CANADA COMMERCE

JANUARY
1975

MINISTER DOES A'DRILLING GO

Early mornings and long days were the rule when the Hon. Alastair Gillespie, Minister of Industry, Trade and Commerce, visited Halifax last fall.

He was the main speaker at the Halifax Ports Day Annual Meeting, where he addressed an international audience; he held consultations with provincial authorities, and officially opened the Halifax C.A.S.E. office. He also took a helicopter trip to visit Shell Canada's SEDCO H drilling rig in operation at sea off Shelburne.

It was his first trip aboard a drill vessel and he took particular interest in the work of the roughnecks (drill crews) running the drill pipe. He is seen here on SEDCO H talking with Ralph Barnes, the Shell foreman on board, and Derek Brown.

CANADA COMMERCE

Vol. 139 No. 1 Jan. 1975

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What are the things you look for when you interview an applicant for a job? Appearance? Self-confidence? Ability to get on with others? Leadership? All important qualifications, no doubt, but surely the most important would be the ability to do the job the applicant is applying for.

Which brings in the question: does ability go only with a certain colour of the skin, religious upbringing — or sex?

This year of 1975 has been designated International Women's Year by the United Nations, of which Canada is a member. There is a moral obligation, therefore, on all Canadians to do their part in any UN program. Moral obligations, however, do not necessarily pay the bills or keep the shareholders happy: one has to keep the company in the black to do that, and that means a competent staff of hard-working and efficient hard-nosed businessmen. Tradition dies hard!

Whence comes the philosophy that women have no head for business? That they can't be trusted to run anything more complicated than a typewriter or an adding machine — or a household? Perhaps this philosophy is wrong, and has been all along. Perhaps women are not only equal in their planning abilities, in their capacity to run things, perhaps they are even superior to men. Men, after all, seem to have got this world into a pretty sorry state. Women might well be the salvation of the human race.

All of which brings us to our lead article this month — one worth reading and thinking about.

Articles appear from time to time in the pages of the business press on foreign contracts being awarded to Canadian companies, and perhaps others have wondered just what this means to the business community generally. The article on page 17 makes it clear that it means a lot, and that a foreign contract can be spread over many other companies, bringing jobs and orders to many more than the prime contractor. Which goes to show that it pays to make your product known to your friendly neighbourhood consultant, even if you are not in the export business yourself.

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Industry, Trade and Commerce / Industrie et Commerce

Canada Commerce is published monthly by the Department of Industry, Trade and Commerce. Established 1904.

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Subscription

"Canada Commerce" is sent without charge to Canadian producers of goods or services. Others may have the magazine at $5 a year in Canada, $7 abroad. Single copies 60 cents each. Please forward all orders, with cheque or money order made out to the Receiver General of Canada, to "Canada Commerce", Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5

Publié aussi en français

INTERNATIONAL WOMEN'S YEAR

SHARON BROWN,
International Women's Year Secretariat

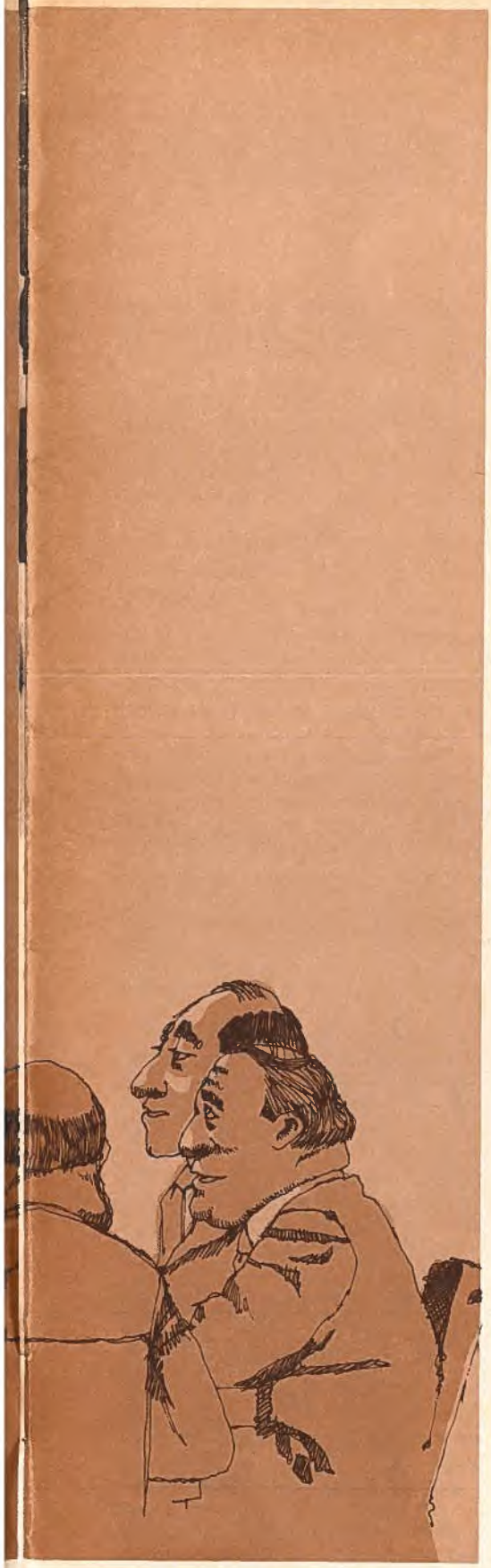
This coming year of 1975 is International Women's Year — declared by the United Nations to be one in which the women and men of the world work together toward fully integrating women into society. For Canadians, it means a renewed commitment by the Government "to continue its program of extending equality before the law to all Canadians. To this end wide-ranging legislation will be introduced to guarantee the equal status of women in areas within the Federal Government's jurisdiction. In this respect the Government is planning a substantial program of activities to mark International Women's Year in 1975," according to the Speech from the Throne at the opening session of Parliament last September.

Despite the many advances in women's status over the last few years there is still much to be done before women and men become true equals in society. Traditional attitudes must change, the attitudes of both men and women. Women cannot become equals without this change. International Women's Year, therefore, has meaning not only in Canada but for all nations of the world, and for both men and women.

Within Canada, the Government has provided the impetus to action; taking action is up to each individual, which means you, whatever your sex. Barriers to equality still exist, and they exist both in fact and in the mind. Consider your attitude, for instance, to:

- the women re-entering the work force after years at home raising a family,
- the young woman choosing career-potential subjects at university,
- the parent looking for day care at reasonable cost,
- the widow coping with the things her husband "always took care of,"
- the businesswoman watching younger men get jobs she can easily handle, but is never offered,
- the factory worker receiving less than legal minimum wage, and being too intimidated to protest,
- the farm wife whose years of contributions net her a possible zero if the marriage dissolves,
- the working woman trying to get financial credit without her husband's signature,

What's wrong with this picture?



- all those women (and men) who don't know, and want to learn, their rights under the law.

Certainly, it's all been said before. But in Canada, International Women's Year will not be devoted to discovering what the issues are; it will be a year for coming up with the answers and solutions to the problems, including the ones just mentioned.

In 1970, the Report of the Royal Commission on the Status of Women delineated the issues in no uncertain terms. Now, five years later, of the 122 recommendations within the federal jurisdiction, only 42 (34 per cent) have been implemented, with another 30 per cent partially implemented, according to the Advisory Council on the Status of Women.

Solid commitment — So, although Canada may be among the more fortunate countries of the world in which to have been born female, there is still a great deal to be done here before women achieve the equal status and opportunity they seek. This, the Canadian Government acknowledges. The Government's commitment to women, and to International Women's Year, is a solid one. External Affairs Minister Allan MacEachen told the delegates to the United Nations International Seminar held in Ottawa this last fall that "the Government of Canada is actively dedicated to the principle and to the practice of equality between women and men in all aspects of Canadian life."

Mr. MacEachen also told the delegates from 32 countries: "We believe that if we are to reach our proper potential as a nation, we must be able to give our citizens not only the choice to be what they want to be, but the opportunity as well. We also believe that 1975 should be looked upon only as a beginning for all of us. It is the year for looking at what we have done or haven't done, to assess where we are now, where we should be going. It might be described as the launch-pad year."

The situation for women in Canada, despite what some critics decry as the snail's pace of change, is considered by the international community to be reasonably well advanced.

International Women's Year isn't just for Canada, of course, but for all the 132 member states of the United Nations — one or two where women live and work in relative equality, others where the struggle is newly recognized and barely under way; and still others, the majority perhaps, somewhere in between. Canadian women can consider themselves as being more fortunate than many others.

Ways and means — The fact that the United Nations invited Canada to be host country for the two-week seminar speaks well of our country's reputation regarding the status of women. The purpose of the seminar was not to discuss issues, but to formulate "national machinery" — organizations within governments such as women's bureaux, human rights commissions, status of women councils. For several Western countries — Canada, the U.S., Sweden, Britain to name a few — much of this type of machinery already exists, and delegates representing those countries provided details on what exists, how it operates and an assessment of its success (or lack of it).

The delegates shared experiences. For many of the developing or third-world countries, this machinery is still to be created, often amid economies with pressing fundamental needs for food and shelter. As the delegate from one such country put it: "When the women in our country have time to learn to read and write instead of digging wells and transporting water, their status will have improved."

Considering the widely differing cultures and languages — sessions were translated into English, French, Spanish and Russian — the seminar served its purpose well. "We moved from a misunderstanding to an understanding about what is being done in each country on the status of women," said Rita Cadieux of the Department of Secretary of State, who was head of the Canadian delegation, and later elected chairman of the seminar.

By the conclusion of the seminar, the delegates had garnered a wealth of knowledge of the existing machinery in many countries, learned of the problems, plans and projects as presented in the various country papers, and prepared a list of 33 recommendations and conclusions. Among them was the awareness

that what works well in one country may not work in another with a different culture and heritage. Still, all agreed that "where national machinery . . . does not exist, every effort should be made to establish" it, adapted to the needs of the particular country. Another key point was the agreement that such machinery should be "institutionalized wherever possible to survive changes of government."

Here in Canada, the Advisory Council on the Status of Women fulfills that role. And with the creation last spring of the International Women's Year Secretariat, under the Co-ordinator, Status of Women, in the Privy Council Office, the Government has taken another step in promoting and encouraging the equality of women.

"Canada can hardly be called backward with respect to the status of women, but that's no reason to retrench. We have a great deal of work ahead of us," says Mary Gusella, director of the International Women's Year Secretariat. She sees the secretariat's mandate as one of promoting social change. She and the rest of her 12-member staff will be spending International Women's Year "trying to reach the unreached, and creating awarenesses and activities that will last well beyond 1975, when the secretariat goes out of business."

Seeking answers — "We believe the Government's commitment to women, to effecting genuine changes in the status of women, is a sincere one," she says. "They're backing it up with a $2 million budget to carry out our program. Our job will be twofold: one, to conduct a national information campaign to inform women and men of women's present status, and inspire them to create the changes that will fulfill their needs. Secondly, we will be sponsoring five conferences throughout the year — four regional and one national — which we hope will be used by women and men as platforms for action. We don't want the conferences to rehash the issues. We already know what the issues are. Instead, we hope they will come up with answers, ways and means of solving problems, changing situations and so on. We're trying to ensure grass-roots participation by studying methods of paying some delegates' expenses to attend."

In each province and territory, a representative, appointed by the provincial premiers and territorial commissioners, is the liaison with the secretariat. They will form regional planning committees and, working together with the secretariat, will be responsible for the planning of the formats and topics of the four regional conferences. "We feel that the individuals in each region know their situations better than we do," says Ms Gusella. "At the national conference in November (1975), we will try to bring together all the issues at the regional level, as well as provide a forum on a national scale."

Cost not criterion — Although the Government has indicated that increased funds for projects relating to International Women's Year may be available, the secretariat will not act as a funding agency. Rather, it will take the role of forwarding centre. "We would like to emphasize," Ms Gusella says, "that projects need not cost a fortune to be effective. It will be impossible for the Government to fund each and every project. We are urging individuals and groups to think in terms of fund-raising on their own, and not to forget the voluntary resources and services that are available."

The basic issue is freedom of choice. The secretariat will be emphasizing that women who pursue goals actively can be what they want to be. "Certainly, there is legislation to be changed," says Ms Gusella, "but attitudes also must change. The woman who wants to stay home and raise a family should feel free to do so. Or she should feel free to become a mechanical engineer, if that's what she wants. And by the same logic, the man who wants to stay home with a family should not be a subject of ridicule. Those men and women who want to work should have the same educational and employment opportunities regardless of sex."

Most provinces in Canada have equal pay for equal work legislation; most have anti-discrimination legislation. But attitudes, as well as law, need changing. Many jobs are still described as masculine or feminine territory. Why else call a man who is a nurse, a male nurse? Why else do reporters flock to get the story on the new female truck driver or lumberjack? Certain jobs are still perceived as being for men; others, for women. They've been dubbed "job ghettos."

For instance, in 1973, the chartered banks employed more than 106,000 employees, of whom 70 per cent, or about 74,000, were women. But most of these women are still employed as tellers, machine operators, typists, stenographers, and at other clerical jobs. That year, the Bank of Montreal reported that 12 per cent of its management positions were held by women, up from 5 per cent in 1966. The Advisory Council on the Status of Women reported that in 1974, of the 6,500 bank branches in the country, only 80 or 1.2 per cent had women as managers.

Banks are only one area; similar percentages apply in many other industries. Even in the federal public service, where a concerted effort to promote equality is under way, women comprised 97.8 per cent of all stenographers in 1971, and 71 per cent of all clerks. Women are as scarce at the top of the ladder as they are predominant at the bottom. For instance, in private industry, only 4.2 per cent of employed women held management positions in 1972, compared with 12.6 per cent of men.

Onus on individual — There is still a long road ahead to the day when a nurse will be a nurse, not a male nurse; an engineer just an engineer, not a woman engineer. The Government has set the stage, to be sure, but the onus is still on the individual woman or man. There is some evidence now that individuals are taking up the challenge. It can be seen in changing patterns of education.

There is as yet no statistical evidence that women are deserting their traditional areas of education and employment, but there is some evidence that they are going after new endeavours. When the cry goes out, "why are there not more women executives," the traditional reply from business has been: If I can find a qualified woman, I'll hire her. To be sure, the numbers of women in schools of law, medicine, and business, traditionally male-dominated bailliwicks, was until recently negligible. Now that's changing.

In 1971, only 2.3 per cent of Canada's 13,354 lawyers were women. However, in

the law schools, female enrolment is increasing rapidly. In 1971-72, 1,152 of 7,751 law students were women, compared with 153 women in a total of 2,892 law students in 1962-63. Not only has total enrolment skyrocketed in less than a decade, but the percentage of female law students has jumped from about 5 per cent of the total enrolment to almost 15 per cent. In some law schools, observers report that women comprise nearly half the enrolment in the current school year.

Similar increases are showing up in business and medical schools. In 1962-63, women comprised 4 per cent of the total undergraduate business school students. In 1971-72, they numbered 10 per cent. In the medical schools, women students constituted 10.5 per cent of the student body in 1962-63; less than a decade later, in 1971-72, the proportion of women medical students had risen to 19.4 per cent.

If the trend continues, as it appears to be doing, women will enter the labour force with the qualifications to take an equal part. Already women make up more than 33 per cent of the labour force, but the majority are clustered in low-paying, dead-end jobs. It is estimated that by 1980, women will constitute almost 36 per cent of the labour force, with about 3.9 million women working.

If International Women's Year is to be successful, the efforts may well last through the decade, when, it is hoped, those nearly four million women will be participating in the economy on genuinely equal terms with men.

Hire him he's got good legs!

Duty-Free Machinery Imports Worth $460 Million

A report prepared by the Machinery Branch of the Department of Industry, Trade and Commerce shows that machinery worth a total of $460 million was imported duty-free by Canadian firms in 1973.

The report, *Machinery Program Analysis,* is prepared each year to assist Canadian machinery producers in identifying new prospects in Canada. The duty-free program has been in effect since January 1, 1968, and since that time applications for remission of duty have reached more than 19,000 a year.

Each application is reviewed, bearing in mind the needs of Canadian machinery users. When needed machinery is not available from Canadian sources, approval of remission of duty is usually given. But the program also assures Canadian producers of tariff protection when they are in a position to supply. At the same time, machinery users are made aware of domestic capabilities.

Copies of *Machinery Program Analysis — 1973 Imports* are available from the Department's Regional Offices or from the Machinery Branch in Ottawa.

Sound Familiar?

There are six Helmut Schmidts in Bonn, and for some time they've been getting their wires crossed.

To sort things out, Chancellor Helmut Schmidt has written to his namesakes saying that his office will do everything it can to stop the phone hoaxers, misdirected mail, and wrong numbers. Schmidt the Chancellor said it might be a good idea if the other five would enter their professions alongside their names in the telephone directory.

Letters to this effect were duly dispatched. But the exercise seemed to be doomed to failure from the start when the post office delivered two of them to the Chancellery.

(*The Bulletin* of the Federal Republic of Germany)

ANTI-POLLUTION EQUIPMENT IN ITALY

W. H. SKOUSE,

Commercial Officer, Milan

The four great bronze horses of Venice stood proudly on the spires over St. Mark's Square for centuries after they were brought from Turkey at the zenith of the Venetian Republic. Cast in 1264 and brought from the east on Venetian galleys, the famous statues represented the power and affluence of the Italian city-state, made prosperous by the products of its craftsmen and its commercial domination of the eastern Mediterranean Sea.

The horses of St. Mark's Square survived the greatest conquerors. Only the Emperor Napoleon dared to remove them, but on the collapse of his power, the statues were returned to again watch over the square. They seemed eternal, like so many of the monuments to Italy's past.

Today, the horses have vanished. This time, however, they have been removed for their own protection. The Venetians, fearful because the horses were being literally eaten away by sulphur dioxide and other fumes, have put the great treasures in storage, awaiting a solution to the serious air pollution problem in the area.

But Venice is not a great industrial centre. Who, then, is the culprit? Tracing the source of air emissions has always been until very recently a Sherlock Holmes-style investigation, combining

complex wind analysis with remote air-monitoring.

The guilty party in the Venetian case? The corroding gases were finally tracked to the thriving industrial complex at Marghera.

The discovery of the source of the pollution again emphasized that pollution can never be fought only as a local concern. Marghera is separated from Venice by 12 miles of water. The famous blue lagoon is itself heavily polluted by industrial and human wastes. In few places in modern Italy does the conflict between concern for history and the striving for economic prosperity seem so evident.

Beaches closed — Yet pollution threatens not only monuments, or there would have been little public outcry. For generations, Italians have been proud of their way of life, which is highlighted by attractive surroundings and an indefinable "style". Pollution threatens the Italian environment. Milan, the industrial heart of Italy, suffered for years from chronic air pollution and smog before local authorities began to crack down on large industrial polluters. The beautiful lakes of northern Italy are still magnificent to look at from a distance, but the water is not fit for swimming or drinking. The resort owners of the Italian Riviera on the Adriatic Sea are openly questioning the prospects for the survival of a tourist industry that brought Italy $2.3 billion in badly-needed foreign exchange in 1973. Tourists have traditionally come from northern Europe for the sun and the sea, but in all of coastal Italy only two municipalities have sewage treatment plants, and vacationers have found more and more beaches closed by health authorities.

This pollution of air and water is not unique to Italy. It is shared to some extent by all industrialized countries. But the problem is more intense in many parts of Italy because of the rapid pace of the Italian "industrial miracle" after

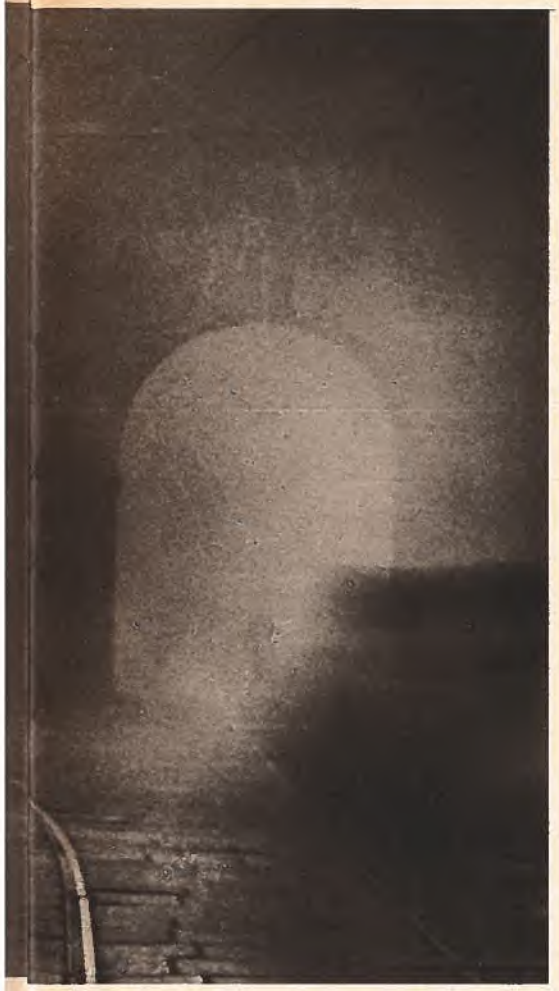
World War II. Although devastated by war and completely devoid of most raw materials, Italy is today the seventh industrial power in the world, with well-developed steel, petro-chemical and automobile industries.

In a country concerned with rebuilding a shattered economy, economic growth took precedence over all else. The money needed for productive manufacturing ventures was simply not available for investment in such luxuries as sewage treatment plants. World scale industry grew up in towns that had previously supported only small tradesmen and artisans. The genius of Italian engineering and construction was put at the disposal of customers around the world, while the growing pains of the large Italian industrial centres went unstudied and unremedied.

Ministry created — An alliance of local authorities — the Italian tourist industry, ecologists and journalists — finally succeeded in persuading the Italian government to create a Ministry of the Environment in 1972. As in Canada, the Ministry is responsible for co-ordinating the regional and municipal pollution-control bylaws. Much rhetoric was heard about the need to tackle environmental problems. Large Italian firms set up research units to study their particular pollution programs. A small but interesting market developed for equipment needed for the first stages of any anti-pollution battle — the monitoring devices needed to measure the degree of pollution and control the standards set.

How large are the resources presently devoted to pollution abatement programs in Italy? Prior to the energy crisis, an OECD study projected a total investment in Italian pollution abatement between 1971 and 1975 at U.S. $3.2 billion. The same study projected $11 billion between 1976 and 1980.

These amounts would represent about 1.6 per cent of the Italian GNP over the same periods. Given the current financial difficulties in Italy which are intensified by the country's heavy reliance on imported petroleum, it is conceivable that while these projections reflect what ought to be spent, the actual expenditures may be lower. For the short term it appears that interesting markets



exist mainly for firms with expertise in the detection and monitoring of pollution and for firms that are able to take a long-term market development approach and sell demonstrator equipment.

Importance of tourism — What guarantee is there for Canadian companies that the Italian market will ever approach the predictions of the OECD study? The answer is simple: certain countries to which tourism is not important could tolerate some industrial pollution and justify the ill effects by pointing out the foreign exchange earned by exporting the products of the polluting companies. Italy, although the world's seventh largest trading nation, depends heavily on tourist dollars to balance its commercial account. The Italian ecology is fragile and heals slowly. The destruction of this ecology would mean the loss of much of the tourist industry. In Italy, pollution is not an inconvenient, if necessary, evil: it is a serious threat to the economic health of the nation.

For the above reasons, the Italian market for anti-pollution equipment and expertise is very promising on a long-term basis. With this in mind, the Department of Industry, Trade and Commerce received a top-level mission of Italian pollution-control experts in April 1974. The mission members, major users of pollution analysis equipment, were unanimous in their praise of the realistic standards set up by the federal Department of the Environment and administered by provincial and local authorities.

Such compliments of the effectiveness of Canadian legislation may be flattering, but do not earn export dollars for Canada. More important, from a Canadian industry viewpoint, was the good impression the Italian visitors received of the Canadian capabilities in consulting and anti-pollution equipment. The areas of particular interest were:

- Air monitoring systems. All Italian air monitoring is now done by computerized ground stations. Canadian proposals for using a mobile remote atmosphere spectrometer that would be capable of detecting pollution far above ground level are under study for surveys in Milan, La Spezia and Sicily.
- Water treatment plants. Raw sewage disposal threatens the vital tourist sector and one Canadian company has had considerable success marketing a water oxidation system for use by small municipalities. The potential for this market will become very interesting when local councils are freed from the recent government-imposed credit restrictions.
- Solid-waste removal systems. One Canadian manufacturer has entered into a licensing arrangement for a compacting system that will be operating soon in a southern municipality, where it will be used for demonstration purposes.

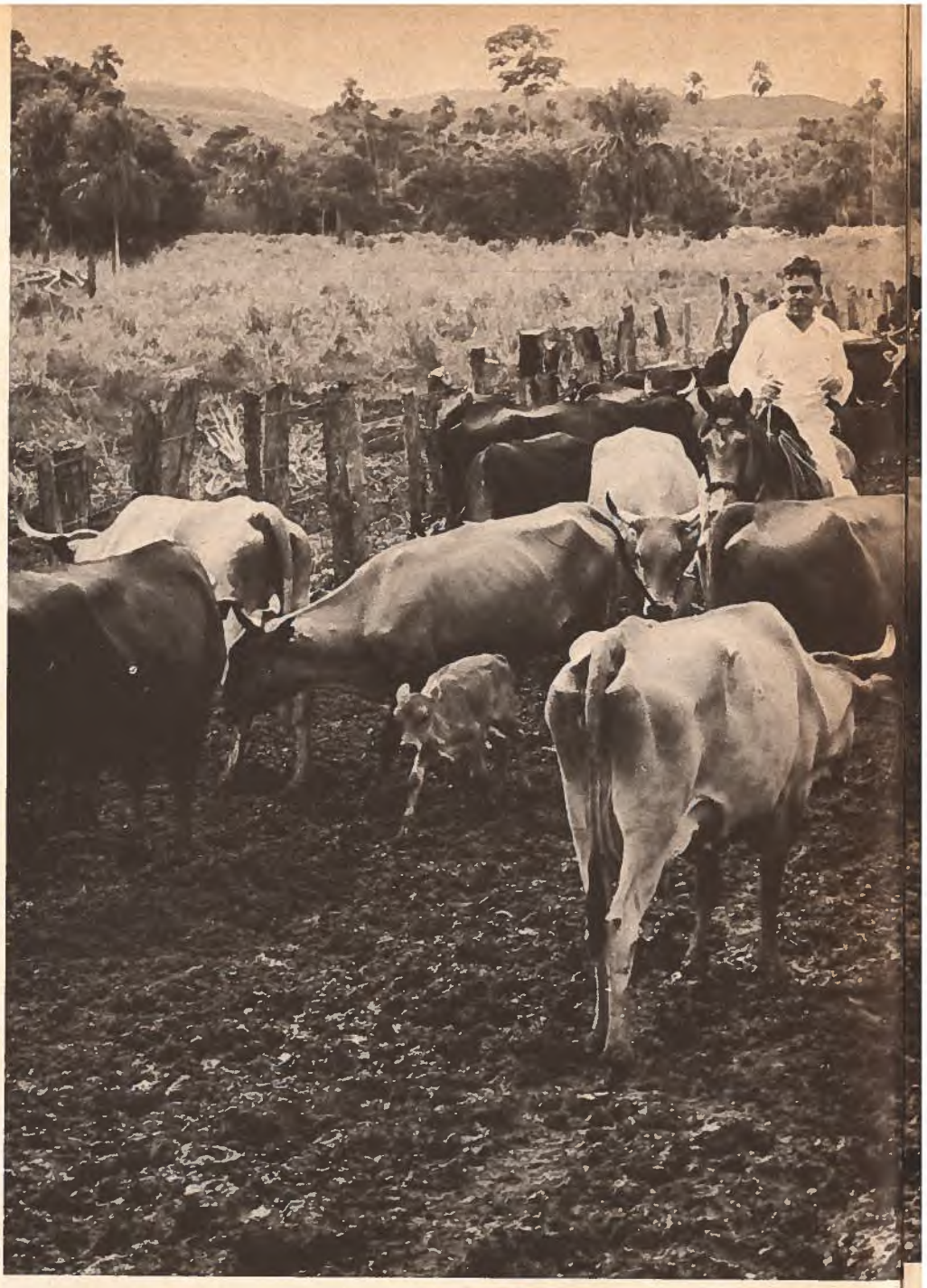
Large-scale anti-pollution investment at the national level has been postponed because of Italy's balance-of-payments problems. But investment in pollution abatement equipment makes economic sense for Italy, and Canadian companies which can demonstrate their technical superiority stand a good chance for taking a healthy share of orders when purse strings loosen. Storing the treasures of Italy to protect them from pollution is only a short-term measure and Italians are now aware of the need to attack the roots of the problem.

Last October, Milan was host to an international anti-pollution exhibition, ANTINQUINAMENTO 74. There were 450 exhibitors, of which 150 came from outside Italy. It will be held again in the fall of 1976.

Canadian companies wishing more information about market possibilities in this field, addresses of contacts, or who want more information are invited to contact the Senior Trade Commissioner, Canadian Consulate General, Via Vittor Pisani 19, Milano 20124, Italy.

VENEZUELA: OPPORTUNITY KNOCKS NOW

T. G. CULLEN,
Assistant Commercial Secretary, Caracas



The Venezuelan federal elections of 1973 brought to power Carlos Andrés Pérez and the Democratic Action Party with a program aimed at achieving the autonomous self-sustaining growth that is a hallmark of a developed nation. Although development will be facilitated by swollen petroleum revenues, the task ahead is still formidable. Venezuela is dependent economically on foreign sources for technology and capital goods as well as for the consumption of its petroleum and iron ore, at least for the time being. Just as serious is the dependence on foreign foodstuffs, especially from neighbouring Colombia.

Steel and energy — Although the word dependence seldom appears in local political speeches, its reduction or its abolition is a key concept in the development program of the new government. There is continual preoccupation by both major political parties with the eventual nationalization of the oil industry. Venezuela has two billion metric tons of proven iron ore reserves south of the Orinoco River, and iron ore will be the basis of the country's industrial economy of the future. It is now policy that, in the future, the nation will export steel rather than unprocessed ore.

The government has established a fund of $500 million to be invested in the industrial expansion of the nation over the next five years, and the steel industry will come in for a large part of this. The national steel commission is now sifting through no fewer than 21 proposed steel manufacturing projects. Representatives of the industry are constantly reviewing the technologies available from all of the major industrialized nations of the world, including Canada.

It would be a mistake, however, to underestimate in any way the government's preoccupation with energy supplies. The country's hydroelectric power-generating capacity has been growing steadily for a decade and investment in electric generating facilities will continue to command large federal investments. Canadian generators will be installed soon on the Guri Dam, the largest in Venezuela, which will supply the industrial power to the entire Orinoco River region.

The construction of 36 rural dams is envisioned as part of the government's vast investment program in agriculture.

The reversion of petroleum concessions to the government is being approached cautiously and most probably will be effected over a number of years. Lack of a clearly defined policy on this has limited the over-all investment by the international oil companies over the past few years, but recent shortages have opened new opportunities for Canadian petroleum equipment suppliers in this U.S.-dominated industry. Nationalization may eventually present more. Canadian technology in the fields of natural gas and in the extraction of foreign properties from crude petroleum is well known here.

Agriculture — The Achilles heel of the Venezuelan economy at the moment is the weakness of its agricultural sector (periodically, there are shortages of meat, milk, eggs, poultry, grain, fruit and vegetables of all kinds). Urban industries, especially construction and the petroleum industry, have unbalanced the Venezuelan economy for two generations, draining resources and manpower from rural areas to the extent that agro-industries and livestock raising are almost disaster areas today.

The importance that agriculture enjoys now in the policy of the government

Typical Creole cattle being rounded up in western Venezuela. The development of agriculture is high on the government's priority list.

is reflected in the federal budget. The five year plan of the Ministry of Public Works calls for a water control, irrigation and land reclamation program for 500,000 hectares (including the construction of the 36 dams previously mentioned) at a cost of more than $1 billion. Furthermore, the President has announced the creation of a fund of $500 million for agricultural development in Venezuela and in surrounding Latin American countries. So there should soon be sales opportunities for Canadian agricultural machinery and for cattle semen.

Transport — The determination of the government to counteract the tendency by industry and population to settle in a narrow corridor close to the Caribbean coast, and to develop the interior, is evident in its transportation priorities. The long-expected Caracas subway or "metro" will probably have to wait a few more years before construction is begun but there is every indication that the railways will be expanded and joined into a cohesive system, with an annual appropriation of approximately $50 million between 1975 and 1991. Canadian manufacturers of railway rolling stock and communications equipment should be contenders to participate in this program. The entire project will be internally financed.

Port congestion and ocean transport have long been major headaches in Venezuela. Two new commissions have been set up, one to oversee the creation of a strong local shipbuilding industry and the other to overhaul and expand the unsatisfactory port facilities and upgrade port administration. The cargo-carrying capacity of Venezuelan ships is to be doubled and 100 fishing vessels will be purchased by the government in the next five years. The private market for fishing vessels is still larger — but finance is a critical factor.

Studies are under way for the eventual construction of a new international airport near Puerto Ordaz and the Orinoco River. Smaller airports through-

Venezuela has the world's highest water fall, the Angel Falls, 3,212 feet high.

out Venezuela are being improved to accommodate the DC-9 aircraft in service with both domestic carriers.

Mining and forestry — Mining in Venezuela has always been a poor and neglected cousin of the petroleum industry. Legislation designed to maximize returns to the nation in the petroleum sector has been extended in the past to include all mining endeavours, most of which cannot be expected to sustain a heavy tax burden. The government recognizes that incentives must be provided if the mining industry is to develop, and there are indications that the industry may get relief by early 1975.

As well as petroleum and iron ore, Venezuela has substantial deposits of gold, diamonds, bauxite, nickel, lead, zinc, coal and uranium, and lesser quantities of other minerals. Canadian companies with expertise in gold mining and with interest in joint ventures in Venezuela are particularly in demand.

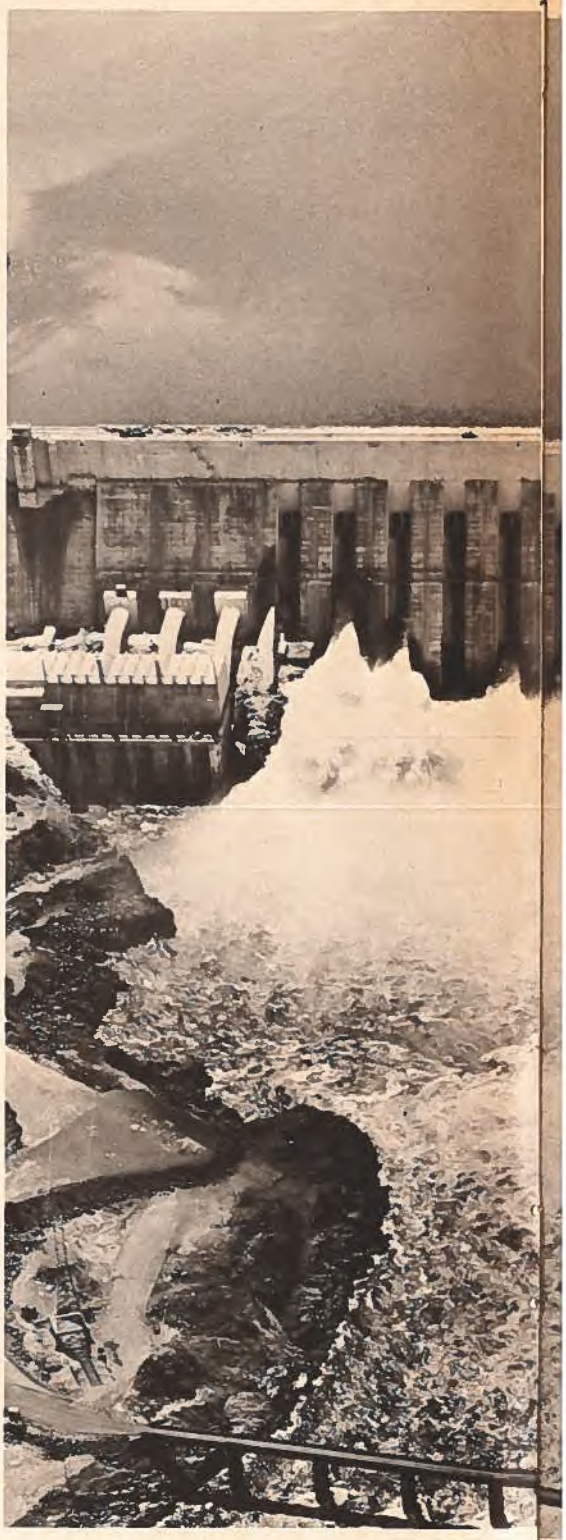
Forestry is, generally speaking, an undeveloped industry seeking direction, and local officials have clearly indicated their recognition that Canada is the first source of forestry technology in the world. Venezuela has large forests of tropical hardwoods, which admittedly are difficult to harvest economically because of the proliferation of species within any given area.

In addition, huge tracts of previously barren land have been planted with a species of Caribbean pine which, within a decade, may entirely change the forest products picture in Venezuela. This amazing feat of creating a gigantic productive forest out of sandy alluvial soil by introducing a foreign species is the accomplishment of the Venezuela Guayana Corporation, a large and autonomous regional authority like the Tennessee Valley Authority in the U.S. This corporation has had a dynamic influence on almost every aspect of life in the southeast part of the country.

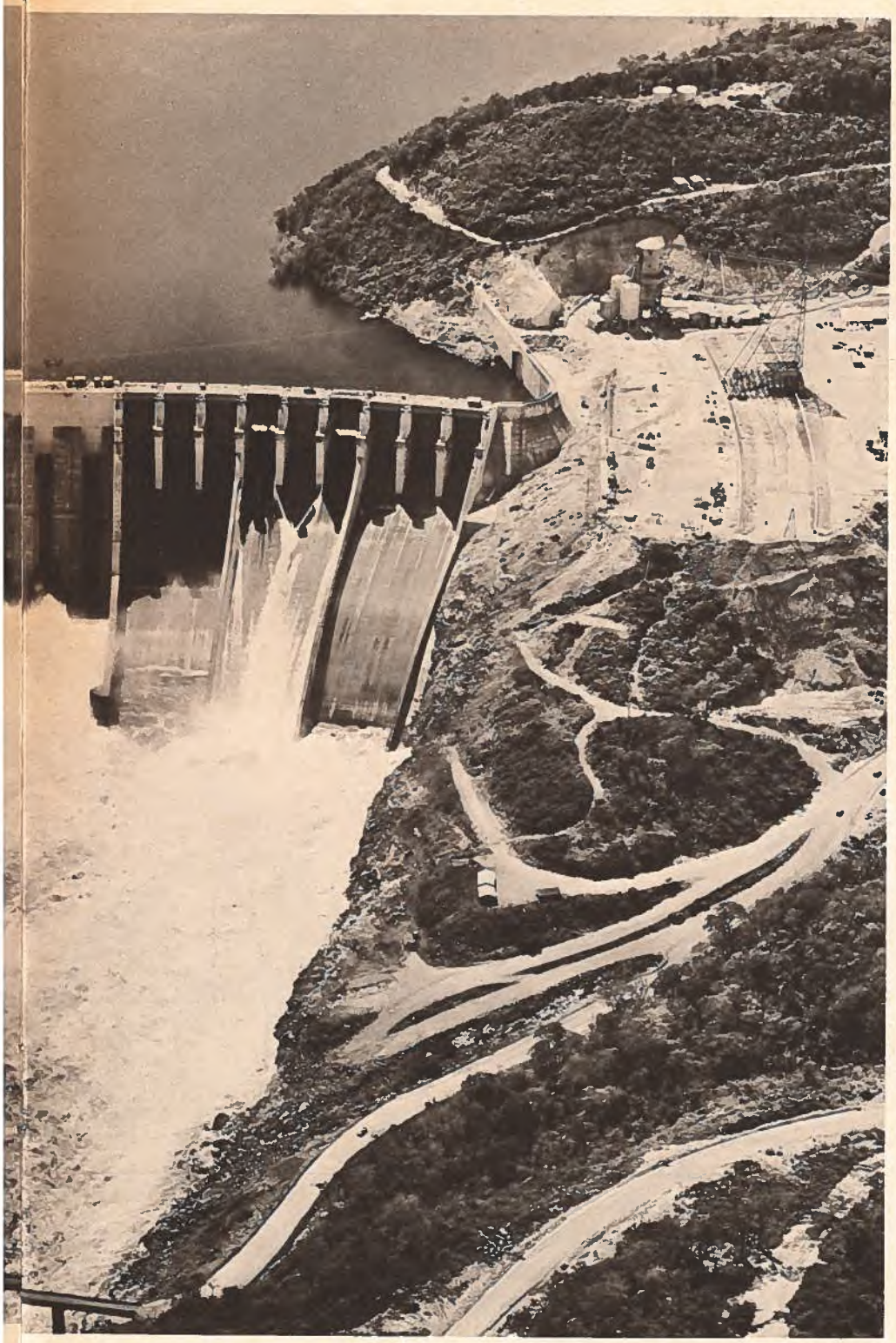
Forest products, in the form of newsprint and pulp, are leading Canadian exports to Venezuela, worth approximately $30 million annually. Export of automobiles and auto parts are still the category of greater value, currently accounting for annual sales of $66 million. All other Canadian exports to Venezuela should account for sales of approximately $50 million in 1974. Venezuela as yet exports little besides petroleum and related products to Canada. At current prices, however, Canada will spend well over one billion dollars for Venezuelan petroleum in 1974.

In the past, Venezuelan importers have traditionally been afforded liberal terms of payment and have tended to operate on 60, 90, 120 and 180 day sight drafts, but world commodity scarcities and inflation have forced many importers to make the acquaintance of letters of credit and cash before shipment. The importers' lot has been further aggravated in the past year by mounting congestion in local ports. Recent efforts by the government have alleviated the situation somewhat but the endemic problems persist.

Approaching the market — The Venezuelan market, perhaps more than most, is extremely resistant to arms-length reconnaissance and superficial approaches by foreign exporters. In almost every sector, especially in large projects in which the federal government is involved, the retention of a local representative is an absolute necessity



The Guri dam, largest in Venezuela, where Canadian generators are to be installed.



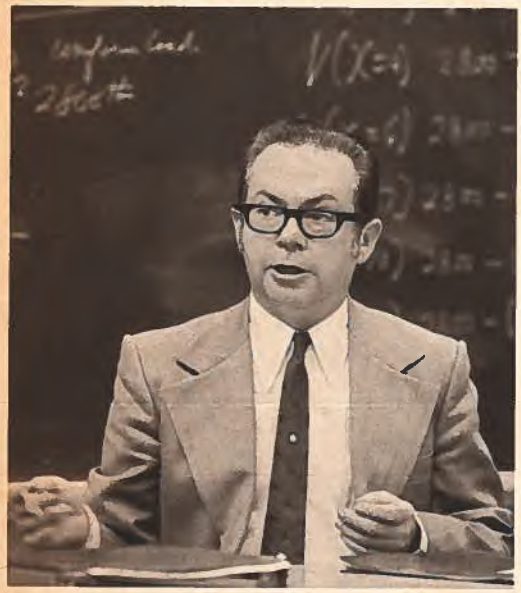
for acquiring and maintaining business. The choice of a local representative is the most critical decision that the exporter will make. In this market, where U.S. and European lines generally offer the secure and traditional course of least resistance, an energetic and resourceful agent is usually of more value than an overextended although "well-connected" representative.

Once an exporter has successfully introduced and established the reputation for his product the rewards can be exceptional. Venezuelans are "muy parejeros", they all tend to choose the same thing once it has acquired the reputation for excellence. Both Americans and Europeans have accomplished amazing feats of advertising in Venezuela. One particular medium-priced U.S. car model, for example, is considered to be at least as prestigious (and as expensive) as a German luxury model which retails for twice its price in Canada. Similarly, every self-respecting Venezuelan knows that Scotch whisky is the only thing worth drinking — and only two or three well known brands at that. The importance of a good agent is, therefore, paramount.

For Canadian manufacturers, exporters and consultants in marine, rail, metal fabricating and agro-industries especially, the time to establish a presence in Venezuela is now, while many of the five-year and longer projects are still in the gestation period. And if you need more information, contact the Commercial Counsellor, Apartado 62.302, Caracas 106, or cable CANADIAN, Caracas. We will be pleased to help you.

TEACHING SUCCESS THROUGH FAILURE

ANDY TURNBULL,
Special Correspondent



Bernie O'Connor emphasizes a point to his class.

Grade 12 students Francis O'Brien, left, and Gordon Morse assemble a garbage compactor they are building as a project under the watchful eye of Bernie O'Connor.

Canadian secondary school teacher Bernie (Bernard) O'Connor wants his teenaged industrial physics students to fail, and he tells them so. But the students succeed. They design and build their own computers and they use them to solve engineering problems that might stump a professional engineer.

The students' solutions are good, too. One major company is now rebuilding the materials handling section of a rolling mill according to the plans of a group of seven teenagers; at least a dozen other factories in southern Ontario are using machinery designed or modified by students, and three students are negotiating with companies for the rights to build and market devices the students developed as part of their school work.

"I don't care whether your project works or not", Mr. O'Connor tells his classes. "You're not marked on that. You'll have your failures . . . you'll fall down somewhere. Then I'll make you pull yourselves up and you'll learn more and grow more every time you do it. And if you're not going to fall down on your own, I'll trip you to make sure you do.

Technology "incidental" — The projects are the main focus of the industrial physics course, now offered in about 30 of Ontario's 400 secondary schools. Each student at the beginning of the year is asked to conceive a project — a device or a system — that will have some use or relevance to the world. Through the year each student will spend most of his time on that project, learning the technology he needs as he goes along. Educators refer to the teaching method as "project technology teaching".

To Mr. O'Connor, teaching at Thomas A. Stewart Secondary School in Peterborough, Ontario, the technology is incidental. "We're not teaching technology here", he says, "we're teaching students. The technology is a handy tool and we hope some of the students will find a use for it after they graduate, but it's not important to the course. We're teaching the students to think — to find the technology they need as they need it — to look for creative solutions to problems. We base the course on technology because it's easier to evaluate the solution to a technological problem.

"But this course would be just as useful to a student who wants to become a musician or a clergyman as to one who wants to become an engineer."

Whether as an end in itself or as a means to an end, there's no doubt that Mr. O'Connor's students are learning technology together with the creative problem-solving Mr. O'Connor emphasizes.

Successes — One grade 13 student designed and built an automatic spring-forming machine as his project. The machine is now at work in a Peterborough area factory, and a toolmaking company is negotiating for the rights to the design. The student was given a full credit for the project in his first year of engineering at Queen's University in Kingston, Ontario.

A grade 10 student several years ago built a Hiltz tube — a fluidics curiosity that separates a stream of ambient-temperature air into streams of hot and cold air. Since then he has improved the basic design and made it so efficient that at least two international corporations are interested in the industrial possibilities.

One student worked during the summer after his grade 11 year on his own original research project at Queen's University. Another passed up an offer of a job in engineering management with a multi-billion dollar company last summer, after his grade 13 year.

Groups of students from the course have redesigned systems and machinery for factories throughout southern Ontario, and are now involved in civic projects for the City of Peterborough. Construction is in progress on a ski lift for the city designed by the students and being built under their supervision. Cost to the city will be about $3,000 for a ski lift Mr. O'Connor says will be worth about $50,000. Students are also designing a 70-yard footbridge to span the Otonabee River near the school.

One group of students is working on a compound rotary steam engine so unique — and so promising — that a truck leasing company with 2,700 units is willing to back the project with a $10,000 grant. The company thinks it

might be able to use the engine to power its trucks.

Another group of students is exploring the potential of permanent magnets as a power source. Mr. O'Connor believes these students already have enough results to demand a reassessment of the whole theory of magnetism.

One student designed and built a computer that runs on a stream of air controlled by the methods of fluidics. He got a full university credit for his project. Another student is building a computer to write and play music, using both digital and analogue functions. One of his classmates is hoping to develop an improved thermionic generator.

Not all geniuses — Of about 200 students who have started the course in the five years Mr. O'Connor has been teaching, about 50 have finished their schooling to the grade 13 level. Seventeen of these students had the full four years of the industrial physics course — and the 14 of them who entered university averaged more than 90 per cent in their first year. Three of them have research grants — normally a post-graduate prerogative — while they are still undergraduates.

The students are bright — that much is obvious — but they are not all natural geniuses. The 100 or so students now in the four years of industrial physics at Thomas A. Stewart Secondary School represent a small fraction of the 5,000 or so secondary school students in the Peterborough school system, but the course is open to all.

"We find it better for the students to select themselves for this course," Mr. O'Connor says. "They enroll at the grade 10 level and I really sock the work to them. About 40 per cent of them drop out after the first year, but the ones who think they can stand the pace stick with it. We're more careful about the teachers. Anyone who wants to teach industrial physics has to be a professional engineer with several years practical experience to start with, then he has to pass a technical examination before he starts his teacher training."

Mr. O'Connor is a provincial examiner for industrial physics teachers, and he examines candidates for more than their technical knowledge.

"I had a PhD in here once", he says, "who I refused to examine. I didn't think he would ever be able to relate to teenaged students. A teacher has to know the technical side of things but he has to know people too. If you can't laugh with your students, you can't teach them."

Mr. O'Connor began his teaching without the usual technical examination, but his was a special case. He was 21 years with the Aluminum Company of Canada, latterly as the company's director of education and the superintendent of Alcan's six northern division plants and he had had eight years experience on the Kingston (Ontario) Board of Education when he submitted a brief outlining his ideas on education to the provincial department of education in 1965. He was 37 years old.

Three years later the province's first industrial physics course began in Kingston. Mr. O'Connor left Alcan then, spent a year at university studying education, and came to Peterborough as a teacher. He's been at it ever since.

Teacher interest — And he's doing the job so well that the school has had to limit the visits of educators who want to study his teaching methods — week long visits are no longer welcome. But they still come — from all over Canada and the U.S. — to see a combination of the sophisticated management techniques Mr. O'Connor learned at Alcan, Mr. O'Connor's own hard-driving teaching style and the project technology approach to teaching.

Project technology teaching is being introduced in the U.S., according to Professor D.E. Loney, co-ordinator of technical education at Queen's University Faculty of Education, and it's popular in England. Professor Loney, though, knows of no school system where it's carried as far as it is in the Ontario industrial physics program.

"The problem with conventional education", he says, "is that teachers tend to teach only with relation to their own subjects. They seem to think the student will be able to integrate the commonalities between the different fields — but in most cases the student won't do that and he may lose interest.

"Project technology teaching involves a multi-disciplinary approach, where the commonalities of different fields are integrated in the classroom. It demands a creative approach to a problem — and I think the creative component is missing in a lot of conventional education."

Professor Loney was appointed head of the provincial department of education's technical curriculum development section in 1966, and one of his first acts was to organize the committee that evolved the outline for the industrial physics courses, a subject that had long interested him.

The program is still evolving, and is spreading slowly through the whole of the school system. Mr. O'Connor's is the only course offered to the grade 13 level — at which Ontario secondary school students graduate with honours — but long-range plans would make the course, and the teaching techniques, available to any student in the province. The main barrier to extension of the course to more than 30 schools that now offer it is the shortage of teachers able to meet the standards demanded of industrial physics teachers.

Professor Loney hopes soon to be able to offer qualified teachers a certificate in project technology teaching, and to train more teachers in project technology techniques. It is obvious now that these techniques are better than traditional methods of teaching students technology, and may be the ideal way of training students to become engineers.

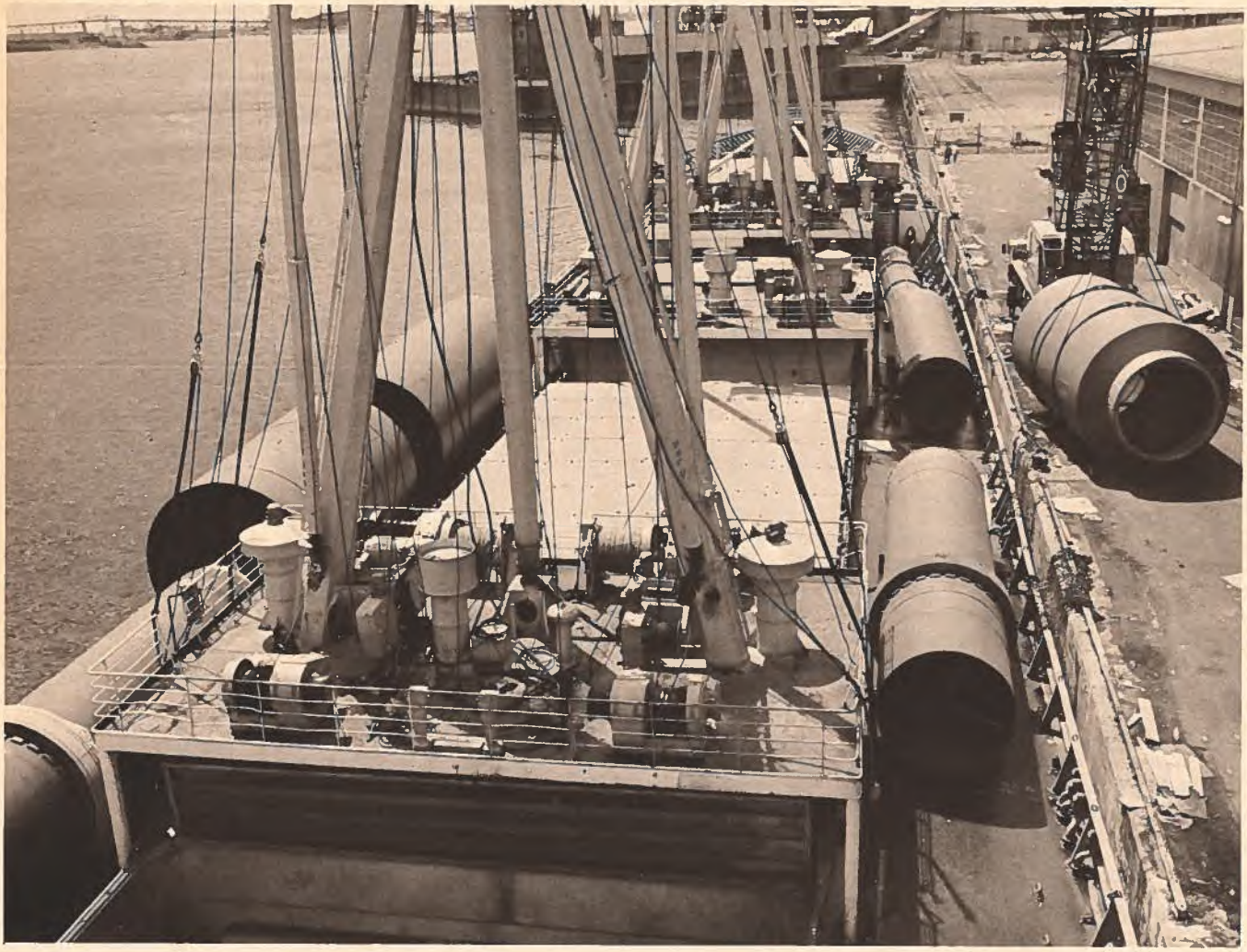
If Mr. O'Connor is right, they may also be the best methods for teaching students to become musicians, clergymen, or anything else they want to become.

"We've got a lot of bright kids in Canada," he says, "and I think it's up to us to make sure they get the best there is in education. They're Canada's future and, the way these kids are coming through, it looks like it's going to be a great future.

"They'll have their failures in class — it's part of a teacher's job to see that students fail somewhere along the line. Then it's the teacher's job to see that they learn to recover from the failure. Nobody's going to succeed all the time, and the people who succeed in the end are the ones who learn to cope with their failures."

How one engineering project helps Canadian exports

Sections of kilns and coolers manufactured by Allis-Chalmers Canada Limited in Lachine, Quebec, are loaded at the Port of Montreal, bound for Cinko Kursun Metal in Turkey. When assembled at the site, the kilns and coolers will be 230 and 60 feet long, respectively.



A zinc refining, rolling and casting complex, now taking shape in a green Anatolian valley in the shadow of a snow-capped peak in Turkey's Toros Mountains, is creating work for more than 500 Canadians. By the time it is completed, in 1975, the $60 million plant will have accounted for the export of more than $20 million worth of Canadian equipment. If goods and services are added, the export figure tops $25 million. One main reason for the impressive economic spin-off for Canada is that Canadian engineers are providing design, procurement and construction services for this major project.

On October 27, 1972, the Montreal-based SNC Group won the project management contract for the complete plant from the Ankara firm of Kursun Metal Sanayii A.S. (CINKUR), bidding against international competition from the U.S., Germany, Britain, France, Belgium and Eastern Europe. Several factors contributed to the choice of the Canadian firm. The SNC Group possesses a high reputation in zinc refining. This expertise, initially developed in Canada for Canadian clients, was later marketed in several countries abroad by the company, which has for many years been making a determined thrust into the world-wide market for engineering services.

A further incentive to the choice of Canadian engineers was a $21 million loan from the Canadian Export Development Corporation, made on the understanding that a certain percentage of goods and equipment for the project would be purchased in Canada.

Local firms used — Detailed design began in the SNC Group's Montreal offices in November 1972, and in early 1973 a design office was opened in Ankara, using the staff of local consulting firms under the supervision and responsibility of SNC Group engineers

from Canada. Construction began at roughly the same time and, in line with SNC project management methods, design and construction have proceeded simultaneously. This meant that the procurement team went to work as soon as the contract was awarded.

Negotiations with major suppliers occupied the first half of 1973, culminating in contract awards in August of that year. In December of 1973, the first shipment — of rear dump trucks, front-end loaders and graders for the CINKUR mine in the Toros foothills — left Montreal aboard a Russian freighter. Since then the flow of Canadian equipment has continued on a smoothly planned schedule.

Canadian equipment — Biggest of the procurement contracts went to Allis-Chalmers Canada Ltd., for the supply of the Waelz plant — a prime component of the refinery and one of the few of its kind in the western world. The multi-million dollar contract covers four kilns, two measuring 230 feet by 14 feet in diameter and the others 8½ feet in diameter by 118 feet long, complete with refractories and bag-houses. Rotary coolers, weigh feeders, drag chain conveyors, fans, control panels and other equipment for the Waelz plant are also being supplied from Allis-Chalmers' Lachine works.

The second largest contract, for a continuous strip casting, sheet rolling and finishing line, went to a specialized California firm. Most of the contract value of this was siphoned back to Canada when the U.S. supplier sub-let manufacture of the rolling mill, spares and electric components to Canron Limited's plants in Lachine and Three Rivers. Also, some of the continuous strip casting machine equipment was purchased by the U.S. supplier from EBCO Industries Limited in Vancouver.

Ajax Magnathermic Canada Limited, of Ajax, Ontario, supplied six furnaces, and the electrolytic cell linings and anodes were bought from Canada Metal in Montreal. Mining and other mobile equipment came from GM/Terex of London, Ontario: Hewitt Equipment of Pointe Claire, Quebec; International Harvester of Hamilton, Ontario; and Dominion Road Machinery of Goderich, Ontario. Some 50 general service pumps came from Worthington of Brantford, Ontario. Dorr-Oliver of Orillia, Ontario, supplied special duty pumps, drum filters, filter presses, agitators and thickeners. Protective Plastics of Toronto, which supplied FRP pipe and fittings, is manufacturing the cooling towers under sub-contract from the Belgian designer.

Among other major Canadian suppliers were General Electric, for transformers and rectifiers; Westinghouse, for motors; B/X Industries, for cathodes and bus bars; Koppers of Canada Ltd., for the complete ball mill; Bailey, for instruments; Cusco, for control panels; Rexnord and Hewitt Robins for ore crushing equipment; Jeffrey Manufacturing, for conveyors; and Allis-Chalmers, Rumely, Ltd., for fork lift trucks. Canadian manufacturers produced some $200,000 worth of valves and $100,000 worth of stainless steel components for the project. The over-all number of suppliers in this country totalled well over 100.

On-site supervision — The project has also given staff of some Canadian manufacturing companies a chance to travel to one of the more colourful countries of Europe. The major vendors are providing supervisory assistance in the erection and commissioning of their equipment, and men from Canada Metal and Allis-Chalmers are now working with SNC Group engineers on the site. Experts from other Canadian firms are expected to join them soon.

Apart from the engineers in charge of on-site quality, the SNC Group has a team of senior engineers, representing chief disciplines, based in Ankara to supervise detailed design. They will move to the site for the equipment installation stage, now beginning.

For Turkey, this plant means a big step toward becoming self-sufficient in zinc, which at present is entirely imported. The plant will produce 6,000 tons of refined lead annually, some cadmium, and 40,000 tons of zinc.

The CINKUR project, with its massive Canadian input, illustrates dramatically the benefits that accrue to the Canadian economy when our engineering services are marketed abroad. Members of the SNC Group first gained their solid background in zinc plant engineering within Canada, for Canadian clients — a prerequisite engineers feel is essential if they are to make an impact in the international market. The SNC Group attributes the success of its aggressive international marketing effort in part to its willingness and ability to seek out and negotiate financing arrangements with such government agencies as CIDA and EDC, or with international agencies like the World Bank and the UN. Where possible, as on the CINKUR job, SNC likes to encourage substantial local participation.

For the SNC Group, it is certainly a philosophy that has paid off. The company has recently completed a large dam in India, and is now at work on projects in England, Ireland, Germany, Spain, Algeria, Tunisia, Nigeria, Mauritius, India, Surinam, Peru, Jamaica, Hawaii, the mainland United States — and, of course, Canada.

Second Argentina machine tool fair set for '76

Argentina's second International Machine Tool Fair (FIMAQH — Feria Internacional de la Maquina-Herramienta) will be held in Buenos Aires in May 1976. The first fair was held in April 1974, with participants from 17 countries exhibiting many types of machine tools.

The fair is being staged under the auspices of the Argentine Secretariat of Foreign Trade and is already being considered one of the most important events of its type in Latin America. For more information, contact the Secondary Industries Division, Machinery Branch, Department of Industry, Trade and Commerce, Ottawa K1A 0H5.

Foreign Exchange Rates

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

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

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

Note: The following rates were current at Nov. 29. Because of unsettled market conditions exporters should consult their bankers for up-to-date quotations.

Country and Currency	foreign currency unit in Canadian dollars	Canadian dollar in foreign currency units
Algeria		
Dinar	.2380	4.20
Arab Republic of Egypt		
Pound (official)	2.5229	.40
Argentina		
Peso (financial)	.0989	10.11
(commercial)	.1974	5.07
Australia		
Dollar	1.2996	.77
Austria		
Schilling	.0558	17.92
Bahamas		
Dollar	.9872	1.02
Belgium and Luxembourg		
Franc	.0265	37.74
Bermuda		
Dollar	1.0397	.96
Bolivia		
Peso	.0494	20.24
Brazil		
Cruzeiro (official free)	.1352	7.40
Britain		
Pound	2.3007	.43
Britisb Honduras		
Dollar	.6078	1.64
Burma		
Kyat	.2050	4.88
Cbile		
Escudo (commercial)	.0007	1,428.57
(financial)	.0006	1,666.67
Cbina, People's Republic of		
Yuan	.4188	2.39
Colombia		
Peso (fixed)	.0360	27.78
Costa Rica		
Colon	.1185	8.44
Cuba		
Peso	N.A.[10]	
Czechoslovakia		
Koruna (fixed basic rate)	N.A.[10]	
Denmark		
Krone	.1677	5.96
Dominican Republic		
Peso	.9872	1.02
Ecuador		
Sucre (official)	.0390	25.64
El Salvador		
Colon	.3949	2.53
Fiji		
Dollar	1.2340	.81
Finland		
Markka	.2686	3.72
France, Monaco, etc.[1]		
Franc	.2136	4.68
French Pacific[2]		
Franc	.0110	90.90
Franco-African Republics[3]		
Franc	.0042	238.10
Germany		
D Mark	.3992	2.51
Ghana		
New Cedi	.8555	1.17
Greece		
Drachma	.0333	30.03
Guatemala		
Quetzal	.9872	1.02
Guyana		
Dollar	.4444	2.25
Haiti		
Gourde	.1974	5.07
Honduras		
Lempira	.4936	2.03
Hong Kong		
Dollar	.2035	4.91
Hungary		
Forint (official)	.0869	11.51
Iceland		
Krona (official)	.0083	120.48
India		
Rupee	.1229	8.14
Indonesia		
Rupiah	.0024	410.00
Iran		
Rial	.0134	74.63
Iraq		
Dinar	3.3346	.30
Ireland		
Pound	2.3007	.43

Country and Currency	foreign currency unit in Canadian dollars	Canadian dollar in foreign currency units
Israel		
Pound	.1646	6.08
Italy		
Lira	.0015	666.66
Jamaica		
Dollar	1.0859	.92
Japan		
Yen	.0033	303.03
Kenya[4]		
Shilling	.1379	7.25
Korea, Republic of		
Won	.0024	404.38
Lebanon		
Pound (free)	N.A.[10]	
Libya		
Dinar	2.777	.36
Malawi		
Kwatcha	1.2280	.81
Malaysia		
Dollar	.4210	2.38
Mexico		
Peso	.0780	12.82
Morocco		
Dirham	.2353	4.25
Netherlands		
Florin	.3849	2.60
Netherlands Antilles		
Florin	.5515	1.81
New Zealand		
Dollar	1.2908	.77
Nicaragua		
Cordoba	.1410	7.09
Nigeria		
Naira	1.4700	.68
Norway		
Krone	.1838	5.44
Pakistan		
Rupee	.0997	10.03
Panama		
Balboa	.9872	1.02
Paraguay		
Guarani (free)	.0078	128.21
Peru		
Sol (free)	.0225	44.44
Philippines[5]		
Peso (free)	.1402	7.13
Poland		
Zloty (fixed basic rate)	.2577	3.88
Portugal & Overseas Provinces[6]		
Escudo	.0392	25.51
Saudi Arabia		
Riyal	.2850	3.50
Sierra Leone		
Leone	1.2371	.81
Singapore		
Dollar	.3358	2.98
South Africa		
Rand	1.4314	.70
Spain & Dependencies		
Peseta	.0172	58.14
Sri Lanka[7]		
Rupee	.1475	6.78
Sweden		
Krona	.2320	4.31
Switzerland		
Franc	.3704	2.70
Syria		
Pound (free)	.2711	3.69
Thailand		
Baht (free)	.0493	20.28
Trinidad & Tobago[8]		
Dollar	.4793	2.09
Tunisia		
Dinar	2.2684	.44
Turkey		
Lira	.0713	14.03
United States		
Dollar	.9872	1.02
Uruguay		
Peso (free)	.0007	1,428.57
Venezuela		
Bolivar (official free)	.2302	4.34
Yugoslavia		
Dinar (official)	.0571	17.51
Zaire, Republic of[9]		
Zaire	1.961	.51
Zambia		
Kwacha	1.3893	.72

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

2. New Caledonia, New Hebrides, French Polynesia.

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

4. Rate also applies to Tanzania and Uganda.

5. Exchange rate in Philippines on floating basis with daily quotations by banks.

6. Approximately same for Portuguese territories in Africa.

7. Formerly Ceylon.

8. E. C. dollar, at same rate, used in Leeward and Windward Islands.

9. Formerly Congo (Kinshasa).

10. Rates not available at press time.

Export Opportunities

The inquiries listed below come from several sources, including various Branches of the Department in Ottawa and from the Trade Commissioner Service posts abroad. More information on these items can be had by contacting the post at the address shown under each item. In some cases we have given the name and address of the company so they may be contacted direct.

Chemicals

DENMARK — A major Danish company who produces catalysts for the chemical industry and is planning an additional catalyst plant in Sweden, requires the following: nickel nitrate, copper nitrate, copper carbonate, magnesium oxide, chrome acid, aluminium hydroxides and zinc oxide: Commercial Counsellor, Canadian Embassy, Prinsesse Maries Allé 2, Copenhagen V, Denmark.

PHILIPPINES — This Philippine company is interested in acting as agency representatives and/or distributors of industrial chemicals, and raw materials, and chemical intermediates: Stantest Industrial Suppliers, P.O. Box 3897, Manila, Philippines, Attention: Mr. Leodolfo de Guzman (Manager).

Investment

PHILIPPINES — This company is offering research and consultancy services for feasibility studies; manufacturing and joint venture agreements: Mrs. Edna Rovero, Manager, RHO Chemical Corporation, P.O. Box 1701, Manila, Philippines.

Wood Products

UNITED STATES — Hardwood - 5,000 to 10,000 cords cut to American standards for shipment in car lots. Preference is for 85 per cent hardwood consisting of oak, ash, cherry, bass, maple H & S, cucumber and butter nut, etc. Face cord 18 inches deep, 4 feet high and 8 feet long. No wood more than 4 inches in diameter in a cord. Logs 6-10 inches split in two and 10 inches and more split in quarters. Each cord must be either wired, or use a flat wired band for the purpose of quality and control: Consul and Senior Trade Commissioner, Canadian Consulate, 3 Parkway Bldg., Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Trade Lines

Argentinian refinery

YPF (Yacimientos Petroliferos Fiscales), the State Oil Utility, has announced that studies are under way for the construction of a petroleum refinery at Puerto Rosales (Buenos Aires). The refinery is to begin operations by 1978 with a daily capacity of about 25,000 cubic metres of petroleum; the investment required is estimated at about US$ 300 million, to be financed by national and foreign groups. — Buenos Aires

Argentina - Russia trade agreement

An Argentine mission made up of government officials and private businessmen has announced final conformity on a series of trade agreements. Of greatest importance to Argentina was the final acceptance of a long term loan for US$ 600 million at a 4.5 per cent interest to finance the purchase of Soviet equipment to be installed in Argentine hydroelectric projects. In turn, Russia will buy 90,000 tons of Argentine beef over a three year period and pending final quality inspection, one million hectolitres of wines. — Buenos Aires

First of its type for Argentina

Agromas Ltd. has started up in Bahia Blanca the first Argentine plant for manufacture of hyperphosphate, organic and natural fertilizer, which previously had been totally imported. Approximately 18,000 tons of hyperphosphate and nearly 45,000 tons of triple superphosphate have been shipped in annually at high cost in foreign exchange. The plant's initial capacity is 80,000 tons a year, sufficient to cover local demand for this type of fertilizer. — Buenos Aires

Dutch-Arab tanker company

The United Arab Emirates (Trucial States) and the Dutch Shipping and Trading Company SHV have signed an agreement to form a joint petroleum tanker company for the transportation of UAE crude oil and refined products.

The joint company, owned 51 per cent by the UAE Government and 49 per cent by SHV, has been guaranteed by the UAE to transport 5 million tons of crude and refined products in its first year of operation and at least 10 million tons annually from then on. It will purchase in the next two years four 250,000 d.w.t. tankers at an estimated cost of $152 million. Charter tonnage will be used until these ships go into service.

The UAE will take over the entire management of the tanker fleet after 12 years during which SHV will manage the company. The tanker company will be based in Abu Dhabi with a branch office in London to handle the chartering business. — Beirut

Fertilizer plant for Oman

The Government of Oman has signed a contract with Gazocean of France calling for the construction of a fertilizer plant costing $400 million to process natural gas piped through 200-mile, 20-inch line from the gas fields. Besides providing feedstock for a planned daily output of 2,000 tons of ammonia and urea, this line will fuel a major new seawater desalination plant and electricity generating station.

Another contract was also signed with Tesoro Petroleum Corp. of the United States which provides for the construction of a liquefication plant costing $100 million to process associated gas from the existing oil fields about 180 miles southwest of Muscat.

The only producer of oil in Oman at present is Oman Petroleum Development (85 per cent Royal Dutch Shell). Crude oil produced during the first half of 1974 averaged 297,000 b/d. — Beirut

Norwegian textiles

In 1974 exports from Norwegian textile factories will for the first time pass Kr. 500 in value. Export figures for the last 12-month period show an increase of 20 per cent. On the other hand, the domestic market, which normally accounts for 70 per cent of the industry's output, has declined somewhat during the year. There has been an annual increase in exports of 10-15 per cent every year for the last 15 years. Two-thirds of these exports go to other Nordic countries.

The Soviet Union is expected to become a steadily more important market for Norwegian textile factories. Last year, exports to the Soviet Union were worth Kr. 20, and the industry has every hope of increasing this in 1974. — Oslo

Scottish cheese

In an effort to boost Scots Cheddar cheese by 50 per cent over the next few years, about 10 million pounds is being invested in new plant equipment. The

new mechanized cheese plants in the South-West of Scotland — at Stranraer and Mauchline (owned by the Scottish Milk Marketing Board), Sorbie (Unigate/CWS) and Lockerbie (Express Dairy) — are expected to produce 90 per cent of Scottish Cheddar output. Existing plants at Sanquhar and Kilmaurs in Ayrshire are being phased out this year (both are owned by Express Dairy), and will be replaced by the 5 million pounds factory at Lockerbie. — Glasgow

Spanish satellite

Spain's first satellite, INTASAT, has been launched by NASA. It is circling the earth at an altitude of 1,650 kilometres and scientific objectives include the study of the ionosphere with particular reference to the distribution of solar energy, penetration of radiation, state of disturbance in atmosphere and so on.

This makes Spain the 11th nation with an artificial satellite in space. To date five nations have launched their own satellites: The U.S.S.R., the U.S., France, China and Japan, while five others have manufactured artificial satellites: Italy, Britain, Austria, Canada and Holland.

This space project was made possible by the collaboration of Spain's Aerospace Institute (Instituto de la Técnica Aeroespacial) — INTA, which gave the satellite its name, and the firms CASA (Construcciones Aeronauticas S.A.), Standard Eléctrica, Hawker Siddeley Dynamics and N.A.S.A. — Madrid

Uranium in Spain

Important uranium deposits have been discovered recently on the banks of the River Ebro near Almatret and Mequinenza, Province of Lérida. Preliminary estimates put reserves at approximately 20,000 tons of uranium which, if confirmed, will make this one of the richest uranium-producing areas in Spain. — Madrid.

Turkish refrigerator factory

The construction of a major refrigerator plant in Eskisehir at the organized industrial zone has been completed. The plant, built by Koc Holding will manufacture Arcelik type refrigerators, a popular brand with Turkish housewives. Under single-shift operation, the plant will turn out 250,000 refrigerators annually.

The project has cost TL 250 million and is scheduled for operation by early 1975. Installation of machinery and equipment at the main factory building has started.

According to industry sources, the Eskisehir plant should have an annual sales turnover of TL 1,000 million. After satisfying local demand, the factory will export refrigerators to Middle East countries: — Ankara.

Turkish tourism

In the first six months of this year Turkish tourism receipts increased by 45.6 per cent over 1973. This was a significant development because the number of foreigners visiting Turkey fell to almost nil in July and August due to the Cyprus crisis. Turkey's tourism receipts in the first half of 1974 totalled $135,520,000 compared to $83,363,000 last year.

The tourism receipt-expenditures balance, which was in the red until 1970, is now running in favour of Turkey. In 1971, the balance was $10.3 million in favour. In 1972, the balance rose to $26.3 million and in 1973 to $38.9 million. This year, the balance was running $56.6 million in favour of Turkey.

Over the January to August period, the number of tourists visiting Turkey fell by only 2 per cent this year compared to the same period in 1973. However, in spite of this setback, tourists spent more money in Turkey than ever. On the other hand, more Turks visited foreign countries this year. In the first half of 1974, 498,112 Turks travelled compared to 393,291 last year, a 26.7 per cent increase. —Ankara

West Germany Construction Industry

The October issue of *Canada Commerce* carried an article on the European Hardware Market that stated that the Government of the Federal Republic of Germany was expected to provide additional incentives to maintain high construction levels. Events overtook us and the Trade Commissioner's office in Duesseldorf has advised us of what these steps consist of.

Although the Federal German Government maintains the position that the unusual construction boom experienced in the first decades after the war could not be maintained forever at that high level, it now has stepped in to stop the recent slump in the construction industry before its effects on the whole economy and the increase in unemployment could assume alarming proportions.

In addition to substantial investment incentives, premiums for the hiring of unemployed and increased government procurement from which many branches of industry should profit, a special program has been devised involving federal expenses in the amount of DM650 million for the revival of the construction industry alone. Moreover, special investment incentives will be granted to public non-profit residential construction companies and tax abatements for the construction of private residences, temporarily suspended, have been reintroduced.

It can be assumed that all these measures will lead to a general revival of the residential construction activity which optimists hope can be stabilized at a level of 500,000 residential units per year. But the do-it-yourself market for building hardware is apt to gain most from the expected revival.

In the second column of page 30 of the September issue of *Canada Commerce*, in the article, "Brazil, an Emerging Power," there was a reference to Canadian exports to Brazil reaching $11 million in 1973. This was incorrect. The figure should have been $111 million.

CANADA'S TRADE FAIR PROGRAM

The following is a list of trade fairs for the fiscal year 1975/76, beginning April 1, 1975, at which the Department of Industry, Trade and Commerce will sponsor exhibits. Although this program is relatively firm, changing conditions or unforeseen circumstances could necessitate adjustments. Canadian manufacturers interested in participating under government auspices in any of these fairs should contact the Office of Export Programs and Services, Department of Industry, Trade and Commerce, Ottawa, Ontario, K1A 0H5. Companies participating in trade fairs abroad that are not listed may be eligible to receive a financial contribution from the Department to cover the cost of participation. Details of this shared cost program can be obtained from the Office of Export Programs and Services within the Department.

	WHAT	WHERE	WHEN
Agriculture	**20th World Veterinary Congress** This will be Canada's first official participation in this Congress which will enable Canadian industry to demonstrate its technological competence in the veterinary field.	**Thessalonika, Greece**	**July 6-12, 1975**
Automotive	**Tokyo Auto Service Equipment Show** This is the leading Japanese show for service station equipment.	**Tokyo**	**May 23-26, 1975**
	Automotive Parts and Accessories Association This is the largest after-market parts exhibit in the U.S.	**Chicago**	**November 10-12, 1975**
	21st Japanese Motor Show A show to display automotive parts, give comprehensive technical explanations and have a discussion of specifications for quotation with senior industry purchasers.	**Tokyo**	**Oct. 31–Nov. 10, 1975**
Clothing	**National Children's Wear Association Junior Fashion Fair** An important and prestigious two-phase event for children's wear buyers.	**London**	**April 7-10, 1975** **October 13-16, 1975**
	International Men's and Boys' Wear Exhibition (IMBEX) An exhibition of men's and boys' apparel including outerwear, sportswear, slacks, jeans and knitwear.	**London**	**February 24-28, 1976**
	Women's Apparel Show (solo) Fashion apparel to be shown will include outerwear, sportswear, coats, leather and knitwear.	**New York**	**April & November 1975**

	WHAT	WHERE	WHEN
Construction and Construction Materials	**International Building Exhibition (Batimat)** This is the world's largest building materials exhibition offering the greatest market exposure of Canadian products to EEC builders, developers, architects and distributors.	**Paris**	**November 20-30, 1975**
	Industrialized Building Exposition (INBEX) An annual event featuring full-size and scale systems and components, building material, consulting services, building and hoisting equipment and woodworking machinery.	**Chicago**	**December 1975**
	16th Salon International du Bâtiment An annual event exhibiting all sectors of the building trade from industrialized building to interior decoration. On display will be model houses, timber systems, roof trusses, heating systems, insulation, doors, windows.	**Brussels**	**February 14-23, 1976**
Education	**American Vocational Association Show** This is a national educational equipment show emphasizing vocational technical training equipment used in schools and technical colleges. Electrical and electronic teaching systems, woodworking, metalworking, welding, automatic audio-visual equipment will be on display.	**Anaheim, California**	**December 5-10, 1975**
Electronics	**Second World Telecommunications Exhibition (Telecom '75)** This specialized exhibition on all fields of telecommunication is held in conjunction with the world administrative radio conference for marine mobile telecommunications. Experts and buyers of telecommunications and electronic equipment from ITU countries will attend.	**Geneva**	**October 2-8, 1975**
Engineering	**Shipbuilding, Marine Engineering and Communication Exhibition (Europort 75)** This show is geared to develop an export market for Canadian ships, ships' equipment and marine products generally.	**Amsterdam**	**November 11-15, 1975**
	Europe Offshore Exhibition and Conference This is an international trade fair concentrating on oil and gas exploration and operation. On display will be all types of products including scientific oceanographic instruments, major oil exploration and development equipment and rigs, and pollution control systems and equipment.	**Aberdeen, Scotland**	**September 16-19, 1975**
	Society of Petroleum Engineers (AIME) Offshore Technology Conference A major show on ocean technology. The technical sessions include a broad range of engineering and scientific subjects related to the development of oceans.	**Houston**	**May 5-8, 1975**
Farm Equipment	**California Farm Equipment Show** An exhibition of heavy agricultural implements for the northwest market and related industrial equipment, particularly short line.	**Tulare**	**February 11-13, 1976**
Food	**National Food Services Exhibition** This will be Canada's second participation in this event held every second year specifically for the catering industry.	**London**	**April 4-8, 1975**
	National Fancy Food and Confection Show An annual exhibit and workshop session for distributors, manufacturers and retailers of fancy and gourmet foods, specialty foods, biscuits and confections, and wines and spirits.	**Chicago**	**August 17-20, 1975**

	WHAT	WHERE	WHEN
Forestry	**International Trade Fair for Machinery and Equipment for the Wood Industries (LIGNA)** This is the first official Canadian participation in this fair for sawmill, plywood and woodworking equipment.	**Hanover**	**May 28-June 3, 1975**
	Forest Products Machinery and Equipment Exposition This will be our fourth participation in the leading forest harvesting and sawmill equipment exhibition in the eastern U.S.A.	**Atlanta, Georgia**	**June 6-8, 1975**
Furs	**International Fur Trade Exhibition** This trade fair enables Canadian raw fur producers to exhibit their products to fur brokers and agents, and fur garment manufacturers and retailers.	**Frankfurt**	**April 16-20, 1975**
Furniture	**Hickory Furniture Mart** This is a vertical household furniture show which takes place in the spring and fall. Hickory area shows are the largest and most important in the U.S., attended by about 77 per cent of the major U.S. buyers.	**Hickory, North Carolina**	**April & October 1975**
Leather and Leather Products	**Semaine du Cuir** This is the world's largest annual leather industries trade fair.	**Paris**	**September 13-17, 1975**
	Footwear Show (solo) This first solo footwear exhibit held in the U.S. will display Canadian products to distributors and department, chain and independent shoe store buyers.	**New York**	**March 1976**
Machinery	**International Packaging Machines, Packaging Materials, Confectionery Machinery Fair (INTERPACK)** This will be our first official participation in this international packaging equipment show.	**Duesseldorf**	**May 9-15, 1975**
	International Restaurant Equipment Fair (IREF) This is an annual trade show for restaurant and catering services and equipment.	**Tokyo**	**August 1975**
Nuclear Industries	**4th International Nuclear Industries Fair (NUCLEX '75)** A vertical technically oriented fair of world stature, NUCLEX will present a complete range of products and services related to the nuclear industry.	**Basel**	**October 7-11, 1975**
Sporting Goods	**Salon Professional des Articles de Sport et Loisir de Plein Air (SISEL)** This will be our second participation in this camping and sporting goods show.	**Paris**	**September 21-23, 1975**
Textiles	**33rd Interstoff Trade Fair** **34th Interstoff Trade Fair** This is an international, twice-a-year exhibition for textiles.	**Frankfurt**	**May 12-15, 1975** **November 18-21, 1975**
	International Trade Fair for Home Textiles, Floor Covering and Household Textiles (HEIMTEX) This will be Canada's second official participation in this international fair for draperies, upholsteries and clothing fabrics.	**Frankfurt**	**January, 1976**

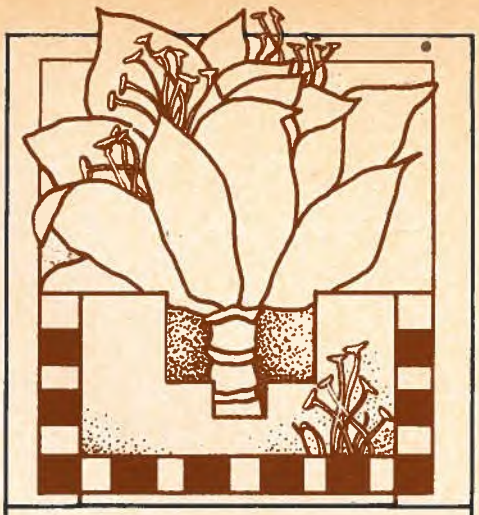
	WHAT	WHERE	WHEN
Transportation	**International Exhibition Transport Expo** Intra-urban transportation systems and equipment, railway equipment and consulting services will be displayed at this international fair for transportation industries.	**Paris**	**April 15-20, 1975**
	Paris Air Show This aerospace show will allow the Canadian industry to demonstrate aerospace components, STOL systems and electronic navigational systems to marketing, technical and senior management personnel of the international aerospace industry and foreign governments.	**Paris**	**May 30-June 8, 1975**
	International Airport Construction and Equipment Exhibition On display will be passenger and baggage handling equipment, freight handling equipment and machinery, aircraft handling equipment and airport administration services.	**Brussels**	**September 15-18, 1975**
General	**Poznan Industrial Trade Fair** This is Poland's largest trade fair attracting buyers from Poland and other Eastern European countries.	**Poznan, Poland**	**June 8-17, 1975**
	Tehran International Trade Fair This is a large annual horizontal fair for manufactured goods.	**Tehran, Iran**	**September 16-27, 1975**
	Baghdad International Trade Fair	**Baghdad, Iraq**	**October 1-21, 1975**
	12th Algiers International Trade Fair The objective of our participation is to introduce Algerian decision makers to the manufacturing and consulting capabilities of Canadian exporters.	**Algiers**	**August-September 1975**
	Izmir International Trade Fair This fair will be used to display Canadian manufactured goods.	**Izmir, Turkey**	**August 20-September 20, 1975**

The Department will also be participating in the following Book Fairs:

American Booksellers Association Exhibition		**June 1975**
20th U.S.A. International Book Exhibition	**San Francisco**	**June 29–July 2, 1975**
Frankfurt Book Fair	**Frankfurt**	**October 1975**
International Book Fair of Brussels	**Brussels**	**March 1976**

MISSION SEEKS TRADE WITH BRAZIL

LUIS BUSTOS,
Latin America Division,
Western Hemisphere Bureau, IT&C



Sr. Gomez, Brazilian Minister of Trade, examines a Canadian hand-woven wall-hanging given to him by the Hon. Alastair Gillespie, left.

Hard work was the order of the day — all five days — during the Canadian trade mission visit to Brazil last fall. The mission was composed of 33 of Canada's leading businessmen, plus senior government officials and media representatives, and was led by the Hon. Alastair Gillespie, Minister of Industry, Trade and Commerce. The basic objectives were to promote trade in goods and services between the two countries and to establish high-level business contacts.

If the number of meetings held is any measure, it is safe to say that these objectives were fully met. Individually and in groups, mission members had more than 250 meetings with representatives of the Brazilian government and of Brazilian financial and business communities in Brasilia and in the states of Sao Paulo, Guanabara, Parana, Rio Grande do Sul and Minas Gerais. All members expressed appreciation of the warmth and cordiality shown them during their trip.

The schedules for individual businessmen included meetings with Brazilian executives of utilities, steel industry, air transportation, food and feed industry, urban development, tourism, construction and livestock, as well as with academics in the field of international business.

In their discussions, the members of the mission identified numerous possibilities for new business in the short, medium, and long terms. Although the largest dollar volume potential is in the larger projects such as hydroelectric power, railways and steel manufacturing, the opportunities in the other sectors are indeed attractive.

Businessmen reacted most favourably: Brazil is an attractive market that challenges the aggressive businessman. Newcomers and old-timers alike agreed that strong marketing and patient groundwork are basic ingredients in any effort to penetrate it.

The President of Brazil, General Ernesto Geisel, centre, shows his pleasure at a gift of a Canadian-made silver table ornament. On the President's left is Mr. Gillespie.

On arrival in Brasilia, the mission was received by the President of Brazil, General Ernesto Geisel, and by his senior ministers. President Geisel said he shared Mr. Gillespie's view that joint ventures would be a most important means for expanding the economic relationship, and coined a new Brazilian verb, "jointventurar", to make the exercise easier for both parties. He also emphasized the responsibility of both governments to open doors in trade and economic matters, agreeing with Mr. Gillespie's rejoinder that it was equally important to keep the doors open.

It was agreed that Canada and Brazil should co-operate in the forthcoming GATT multilateral trade negotiations, supporting the sector approach in ensuring that world markets were liberalized, particularly for upgraded resource products.

Mr. Gillespie, at a meeting with his counterpart, Sr. Severo Gomes, examined at length the possibilities for trade expansion, noting that two-way trade in 1974 was expected to approach $500 million. Brazil is one of Canada's largest customers for wheat and both ministers hoped this important trade would continue. They recognized that there was substantial scope for the exchange of products, for investments, and for other forms of economic co-operation between the two countries. Mr. Gillespie said he was glad to learn of the many opportunities for joint ventures between Canadian and Brazilian companies. He noted that Canada already had substantial investments in Brazil and was glad to learn that Canadian investment was welcome, particularly in view of the new investment opportunities opening up.

There was agreement to encourage the exchange of official and private trade delegations, marketing missions, and participation in trade fairs. Sr. Gomes said that Canadian firms would have wide scope for supplying machinery and services for the third expansion plan for the steel industry. Canadian firms advised their intentions to bid on various portions of the plan.

Brazil's Second National Development Plan emphasizes energy, transportation, communications, agriculture, and the manufacture of capital goods and of other industrial products. Canada could help Brazil to achieve its objectives, particularly in the fields of engineering, power development, communications, transportation, resource development, agriculture, and fisheries. Also of specific interest to Canada are Brazil's giant hydroelectric schemes, the recently-announced $4.5 billion railway development program, and the substantial expansion plans for the Brazilian iron and steel industry.

During the meeting with Sr. Shigeaki Ueki, Minister of Mines and Energy, considerable time was given to discussions on the Itaipu project and other major energy projects in Brazil. Several Canadian firms expressed interest in participating in this rapidly expanding sector. Prequalifications for the Itaipu project will take place by mid-year 1975; tenders will be called by the end of the year; orders by the first half of 1976, and start-up is expected early in 1983.

The timing between ordering and start-up will require deliveries of three or even four turbine-generator units a year, rather than the usual two. This may dictate the need for joint efforts by companies or countries. There are no plans to order the entire equipment needs in one block (about $1 billion), but bids will be called on portions of the project — turbine-generators, pennstocks, transformers, switchgear, etc. — each order worth between $50 million and $200 million.

Design studies are being considered for the high-voltage AC or DC transmission systems from generating to consuming centres. Brazil is looking for low-interest rate loans to pay for these studies, the costs of which, including paying for the consultants, is expected to be relatively low (several million dollars) compared with the total costs.

Discussions were also held on the possibilities of co-operative programs in the fields of oil and gas pipelines, nuclear energy and mineral exploration, and an invitation was given Sr. Ueki to visit Canada to see Canada's capabilities in the energy and mining sectors.

Other sectors that were discussed during the trip included fertilizers, breeding cattle, fish processing plants and agro-business generally. Oil, of course, was a subject of mutual interest, and several areas were identified where Canadian collaboration might be beneficial, particularly in exploration work and in shale operations. There was also interest in a possible joint venture to extract Canadian coal for Brazilian use.

It will take some time to evaluate the results of the mission, particularly in the area of joint ventures (which came in for a lot of discussion), but it is safe to say that the basic objectives were fully met. High level contacts were established and open discussion of Canadian capabilities to match Brazilian development needs led to a better mutual understanding of the ample scope for expansion in the trade and economic relations between the two countries. Canada's interest in that expansion was recognized and well received by Brazil. Aggressive follow-up by Canadians is the next step. The doors to that booming market are open; it is up to us to take full advantage of the opportunities identified.

The Summer Job

PHILIP CHEFFINS,
Manpower and Immigration

With the emergence of a unique 'youth culture' in the 1960s, the federal government began to pay more attention to the problems and aspirations of young people.

Faced each summer with a disturbingly high rate of unemployment in the youngest section of the labour force, the government instituted a variety of approaches to the problems of youth. Programs were initiated, and a new government role in the summer employment scene began to evolve.

Reflected in the Summer '74 student employment program, for example, was a new awareness of the significance of the summer job. There are many reasons for the reassessment of the importance of summer employment. One of the most important is its value to students as a "Career experience".

Despite the devaluation of the undergraduate degree as an instant job ticket and the uncertainties of post-secondary education itself, a majority of students still continue their years of schooling. With only a vague idea of what they really want to do, and with little preparation for employment, the school to work transition becomes a trying experience for many students. Often they drift into jobs for which they are not suited and

drift out again disillusioned and frustrated.

Employers, too, may be penalized by this process. They may spend months training a new graduate only to see him resign when he finds that his new position fails to give him the sort of job satisfaction he was really seeking. Faced with what he feels is erratic behaviour and attitudes, the employer often generalizes his experiences with individual young people into opinions about the generation as a whole.

Experimentation — But through summer employment students can try on for size a number of jobs for which they have aptitudes, giving employers a good idea of their talent and potential at the same time. This type of job experimentation was one of the real benefits of the Federal Government's Summer '74 student employment program.

So summer jobs can be more than a peripheral experience, a way of making enough dollars for the next school term. Students are looking to summer employment as a way of turning on to potential careers. And it seems employers are re-assessing the uses they can make of the summer students they hire.

Surveys conducted by the Federal Government revealed that more than one third of students hired in the summer of 1973 worked in professional or semi-professional positions. In addition, 75 per cent of employers thought that the students had been able to apply their knowledge to a considerable extent in the job. Almost half the students indicated they thought the summer work was of great value as a work experience, and a similar number stated that their jobs related, in some way, to their field of study. Only 2 per cent thought their summer employment was of no real personal value.

Most important, the figures showed that most students found work in private industry. With 86 per cent of the student jobs supplied in the private sector in 1973, the Federal Government re-evaluated its own role in summer employment.

In planning its $66 million Summer '74 program, the Department of Manpower and Immigration did not lose sight of the complementary roles that the Federal Government and the private sector had to perform.

Unfilled jobs — Among the anomalies of the summer employment scene in 1973 were cases of good jobs going unfilled despite a student unemployment rate of almost 8 per cent. The new federal emphasis on filling existing positions within the job market was clearly outlined in a statement by the Minister of Manpower and Immigration, Robert Andras, at the launching of the program. "It is obvious that the greatest leverage in ensuring that our young people find work in the summer," Mr. Andras said, "comes from investment of tax dollars and effort in providing smoother and greater assistance to the job finding and matching process in the private sector. The jobs are there to be found and we want to help the students find them."

So the guidelines for student employment programs were laid out: increase participation in the summer labour market by all possible means, and increase the effectiveness of matching students to jobs for which they are suited.

But in addition to providing a stimulus for improving the job climate in the private sector, the Federal Government also recognized the need for direct job creation. Results of previous years' programs have shown that there is a limit to the private sector's capacity to absorb students in the summer months. Along with job creation by provincial and municipal governments, the Federal Government, through summer programs such as Opportunities for Youth, plays a role in direct student hiring, particularly in areas of high student unemployment. Through the various direct and indirect student hiring components of Summer '74, employment was provided for some 390,000 students.

The key link in the summer employment chain is the Canada Manpower Centre for Students. Placing more than 200,000 students in jobs last year, the centres also acted as clearing houses for all information on the various components of Summer '74.

Summer jobs found and filled within member firms of the Canadian Chamber of Commerce are a good example of the kind of private public sector co-operation that is possible. Called "Operation Placement," the Chamber of

Commerce student hiring program was responsible last year for finding jobs for more than 53,000 students with its national members alone, utilizing the CMCs for Students.

Farm work — It is worth remembering that the summer student labour force is not merely a residual or make-work element — it also has a vital role to play in the Canadian economy. Last year, for example, the impact of students on one key Canadian industry — agriculture — was increased by a new Summer '74 component.

Faced with chronic labour shortages, the agricultural industry has long made use of summer student labour. This year, a two-pronged approach to the problem supplied about 80,000 agricultural workers to meet the increasing demands for farm labour. The first element, called Agriculture for Young Canadians, (AYC), was designed to interest students (primarily those under the age of 18) in

A children's playground being built near St. John's, Newfoundland, by students with the help of an O.F.Y. grant.

farm work in the summer and in possible future careers in farming. Combining summer employment and a vacation through a division of working and recreation hours, AYC provided an attractive introduction to farm work for students, and supplied farmers with a vital source of summer labour.

The second element of agricultural assistance in the Summer '74 package was the Canada Farm Labour Pools which operated like non-profit temporary help agencies. About 45 pools were established in various areas of high agricultural labour demand across Canada to facilitate planning for manpower needs and to organize both the supply and demand sides of the farm labour market.

Travel money — Short-term labour in other industries also relies on the availability of a student labour force. To get the students to hard-to-fill and short-term jobs in other parts of the country, the Student Mobility Program, another new element in Summer '74, provided a modest amount of money to subsidize travel costs for students 18 years of age and older. In general, these were jobs that could not be filled locally by Canada Manpower Centres, and the students had to agree to stay in the job for a specified period. In addition, through a co-operative effort with the Secretary of State Department, 100 youth hostels were linked with the CMCs for Students in a national notification system for short-term jobs.

Within the structure of direct job creation is the now familiar Opportunities for Youth program. OFY projects have been assailed and praised by editorial writers across the country for their flaws or virtues, but many people seem to have forgotten that the primary objective of the program is to provide jobs for students.

At $30.5 million, OFY was the largest single component of the Summer '74 program and provided direct employment for more than 26,000 young people. A very wide range of projects was sponsored, from the very serious to the lightly adventurous. But economically, Opportunities for Youth provides the Federal Government with an important tool to attack the problem of student unemployment, particularly in areas where further absorption by the private sector is no longer possible. This year, more than in the past, OFY was directed to specific pockets of potential student unemployment around the country.

Scope for initiative — A great number of projects provided real community services, from day-care centres to information bulletins for local ethnic groups, to recreation programs for senior citizens. But aside from these tangible benefits, the students participating in the program have had the advantage of career experimentation in a very real sense. A pollution-free car developed by a student in Vancouver may not be a prototype for Ford of Canada, but the student may well bring his enthusiasm and basic expertise to that company at a later date. And that sort of career experience can be seen across the country as one of the real products of the program — from a communal dental clinic in Winnipeg to an ecological park in New Brunswick.

It is difficult to assess a program like Summer '74. Against the idealism and ambitions of individual students in individual endeavours must be weighed the reality of employment statistics and cost/benefit ratios. There will be critics who will say it cost too much and others who will say that it wasn't nearly extensive enough.

But whatever its virtues or flaws, by establishing a job-search and job-creation program to help students find their own identity within the fabric of Canadian society, Summer '74 paid off as a positive step in the right direction.

One of the main streets in Riyadh.

THE SAUDI-ARABIAN MARKET

F.W. HEWES,
Managing Director,
Caproco Corrosion Prevention Ltd.

In a search for new markets, the author of this article decided to see what Saudi Arabia could offer. A few preliminary inquiries showed that there were at least prospects for corrosion prevention goods and services. Here he gives his impressions of the Saudi Arabian market gathered over two highly successful trips.

Caproco's prime interest initially in Saudi Arabia was in the oil and petrochemical industries. The Arabian American Oil Company (Aramco) is of course the outstanding prospect in the oil industry. This organization alone produces in excess of nine million barrels per day. Present plans are to increase this production to 20 million barrels per day over the next few years. Aramco's operations are now almost entirely in the western part of the country although it is exploring to the south in the "Empty Quarter". The main office

Part of the main building of the Dahran airport.

is in Dhahran with most of the major fields and field offices within 200 km. A refinery and storage terminal are located at Ras Tanura about 40 km north of Dhahran.

The Arabian Oil Company (AOC), which is partly owned by Japanese interests, has its operations in the neutral zone about 250 km north of Dhahran.

Petromin, the Saudi Government oil organization (General Petroleum and Mineral Organization), has its head offices in the capital, Riyadh. Petromin is the co-owner, with foreign interests, of Aramco and AOC. It also carries out all petroleum distribution in the country, operates refineries in Riyadh and Jeddah, operates a fertilizer plant and a sulphuric acid plant near Dammam and has joint ventures with foreign partners in the geophysical surveying, drilling, lubricating oil, manufacturing and marine construction fields.

The Ministry of Agriculture and Water operates a number of desalination plants throughout the country and many more are planned. Availability of water for human consumption, industrial purposes and agriculture is very limited and therefore will continue to be the most important and growing activity in the future.

Making contacts — Making contacts within Aramco is essentially like doing so in any large North American oil company, but the offices in Dhahran are large and rambling and there is no receptionist as such. Thus some guidance as to a starting place is required (i.e. a name and room number). People in most key engineering and administration positions are expatriates, and English is the working language.

We did not call on AOC and cannot, therefore, comment on the situation there. Many visitors will hire a car and driver in the Dhahran/Dammam/Al Khobar area and drive north calling on AOC in the Arabian part, Getty Oil in the Kuwait part of the neutral zone and then continue on to Kuwait. Others do this trip in the reverse direction.

For contacts in Riyadh or Jeddah for Petromin or for any of the Saudi Arabian Government ministries, the help of a local agent or representative is almost mandatory. Most Saudis in key positions in the various ministries under-

stand and speak English well but it is of great benefit to be accompanied for the first few visits by a Saudi.

Accommodation — Staff in the commercial division of the Canadian Embassy in Beirut and in the new Embassy in Jeddah can be of invaluable assistance in advising a visitor how to travel and where to stay in the various countries.

For people visiting Dhahran or Ras Tanura the usual stopping place is Al Khobar, a 20 minute taxi ride from the Aramco main office in Dhahran. For a trip to Ras Tanura it is probably best to take a local taxi to Dhahran then a Dhahran taxi to Ras Tanura.

There are two hotels in Al Khobar, the Al Gosaibi and the Al Khaja. The former is more modern, but a room there will cost $40 per night single. Rooms at the Al Khaja are less expensive and not so modern.

In Riyadh there are several suitable hotels. We stayed at the Al Yamama Hotel where rooms are about $30 per night single. In Jeddah, where again there are several suitable hotels, we stayed in the Al Attas Oasis, costing about $20 per night single.

The hotels in Saudi Arabia are generally quite passable and the food in the hotel dining rooms is good to excellent. There are a few restaurants separate from hotels which are quite good.

Cost of hotels and meals are high compared with North American or European prices. It is well to allow $60 to $70 per day plus a further $10 or $15 for local transportation. These costs will obviously vary depending on the type of calls being made but the above levels are recommended for the first trip.

Visas — There are problems about getting a visa to enter Saudi Arabia and it can take a long time to get one. Businessmen are strongly advised to contact the Africa and Middle East Bureau of the Department of Industry, Trade and Commerce in Ottawa for help and advice before they leave. They could also contact the Canadian Embassy in Beirut or in Tehran. It is possible, under certain circumstances, to get a visa through these embassies fairly quickly. It is best, however, to allow anything up to three months to get your visa issued.

Technically, there should be an invitation from a firm or sponsor within Saudi Arabia before you apply for a visa. The application is then passed through various Saudi government offices and the visa finally is sent to a designated Saudi Embassy, perhaps in London, Beirut, Tehran or Bahrain, where the applicant can pick it up.

For those entering the country under Aramco sponsorship the usual location for obtaining a visa is Beirut. Normally this is a one-day procedure. Certain local Saudi agents can also expedite visa formalities in Beirut.

Travel — You can get into Saudi Arabia from Bahrain or Kuwait, or from Beirut via Dhahran on the Persian Gulf. It is also possible to enter Saudi at Jeddah but we are not familiar with this route. Travelling from Dhahran to Riyadh to Jeddah is best by air, although reasonable highways do exist.

In the Dhahran area taxis are plentiful both in Dhahran and in Al Khobar. Self driving, while possible, tends to be character-building and somewhat hazardous. In Riyadh and Jeddah taxis are also readily available, but it may be wise to rent a car and driver by the day to save time and complications in getting from one call to another.

Restrictions — Liquor is not allowed and an arriving passenger should not attempt to carry any in his bag. Customs inspections seem to concentrate more on the search for liquor than for anything else.

For women, short skirts or bare arms are in poor taste and could lead to embarrassing remarks or incidents.

Aside from these restrictions the atmosphere is friendly and extremely courteous.

Business customs — When making a business call on a Saudi you may find yourself ushered into his office, even without prior appointment, to find one, two or three other unrelated people already visiting and discussing their business. Tea or coffee (Arabian style) will be served to each newcomer as he arrives. One must be patient in such cases since the man being visited is too courteous a host to leave a visitor outside in the waiting room. Before business is completed, new arrivals could be brought in and introduced.

In all oil company offices English

is the working language. In most government offices some English is understood, but we found it of real benefit to have a Saudi along, as mentioned above, to help with the amenities, which are very important, and to ensure that the subjects being discussed are thoroughly understood.

There are a number of ways that business can be carried out in Saudi Arabia. For full details the guidance of the commercial division of the Canadian Embassy in Jeddah should be sought. However, this may be summarized as follows:

- Material sales may be made direct to Saudi Arabian customers or through local agents to their customers. These are normal foreign commercial transactions that have no problems with foreign exchange controls on the part of the customer.
- Engineering or technical service sales may be made directly to the Saudi customers or, in some instances, through the agents in the case of continuing maintenance services. For example, Aramco has service order contracts to cover this type of work but under such contracts the contracting company cannot work for any other company in Saudi Arabia. Under these contracts tax must be remitted to cover personal income taxes for all employees while in Saudi Arabia. In addition it is necessary to pay company or corporation taxes on the profits from any Saudi operation.
- A company planning to accept actual work contracts must either be registered to do business in Saudi Arabia or handle the contract through a local contractor. Registration apparently involves considerable time.
- It is possible to enter a joint venture arrangement with a private Saudi company. Application may be made in such cases for concessions on equipment, import duties and for a profits tax holiday of five years. Approval depends on whether the particular project will be of future benefit to the development of the Saudi economy. It is also possible to enter a joint venture with a Saudi government organization such as, for example, Petromin.

To a Canadian firm contemplating entering or exploring the Saudi Arabian market for sale of any industrial goods or services the following general recommendations are offered.

It is absolutely essential to visit Saudi Arabia and meet the potential customers.

Depending on the type of business and the degree of advance contact that has been made by correspondence or other means it may take two or more trips before an inroad into the market can be obtained. One should be prepared to take a second or third trip if the first one shows even the slightest promise.

It is strongly recommended that the services of a local agent or representative be secured or that the first trip be made with someone who has visited Saudi and knows its procedure, even if he doesn't know the particular contacts of interest.

The commercial division of the Canadian Embassy now established at Jeddah will without doubt be of great help. If one has no contacts with agents or people with previous contacts in Saudi it might be well to make the first call at Jeddah to seek the guidance of the Commercial Counsellor there. The address is: P.O. Box 5050, Queen Building, King Abdul Aziz Street, Jeddah, Saudi Arabia. In addition, the commercial division of the Canadian Embassy in Beirut can be of great help.

BIG OR SMALL YOUR COMPANY NEEDS CTDAS

SANDRA MURPHY,
Canadian Organization for the Simplification of Trade Procedures.

The author is a Project Officer with COSTPRO. This is her report on the experience of a large company that implemented the Canadian Trade Document Alignment System.

In joining the steadily growing number of Canadian organizations using CTDAS methods, the Asbestos Corporation Ltd. became the first of the major Canadian mining companies to take full advantage of aligned one-run methods to lighten the burden of export documentation requirements. At the same time it found it possible to integrate the internal aspects of order booking and processing, shipping and invoicing procedures, and the documentation system, to produce a single aligned method for handling all orders for both domestic and foreign destinations.

The Asbestos Corporation Ltd. was established in 1925. Today, it operates five mines and five finishing mills with exports to more than 80 countries. For the six-month period ending June 1974, ACL exported 224,392 tons compared with 188,315 tons during the same period in 1973. Its market shares for the same period in 1974 have risen from 25 per cent to 28 per cent. The rate of increased sales shows how rapidly it is expanding as one of the largest shippers of asbestos.

But all of this is history — a record of growth that makes the Asbestos Corporation Ltd. a world leader. Until recently, though, the progress did not cover all aspects of the company's operations. Certainly, the expansion was apparent in its productivity, with increased staff, more modern machinery and equipment, and better transportation methods through containerized shipping.

But procedures and documentation had not progressed to the same extent. Shipments were sometimes slow in arriving at customers' plants because of documentation errors. Staff members found it difficult to cope with the ever-increasing flow of paperwork. It seemed surprising that a "system" of procedures that had evolved from 19th century methods could still be in effect — and if the system was archaic, why had it not been changed? Was it lack of money? Was it too time-consuming to implement? In actual fact it was none of these. The main problem proved to be inertia! I have since discovered that this is quite common in many companies. But it is a problem that can be overcome — as the Asbestos Corporation has shown.

In 1973 the corporation decided to move its head office from Thetford Mines to Montreal. This meant a reorganization of the accounting department and the sales and traffic department. Because some new personnel would be involved as well as the reorientation of regular staff, it was decided to look into a new system for export documentation.

Around the same time, the Canadian Organization for the Simplification of Trade Procedures (COSTPRO) had introduced an aligned export format known as the Canadian Trade Document Alignment System (CTDAS). Informal discussion between the Asbestos Corporation and COSTPRO led to the employment of Porteous Systems Service Ltd. This firm is headed by David Porteous who has often been a consultant for COSTPRO. Mr. Porteous began his research with an initial survey report on the corporation's existing systems and his findings included the following:

"The existing documentation methods resulted in excessive transcription of information and duplication of effort. The documentary processing of an overseas shipment could call for the separate preparation of up to 16 documents bearing substantially the same information. The results of this were:

a) High requirement for both skilled and clerical labour throughout the documentation process.

b) Most of the documents involved had to be produced as quickly as possible, while each set had to be carefully verified, which was not always feasible and errors occurred.

c) Documentation was carried out by different departments in different locations. This made it difficult to control the progress and timely shipment of individual orders and added to the likelihood of errors."

In essence, the existing methods were time-consuming and costly. Porteous' comments were not intended to reflect upon the abilities of those concerned in the work areas studied — in fact, these people displayed a thorough knowledge of their individual responsibilities.

The consultant suggested that the company's export documents should be, as far as possible, aligned and that a one-run method of document preparation, using the Canadian Trade Document Alignment System, should be employed. That would mean that the typing of a master document in two stages would replace the multiple typing operation in use. Mr. Porteous also suggested that it might be helpful to make use of one or more masters to complete information on a wide range of commercial and customs documents. The master(s) would be used to reproduce all or most of the required information on the remaining documents by means of masking the master and reproducing the documents through a spirit duplicator.

It was also suggested that methods for the control and internal expediting of orders be established and that both the control and preparation of documents be confined to one department or location. It was felt that a combination of an aligned one-run system with centralized documentation and expediting would provide the greatest over-all economy of time, labour and control over orders in process.

The Asbestos Corporation instituted the recommended changes in July 1973. From the beginning of August through

September the system was developed. Equipment was installed, new personnel trained and the system was fully functional by January 1974. The only expense involved was the purchase of two spirit duplicators and the consultant's time. Initially, there was some additional stationery costs resulting mainly from the new art work.

After seven months of operation, I spoke with Mr. Steele and Mr. Gibb, of the corporation's sales and traffic departments. They both expressed satisfaction with the operation as a whole but they did point out that several minor problems were encountered. Most of these were ironed out as personnel adapted to the system but one or two problems remain unsolved — such as the changing of last-minute information on the master. This is due, in the main, to changes in shipping quantities, packing, and routing details that, under present market conditions, are taking place up to the moment of loading and shipping. In addition, some difficulties were encountered when officials of some countries refused to accept aligned documents. Most countries now have agreed to accept them, but shipments to a few areas, notably South America, still require cumbersome old-style documentation.

On the other side of the coin, there were very distinct benefits from implementation of the CTDAS: 1) substantial reduction in time needed to produce documents; 2) reduction in requirements for skilled clerical assistance; 3) increased control of order processing and marked reduction in the incidence of documentation error.

An important factor pointed out by Mr. Steele was that with the substantial increase in the volume of orders processed, a corresponding increase in typing staff was not required. Mr. Gibb noted that because of the simplicity of the system, moving the head office to Montreal did not result in any serious breakdown in operations. In fact, had the system not been simplified, the complications created by trying to accomplish the documentation from two widely-separated offices using the old method would have resulted in certain chaos. The adoption of the CTDAS helped to make the move possible.

This has been the story of a large corporation that demanded a procedural system which ensured efficiency and accuracy for a substantial volume of exports. But use of the CTDAS is not limited to this type of company. For the large corporation it is advantageous in terms of control, speed, and economy. For freight forwarders, many of whom already use the system, it is easier to handle large volumes with the system. The lesser-volume exporters also have discovered that using this system in co-operation with their freight forwarders ensures clarity, simplicity and over-all efficiency.

The Canadian Trade Document Alignment System has been a giant step forward in terms of trade facilitation both domestically and internationally. The question is: "are you using the CTDAS, and if not, WHY NOT?"

You can contact COSTPRO by mail at 2085 Union Street, Montreal, Quebec H3A 2C3, or telephone (514) 283-4091.

California industry

In a recent review, *California Business*, an authoritative weekly, states that California's powerful aerospace-electronics industry is expected to continue growing for the next 18 months though the pace may not be as rapid as it has been since mid 1971, when the industry was at a very low ebb. Increased spending in defence and aerospace markets will more than offset some temporary softness in the civilian aircraft and electronics industries. By late 1975 total aerospace-electronics employment in the state should reach 520,000 its highest level since 1968.

California is expected to receive about 23 per cent of the nation's defence prime contract awards and over 35 per cent of NASA's awards. This should be good news to Canadian sub-contractors, who have won contracts in the past and have a good performance record with California companies.

The short-term outlook for the home-building industry is gloomy. New residential construction, which accounts for almost 40 per cent of the consumption in both lumber and plywood, declined from a rate close to 2.5 million housing starts in January 1973 to a low of 1.47 million in May 1974. However, economists predict an average annual increase of 23 per cent for 1975 until 1979, with emphasis on lower income houses which comprise 60-70 per cent of home sales. During this period an estimated 1.3 million additional houses will be built and one million houses to replace old structures.

These forecasts are premised on interest rates declining and, if they do, the long-term outlook for the sale of Canadian lumber is good — **Los Angeles.**

THE FRENCH COMPONENTS CONNECTION

L. RICHARD KOHLER,
Assistant Commercial Secretary, Paris

The electronics industry in France is both dynamic and open to competition — dynamic, because of a 15 per cent increase in annual sales over the last 13 years and the creation of 60,000 new jobs, and open to competition because, despite an increase in exports of 36 per cent during 1973, imports climbed 42 per cent over the same period.

The most significant imports making inroads into France's electronics trade have been consumer goods, components, instrumentation and computer hardware. The participation of foreign electronics industries in the French market has gained ground because of an overwhelming market growth. The causes are complex but the principal reason seems to be an insufficiency of domestic investment and reinvestment.

The French are doing everything they can to boost exports; at the opening of last April's Salon International des Composants Electroniques in Paris, the then Prime Minister, Pierre Messmer, reiterated the government's intention to pour into the electronics industry some four billion French francs ($900 million) for purposes of research and development. But the struggle is not an easy one: French-owned semi-conductor manufacturers can use all the help they can get. In 1973, imports of U.S. semi-conductors were half of the total sales of the French semi-conductor industry.

The components industry itself is growing as quickly in France as in any other developed nation. In 1973, sales totalled $1,019 million, an increase of 30 per cent over 1972. Semi-conductors grew the quickest: in 1973, their sales totalled $235 million, a 40 per cent increase over 1972.

Medium-term tendencies — The French Bureau des Informations et des Prévisions Economiques (a kind of oracle for the Ministry of Economy) predicts that sales of electronic tubes and semi-conductors are expected to reach $537 million by early 1975, which represents an increase of 28 per cent over 1973.

In general, as far as active components go, demand for electronic tubes (especially for television) will be double in 1975 to what it was in 1971, and demand for semi-conductors will be nearly tripled (discrete components, although not to be neglected, are predicted to be well outstripped by integrated circuits). As far as the passive components market goes, it also should at least triple. French dependence upon imports of the above is not expected to decrease.

CANADIAN ELECTRONICS EXPORTS TO FRANCE

	1972 $'000	1973 $'000
Telephone apparatus equipment & parts	51.7	66.1
Radar equipment & related devices & parts	48.4	210.2
Sound amplifiers, excluding parts	.8	12.1
Radio transmitting-receiving units	14.3	42.4
Radio T.V. broadcast trans. equip. n.e.s.	24.6	21.1
Commercial telecomm. equip. n.e.s.	199.2	135.4
Electronic tubes & parts	5.8	48.6
Semi-conductors & parts	3.6	98.9
Resistors, electronic & parts	1.3	.1
Electronic equip. components n.e.s.	155.3	203.2
Electricity-measuring instr. & parts	140.0	308.6
Measuring & testing equip. & parts n.e.s.	411.2	371.1
X-ray & related equip. & parts	347.6	562.5
Navigation instruments, app. & parts	548.2	1,795.6
Geophysical mineral prosp. equip. & parts	159.5	75.7
Lab. optical instrumentation equip. & parts n.e.s.	202.2	240.1
Card punch sort tab computers & parts	2,366.8	4,937.1

Source: Statistics Canada

One of the best methods of judging current and future tendencies of an industry is to visit the trade shows. In the electronics industry, the European arena is more or less dominated by two major shows: Electronika in Munich, and the Salon International des Composants Electroniques in Paris. It is generally recognized that the latter is of greater importance for the promotion of electronic components, as opposed to instrumentation and electronics machinery. In April 1974, almost 60,000 visitors attended the Salon, and about 10,000 were non-French. Of the 1,090 exhibitors, 704 exhibited under "components", which gives an idea of the importance components have over other sections at the Salon (instrumentation, machinery, other equipment and products).

Although nothing startlingly new was shown at this last Salon, micro processors and computers, components for use in the automobile industry, telephone dial coders and the rainbow world of colour television components were dominant. Other items drawing interest were: three new TV-C tubes; the development of photocouplers; the evolution of colours in opto-electronics; the generalization of DIL resistance housings, and condensers.

The Commercial Section at the Canadian Embassy in Paris has available, for interested readers, copies of an article (in French) in which new components exhibited at the Salon are described in detail.

Canadian exports to France in the electronics industry have not been significant, relative to some other industries. However, as the accompanying table shows, increasing results are being achieved: a 95 per cent increase in sales of Canadian electronics to a market as sophisticated as the French one is heartening — and there is scope for the trend to continue.

Canadian manufacturers wishing to export should consult the regional offices of the Department of Industry, Trade and Commerce for advice on the various assistance programs available for market identification, participation in fairs (such as the Salon International des Composants Electroniques), etc. Or you can contact the Minister-Counsellor (Commercial), Canadian Embassy, Paris, direct, for advice — the office is there to serve you.

ELECTRONICS INDUSTRY IN CALIFORNIA

BERNARD E. BRANDENBURG,
Commercial Officer, Los Angeles

Over the last few years, product innovation and new requirements from business and industry have opened up exciting markets for the electronics section. The increasingly diverse applications of electronics technology have one thing in common — they are all in the civilian marketplace, which now looks like the promised land of profits for the industry.

The future for electronics manufacturers based in the eastern United States looks particularly good. Sales of these firms were projected to slow from the vigorous pace of 1972 and 1973, when gains of 9.6 per cent and 14.2 per cent respectively were recorded, to an advance of about 6 per cent. But this is better than projections for the U.S. electronics industry as a whole, which forecast an increase of approximately 4 per cent. If the projections are accurate, total sales for western electronics firms should be worth at least $5.7 billion by the end of 1974.

A large portion of these sales will be made by firms in California where, until recently, corporate executives concentrated on selling to just two customers — the U.S. Defense Department and the National Aeronautics and Space Administration. These same firms now are busily turning the pages of business directories in search of new outlets, and this desire for civilian customers has stimulated the "urge to merge."

For example, Rockwell International Corporation in El Segundo, California, the prime contractor on the Appollo moon rocket project, recently acquired Admiral Corporation of Chicago, a big producer of radios, televisions and refrigerators, as well as other consumer items. Before the acquisition, Rockwell International had been getting 2 to 3 per cent of every sales dollar from consumer products but this should now go to 17 or 18 per cent. Already the Rockwell electronics group has scored a big marketing success with its portable calculator. Rockwell also owns Collins Radio, which has a high technology plant in Toronto manufacturing communications equipment.

Government contract awards will continue to be of importance to the area's electronics industry. Many firms however, have become increasingly disenchanted with this type of business and are trying to increase their consumer markets because of complicated contract award procedures and the uncertain life span of many government programs. Government contracts in the non-defence areas are increasing sharply and a portion will include electronics content, such as pollution control monitoring devices, improved airline flight control systems and ground transportation.

Foreign competition — Recent problems in the industry have included fierce competition from foreign manufacturers located mainly in Southeast Asia and who have the advantage of skilled but low-cost labour forces. These firms have made inroads in the U.S. market through their rapid technological advances, especially in television, radio and electronic calculators. But wage differentials between the U.S. and other nations have been narrowing steadily. Dollar devaluations plus government moves to prevent product dumping also have curbed the growth of some imported electronic items.

But the electronics industry in the West has made tremendous progress, particularly with integrated circuits and automated production processes and these developments have given the industry a substantial competitive edge. All this, together with aggressive marketing schemes and close attention to cost controls, has contributed to a steady growth. At the same time, economic growth in many foreign countries has opened new markets for California electronic producers.

Trade shows — There are two important trade shows for the California electronics industry. One of them is WESCON (Western Electronic Show and Convention), which is an annual event alternating between Los Angeles and San Francisco. WESCON 1973 took place in San Francisco and more than 40 computer and communications companies took part. The major emphasis in computers and communications was placed on minicomputers. The OEM nature of the convention was reflected in the heavy representation from mini-computer peripheral firms. In addition, the show had a distinct international flavour with strong representation from Britain, West Germany and France, as well as some Japanese participation.

The emphasis on computers was

played up during the technical program with six sessions directly related to the application of computers, and others covering the use of components for computer systems or expected developments in components that would affect future computer systems. A sizeable portion of this trade show is devoted to production control equipment and related components.

The other important show is NEPCON (West/International Micro Electronics and Semi Conductor Exhibition). This consists basically of two exhibitions and is also an annual event, alternating between Los Angeles and San Francisco. It covers the tools, hardware, machines, materials, chemicals and supplies required for manufacturing printed and multi-layered circuits, assemblies and equipment. The micro-electronics part of the exhibition features the specialized products required for manufacturing semi-conductor devices, integrated circuits, hybrid thick film and thin film circuitry.

Separate technical programs support each side of the exhibition with concentration on the latest advances in electronic and micro-electronic manufacturing techniques and applications.

These trade shows have been well received and offer exhibitors a good point of entry to the electronics market in California.

Shortages — Even as the boom in electronics business continues, suppliers of materials and production equipment are worried about the state of the general economy. But the majority project a continued rise in sales, although at a slower pace.

The problems include delays in safety and pollution control legislation and high prices for raw materials. Shortages of some key components could disrupt production schedules. This continued delivery problem has given many Canadian manufacturers added impetus to enter this market and compete successfully.

The Californian electronics industry can look forward to a period of more stable growth than in the past, but it does have to improve productivity. This means more automation of production processes and more computerized inventories, which may mean opportunities for Canadians. The industry will also have to keep up with the continued emphasis on environmental protection with production of measuring and testing devices, another area in which Canadians can help. The consumer, of course, will continue to want such items as pocket calculators, telephone answering units, quadraphonic stereo systems and television sets.

Opportunities — New markets include areas such as automobile safety equipment — key and seat belt warning and interlocking devices, emission controls, safety warning devices, for instance — and options such as stereo systems, climate control and anti-skid devices. Control monitoring systems are finding larger markets as a result of legislation on air, water, noise and thermal pollution. Hospitals are increasingly using electronic technology, as are retail businesses (inventory control systems and point-of-sale computer terminals, for instance). There is also the consumer field where the use of small integrated circuits is slowly spreading into many household items.

Some of the more positive factors pointing to continued growth include the U.S. government's increasing use of electronics equipment and material for non-defence purposes; the fact that new-model cars will have a higher electronics content per unit, and that unfilled orders at the end of 1973 were at a record level. The industry will have to increase the investment in new plant and equipment and sales will be stimulated by product innovation.

This article has only briefly outlined what is taking place in California, but it has hopefully aroused your interest. We would be happy to give you more details. Our address is: Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014.

French Secretary of State for Youth, Sports and Leisure, M. Pierre Mazeaud (second from left), was accompanied by Canadian Minister-Counsellor (Commercial), F. Ian Wood, on a visit to the Canadian national exhibit at the Salon International du Sport et de l'Equipement (SISEL) which was held in Paris last fall. Mr. Wood later presented M. Mazeaud with a commemorative plaque.

SISEL is an annual show but this was the first time the Department of Industry, Trade and Commerce had participated. The seven Canadian recreational products companies entering exhibits with the assistance of the department reported that their efforts were extremely worthwhile. Total sales of about $300,000 were made on-site and follow-up business was expected to be worth at least $1 million.

One company, Aquaslide 'N' Dive of Canada, established a distributorship in Europe as a result of contacts made at SISEL and may build a factory on the Continent. Another firm, COLECO, signed an agreement with its French representative for the supply of 2,000 swimming pools.

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