a DOD contract directly from one of the military procurement agencies, ensure that your company is registered and current with the Canadian Commercial Corporation (CCC).^{*} The CCC acts as the contractual designee for all DOD agency direct contracts in excess of \$10,000. Making certain that your application with the CCC is complete prior to bid award will expedite administration of the contract and the greater likelihood of follow-on business.

• **PERSISTENCE** — The most frequent complaint heard in the field is the infrequent contact many firms maintain with the prime contractor in trying to identify prospective program opportunities. Recognizing that the cost of long distance marketing can be substantial and perhaps unacceptable, particularly when the prospects for success are somewhat dim, allotting sufficient resources to establish your accessibility is imperative if you hope to be a credible competitor.

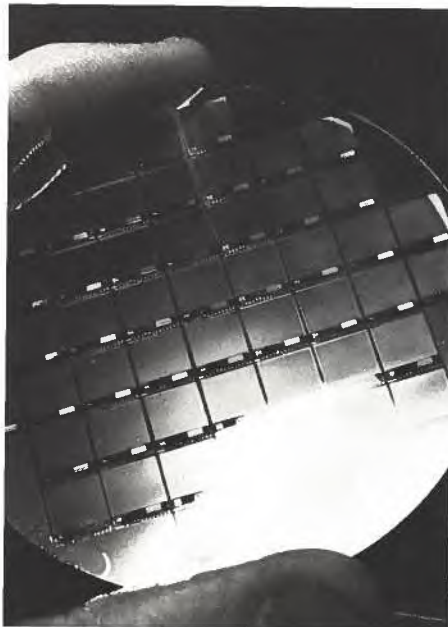
• Make every effort to get established at the very earliest stages of the production development program (this is particularly critical on contracts of DOD origination). Many successful vendors regularly minimize the profit margins on the first runs of a projected long term program in anticipation of recompensation over the long run course of the contract through economies of scale and improved production techniques.

• Finally, use your government trade offices to help identify new market potential or to evaluate current program status on government contracts. The posts can offer a low cost augmentation to your marketing resources and assist you in determining the form and extent of your entry into the market.

**Commercial Division
Canadian Consulate General**
One Maritime Plaza
San Francisco, CA 84111
Tel: (415) 981-2670

***See article on CCC page 17 of this issue.**

Significant Prime Contractors in the San Francisco Post Territory



**Acurex/Aerotherm Division
Mountain View, CA**

Space gear and equipment, gasifiers, data processors, and R&D.

**Addington Laboratories, Inc.
Sunnyvale, CA**

Microwave components, solid state products, cables and connectors, multiplexers, filters.

**Aertech Industries
Sunnyvale, CA**

Telecommunication devices.

**Allied Engineering and Production Corp.
Alameda, CA**

Missile components, hydraulic and vacuum systems.

**A.C. Ball
Sunnyvale, CA**

Precision machining for the U.S. military.

**California Microwave
Sunnyvale, CA**

Communication and radar systems.

**Carco Electronics
Menlo Park, CA**

Flight motion equipment, simulation equipment, radome radar antennas, electrical test equipment.

**Composite Technology
Stockton, CA**

Honeycomb structures and helicopter blades repair.

**Control Analysis Corp.
Palo Alto, CA**

Electronic equipment and R&D.

**Control Data Corp.
Palo Alto, CA**

Electronics, manufacturing data processing equipment and systems.

Decom, Inc.
Belmont, CA
Communications systems.

Delmo Victor Co.
Belmont, CA
Antennas, TV Systems, communications and radar systems.

De Laval Turbine, Inc.
Burlingame, CA
Turbine engines and related parts.

Dest Data Corp.
Sunnyvale, CA
Electro optical equipment and measurement systems.

Doren Co.
Oakland, CA
Marine propellers and accessories.

Echo Science Corp.
Mountain View, CA
Video and digital equipment.

Eimac Division of Varian
San Carlos, CA
Electron tubes and TWT.

ESI Electronic Corp
San Francisco, CA
Electrical manufacturer.

ESL, Inc.
Sunnyvale, CA
Electronic and electromagnetic devices.

Feirchild Camera & Instrument
Mountain View, CA
Microwave, camera and semiconductor equipment.

Fairchild Semiconductor
San Rafael, CA
Communications equipment.

FMC Corp., Ordnance Division
San Jose, CA
Armored tracked vehicles, personnel carriers.

Ford Aerospace and Communications
Palo Alto, CA
Satellite and antenna systems, communications, computers, precision measuring antennas.

General Electric Co.
Pleasanton, CA
Nuclear energy R&D, radioactive products.

Global Associates
Oakland, CA
Logistics supporters for overseas DOD installations.

GTE Sylvania
Mountain View, CA
Communications equipment, data storages, R&D.

Kaiser Aerospace & Electronics
San Leandro, CA
Machining, missile components, electronics.

Litton Industries
San Carlos, CA
Microwave tubes, display and accessory equipment.

McCormick Selph
Hollister, CA
Explosive ordnance and atomic weapons components.

Parsons Corps. of California
Stockton, CA
Tow targets, bonded parts and fiberglass products.

Precision Data, Inc.
Mountain View, CA
Magnetic tape recorders of military ASW applicators, and industrial/medical instruments.

Randtron Systems
Menlo Park, CA
Antenna and electrical systems.

Reytheon Co.
Menlo Park, CA
Radio sets and tubes.

Reese Mfg.
Sacramento, CA
Assemblies and mechanical systems for the aircraft industry.

Singer Simulation Products Div.
Sunnyvale, CA
Training simulators for aircraft and low light TV and R&D.

Systron Donner
Concord, CA
Fire protection and detection systems, fire control and missile components.

Space Microwave Labs
Santa Rosa, CA
Electronic communication components.

Varian Associates
Palo Alto, CA
Klystron tubes, analytical instruments, recorders oscillators, spectrometers, transmitters.

United Technologies- Chem. Sys. Div.
Sunnyvale, CA
Missile boosters and components.

Watkins Johnson
Palo Alto, CA
Microwave electron devices and systems TWT' oscillators, communication equipment.

Westinghouse — Marine Division
Sunnyvale, CA
Machining, missile canisters

COLORADO & UTAH

Ampex Corp.
Colorado Spgs.
Audio and video electronic components.

Digital Equipment Corp.
Colorado Spgs..
Computer disks.

Ford Aerospace and Communications
Colorado Spgs.
Command and control systems.

Hewlett-Packard Co.
Colorado Spgs.
Oscilloscopes, display, logic analysers.

Honeywell
Colorado Spgs.
Solid state electronic devices.

Inmos Corp.
Colorado Spgs.
MOS/LSI microcircuits.

Kaman Sciences
Colorado Spgs.
Scientific instruments, R&D.

Litton Ind. — Data Systems Div.
Colorado Spgs.
Communication and air defence systems.

Mostek
Colorado Spgs.
Semiconductors.

Rolm Corp.
Colorado Spgs.
Computerized telephone systems.

TRW Colorado Electronics Inc.
Colorado Spgs.
Space, avionic, ground electronics, communications.

Martin Marietta — Aerospace Systems
Denver
Missiles, space satellite systems.

Sundstrand
Denver
Machining for aircraft industry.

Ball Bros Aerospace
Boulder
Satellite payload systems.

Storage Technology
Louisville
Data storage systems, peripherals.

Sperry — Defense Systems Div.
Salt Lake City, UT
Classified military electronics.

National Semiconductor
Salt Lake City, UT
Semiconductor manufacturing.

Thiokol
Magna, UT
Missile booster rockets, components.

The Canadian Medical Industry — Cracking the 900 Million Dollar Nest Egg

by Shirley Plowman

You'd think the country that developed insulin, the pacemaker, the artificial kidney, the electron microscope and many more life-saving innovations would have little need to import products in the health care field.

Wrong!

At this moment, \$900,000,000 worth of health care products bought in Canada are not made in Canada. And a large part of them should be, and could be.

Canada imports disposable clothing, single-use syringes, thermometers and a horde of other simple health products that could easily be manufactured here.

Along with the \$900,000,000 that Canada sends winging out of the country go about 13,500 medical and health care related jobs. Jobs that could remain in Canada for the benefit of Canadians looking for work in the lucrative health product field.

Canada's total medical and health care market is estimated at \$1.2 billion, 75 per cent of which will go to buy imports.

"It's a chicken and egg situation," says Harry Nellis, chairman of a special federal-provincial organizing committee on health care products and a staff member of the Ontario Ministry of Industry and Tourism. "Manufacturers say hospitals prefer foreign products and that a medical devices industry won't grow until it's supported. Medical buyers insist they

would like to buy Canadian but claim the items are either too costly or non-existent."

So the chicken. And the egg.

Despite obvious differences in outlooks, both sides appear to be interested in the same goals. Hospitals would like to help support a strong domestic market; governments don't want to strong arm anyone into buying Canadian simply because it happens to be manufactured here.

Those pushing for home grown medical products ask skeptics to look at what the falling Canadian dollar and the relative rise of other countries' currency has done for Canada's price position in the last few years. A look at the price lists of domestic manufacturers, they say, will probably reveal bargains one would scarcely suspect.

Most Canadian companies, however, cannot afford the investment in research and development and market research, says Raymond Grunwald, president of Précis Surgical in St. Laurent, Quebec. "I believe that government on all levels must be an active partner in establishing long-term industrial strategies and the necessary infrastructure to support them. In turn that will permit selected technologies to be recipients of capital and labour resources in order that the nation's accounts will reflect high levels of value and productivity."

Since the completion of a comprehensive Health Care Products Sector study published by IT&C in February 1980, the federal government and the provinces were very much aware of the untapped medical products field. The health care market was singled out as a prime target for a joint federal-provincial initiative to increase the level of Canadian manufacturing.

As a start, the provinces had agreed last year to try to reduce the amount of medical imports by 10 per cent during 1981.

The problem was already pinpointed. The solution would take a little time. An obvious first step was to bring all the interested parties together under one roof to see what exactly was being imported and

what they could do about it.

The industry departments of all 10 provinces, along with seven federal departments, got together to put on the show — a governmental first.

It was the task of IT&C to coordinate the efforts of other departments and bodies such as National Revenue, Supply and Services, the Federal Business Development Bank, the National Research Council, the Department of Health and Welfare, National Defence and Veterans' Affairs.

Hospital purchasing agents were approached and told about competitive Canadian suppliers. Samples of a large volume of imported goods were collected, ranging from surgical masks to clamps. Importers and foreign companies were contacted, candidly told about the show and got the message that it might be a good idea to open a plant in Canada if they hoped to do business here. Then all interested parties were invited to Winnipeg where the Health Products Opportunities Show (HPOS) would be held at the Winnipeg Convention Centre on April 1 and 2, 1981.

Sponsored by the federal and provincial governments, the purpose of the show was to help the Canadian health care products industry increase its level of manufacturing.

Since the aim was to identify manufacturing opportunities in product areas now supplied by imports, the show featured only imported medical products. About 10,000 products and components were on display, selected by Canadian medical professionals who had previously expressed an interest in obtaining them in Canada.

Along with the exhibits, an audio-visual "awareness program" was launched to sensitize hospitals to the Canadian sources of health care supplies.

IT&C's product sourcing directory "Interim Listing of Made in Canada Health Care Products" was also on hand to coincide with the show's opening. The directory was a valuable fount of information on Canadian sources of these products.

Said IT&C Minister Herb Gray at the show's opening: "This occasion is

an excellent example of governments and industry working together to increase employment, acquaint Canadian manufacturers with the opportunities available in this sector of industry, and help ease inflationary trends within the economy."

He praised the ten provincial governments, the federal government and the Canadian Association of Manufacturers of Medical Devices for their success in bringing buyers and manufacturers together to see the exhibits and determine those that could be made in Canada.

The show was, in the words of the organizers, "a smash hit." About 1,000 manufacturing representatives came to view the exhibits and to make prospective deals. Ontario's Ministry of Health alone signed 48 new Canadian suppliers.

"The market is almost endless," said Saskatchewan Industry and Commerce Minister Norman Vicker. "For example, a manufacturer who makes hose pipe could also make medical tubing; or a clothing manufacturer, surgical gowns."

The show was both an eye-opener and a morale booster for many companies.

"It's unreal! I think what we're seeing here is the embryo of a Canadian medical industry," enthused James Hudson, president of Northern Medical Industries Ltd., Mississauga, Ontario. "Within the first couple of hours, I developed enough positive commitments that if even half of them were to come to fruition, my plant would be running five, possibly six days a week, on three shifts!"

Government officials believe that concerted effort by Canadian purchasers and manufacturers can result in a significant reduction of the current trade deficit in health care products.

"There is no doubt that Canadian manufacturers can win large orders for everything from hospital clothing to high technology instruments," says Harry Nellis, who chaired the federal-provincial committee for the show. "We have already demonstrated that we have the expertise."

George Woyzbun, Chief of IT&C's Health Care Products Division, also

believes that there are many opportunities to manufacture these products in Canada, but cautions that "for many products, the Canadian market is not large enough to support manufacturing on an economic basis. For such products Canadian manufacturers must consider producing for exports, as well as for the domestic market. We are prepared to assist companies in initiating export programs."

Manitoba's Economic Development Minister J. Frank Johnston said the province will aid manufacturers who feel they can produce medical items now imported. "Shows such as this are needed to help smaller manufacturers find markets for their products because they often don't have the resources to do the market research available to them through the show."

The Canadian Development Corporation (CDC) has a definite interest in this area and is standing by to assist Canadian companies in the medical products industry. CDC assistance would either consist of

taking equity positions in the established health care product companies to enable them to expand, or by providing start-up and growth equity capital to smaller companies in amounts from \$100,000 to \$1,000,000.

This spirit of enthusiasm and helpfulness seems to sum up the hope generated by the show. Co-operation between government and industry was finally able to do what all the concerned people working in isolation could not do — start to sort out the chicken from the egg — and launch a new and thriving integrated medical products industry.

For further information, please contact:
George Woyzbun
Chemicals Branch (44)
Industry, Trade and Commerce
 235 Queen Street
 Ottawa, Ontario
 K1A 0H5
 Tel: (613) 992-1591

Health Care Contacts

If you have any questions, contact the appropriate government representative:

Newfoundland	Fred Murrin	709 737 2781
Prince Edward Island	Doug Cameron	902 892 7411
Nova Scotia	Alan Millman	902 424 4211
New Brunswick	John Adams	506 453 2790
Quebec	Jacques Marcotte	418 643 2738
Ontario	Harry Nellis	416 965 3560
Canada (Ottawa)	Fred Fiksel	613 992 1591
Manitoba	Reg Ebbeling	204 944 2471
Saskatchewan	Ian Sinclair	306 565 2202
Alberta	George Fontana	403 427 2269
British Columbia	Dean Dring	604 689 4411



Canadian Machinery Industry

Where It Was and Where It's Going

According to a study conducted by IT&C's Machinery Branch, growth of this industry slowed substantially in real terms in 1980 but manufacturers are "reasonably optimistic" about the prospect for growth in 1981. Firms surveyed indicated that unfilled orders at the end of 1980 were up 17 per cent over the same period in 1979. Expectations for 1981 see total production reaching \$9.9 billion.

What Happened in 1980

The Canadian machinery industry continued to grow in 1980 but at a substantially reduced rate. Total industry production reached \$8.8 billion in 1980, an 11 per cent increase over 1979 in current terms but only 1 per cent in real terms after allowing for price inflation in the industry of 10 per cent. Real growth between 1978 and 1979 was 8 per cent.

The industry's growth rate was adversely affected in 1980 by a severe slump in the North American market for agricultural and construction machinery which together recorded a 9 per cent decline in real terms compared to 1979. When the results of these sectors are removed from the data, average real growth for all other sectors was 3 per cent, substantially better than the average for total manufacturing which recorded little or no growth in 1980. Exports continued to

contribute the largest share of the increase reaching close to \$4 billion in 1980, a 16 per cent increase over 1979 in current terms before allowing for the abnormally reduced growth in farm machinery exports.

These results are revealed by a survey of the industry, carried out at the end of 1980, which included manufacturers of resource-based machinery, plant and industrial equipment as well as agricultural equipment producers and manufacturers of mechanical equipment for power generation.

The Canadian market for machinery products continued to grow significantly, reaching \$16.0 billion in 1980, a 13 per cent nominal increase over 1979 due largely to continuing high levels of non-residential capital investment. While Canadian machinery manufacturers increased their shipments to the domestic

market to \$5 billion in 1980 from \$4.6 billion in 1979, imports increased twice as fast to a level of \$11.1 billion to retain a 70 per cent share of this market.

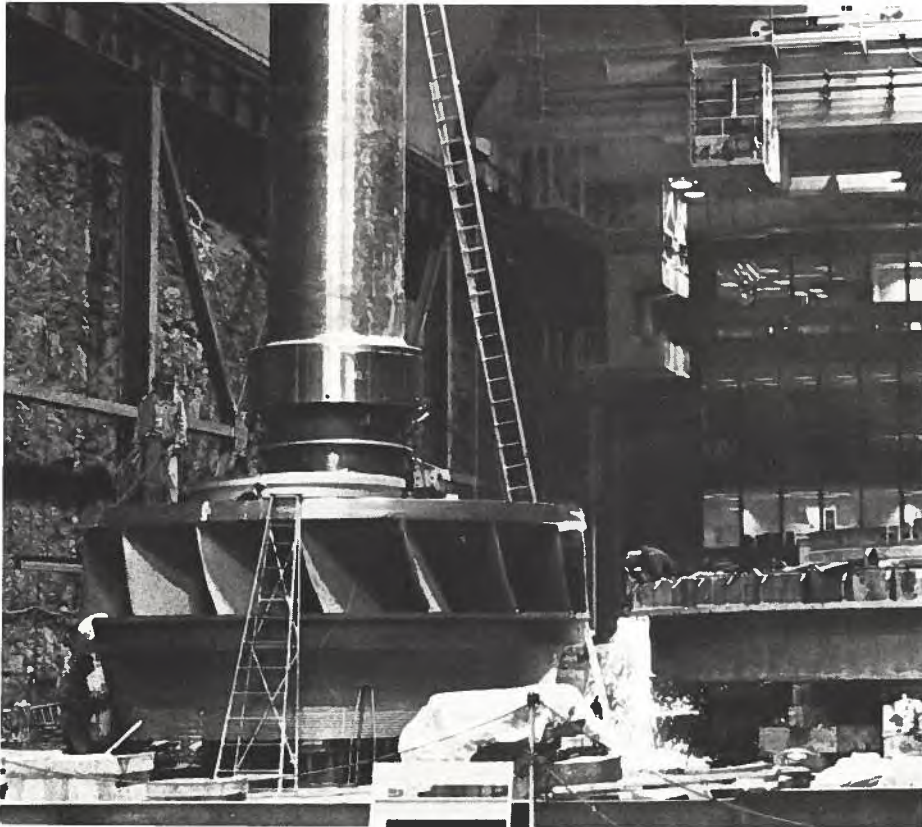
Of 15 major sectors in the industry surveyed, the strongest growth compared to 1979 was experienced in pumps and compressors (34 per cent); rolling mill and metalworking machinery (28 per cent); forestry equipment (21 per cent); mining equipment (18 per cent). Sectors which experienced notably reduced growth in 1980, in addition to farm machinery, included — general purpose industrial equipment and valves (7 per cent); power generation equipment (4 per cent); and construction equipment (3 per cent). All rates expressed in current terms.

Average capacity utilization rate for the machinery industry during the year was 86 per cent, up 4 per cent from 1979. However, some increase in excess capacity was starting to occur in most sectors towards the end of the year. Average employment in the industry as a whole was up 3 per cent in 1980 (not including a drop of 15 per cent in farm machinery), while new investments by machinery and equipment manufacturers equaled \$325 million, up sharply over the \$279 million reported in 1979. The review also indicates that a shortage of skilled manpower continues to be the most serious constraint facing the industry; the cost of financing was also cited as a major problem.

Outlook for 1981

Canadian machinery manufacturers are reasonably optimistic about the prospect for growth in 1981. The firms surveyed have indicated that unfilled orders at the end of 1980 were up 17 per cent over the same period in 1979. They expect production to reach \$9.9 billion in 1981 for a 13 per cent gain over 1980 or approximately 3 per cent in real terms assuming current rates of price increase.

However, there are certain negative factors that may affect the industry's projected performance for 1981. For instance, recently spokesmen for key sectors of the industry have expressed more concern than previously over the short-term impact of the government's energy policies. In particular, it is now believed that some major resource projects which were expected to get underway in 1981 will be further delayed, restraining the outlook for resource-based machinery in particular. In addition, firms report that the sharp curtailment in oil exploration activity in Western Canada with a corresponding increase in activity in the United States can be expected to have a negative overall effect on their operations since exploration and drilling teams tend to obtain much of their needed equipment and services in the local market.



The outlook for capital spending by all sectors of the Canadian economy in 1981, as provided by economic forecasters, is also somewhat mixed. The year-end forecast of the Conference Board in Canada now estimates that real business investment in machinery and equipment in 1981 will be lower by nearly 1 per cent compared to 1980. In addition to reduced investment related to oil and gas noted above, the board estimates that the climate for capital spending in 1981 will be restrained by lower capacity utilization rates and a sharp fall off in corporate profits and cash flow. The capital expenditures survey of 300 of Canada's largest corporations carried out by Industry, Trade and Commerce, however, is considerably more positive. This survey is projecting real increases in capital spending by major corporations in 1981 of between 2 and 3 per cent in real terms, about half that is expected to be realized in 1980 when accounts are complete. It should be noted that these latter estimates were prepared prior to the October 1980 budget. Even more optimistic is a recent survey by Statistics Canada taken after release of the 1980 budget which reveals that capital spending in Canada is expected to rise by 16.6 per cent in current dollars or approximately 6 per cent in real terms in 1981.

SECTOR ANALYSIS (all changes reported are in current dollar terms)

Pumps and Compressors

Canadian manufacturers of pumps and compressor sets recorded strong growth in 1980, up 34 per cent in current terms over 1979 and well ahead of the year-to-year increase between 1978 and 1979 (13 per cent). This increased activity can be traced directly to extensive oil and gas exploration activity in Western Canada and the U.S. and to the sale of gas-driven compression and generating equipment to Algeria and India as well as major equipment sales for a fertilizer plant in Madagascar. It should be noted, however, that activity in this sector tends to involve a considerable volume of assembly work or "packaging" of components and sub-assemblies not available from production in Canada, which leads directly to a concurrent increase in imports in this product area.

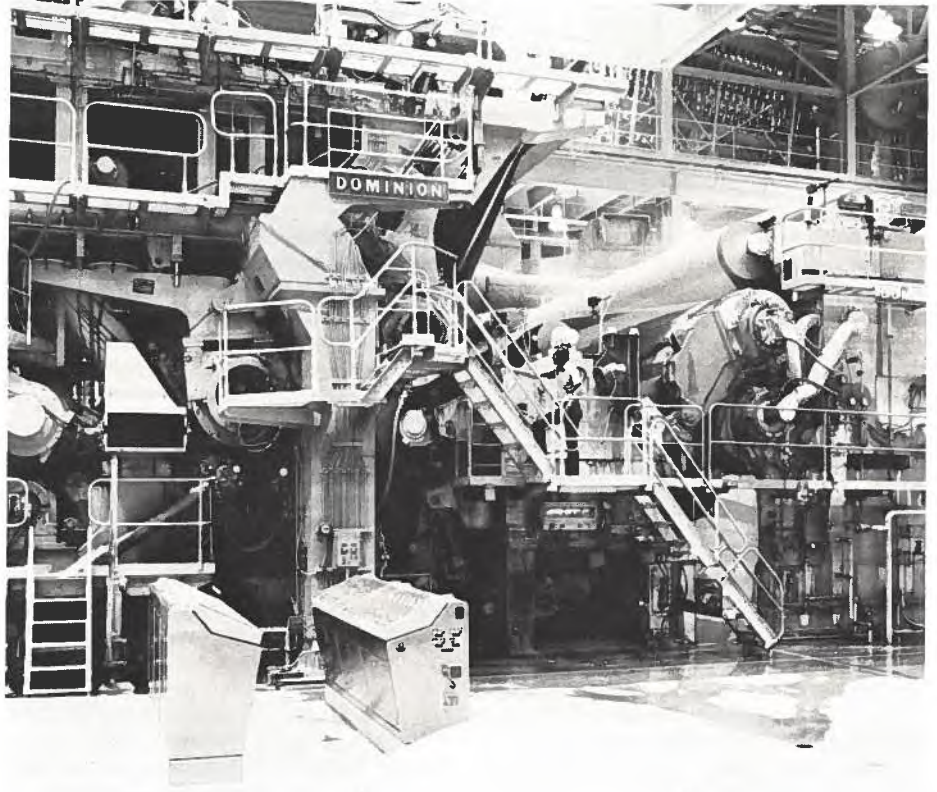
Rolling Mill and Metalworking Equipment

Rolling mill and metalworking equipment production again increased substantially in 1980, recording a growth of 28 per cent over 1979. Particular strength in this sector can be traced to a continuation of the capital spending programs of the automotive companies for new transfer machines in connection with product changeovers (downsizing) and

plant modernization. Partially offsetting this strength, however, was a noticeable slackening in the demand for steel-making equipment reflecting the drop in auto assembly and construction activity.

Forestry Equipment

The forestry equipment sector recorded growth of 21 per cent over the levels achieved in 1979, reflecting increased pulp and paper equipment sales due, in large measure, to the joint DREE/provincial governments-sponsored modernization program in the domestic market. Also, there were several major foreign projects such as the Kwidzyn project in



Poland and the Ruzomberok project in Czechoslovakia as well as two major projects in Argentina. Forest harvesting equipment sales continued to be strong, at least in the first half of 1980 based largely on export sales to the U.S. market for log skidders and forwarders as well as sales to South America and Australia. A particular weak spot in this sector, however, was sawmill equipment which was severely affected throughout the year by the sharp drop in residential construction starts as a result of high interest rates.

Mining Equipment

Production of mining equipment rebounded strongly in 1980 to post an 18 per cent increase over 1979, double the rate experienced between 1978 and 1979. A major influence over this sector was the demand for equipment resulting from domestic coal and non-ferrous metal

projects in British Columbia, Alberta and Saskatchewan, as well as exports of diamond drilling equipment and underground mobile material handling equipment for major projects such as the IMMSA Group project in Mexico and projects in Peru and Chile.

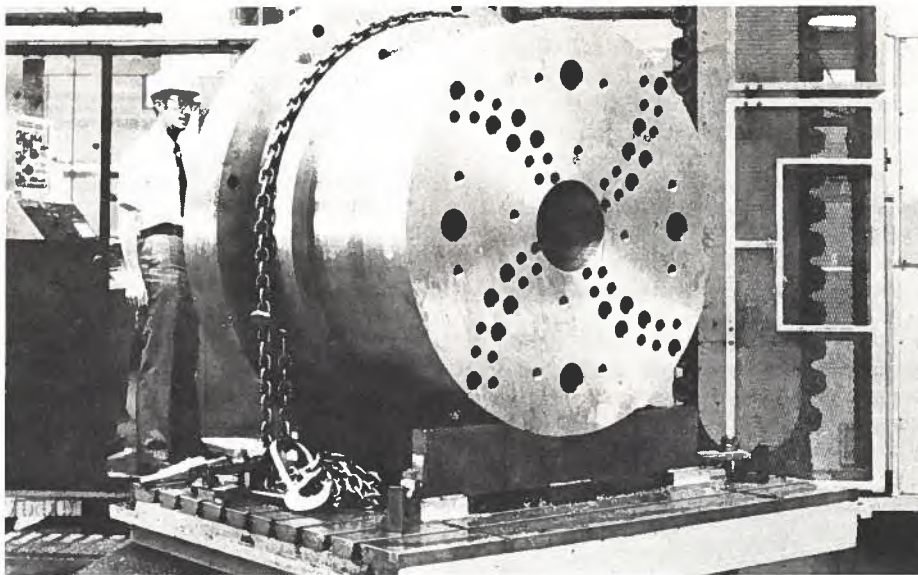
Agricultural Equipment

Production in the farm equipment sector was reduced during the year by a prolonged slump for agricultural equipment which occurred in the North American market primarily as a result of abnormally high interest rates. Output in the sector was further affected by the financial

problems experienced by two major Canadian manufacturers — Massey-Ferguson and White Farm Equipment. The result was no growth in 1980 in current terms (10 per cent reduction in real terms) compared with 16 per cent growth during the previous year. It should be noted, however, that western-based short-line manufacturers did considerably better in 1980 than the full-line firms and the sector as a whole started to recover noticeably towards the end of the year.

Construction Equipment

The construction equipment sector experienced an overall decline in activity of about 3 per cent in 1980 or -7 per cent when measured in real terms. Reduced activity was widespread throughout the sector and reflects the dampening effect of high interest rates on new housing starts and public works budgets.



Service Industries Equipment

An analysis of the several groups making up the service industries equipment sector reveals that, while manufacturers of commercial refrigeration equipment and producers of other items such as automotive services equipment and restaurant equipment achieved growth rates at or above the average for the industry, several groups experienced notably slower growth. In particular, manufacturers of conventional heating equipment were abnormally affected by the trend in the residential market to off-oil conversion while producers of plumbing and hardware and house and garden tools felt the impact of the depressed state of new residential construction.

Exports

In 1980, Canadian machinery manufacturers continued to perform well in export markets, with exports increasing from \$3.4 billion in 1979 to \$3.8 billion, an increase of 11 per cent in current dollar terms when farm machinery is included.

Sales to the U.S. markets, as expected, outpaced all other markets and accounted for more than 75 per cent of exports, but increased sales to Mexico, South America and Eastern Europe were also noted. Products demonstrating above average year-to-year growth in exports included — forestry equipment; mining equipment; oil and gas field equipment; as well as a selected range of household equipment such as garden tools and accessories.

Employment

Employment in the machinery industry declined overall by 6 per cent in 1980 due almost entirely to the sharp reduction in employment in the farm machinery sector. Excluding this sector, average employment for the rest of the industry was up approximately 3 per cent in 1980, compared with 8 per cent in 1979. Employment growth by individual sectors followed closely the trend of production analyzed above. Significantly higher than average employment growth rates

appeared in rolling mill and metalworking equipment (up 12 per cent), pumps and compressors (8 per cent) and mining machinery (6 per cent), while decreased employment was reported by material handling equipment manufacturers (-5 per cent), farm machinery (-15 per cent), construction equipment (-2 per cent), and several areas of service industry equipment which depend on the housing industry such as plumbing and hardware (-2 per cent).

Investment

According to the responses from surveyed firms, the machinery industry undertook substantially increased investments in new plant and equipment in 1980 based largely on improved profit margins and high average capacity utilization rates. These results tend to be confirmed by recent Statistics Canada data which indicate that ongoing and planned investment programs by all machinery manufacturers rose to \$350 million in 1980, up from \$270 million in 1979.

Capacity Utilization

While the average capacity utilization rate for the year was reported at a relatively high 86 per cent, somewhat higher than the overall manufacturing industry average of 83 per cent, this rate dropped off considerably towards the end of the year. For the year as a whole, the mining equipment sector reported the highest capacity utilization (92 per cent), followed by industrial machinery (88 per cent), commercial refrigeration (87 per cent), and forestry equipment and pumps and compressors (83 per cent). Sharp drops in capacity utilization were experienced by construction equipment and agricultural equipment, falling to 79 per cent and 78 per cent respectively. Material handling equipment continued to be troubled by excess capacity reporting 77 per cent capacity utilization at the close of 1980.

Constraints

The most significant constraint to growth and productivity faced by firms in the machinery industry in Canada continues to be a severe shortage of skilled manpower. Fully 73 per cent of the firms contacted listed this as their most troublesome problem. The cost of financing ranked next with surveyed firms as a major difficulty reflecting continued high interest rate levels. Other notable constraints listed included the cost, availability and delivery of material inputs.

W.R. Graham
Planning and Analysis
Machinery Branch
Industry, Trade and Commerce
 Tel: (613) 992-0374



Increased Canadian Exports Aim of Canadian Commercial Corporation

For the past two years, Chris Poole, a Trade Commissioner with the Department of Industry, Trade and Commerce, has been on secondment to the Canadian Commercial Corporation as Vice President (Planning and Liaison). In this article, he explains how the Corporation assists the exporting community.

The CCC: What it is

The Canadian Commercial Corporation (CCC) has been in existence since 1946 but its role in promoting Canadian exports is still not widely understood in the private and public sectors.

Many individuals are surprised when they learn that over the Corporation's 35-year history, it has provided in excess of \$10 billion in goods and services to more than 50 countries and international agencies. What, they ask, does this Crown Corporation provide that suppliers of these goods and services do not?

Some individuals believe that CCC provides financing, others think it provides insurance against the risk of doing business abroad, and still others assume the Corporation has a marketing role and operates a network of salesmen abroad.

Incorrect! The Corporation provides none of these services.

It is not a bank — the Export Development Corporation (EDC) is the Federal Government organization responsible for export financing. Similarly, CCC is not an insurance company (EDC also provides various types of insurance to exporters). To identify foreign market opportunities, CCC often uses the services of the Department of Industry, Trade and Commerce and its trade commissioners abroad. However, the majority of CCC's contracts, about 97 per cent, are a result of enquiries presented directly to the Corporation by foreign governments and international agencies.

CCC's Services

The Corporation's main activity involves tying together the requirements of foreign governments and international agencies with the supply capabilities of Canadian producers of goods and services. In this contracting role, the Corporation is similar to the British Crown Agents. However, the important difference is that CCC acts as principal or prime contractor in all transactions whereas the Crown Agents have, in recent years, reverted to a traditional agency role, rather than acting as principal.

The services of the Corporation are generally used when a foreign government or international agency requires or prefers to contract on a **government-to-**

government basis, or when a Canadian supplier believes this arrangement can help him obtain a contract.

These services include:

- **helping foreign customers find Canadian sources of goods and services, and obtaining bid opportunities for Canadian suppliers;**
- **contracting with foreign governments and international agencies on behalf of Canadian suppliers (CCC acts as a prime contractor with a commitment to deliver a product or a service to a foreign customer, matched by a back-to-back obligation from a Canadian supplier);**
- **following through on all aspects of the sale, including:**
 - a. **inspection and acceptance**
 - b. **shipping services (e.g. consolidating multiple-item shipments, arranging packaging, transportation, documentation and insurance)**
 - c. **paying suppliers and collecting from customers (often providing some short-term credits).**

The main focus of the Corporation's business has, over the years, consisted of contracts for high technology, defence and defence-related equipment, primarily to the United States. Over the past five years, 1976-80, sales to the United States amounted to about 60 per cent of the total value of contracts. While the U.S. market is expected to retain its predominant position, a number of steps have been taken to increase the number of foreign governments with which the Corporation does business. It now receives some 10,000 enquiries each year from more than 90 foreign governments and international agencies.

At any one time, it has 2,500 to 3,000 active contracts with more than 400 Canadian suppliers. These include trading houses as well as manufacturers and suppliers of engineering and construction services. Although an article in the December 1980 issue of **Canada Commerce**, "Using a Trading House," suggested the contrary, the Corporation encourages trading houses to use its services when they feel it is in their interest to

do so. If, for example, a foreign buyer requires a **government-to-government** contract, the trading house would use CCC as the mechanism to comply with the customer's requirement.

The Corporation's contracts cover a broad spectrum of Canadian goods and services, from relatively small individual items to major capital projects ranging in value from a few thousand dollars to \$50 million. Many involve high-technology equipment and systems recently developed by Canadian firms. Total annual-export sales are expected to exceed \$400 million this year.

Export Initiatives

In most cases, CCC receives invitations to bid from foreign-government departments or agencies and international organizations. Where a bid requires obtaining equipment from a number of suppliers, the Corporation acts as a packager, bringing together their quotations into a single bid to meet the foreign customer's requirement. As well, Canadian firms themselves may identify **government-to-government** requirements in a particular market and contact CCC directly. This approach by the firms is particularly applicable in the case of major capital projects.

It has 2,500 to 3,000 active contracts with more than 400 Canadian suppliers.

It is obvious that CCC cannot operate independently of Canadian suppliers of products and services; consequently, it is not in competition with the private sector. Its role is to provide exporters with a government-to-government contract only when this type of arrangement is requested by the foreign customer, or if a Canadian exporter believes it will help him conclude a contract. CCC will not participate if it becomes apparent that Canadian firms are, on their own, pursuing a particular export opportunity. The overall objective, not only of the Corporation but indeed of both the private and public sectors, is to increase Canadian exports. The Canadian Commercial Corporation provides one useful way to achieve this end.

The Corporation welcomes your enquiries. Additional information can be obtained by writing to:

Canadian Commercial Corporation
112 Kent Street — 17th Floor
Place de Ville — Tower "B"
Ottawa, Ontario
K1A 1E9
Telephone: (613) 996-0034
Telex: 053-4359

Economists' Corner

Wage Compensation Levels — International Comparisons Show Canada Now Low Among Industrial Countries

In dealing with the competitive position of Canadian manufacturing in international markets one is often confronted with data dealing with the **rate** of change in wages, exchange rates, unit labour costs and the like. It is often difficult, however, to get a useful bearing on the relative **levels** involved. The latter should be a key element in making international comparisons of competitive positions in industrial countries.

The United States Department of Labor has for some time compiled data from the major industrial countries on wage compensation **levels** of production workers in manufacturing. The data are especially useful when converted to a common base, i.e. U.S. dollars, which reflects major currency re-alignments.

It should be noted that the term "wage compensation" is much broader than the usual concept of hourly earnings in manufacturing. It includes not only the **direct** payments made by the employer to the worker but also includes employer expenditures for pensions, insurance programs, etc. Compensation here also includes other significant taxes on payrolls that are regarded as labour costs.

The tables which follow attempt to highlight the major trends in wage compensation levels in 10 major industrial countries in the period 1960 to 1980.

In Table 1, Canadian wage compensation for production workers in Canadian manufacturing in 1980 (expressed in U.S. dollars) was estimated at \$9.06. This, however, was lower than hourly wage compensation in six other industrial countries including the U.S., Belgium, Germany, the Netherlands, Sweden, and France where comparable wage compensation ranged from \$9.46 upward to \$13.18 an hour. At the same time, wage compensation levels in Italy were virtually the same as in Canada.

Table 2 places the trend in hourly wage compensation in even better perspective by relating all other wage levels to those in Canada. In 1960, 1965 and 1970 Canada ranked second only to the United States in paying the highest levels of compensation to its production workers (in U.S. dollars).

In 1960, countries such as Japan paid their workers only one-eighth of the "wage compensation package" paid to Canadian workers and most major western European countries paid their workers from a third to a half of Canadian manufacturing wages when total benefits are considered.

The recent picture is greatly altered. It is estimated that in 1980, countries such as Belgium, Germany, the Netherlands and Sweden incurred labour costs in manufacturing ranging from one-third to

nearly one-half higher than those paid in Canada. In 1980 only two countries, Britain and Japan out of the 10 major industrial countries had wage compensation levels in manufacturing which were significantly below those in Canada.

In addition, it may be noted that the substantial gap between wage compensation levels in Canadian and American manufacturing of the early 1960s had been all but eliminated in 1975. However, more recently, mainly because of the lower valued Canadian dollar, the traditional gap has been restored. As Table 2 indicates, in 1980 wage compensation levels in U.S. manufacturing were about 9 per cent higher than in Canada. This is lower than the traditional gap of the 1960s and early 1970s but higher than in the period 1975-77. In fact in 1976, Canadian wages had risen above those in the U.S. for the first time.

Table 3 highlights a factor that may not be known generally: Canadian employers encounter a significantly lower burden of additional compensation over and above that of **direct** hourly wages paid to their production workers than do most industrial countries, the only exception being Japan. Supplementary compensation in the U.K. is also reasonably similar to that in Canada.

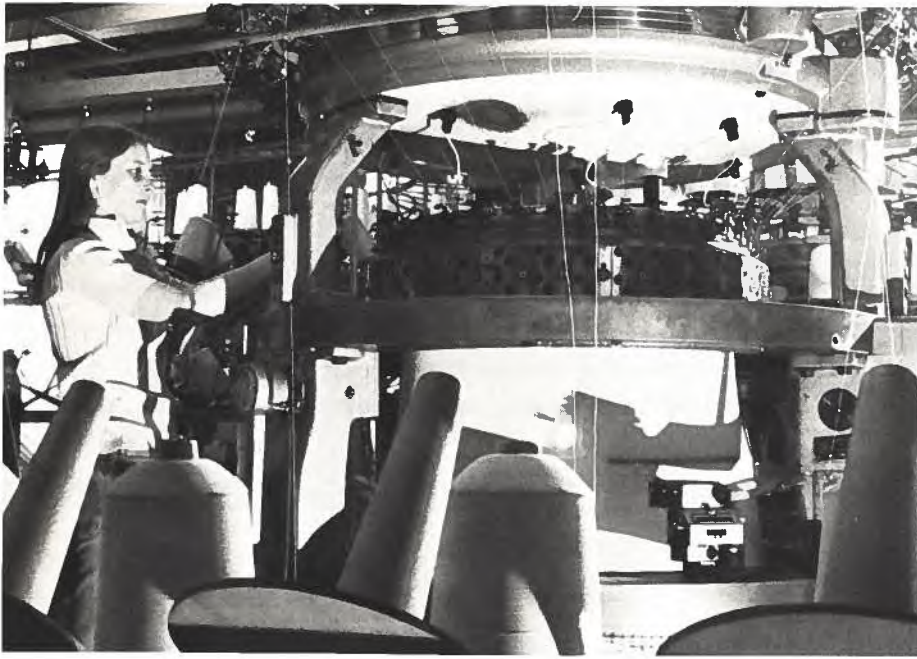
It is estimated that the ratio of additional compensation to direct hourly earnings in Canadian manufacturing in 1980 was about 30 per cent. This compares with about 36 per cent in the United States in the same year and upwards of 63-97 per cent in countries such as Germany, Belgium, France, Italy, Sweden and the Netherlands.

This differential, therefore, is one of the important factors (apart from exchange rate re-alignments) which is currently keeping Canadian wage compensation levels in manufacturing down in comparison with many major industrial countries.

As matters stand it would appear that Japan is no longer the **extremely** low wage country it was in the early 1960s. However, Japanese wage compensation levels in 1980 were still only about two-thirds the level of those in Canada, a fact which may explain the continued competitiveness of Japanese goods in the EEC, U.S. and Canadian markets.

It is important to note that these comparisons relate only to wage compensation levels and do not include comparisons of productivity levels. The latter are much more difficult to compare internationally, but obviously are important in comparing unit labour costs.





Productivity in Canadian manufacturing (output per man-hour) grew at an average annual rate of 3.7 per cent for the entire period 1961-80, a rate which is significantly higher than that for the United States. However, manufacturing productivity in Canada slowed appreciably in the 1970s averaging only 2.4 per cent a year. This deceleration in manufacturing productivity, however, is common to all the major industrial economies.

The foregoing international comparisons do not in any way reflect any normative conclusions as to whether Canadian

manufacturing wages are either high or low in an absolute sense as far as the Canadian economy is concerned. In particular it should be emphasized that the market exchange rates used in converting national currencies to U.S. dollars do not necessarily reflect the relative purchasing power of the various currencies. As a consequence, it should not be concluded that the individual standard of living in some of the Western European countries is significantly higher than in Canada because their wage compensation levels there are now higher in U.S. dollars.

Nevertheless, the substantially lower relative wage levels in Canadian manufacturing coupled with a definite advantage in availability of energy at lower cost, no doubt help explain the sharply improved merchandise trade performance for Canada in 1980, particularly with regard to the countries of the EEC. Moreover, this has implications not only in direct sales but also for Canada's ability to compete against the products of such OECD countries in the key United States market.

A word of caution is in order, insofar as the competitive position of Canadian manufactured goods vis-à-vis some of the more advanced developing countries is concerned. As indicated in Table 4, manufacturing wage compensation levels in countries such as Mexico, Brazil, Korea, Hong Kong, and Taiwan range between one-eighth to about one-third of those in Canada when expressed in United States dollars. By combining advanced technology with relatively low absolute wage levels such countries have become highly successful in penetrating the markets of the more mature industrialized economies. Their degree of success is exemplified by the fact that both the United States and the EEC are now in the process of dismantling some of the special tariff preferences accorded to such countries.

C. Schwartz
Economic Intelligence Branch
Economic Policy and Analysis
Industry, Trade and Commerce
 Tel: (613) 995-2785

TABLE 1: ESTIMATED HOURLY COMPENSATION OF PRODUCTION WORKERS IN MANUFACTURING IN TEN INDUSTRIAL COUNTRIES IN U.S. DOLLARS 1960-1980

Country	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979*	1980**
U.S.	2.66	3.14	4.18	4.49	4.84	5.26	5.75	6.35	6.92	7.59	8.31	9.06	9.92
Belgium	.82	1.30	2.07	2.45	3.18	4.22	5.17	6.60	7.02	8.38	10.18	11.91	13.18
CANADA	2.13	2.28	3.46	3.91	4.31	4.66	5.45	6.11	7.20	7.55	7.68	8.21	9.06
France	.83	1.24	1.74	1.95	2.37	3.11	3.45	4.63	4.83	5.42	6.70	8.11	9.46
Germany	.85	1.41	2.35	2.78	3.37	4.60	5.41	6.24	6.57	7.70	9.43	10.99	11.94
Italy	.62	1.12	1.76	2.12	2.57	3.20	3.66	4.65	4.42	5.13	6.18	7.54	9.01
Netherlands	.68	1.24	2.14	2.58	3.16	4.33	5.40	6.60	6.99	8.11	9.84	11.30	12.18
Sweden	1.20	1.87	2.93	3.23	4.03	4.93	5.63	7.18	8.21	8.85	9.65	11.33	12.60
U.K.	.83	1.15	1.48	1.73	2.03	2.27	2.60	3.27	3.12	3.35	4.26	5.44	7.07
Japan	.26	.48	.99	1.18	1.58	2.19	2.67	3.05	3.30	4.03	5.54	5.59	5.88

* Preliminary

**Provisional

Source: Unpublished data. U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, March, 1981.

Note: Total hourly compensation includes all direct payments made to the worker (pay for time worked, pay for vacations and other leave, all bonuses and pay in kind **before** payroll deductions of any kind). It **also includes** "fringe benefits" such as employer expenditures for social security, insurance, etc. The information is derived from periodic labour cost surveys pro-rated for intervening years. Small differences in compensation levels should not be considered significant. Total compensation is computed per hour worked.

TABLE 2: ESTIMATED COMPENSATION PER HOUR WORKED OF PRODUCTION WORKERS IN MANUFACTURING IN TEN INDUSTRIAL COUNTRIES (U.S. DOLLARS) 1960-1980
CANADA = 100

COUNTRY	1960	RANK	1965	RANK	1970	RANK	1975	RANK	1978	RANK	Preliminary 1979	RANK	Provisional Year 1980	RANK
United States	125	1	138	1	121	1	104	4	108	5	110	5	109	5
Belgium	38	5	57	5	60	6	108	3	133	1	145	1	145	1
CANADA	100	2	100	2	100	2	100	6	100	6	100	7	100	8
France	39	5	54	6	50	8	76	8	87	7	99	6	104	6
Germany	40	4	62	4	68	4	102	5	123	4	134	4	132	4
Italy	29	9	49	9	51	7	76	7	80	8	92	8	99	7
Netherlands	32	8	54	6	62	5	108	2	128	2	138	3	134	3
Sweden	56	3	82	3	85	3	118	1	126	3	138	2	139	2
U.K.	39	5	50	8	43	9	54	9	55	10	66	10	78	9
Japan	12	10	21	10	29	10	50	10	72	9	68	9	65	10

Source: Based on unpublished data of the U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, March, 1981.

TABLE 3: RATIO OF ADDITIONAL COMPENSATION TO DIRECT HOURLY EARNINGS OF PRODUCTION WORKERS IN MANUFACTURING IN TEN COUNTRIES¹ PER CENT

	1960	1965	1970	1975	1979	1980
United States	17.9	20.3	24.7	31.4	35.5	36.4
Belgium	38.9	47.9	56.2	68.3	72.1	72.4
CANADA	15.4	16.2	19.8	22.8	29.2	30.1
France	54.5	62.0	60.3	70.9	79.6	80.6
Germany	35.0	36.5	43.1	57.3	62.3	63.4
Italy	70.3	75.9	79.2	99.4	96.0	97.0
Netherlands	38.5*	43.8*	56.7*	70.0*	72.1*	73.6*
Sweden	16.5	22.7	26.5	45.4	61.3	63.0
U.K.	10.9	13.3	15.0	23.9	30.0	31.7
Japan	12.6*	13.1*	13.2*	14.3*	18.8*	20.0*

Note: Data for 1979 are preliminary estimates. The estimates for 1980 are provisional.

* All employees

¹ Those ratios are in local currencies

Source: Unpublished data of the U.S. Department of Labor, *op. cit.*, March, 1981.

TABLE 4: ESTIMATED COMPENSATION PER HOUR WORKED OF PRODUCTION WORKERS IN MANUFACTURING INDUSTRIES IN CANADA COMPARED WITH MEXICO, BRAZIL, KOREA, HONG KONG & TAIWAN 1975-1980 IN U.S. DOLLARS

COUNTRY	1975	1976	1977	1978	Preliminary 1979	Provisional 1980
CANADA	6.11	7.20	7.55	7.68	8.21	9.06
Mexico	1.89	1.95	1.75	2.00	2.31	2.76
Brazil	1.13	1.29	1.46	1.67	1.73	n/a
Korea	.37	.47	.63	.85	1.11	1.10
Hong Kong	—	—	—	1.13	1.25	1.51
Taiwan	—	—	—	.80	1.01	1.25

Source: Based on unpublished data compiled by the U.S. Department of Labor, March, 1981.

When it comes to sharing the risk of entering new export markets, IT&C's Program for Export Market Development (PEMD) helps to finance the project. It's not everyday, however, that an opportunity exists to participate in a venture that sees eight Canadian horses being transported almost 5,000 miles from Alberta to West Germany. When such a project has been well researched, organized and presented, and the market potential thoroughly studied, IT&C can usually be relied on for assistance. All these factors help reduce the risk and raise the chances of success. In fact, in this case the entire venture just seemed to make. . . .

Plain Horse Sense!

by Don Wight



Willomar's Magic Moment is one of eight horses which travelled from Alberta to Essen, West Germany to participate in Equitana 81.

That's what the Federal Department of Industry, Trade and Commerce and the Province of Alberta thought — and they were proved correct — with their recent involvement in Equitana 81.

Equitana — The International Exhibition for Equestrian Sport, Leisure Riding and Horse Keeping in Europe — is a trade fair which, since its inception in 1971, has been held once every two years in Essen, West Germany.

This, its sixth year, marks the first time Canada/Alberta participated. It is also considered to be the first time Industry, Trade and Commerce's Program for Export Market Development (PEMD) has been partner to such an unusual venture.

Together with the Alberta Department of Agriculture, PEMD co-sponsored and helped finance the four Alberta groups which participated in Equitana 81.

Project officer Clair Merkley and PEMD co-ordinator Allan Anderson agreed: "There is no Canadian precedent for this type of activity."

And quite a precedent it was, in more ways than one.

To begin with, eight high-quality Canadian horses had to be transported from Alberta to West Germany where, for six days, March 11 to 16, they would be on display and participating in daily events. Six horses were for sale; the other two were for display only.

The eight horses were loaded in Claresholm, Alberta on March 3 and after a one-day stop-over in Winnipeg, were trucked to Toronto. After a 1½-day stop-over, they were loaded on March 8 for shipment by KLM to Amsterdam and trans-shipped by truck to the show site in Essen.

Why would federal and provincial governments support what at first sight would seem to be a "far-out" or high-risk venture? After all, such an undertaking had never been ventured before and Europe is well-noted for its high-quality horses. Would Canadians even stand a chance?

Far from being a careless gamble, the Canadian decision to participate was the result of three years of market research and on-site auditing of a previous Equitana show held in 1979.

Research and auditing was carried out by J.G. Tardiff and other IT&C personnel at the Duesseldorf post in West Germany; representatives from the Alberta Department of Agriculture, International Marketing Branch; the Quarter Horse Association of Alberta; and the Alberta Appaloosa Divisional Association.

As well, Dr. Allen of the famed Willomar Arabian Farms of Alberta, had, in addition to attending the 1979 show, made numerous trips and held numerous discussions with equestrian business persons in Europe — where his horses are already well known. And interested



All breeds are presented at Equitana 81, an international horse show in which Canada participated for the first time.

Polish groups have visited his Alberta farms.

Such research made it abundantly clear that there existed in Europe a very good market for Canadian horses. It was also evident that the Canadian groups concerned could get the most mileage for their money by attending Equitana.

Another factor: While the show is always held in Germany, the market is by no means restricted to that country. Indeed, Equitana has become an international marketplace with exhibitors of horses — and goods and services related to the horse industry — coming from virtually every country in Europe.

At Equitana 81, for instance, there were 550 exhibitors of whom 120 were from 20 countries other than Germany. Official participants were from England, Ireland, Poland, Germany, Hungary, Canada, the USSR, Spain, France, the United States and Iceland.

Private exhibitors came from The Netherlands, Belgium, Luxembourg, Denmark, Sweden, Italy, Austria and Switzerland.

All of these — horse breeders, manufacturers and dealers of horse care products and equipment, equestrian associations, and government import and export agencies — found an interested buying public estimated at some 190,000 persons!

And Canada made quite an impression, succeeding in its goals to sell six of

its horses and to show Europeans the quality of horse available from Canada.

The Alberta Appaloosa Divisional Association of Calgary had three horses for sale, a four-year-old mare and two six year-old mares. These horses were selected by an independent committee of five persons and were seen as a good overall cross-section of Alberta's Appaloosas.

Chosen in much the same way as the Appaloosas were three young mares representing The Quarter Horse Association of Alberta (Red Deer). Again, there was no problem in finding eager buyers.

A third participant was Canada Trading Import and Export Company Limited of Edmonton, a company which represents several Alberta western wear and tack manufacturers.

Canada Trading, through assistance from Industry, Trade and Commerce, previously had participated in a number of German clothing and sporting goods shows. As a result of these activities it was successful in developing a substantial market for Canadian western wear and tack in West Germany and Holland.

Approximately 17 of Canada Trading's distributors in Germany attended the show with large inventories available for sale to the general public. Canada Trading itself had a variety of merchandise on hand for viewing by potential distributors.

Last, but by no means the least participant, was Willomar Land and Livestock Ltd. — noted for its Willomar Arabians — of Taber, Alberta.

While the other Canadian participants were interested primarily in making on-site sales, this was not the intent of Willomar owner, Dr. G.W. Allen who, for display purposes only, shipped two horses — Magic Moment, a two-year-old filly; and Pyatigorsk, a two-year-old colt.

These horses have been viewed by a number of Europeans and numerous North American breeders on the U.S. show circuit and have been described as being of "infinite quality." The colt, in fact, is syndicated and insured for \$1,000,000; the filly is syndicated and insured for \$250,000.

Since Magic Moment and Pyatigorsk form part of the nucleus breeding stock at Willomar, they were not offered for sale — though there were interested buyers galore at Essen.

It was considered essential by Dr. Allen and his co-sponsors that these horses be shown in Europe to demonstrate the quality of breeding stock Willomar uses in its breeding program. A very important subsequent goal, of course, is to promote the sale of Willomar stock in Europe.

It is estimated that such horses could be sold for prices in excess of \$100,000 and that in a very short time — in fact the duration of the PEMD contract —

Willomar will be able to sell between \$1,000,000 and \$2,000,000 worth of breeding stock into the Western European market.

As an immediate follow-up to Equitana 81, Willomar held a halter clinic in Holland. The clinic, which was arranged through the assistance of a number of prominent European Arabian breeders, gave Willomar additional exposure to a select group of potential purchasers.

Willomar's attendance at Essen also served another very important function — that of attracting buyers to Willomar's annual production sale which will be held August 21, 1982 at the Spruce Meadows Equestrian Facility just south of Calgary!



All part of Willomar's long-term market strategy, the production sale will be held in conjunction with the World Arabian Association Congress, which takes place a week before the sale, and the Canadian Arabian Horse Association annual meeting, which will take place the week following the sale.

Both of these meetings will be held in Calgary with Dr. Allen as chairman of the two local association committees handling the arrangements for them.

IT&C's Edmonton Regional Office and its Trade Posts have assisted in publicizing the sale by distributing promotional literature to prominent Arabian breeders around the world. The response to the mail-out has been excellent, with many breeders having already indicated they will attend both the sale and congress!

Considerable interest in the congress and sale was also shown at the recent Scotsdale Show — considered a barometer of the international market for Arabians. In fact, Europeans at the show indicated to Dr. Allen that his stock was of such high calibre that it would be in demand in Europe.

An even stronger indication of this demand is that the Polish Government has already made requests to utilize Dr. Allen's stallion in its breeding programs. And recently an official of the Polish Gov-

ernment involved in its Arabian breeding program stayed at Dr. Allen's farm to study Willomar's breeding program and the North American Arabian market.

While not the only participant with a long-term market strategy, Willomar is perhaps the most experienced of the groups, having been engaged in international marketing for some 20 years.

Dr. Allen has made numerous trips to Europe, in an effort to constantly improve his breeding stock. His horses have been imported from Eastern and Western Europe and from the Middle East. Today, Willomar has breeding mares in the United States, Canada and Europe using some of the most important female tail lines in the Arabian breed.

In fact, it was Dr. Allen's international marketing expertise and knowledge of international equestrian matters that proved to be of invaluable assistance to the Canadian success at Equitana 81 — Dr. Allen made all the shipping and health arrangements for the transportation to Essen of the eight Canadian horses.

The show itself saw Canada's entries located in a very prominent display area situated between representatives from Hungary and Russia — and easily accessible to all foreign exhibitors and potential purchasers.

IT&C's Trade Consul in Duesseldorf, J.G. Tardiff, said: "The Canadian/Alberta stand received numerous compliments from visitors as the best and most attractive international stand at Equitana."

Mr. Tardiff also noted that the three Appaloosa and the three Quarter Horses sold at an average price of DM 20,000; that importers expressed a definite interest in travelling to Alberta to purchase similar quality horses in substantial numbers; and that Willomar, whose horses were not for sale, had numerous offers from German buyers. Though Willomar declined, one of its two-year-olds "could have been sold on the spot for DM 500,000."

Canadian horses were in demand!

As Mr. Tardiff commented: "This compares favourably, and especially as it was a first Canadian participation, with our neighbours at the show, the Russians, whose horses only brought an average price of DM 10,000 — and is significantly superior to the Hungarians who were unable to sell seven of the eight horses they had brought to Equitana."

Mrs. Carol Underwood, Editor of the Canadian Appaloosa Journal and looking after Appaloosa's sales and marketing strategies at Equitana 81, was equally impressed, noting that "our Alberta Appaloosas were of great interest to Germany and many other nations, such as France and Italy. One of our mares travelled to Switzerland and the other two remained in Germany."

Indeed, attending the show was a learning experience for, in addition to making sales, the Appaloosa group picked up a lot of marketing tips which they certainly hope to use in any future international shows. The show also provided a better understanding of the horse industry in Europe and allowed many worthwhile contacts to be made.

Mrs. Underwood discovered, for example, that "temperament and outdoor usability were of utmost importance to all prospective buyers and that colour, the beautiful separating factor, was a real asset to the promotion of our Breed of Horse."

In conclusion, she noted that "the market potential for above-average trained horses would seem to be high. If a quality product is presented, a quality price can be obtained."

Intimately involved in supporting and assisting the four organizations in putting together this project were IT&C's Regional Office, its Duesseldorf post, the Ottawa Office and the Province of Alberta.

As A.J. (Ab) Barrie, Regional Officer in Edmonton, put it: "I consider this effort to be an excellent example of how the federal and provincial governments can cooperate to assist industry in developing export markets for Canadian agricultural products."

Clyde McMurchy, Senior Marketing Officer with Alberta Department of Agriculture's International Marketing Branch, states: "I do not know how any of the Alberta participants could have obtained the quality display and the amount of exposure they did without financial assistance from the federal and provincial governments."

And, in general, adds McMurchy, "We received excellent support from the Embassy in Duesseldorf."

All in all, then, Canada's participation at Equitana 81 could be considered a success — both immediate and long-term. And a solid indication that, when taken seriously, horsing around can indeed make sense!

Trade Fair Round-up

by Shirley Plowman

Persistence Pays



Seeing is believing

This seems to be either the friendly giant's shopping cart or the picture of a leprechaun on a shopping spree. It's neither. Just a giant sized supermarket cart — one of the eye-catching props at Euroshop '81.

One rose does not a summer make nor does one trade fair necessarily make for an immediate surge in export sales. Repeated efforts including trade fairs and business calls, though, do pay off in a continuing presence in the European market.

This was the advice offered by B.H. Nielsen, General Manager of J.C. Moag Co. Ltd., to an informal meeting of Canadian exhibitors participating in Euroshop '81 at the Düsseldorf Messen, Düsseldorf, Federal Republic of Germany, April 4 to 9. About 50,000 business and trades people visited the fair to see the exhibits and talk to the representatives of some 597 companies.

Having the product right there on Euro-

pean soil helps too, Nielsen avers. His Mississauga company sells a specially tempered display glass that can be made in many configurations for stores. Moag has warehouse facilities in Denmark and is able to promise almost "next-day-delivery" to many European customers.

Another key, he said, is on-the-ground reliable distributors who know their market. The company has distributors in Britain, Norway, Sweden, Denmark, Belgium, Switzerland and Austria.

On-site sales for the eight Canadian companies selling store fixtures, supermarket equipment, decorating and display materials amounted to \$34,800 with projected sales over an 18-month period of \$5,300,000.

The Sweet Sounds of Success

Canada's first-ever national participation at a European musical industries trade fair has been an outstanding success.

Nine Canadian companies exhibited at MUSIKMESSE staged in Frankfurt, Federal Republic of Germany, February 7 to 11, 1981, with on-site orders totaling \$791,000 and follow-up sales expected to exceed \$4 million during 1981.

Competing against Germany and

Japan, the world's largest producers of acoustic guitars, a small Saint-Léonard, Québec, company — Sibecor Musical Instruments Limited — employing only 50 craftsmen, struck the right note at the Frankfurt show, attracting eager buyers.

Occupying pride of place on the Sibecor stand was a range of classical guitars made of Canadian maple, straight-grain spruce and yellow birch. The hand-made Kamouraska Étude

Spring Show Sees Canada Sparkle

All that glitters can come up gold! Canada proved it with sales of gifts and jewellery at Birmingham, England, February 1-5, 1981.

Twenty Canadian companies exhibited at the United Kingdom's International Spring Fair, resulting in on-site sales of \$216,000 with estimated follow-on sales of \$3,100,000.

One Canadian company not only gleaned some hefty on-site sales — it had no trouble finding agents in Germany, Scotland, England, New Zealand, Greece, Ireland and the U.S.A.

Another succeeded in appointing distributors in Austria, Italy, Southern France, Holland, Belgium, Spain, Channel Islands, Germany, Scotland and Ireland.

Exhibitors and buyers agreed that "design concepts and the entire Canadian exhibit were outstanding."

The Birmingham Post published an article on Canadian Arctic Producers and the Canadian Stand was featured in International Gift News.

Dividing and Conquering Partition Problems —



Garry Henne of Henna Design, Toronto, demonstrates special lightweight partition to Meldwyn Thomas, Canadian Consul-General, Düsseldorf. His partitions, which generated high interest at Euroshop '81, can be used for stores and are easily moved about without strenuous effort.

classical guitar recently won a National Design Council award for excellence in product design.

Canada's sales success with wood instruments was complemented by the orders received for a micro-computer piano keyboard that gives the embryo pianist instant access to 1,500 chords and harmonic scales.

Small enough to fit into a briefcase, this unique learning aid earned accolades for its inventor and manufacturer, Lexicon Music Computer Canada Ltd., Québec City.

I.T.&C Promotional Projects Program

The following is a current list of trade fairs that will be sponsored during the period September 8 to November 22, 1981. The list is published to alert Canadian businessmen and women to opportunities for reviewing the current state of their industries as reflected in the exhibits. At some fairs, Canadian manufacturers are invited to participate. At others, a Canadian information booth is available for contacts with foreign buyers and as an information clearing house.

Canadian companies interested in participating in Department sponsored exhibits are encouraged to contact their nearest IT&C regional office so they may be added to the Department's list of exporters. While attendance at major fairs listed is encouraged, companies should bear in mind that participation is fixed 4-6 months before an event.

Trade Fairs

1. Europe (613) 995-7334

Project No.	Event	Date	Project Manager
September 1981			
81/47055	23rd Brno International Engineering Fair Brno, Czechoslovakia (Information Booth)	Sept. 9-15, 1981	L.V. Ford
81/47022	ISPO '81 (Autumn) — 15th International Sports Equipment Exhibition Munich, West Germany	Sept. 10-13, 1981	H. Schroeter
81/47122	Zagreb International Autumn Fair Zagreb, Yugoslavia (Information Booth)	Sept. 11-20, 1981	H. Schroeter
81/47057	Offshore Europe '81 — Ocean Industries Exhibition and Conference Aberdeen, Scotland	Sept. 15-18, 1981	G. Cooper
81/47026	Interplas '81 — International Plastics and Rubber Exhibition Birmingham, England	Sept. 15-22, 1981	M.P. Pearce
81/47108	SICOB — 32nd International Data Processing, Remote Processing, Commu- nication and Office Organization Trade Fair Paris, France	Sept. 23 - October 2, 1981	
81/47143	Bari Regional Fair Bari, Italy (Information Booth)	September 1981	L.V. Ford
October 1981			
81/47039	NUCLEX '81 — International Nuclear Industries Fair Basel, Switzerland	Oct. 6-9, 1981	G. Cooper
81/47093	ANUGA '81 — World Food Market Cologne, West Germany	Oct. 10-15, 1981	H. Schroeter
81/47042	SAIE — International Exhibition of Building Industrialization Bologna, Italy (Institutional Exhibit)	Oct. 10-18, 1981	J. Harman
81/47049	33rd Frankfurt International Book Fair Frankfurt, West Germany	Oct. 14-19, 1981	G. Debbané
November 1981			
81/47020B	INTERSTOFF '81 — International Trade Fair for Clothing Textiles Frankfurt, West Germany	Nov. 3-6, 1981	M.P. Pearce

Project No.	Event	Date	Project Manager
November 1981			
81/47037	Europort '81 — International Maritime Exhibition Amsterdam, Holland	Nov. 18-22, 1981	L.V. Ford
81/47110	BATIMAT '81 — 13th International Building Exhibition Paris, France	Nov. 13-22, 1981	L. Sarda

2. Pacific Asian, Africa & Middle East (613) 995-8303

Project No.	Event	Date	Project Manager
September 1981			
81/47138	Instrumentation Exhibit at CTC, Tokyo, Japan	Sept. 8-11, 1981	K.J. Tyrrell
October 1981			
81/47056	Baghdad International Trade Fair, Iraq	Oct. 1-15, 1981	H. Schroeter
81/47127	Floor Covering Show Tokyo (CTC), Japan Osaka, Japan	Oct. 6-8, 1981 Oct. 12-15, 1981	K.J. Tyrrell
November 1981			
81/47161	Ocean Industries Show at CTC, Tokyo	Nov. 14, 1981	K.J. Tyrrell

3. U.S.A. (613) 995-8303

Project No.	Event	Date	Project Manager
September 1981			
81/47080	IMTEC '81 — International Marine Trades Exhibit and Conference Chicago, Illinois, U.S.A.	Sept. 24-27, 1981	A. Kuhlmann
81/47113	Woodworking Machinery and Furniture Supply Fair Los Angeles, California, U.S.A.	Sept. 24-27, 1981	T.E. Matthews
81/47090	Farm Progress Agricultural Show Brimfield, Illinois, U.S.A.	Sept. 29 - October 1, 1981	M. Samson
81/47086	Food Products Sales Meeting Buffalo, New York, U.S.A.	September 1981	A. Kuhlmann
81/47088	Food Products Sales Meeting Washington State Food Dealers Convention Seattle, Washington, U.S.A.	September 1981	A. Kuhlmann
81/47066	Solo Business Furniture Show Columbus, Ohio, U.S.A.	September 1981	T.E. Matthews
81/47084	Food Products Sales Meeting Minneapolis, Minn., U.S.A.	September 1981	A. Kuhlmann
October 1981			
81/47044	54th Annual Conference and Exhibition of the Water Pollution Control Federation Detroit, Michigan, U.S.A.	October 4-9, 1981	J.P. Lambermont
81/47005	International Public Transit Expo '81 Chicago, Illinois, U.S.A.	Oct. 8-11, 1981	A. Kuhlmann
81/47124(B)	Southern Furniture Mart, High Point, North Carolina, U.S.A.. (Contribution)	Oct. 23-31, 1981	T.E. Matthews

Project No.	Event	Date	Project Manager
October 1981			
81/47061	Solo Presentation — Canadian High Technology Market Place Boston, Mass., U.S.A.	October 1981	K.J. Tyrrell
November 1981			
81/47076	APAA — Automotive Parts and Accessories Association Show Chicago, Illinois, U.S.A.	Nov. 3-5, 1981	T.E. Matthews
81/47029	25th National Swimming Pool Institute Convention/Exposition Phoenix, Arizona, U.S.A.	Nov. 18-21, 1981	M. Samson
81/47103	Food Products Sales Meeting Cleveland, Ohio, U.S.A.	November 1981	A. Kuhlmann

4. Latin America and Caribbean (613) 995-8303

Project No.	Event	Date	Project Manager
October 1981			
81/47109	Mexican Mining, Geological and Metallurgical Exhibition Acapulco, Mexico	Oct. 18-23, 1981	W.P. Schutte
November 1981			
81/47160	Lima Int'l Trade Fair, Peru	November 1981	

Committee to Review Consulting Engineering Industry

A Consultative Committee on the Canadian Consulting Engineering Industry was established recently to review the current status of the industry. It will assess the industry's potential in terms of the contribution it can make to Canada's economy, and the constraints it might face in realizing this potential.

Made up of 15 senior executives from consulting engineering firms

across Canada, the committee is expected to make recommendations in the fall that could be implemented by the industry, its associations and the government, toward maximizing the industry's performance.

S.J. Cunliffe, a past-president of the Association of Consulting Engineers of Canada, has agreed to act as chairman. Officials from provincial governments will join in the meetings.

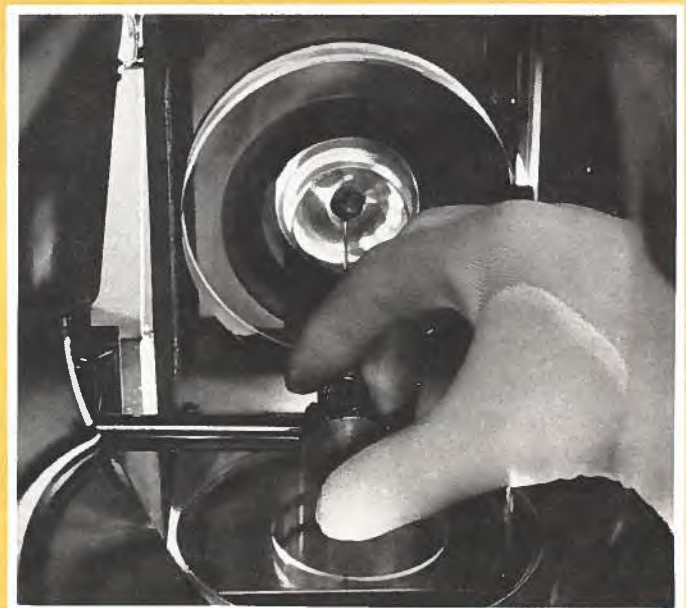
IT&C Minister Herb Gray noted the importance of this service industry sector and its reputation in export markets. He said that there already exists a close rapport between the industry and the Department, particularly through the Association of Consulting Engineers of Canada.

The secretariat to the committee will be provided by IT&C.

Health Care Directory

A finalized edition of IT&C's product-sourcing directory, **Listing of Made in Canada Health Care Products** will be available in mid-summer. Produced by IT&C's Business Opportunities Sourcing System (BOSS), it provides in both official languages, a detailed alphabetical listing of products and the companies that manufacture them. It also contains an alphabetical listing of manufacturers, their complete addresses and the products they manufacture. The publication was created with the co-operation of the Canadian Association of Manufacturers of Medical Devices (CAMMD), Health and Welfare and IT&C's Chemicals Branch. **Those wishing to obtain a copy should write to:**

BOSS
Industry, Trade and Commerce
 235 Queen Street
 Ottawa, Ontario
 K1A 0H5



China's Pulp and Paper Delegation Visits Canada

Representatives of the Ministry of Light Industry and the China International Trust and Investment Corporation of the People's Republic of China visited Canada earlier this year.

The mission was sponsored by Industry, Trade and Commerce as a result of Minister of State for Trade Edward C. Lumley's invitation to Chinese officials while in China last September and to the Vice-Premier of China Bo Yibo during his visit to Canada in August 1980.

China's need for all types of pulp has increased substantially over the past decade with much of the material originating in Canada. Total pulp and paper trade with China in 1980 was more than \$90 million including 165,000 metric

tons of pulp. With increasing industrialization, China will need even greater amounts of papermaking pulp and is seeking a long-term secure source of supply through a joint venture with a Canadian producer.

The Chinese mission, headed by Hu Zong Yuan, Deputy Director Paper Industry Bureau, Ministry of Light Industry, was made up of senior technical and investment specialists.

IT&C arranged visits to companies in Quebec, New Brunswick and British Columbia to review current technical advances in pulp production, inspect mill sites and discuss various forms of investment arrangements.

Petroleum Industry Showcase set for September

Inter-Can, an international conference and exhibition held every two years, will take place September 14 to 18, 1981, in Edmonton, Alberta.

The exhibition is a showcase for the petroleum industry's finest equipment, technology and services.

Sponsored by the Canadian Association of Oilwell Drilling Contractors along with the Canadian Association of Drilling Engineers, it provides a "one stop" world oil and gas marketplace.

Theme for the conference is "**Canadian Offshore Drilling and Downhole Technology.**" Sessions will cover the following areas of operation: **Beaufort Sea, High Arctic, East Coast Offshore Canada, Canadian Offshore Experience Worldwide and Problems of Manpower and Training.**

Exhibits are expected from Australia, Britain, Germany, Indonesia, Italy, Japan, Norway, Northern Ireland, Romania, Russia, Singapore, Sweden and the United States.

Inter-Can '79 attracted 11,800 industry personnel from some 30 countries. The federal and provincial governments sponsored 64 foreign buyers. Results were impressive for completed sales and newly established contracts.

Inter-Can '81 will have at least 50 per cent more exhibit area and offers a wider range of opportunities for domestic and foreign companies involved in the manufacture, servicing and purchasing of onshore and offshore petroleum equipment.

**For further information, contact:
Tom McCaffrey, President and General
Manager**

Inter-Can '81
5829-97 Street, Second Floor
Edmonton, Alberta
T6E 3J2
Tel: (403) 437-2192



In English or In French IT&C Is At Your Service

En français comme en anglais le MIC est à votre service

Do you want to market your products abroad? Set up or expand a small business? Promote industrial development? Whatever your business interest, the Department of Industry, Trade and Commerce will be able to advise you.

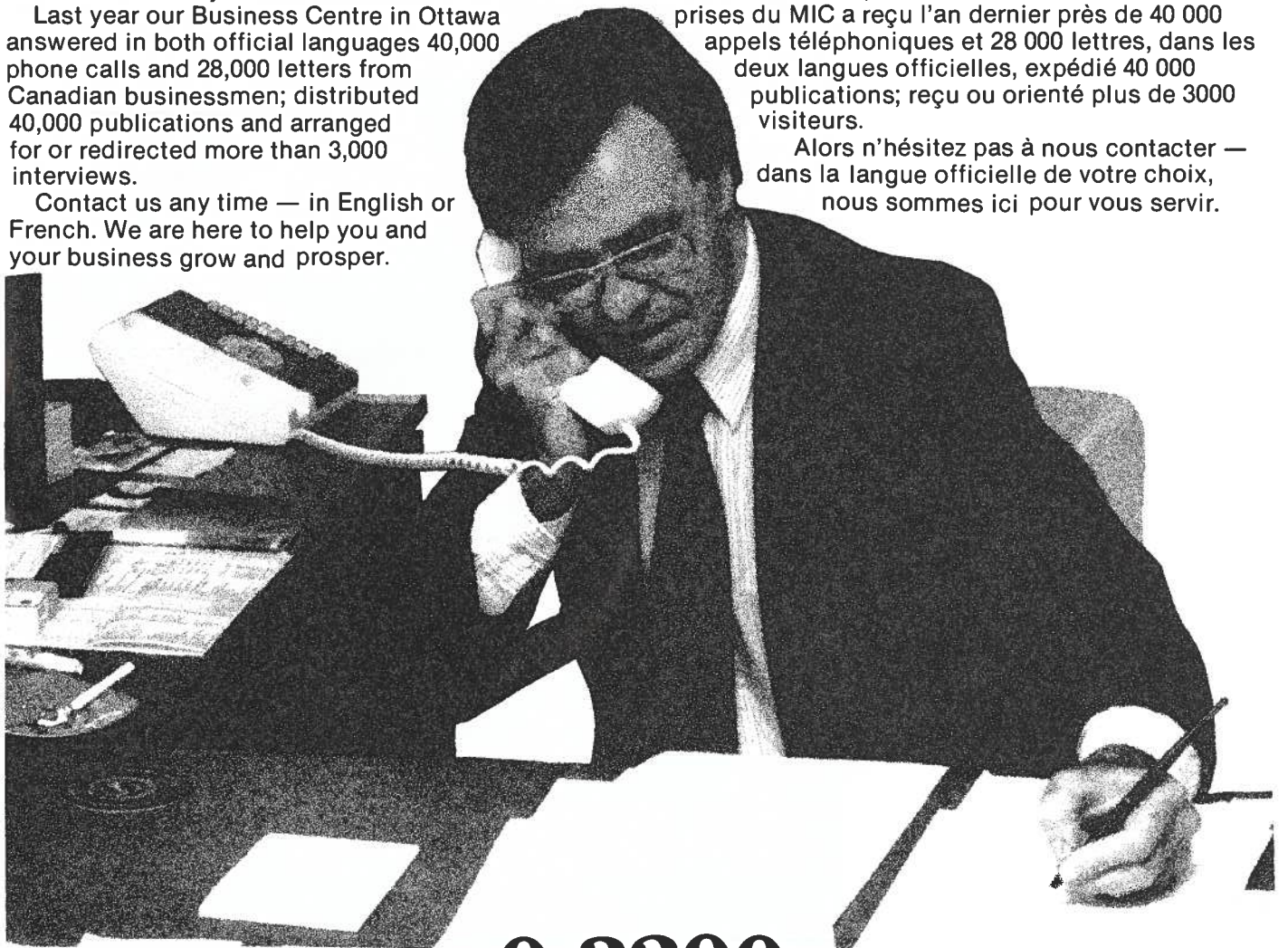
Last year our Business Centre in Ottawa answered in both official languages 40,000 phone calls and 28,000 letters from Canadian businessmen; distributed 40,000 publications and arranged for or redirected more than 3,000 interviews.

Contact us any time — in English or French. We are here to help you and your business grow and prosper.

Que ce soit le service du commerce extérieur, les directions du développement industriel, le secrétariat de la petite entreprise ou tout autre secteur des affaires, le MIC est là pour vous aider.

A titre d'exemple, à Ottawa le Centre des entreprises du MIC a reçu l'an dernier près de 40 000 appels téléphoniques et 28 000 lettres, dans les deux langues officielles, expédié 40 000 publications; reçu ou orienté plus de 3000 visiteurs.

Alors n'hésitez pas à nous contacter — dans la langue officielle de votre choix, nous sommes ici pour vous servir.



Call Zenith **0-3200** Appelez Zénith
or ou

reversed charges **(613) 995-5771** à frais virés

LEE

MMW

E

ADMINISTRATIVE SERVICES BRANCH

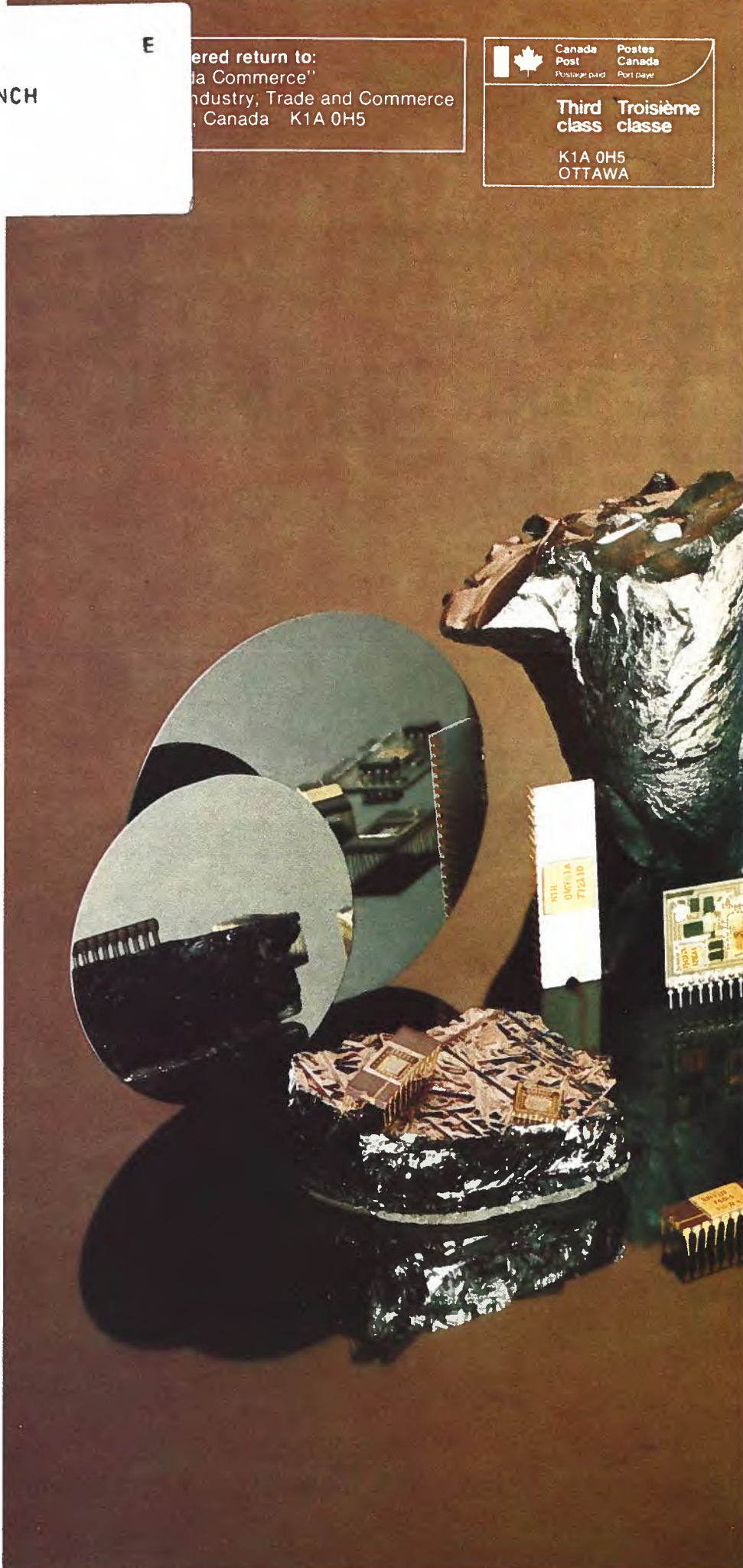
93..11

er return to:
"la Commerce"
Industry, Trade and Commerce
Canada K1A 0H5

	Canada Post Postage paid	Postes Canada Port payé
Third class		
Troisième classe		
K1A 0H5 OTTAWA		

From raw material to integrated circuits, Northern Telecom manufactures the silicon chips used in its Digital World Family of sophisticated products. This composite photo shows the various steps undertaken at NT's Kanata facility outside Ottawa.

1980 Bell-Northern Research —
photo by Roman Koster



Government of Canada

Gouvernement du Canada

Industry, Trade and Commerce

Industrie et Commerce

Canada