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The Italian Aerospace Industry

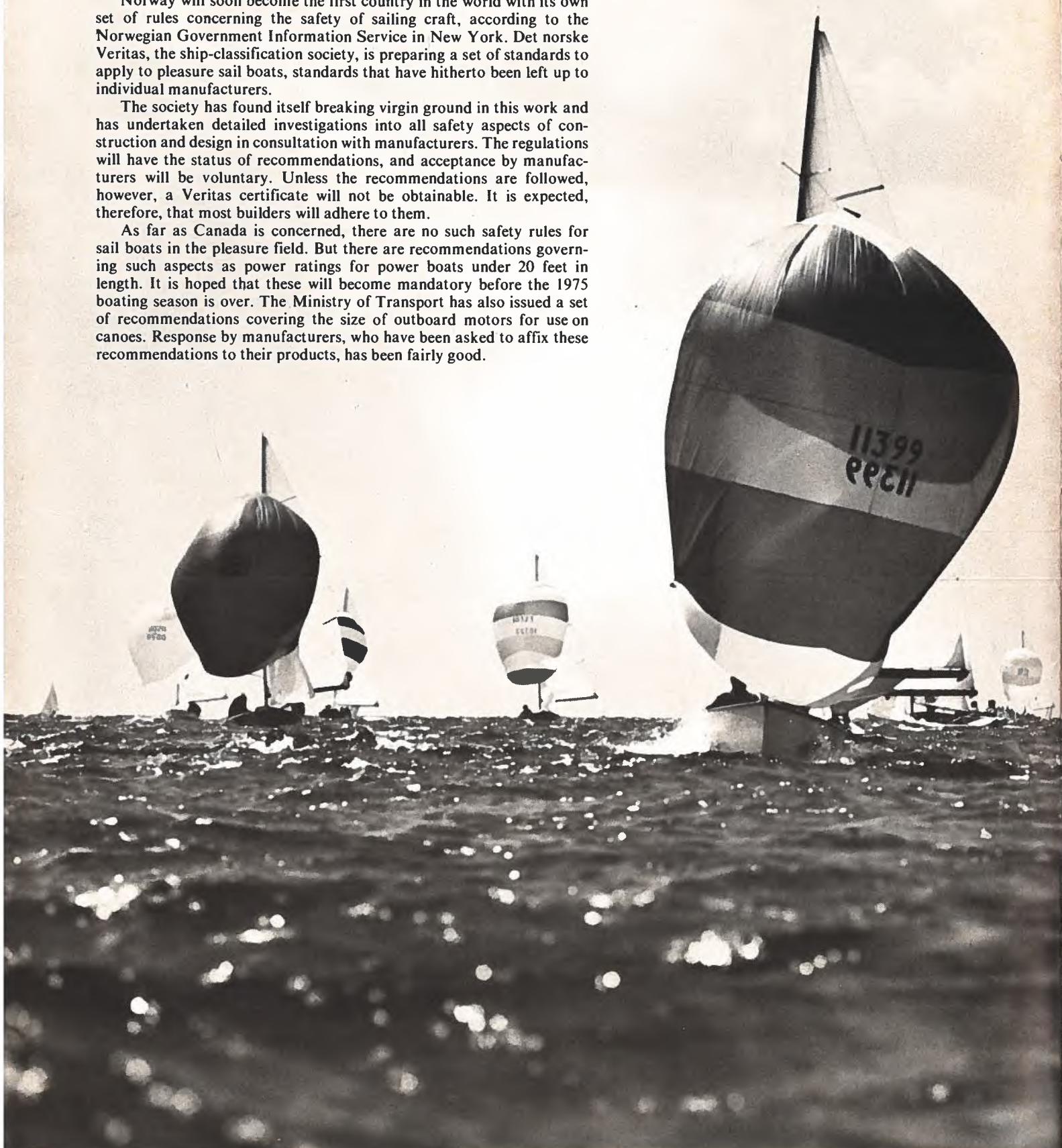


Safety Standards for Sailing Boats

Norway will soon become the first country in the world with its own set of rules concerning the safety of sailing craft, according to the Norwegian Government Information Service in New York. Det norske Veritas, the ship-classification society, is preparing a set of standards to apply to pleasure sail boats, standards that have hitherto been left up to individual manufacturers.

The society has found itself breaking virgin ground in this work and has undertaken detailed investigations into all safety aspects of construction and design in consultation with manufacturers. The regulations will have the status of recommendations, and acceptance by manufacturers will be voluntary. Unless the recommendations are followed, however, a Veritas certificate will not be obtainable. It is expected, therefore, that most builders will adhere to them.

As far as Canada is concerned, there are no such safety rules for sail boats in the pleasure field. But there are recommendations governing such aspects as power ratings for power boats under 20 feet in length. It is hoped that these will become mandatory before the 1975 boating season is over. The Ministry of Transport has also issued a set of recommendations covering the size of outboard motors for use on canoes. Response by manufacturers, who have been asked to affix these recommendations to their products, has been fairly good.



In This Issue

One of the more surprising developments in recent years is the rapid growth of consumer protection legislation. It is happening all over the world, not only in Canada, and it covers all aspects of marketing, including advertising in the various media and packaging of the product. In some countries there is more awareness of the consumer than in others, and legislation affects the consumer product more than a product such as a piece of heavy machinery — on the assumption, perhaps, that a buyer prepared to spend several thousand dollars is more cautious than the buyer picking up a pot of jam in a super-market.

But the implication is there. It is no longer permissible, in many countries, to sell inflammable clothing, to make a false claim in an advertisement or to imply that a product can do something that it can't, and our lead article this month, based on reports from various Trade Commissioner posts outside Canada, is a roundup of what is happening in consumer protection legislation. The consumer may not yet be king of the market place but he certainly has more clout than he used to have.

One might be forgiven if, after reading the article on McKee, one comes away with the impression that Paul Durish is a man who doesn't have to push his sales very hard — that his customers just beat a path to his door. But that is not his way. You don't have to nearly treble your production capacity without some hard selling (word came after the article went to press that the company is to start immediate expansion of its Elmira plant). As a boy, Mr. Durish consistently outsold his paper route competitors by ducking into his home-town pubs, selling his papers to the drinkers there and ducking out again before the authorities could catch him. Once a salesman, always a salesman, if you enjoy it. And judging by the company's success, Mr. Durish still gets a kick out of it.

Swiss Battle Pollution	2
Consumerism — A Growing Force	6
GATT Agreement Provides Hope for Textiles	9
The Italian Aerospace Industry	12
McKee president sees bright future for farm equipment manufacturers	15
Points of Strain in the World Economic Picture	18
Something to Think About — The Changing Work Week	22
From the Librarian's desk	24

 Industry, Trade and Commerce Industrie et Commerce

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Hosellerie
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Swiss battle pollution

MAX MEISTER, Commercial Officer, Berne

Until recently it was felt that the only way to improve man's way of life was to make ever greater technological advances and to push economic expansion by all available means. The world was considered indestructible and its resources limitless.

A few years ago, however, public opinion began to shift and to focus attention on some of the negative consequences of the economic success in the industrialized societies. The continuing need to provide employment opportunities for a growing work force was recognized, but a concern for preserving an appropriate ecological balance became more and more apparent. Individuals, corporations, civic groups and governments began to recognize the necessity of conserving resources, controlling pollution, preserving open spaces and anticipating and preventing environment problems.

Like other industrialized nations, Switzerland's main ecological problems are water, air and noise pollution, and the disposal of refuse. About \$400 million are now being spent on environmental protection, chiefly on water supply and purification, but this amount will be increased considerably in the near future. Half of it comes from public funds, including subsidies granted by the Federal Government, and the rest from industry.

All leading Swiss machinery manufacturers, and many smaller ones, produce pollution control equipment of some sort. Von Roll AG has gained a reputation beyond Swiss borders for its waste incinerators and sewage treatment plants. Cellulose-fabrik Attisholz AG, a producer of pulp, also specializes in the manufacture of water treatment installations. Nine firms, including Gebr. Sulzer AG, Brown Boveri AG and Schweizerische Industrie-Gesellschaft, are studying the possibility of co-operating to produce pollution control installations outside Switzerland.

Foreigners not excluded — Although public works departments at the cantonal (provincial) and communal level are inclined to give preference to Swiss suppliers, foreign manufacturers are not ex-

As part of the fight against pollution all cars are banned from the medieval village of Gruyères during the summer.

cluded from submitting offers for environmental protection installations. Furthermore, there is a large open market in the private industrial sector. Unfortunately, it is not possible to obtain even an estimate of the imports of pollution control equipment, as Swiss foreign trade statistics do not list this equipment separately.

The Swiss are particularly interested in new and improved devices, and good sales prospects exist for control systems, pumps, valves, pipes, measuring and detecting instruments, oil separators, filters, chemicals and new devices for the treatment of sludge and for the purification of air. Canadian manufacturers are certainly in a good position to get a share of this large Swiss market.

Although Switzerland has been aware of environmental problems in the past — there are federal laws governing water pollution and waste disposal — it was not until 1971 that the federal government obtained full power to legislate on anti-pollution measures, including those concerned with air and noise. A comprehensive law is now being prepared and implementation will be delegated to the governments of the cantons (provinces), unless the law specifies that the responsibility lies with the Federal Government.

Network of pipes — The first experimental sewage treatment plant was put into operation in 1914, but it was not until 1955 that the first general water pollution control law was passed. At the end of 1973, Switzerland had about 520 sewage treatment plants in operation and another 100 units under construction or in the planning stage. About 50 per cent of all private and industrial waste water is now passing through treatment plants, but within 10 years, processing facilities already built and under construction will be able to treat all sewage in the country. The sewage treatment plants produce about one million tons of sludge per year, which is used as fertilizer by Swiss farmers. Although the construction of sewage treatment plants does not present a major problem, it is more difficult and vastly more expensive to lay the network of connecting pipes. Since the plants serve whole regions rather than a single community, the waste water has sometimes to be carried over long distances.

Penalties for polluting waters are high. If the pollution is caused by

negligence, the offender risks a fine of \$7,000 or imprisonment up to six months. If it is deliberate, the fine may be as high as \$13,000, with imprisonment up to three years.

The water pollution control law of 1971 contains a clause making the cantons responsible for the collection and disposal of solid household and industrial waste. The disposal can take place in incineration or composting plants, or the waste may be deposited in controlled and specially prepared open spaces. At the end of 1972, Switzerland had 41 incineration plants with or without heat recuperation, 11 combined composting and incineration plants, four simple composting plants and 21 open deposits. The Federal Government, increasingly concerned about "the waste avalanche", is also recommending the recycling of waste materials.

Air pollution has not yet reached alarming proportions and smog conditions do not exist. The sources of pollution are road traffic (55 per cent), oil heating (28 per cent) and industry (17 per cent). Whereas the various industries, especially the chemical and cement industries, have made considerable progress in limiting the content of harmful and obnoxious substances in exhaust air and smoke, pollution from traffic and oil heating is still a major problem.

In October 1971, the lead content in gasoline was reduced but a further reduction planned for 1973 was shelved because of the energy crisis. Nevertheless, it is expected that, by 1980, Swiss exhaust emission standards will be equal to those to be adopted in the U.S. In order to reduce air pollution from home installations, periodic inspections of oil burners are required and the sulphur dioxide content in heating oil has to be lowered. The use of natural gas and electricity for heating purposes is encouraged. Considering the present cost of heating oil, these sources of clean energy have become competitive. As far as electricity is concerned, Switzerland is in a favourable position since, with one exception, all its power plants are either hydroelectric or nuclear and, therefore, non-polluting.

Monitoring equipment — The fact that noise is harmful to human beings was recognized long ago. The road traffic law of 1962 is quite specific about noise



caused by drivers in residential areas and at night. Even the slamming of car doors is considered an offence. The factory law clearly defines the level of noise to which a worker may be exposed. The aviation law contains provisions about flights over populated areas, and in 1971 the Federal Council prohibited the use of Swiss air space by supersonic aircraft. The use of motorboats on lakes has been restricted and most of the winter sport centres have outlawed snowmobiles. But much still has to be done with regard to noise pollution and adequate control organizations have to be created, with proper equipment to check noise levels and to locate offenders.

On the Federal Government level there are several departments concerned with environmental protection. The most important, and the one responsible for the implementation of all laws and regulations in this field, is the Federal Office for the Protection of the Environment, with headquarters in Berne. It is assisted by the Commission for Water Pollution, composed of 31 representatives from the Confederation, the cantons, the universities and industry. Another commission of 16 members advises the Federal Office on matters regarding air pollution. The Federal Institute for Water Resources, Water Purification and Water Protection (EAWAG) in Dubendorf, near Zurich, is connected with all aspects of water economy, and with the recycling of materials. A subsection of the Federal Materials Testing Bureau in Dubendorf studies the effect of detergents in lakes and rivers and checks on air pollution. (No detergents that are less than 80 per cent biodegradable may be sold here.) Pollution control is not fully organized everywhere, although the responsibility of implementing the federal laws lies with the cantons. The more prosperous, densely populated and highly industrialized cantons have special environmental protection depart-

Part of the hydroelectric works at the la Dernier development, a source of non-polluting power.

ments with fully equipped laboratories. Others employ chemists and inspectors who are also concerned with public health and the control of foodstuffs. As a rule, Swiss industry has become fully aware of the necessity to protect the environment and it is collaborating whole-heartedly with the cantonal authorities.

Trade fair — At a time when hardly anyone was talking about environmental protection and long before this subject became a political issue, the Swiss Industries Fair in Basel organized in 1958 the first trade fair for water purification and sewage treatment, called "Pro Aqua". The four subsequent "Pro Aqua" exhibitions were successfully enlarged to include refuse, air pollution control and

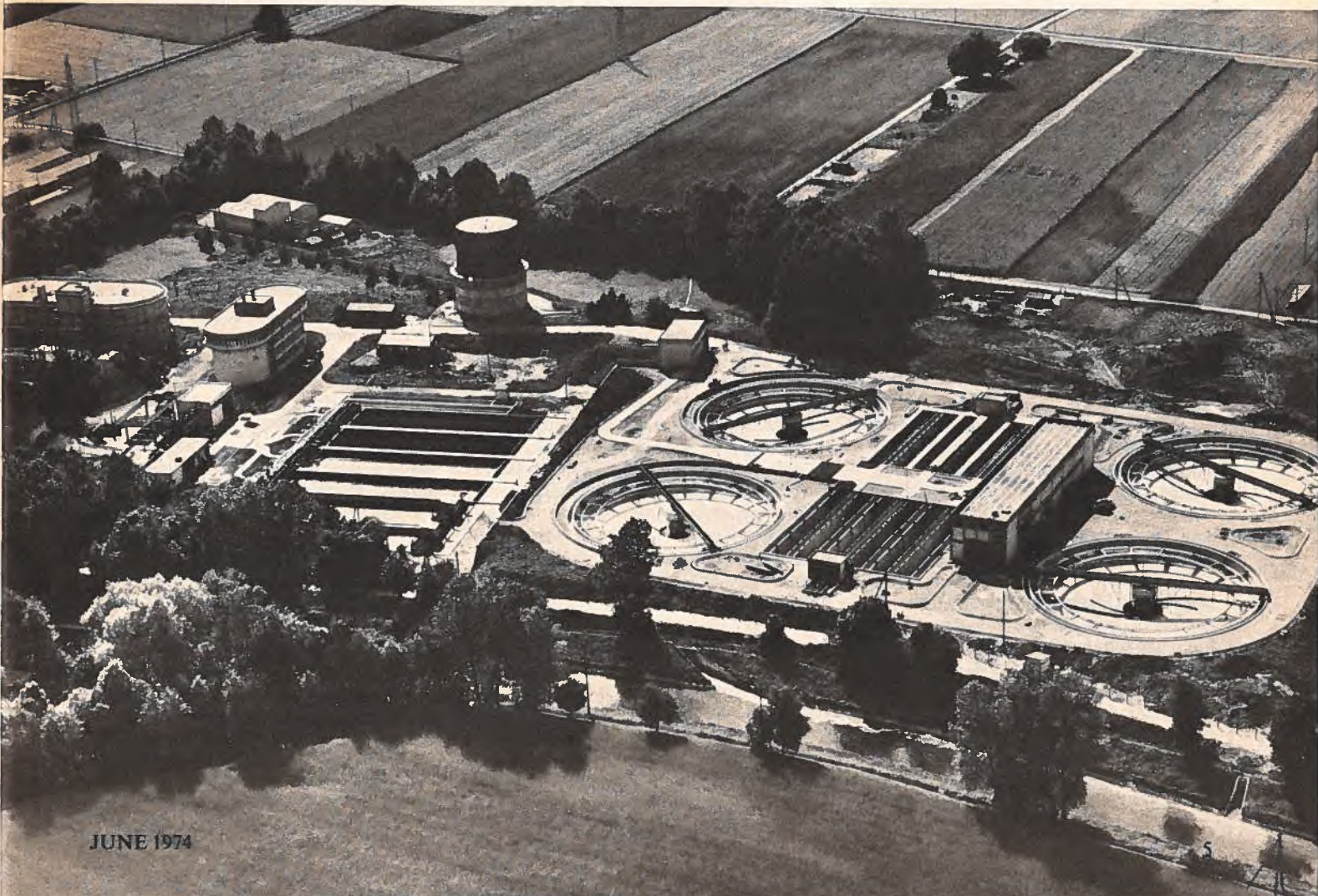
noise abatement sections. In 1971, the name was changed to Pro Aqua - Pro Vita to emphasize the expanded scope of the fair. The next Pro Aqua - Pro Vita exhibition takes place in Basel from June 11 to 15, 1974. For the first time, Canada is participating with a national stand, grouping nine Canadian companies plus the Department of the Environment. This will provide an excellent opportunity for Canadian industry in general and for the participants in particular to show what Canada can contribute to solving the world-wide problem of environmental sanitation.

It is expected that about 25,000 experts, including government officials, engineers, technicians and dealers in pollution control equipment from many

countries will be visiting this fair. In conjunction with the exhibition there will be a number of technical meetings devoted to the subject "Energy and the Environment", stressing the relation between water, air and energy. Noise abatement will be the subject of the 8th congress of the International Association against Noise, which is taking place at the same time.

This is a good show place for Canadian suppliers of pollution-control equipment. But if you missed out on the fair, the Commercial Division of the Canadian Embassy in Berne will be glad to give you more information on this market. □

A sewage treatment plant near Zurich.



Consumerism a growing force

DAVID MAGEE, Assistant Editor

Events of the past six months or so have obscured one of the great contemporary motherhood issues but that does not mean it has gone away. Quite the contrary; consumerism is a constantly growing force, one to which some people feel Canadian business and industry are not paying enough attention.

Everybody knows that for years consumers have been demanding better goods and services — and their demands are being met, either by companies acting voluntarily or by governments imposing legislation.

The federal and provincial governments of Canada are heavily committed to consumer protection, as are most of the governments in most of the countries with which Canada does business. It is probably true that any company, large or small, that fails to respond positively to consumerism is doomed to go under sooner or later. For some Canadian companies this is bad news.

The Financial Editor of the *Montreal Gazette*, David Tafler, wrote in one of his columns that "the general feeling of people in marketing, advertising and public relations is that most Canadian companies are not as progressive as Americans in paying attention to the full scope of consumerism . . . Many have answered the growing consumer challenge simply by changing the title of their vice-president, public relations, to vice-president, corporate, consumer and government affairs.

"They apparently feel consumerism is something that can be handled by their public relations department on a part-time basis."

Some companies, Tafler contended, think that consumer demands can be met by investing heavily in advertising campaigns that promote a better image but they do not change significantly their way of doing business. Tafler reported that some Canadian advertising agencies have appointed people to keep their clients regularly informed on consumerism because the clients are not doing the job themselves.

The *Gazette* columnist wrote that many U.S. companies established some time ago bona-fide consumer affairs departments and have come to consider them essential to their operations. Tafler quoted the chief executive office of one such firm: "Prior to the establishment of

our consumer affairs department, the president was pretty well insulated from bad news until it was nearly too late to do anything about it."

And companies had better do something about it. Forget about all the private groups and any moral questions involved and think about the weight of consumer protection law that is being brought to bear by government agencies in Canada and other countries.

For example, our biggest trading partner, the United States, has hundreds of municipal, state and federal agencies guarding the consumer's well-being. One of the toughest of these is the Consumer Product Safety Commission. It is regarded by many as the most powerful business regulatory agency in U.S. history and its chairman, Richard Simpson, was almost crude about his aims when he was appointed to head the new body. He threatened to put behind bars the chief executive officer of any U.S. company not toeing the line and one of the CPSC's commissioners, David Pittle, has been quoted as saying: "Anytime consumer safety is threatened we're going to go for the company's throat."

Canadians not excepted — A number of companies have already had their jugulars threatened.

The CPSC does not have jurisdiction over automobiles, boats, aircraft, foods, medicines or cosmetics but that leaves a lot of products over which it does have regulatory control. And a senior official of the Commission told *Canada Commerce* that Canadian companies will be dealt with just as stringently as U.S. ones. They simply will not be allowed to sell products that do not meet standards. About the only thing the CPSC will not be able to do to Canadians is take them to court on civil or criminal matters.

Sooner or later most companies are going to have to establish consumer affairs departments. They will not be able to depend on their advertising agencies to keep them abreast of what is happening, because keeping abreast of consumerism is no longer a part-time job.

New York active — Consider the report Commercial Officer Lillian Brittain sent to *Canada Commerce* from the Department's New York City office: "It appears two main types of consumer needs are being fulfilled: (i) the right of

consumers to be informed, as is particularly demonstrated by requirements for nutritional labelling on food products; (ii) the right of consumers to be protected from irresponsible manufacturers, dealers, services — even from themselves, as shown by the proliferation of all types of investigatory bureaux and legislation such as that relating to flammable clothing and toys."

Ms. Brittain reported that the Bureau of Consumer Frauds and Protection of the New York State Department of Law recovered goods, money and services worth about \$1.5 million in the first six months of 1972. It is significant that this is just one agency working in one State. Ms. Brittain also noted that the New York State Legislature in one session saw the introduction of about 600 bills pertaining to the food retail industry alone. Most of them, she reported, were consumerist/environmental/protectionist in bent.

New York City, with its Department of Consumer Affairs, was the first U.S. municipality to develop a comprehensive program of consumer protection and education. The Department handled more than 200,000 cases in 1972, not counting referrals to other agencies.

The State of California established a Department of Consumer Affairs in 1970. It is rated as being very effective and in a typical month handles about 6,000 consumer complaints. It has taken legal action in many cases and has even forced some companies to suspend operations.

Other cities and States have consumer protection bureaus. The City of Los Angeles started one in 1972 that obtained refunds and cost adjustments totalling almost \$270,000 in its first five months of operations. The Allegheny County Consumer Affairs Bureau covers the Pittsburgh area and has recovered hundreds of thousands of dollars for consumers. Another successful bureau is the State of Minnesota's Consumer Service Section.

These agencies constitute merely the tip of the consumerism iceberg in the United States; their equivalents are operating or starting to operate in many other municipalities and States. Furthermore, there are other places for the aggrieved consumer to turn to. In New York State an errant company might

"Anytime consumer safety is threatened we're going to go for the company's throat"

find itself dealing with the Federal Trade Commission, the Post Office Inspector in Charge, the Attorney General of New York and the Better Business Bureau of Metropolitan New York — in addition to the agencies already mentioned.

Swedish ombudsman — For the company that is dragging its feet on the issue, the outlook is just as grim in other countries. One of the first that comes to mind is Sweden. Its Government has been active in consumer protection for 30 years but recently new consumer protection laws have gone into effect, a Consumer Ombudsman (Konsumentombudsmen, or KO) has been appointed and a National Board for Consumer Policies has been established.

In one of its pamphlets, the Swedish Institute said: "The new laws are designed to protect the consumer and strengthen his position in the marketplace. Two of these laws are enforced by the KO . . . the Marketing Practices Act and the Act Prohibiting Improper Contract Terms.

"The purpose of the Marketing Practices Act is to protect consumers from misleading advertising and other unethical marketing practices. According to this law, an advertiser must be able to verify all statements and prove all claims included in an advertisement. Misleading price quotations, inaccurate statements about quality, false promises concerning a product and the like are therefore illegal and can be prosecuted by the KO's office."

The Swedes don't waffle on advertising standards. A tobacco company was forced to withdraw an ad that showed a broadcasting personality smoking its brand of cigarette and another of a stewardess who was doing the same. The reason for the ban? The ads associated cigarette smoking with good health and a glamorous life. In another case, an internationally-known manufacturer of gelatin desserts was forced to change the artwork and copy on its packaging because they implied that the product used natural flavouring. A consumer had complained — accurately — that "this product has never been in the neighbourhood of a raspberry."

Improper contracts — So much for marketing practices. What about the Act Prohibiting Improper Contract Terms? The Swedish Institute says this: "The

aim . . . is to protect consumers against unethical clauses appearing in printed contracts which are used in selling goods or services. The KO examines such contracts and sees to it that those clauses which improperly favour the seller at the expense of the buyer are eliminated.

"When the KO discovers an improper marketing practice or contract clause, either as a result of his own monitoring work or through outside complaints, he first seeks to obtain voluntary adjustments by negotiation. If this fails, he brings the case to the Market Court (Marknadsdomstolen), which has jurisdiction over such matters.

"This special court is headed by an impartial chairman with previous experience as a judge; the court also includes representatives of consumers, wage-earners, employers and other groups. The Market Court is empowered to issue an injunction enforceable with a fine; that is, the Court sets the amount of the fine which the businessman must pay if he transgresses. *There is no appeal from the decisions of the Market Court.*" (editor's italics).

Public Complaints Board — There is also a Public Complaints Board. It has limited power but goes hand-in-hand with the Act on Simplified Legal Procedures which Sweden brought in on July 1 last year and which helps the consumer obtain justice in disputes where only small amounts are involved. The reasoning behind the Act is that many people are reluctant to take a company to court because the cost of the legal battle would be higher than that of the item in dispute.

The simplified legal procedure laid down by the Act assumes that the consumer is capable of presenting a case before the court informally, without legal assistance. It applies in cases where a decision has been made by the Public Complaint Board and where the value of the contested item is below a certain amount. The right of appeal is severely limited and the significance is that the little guy can take on the biggest company without fear of losing his shirt.

EEC consumer — The European Economic Community countries are becoming bastions of consumerism. This situation is exemplified in the report Assistant Commercial Secretary L.

Richard Kohler filed to *Canada Commerce* from Paris: "Time was when you'd sit a Frenchman behind a bottle of good red wine and a well-warmed plate heaped with tasty victuals and that's what he'd talk about — food, glorious food! Forget about business!

"Today things are about the same but post-war affluence and a sophisticated industrial base have given the French consumer an ever-diversifying selection of goods and services, leading to unsettling difficulties in making choices.

"In the past, consumer interests have tended to be overlooked," Kohler told us, "but defensive instincts do not remain dormant long. Government and para-governmental organizations in France are admitting, and upholding, that the consumer is not only a buyer but also someone who must have a say in what goods are made in or imported to France, simply because the consumer is the end to which the economy moves.

"Consequently, the French consumer is becoming better protected and defended. For example, 10 national organizations, ranging from the National Confederation of Rural Families to the Feminine Civic and Social Union, are geared to protecting and defending their members. The state itself administers a variety of powerful organizations: L'Institut National de la Consommation (part of the Ministry of Finance and Economy), the Ministry of Agriculture's Service de la Répression des Fraudes et du Contrôle de la Qualité and the Ministry of the Interior's Direction de la Police Economique et de la Répression des Fraudes.

"Among complementary research and statistical associations, the French also have an active Association Française pour l'Etiquetage d'Information (a labelling tribunal) and the Association Française de Normalisation, which is similar to the Canadian Standards Association."

Organizing the public — Kohler reported that the most zealous of the formal defenders of the consumer appears to be l'Institut National de la Consommation: "Its role is to inform, educate and organize the public into a meaningful force and to represent the public in disputes.

"The I.N.C. publishes a monthly magazine, *50 Millions de Consomma-*

An advertiser must be able to verify all statements and prove all claims

teurs (similar to *Consumer Report*), with a circulation of about 350,000 in which fraudulent consumer products and services are exposed. The magazine carries an amusing section in which billboard advertisements are torn apart. In one instance, a beverage company claimed that drinking its tea was the first step to serenity. "Nuts", retorted *50 Millions*, "everybody knows that tea contains caffeine and caffeine is a potent stimulant."

According to Kohler, the I.N.C. monitors television commercials, disseminates a wide variety of articles on existing consumer protection legislation, handles countless inquiries from the public, provides advice, broadcasts a television program six days a week and publishes another, more technical, monthly consumer magazine with a circulation of 6,000. It also carries out extensive public relations work in France's school system. Kohler concludes: "You can still sit a Frenchman behind a bottle of good red wine, but if the label says 1969, it better be 1969!"

Textile labelling — But consumer protection does not always have to be legislated into existence. For example, Switzerland is one of the countries in the vanguard of voluntary textile care labelling development and promotion. (See

Canada Commerce, January 1973.)

The Swiss Organization for Care Labelling of Textiles (SARTEX) is part of an international organization whose members have agreed to use uniform textile care symbols on garment labels. Manufacturers in Belgium, Luxembourg, West Germany, France, the Netherlands, Austria and Italy, as well as Switzerland, are signatories of the agreement.

Textile care labelling may be voluntary in Switzerland but any Swiss manufacturer who wishes to use SARTEX-approved labels must sign an agreement to follow directives issued by the organization and about 75 per cent of all garments sold on the Swiss market, including imports, carry SARTEX-approved labels. Obviously, the consumer has responded.

Canadian garment manufacturers cannot sign the SARTEX agreement but our care symbol system is similar to the one used by SARTEX members. Labelling can be a complex proposition for the manufacturer, who must take into account all fabrics used in the garment and the type of wear for which it was designed. This usually means that there must be washing, ironing, drycleaning and wearing tests before the article can be labelled correctly. In addition, con-

sideration must be given to other components such as linings, buttons, trims and threads. All this may be bothersome but consumer demand leaves little choice.

Favouring consumer pays off — Many experts believe that the force of consumerism is so strong that it will overwhelm the market system as we know it. Others claim that the system is still viable but there must be more government intervention on behalf of the consumer, along with more comprehensive competition policies and consumer protection laws. In any event, just about everybody agrees that, one way or another, consumerism will overcome.

That does not necessarily spell gloom and doom for business and industry. Consider the experience of one food chain in the United States. It found that the consumerist approach to doing business really paid off. It adopted a system of open dating and unit pricing its merchandise and consumers showed their appreciation. That chain's per-store average in annual sales volume rapidly rose to double that of the rest of the industry, which is not a bad way to have the cookie crumble. □

GATT Agreement provides hope for textiles

AARON J. SARNA, Office of Special Import Policy

Canada has agreed to adhere to the recently-concluded Arrangement Regarding International Trade in Textiles (ITA), the new world textile accord which establishes an improved international environment to govern international trade in textiles of cotton, wool and man-made fibres and blends. Canada will adhere to the ITA for four years effective January 1, 1974.

The Arrangement, which was tabled in the House of Commons on March 20, was concluded at the end of last year under the auspices of the General Agreement on Tariffs and Trade (GATT) by negotiators representing nearly 50 countries, including Canada, which account for the bulk of world textile trade. It replaces the previous Cotton Textiles Arrangement which had been in force since 1962. The principle objective of the ITA is to encourage the expansion and progressive liberalization of international trade in textiles and, at the same time, to ensure the orderly conduct of such trade by avoiding disruption of markets and production in importing and exporting countries.

In commenting on the new accord, the Minister of Industry, Trade and Commerce, the Honourable Alastair Gillespie, stated that the ITA will permit Canada to operate its national textile policy within an improved and recognized international framework. It should also lead to a more equitable distribution of textile imports among industrialized countries, thus lessening diversionary pressures on the Canadian market which has one of the world's highest per capita import rates.

Sensitivity of the negotiations leading up to the conclusion of the ITA were based on the conviction that the particular sensitivities of the textile issue in world trade warranted special consideration and treatment within a multilateral context. Importing countries supported this position consistently throughout the negotiations but exporters such as Japan, the state-trading nations of Eastern Europe, and the developing countries also came to realize that the absence of a GATT sanction for treating textiles as a special issue in international trade would have resulted in the emergence of severe unilateral protectionist measures by major importing countries. These would have imperilled the entire post-war freer

multilateral trading system established under the GATT.

In the massive GATT study on textiles, prepared in advance of the negotiations, the uniqueness of the textile sector was underscored by the following special features (based on 1970 data):

- The share of world trade held by textiles and clothing is approximately 7 per cent, almost the same as chemicals and fuels. The share of world trade in manufactured goods held by textiles and clothing is 9.2 per cent.

- Establishment of a textile industry based on cotton and wool was the starting point of the industrial revolution in most of the developed countries, as the demand for clothing as a basic human need created a natural mass market. In developing countries a multifibre textile industry provides the impetus for economic takeoff in the industrial sector.

- The total value added in world manufacturing represented by textile products is 11 per cent. In the manufacturing sector of the developing countries, textiles account for 20 per cent of value added. The share of developed country manufactured exports held by textiles and clothing is 8 per cent, and for developing countries 23 per cent.

- The textile sector generates substantial income through its consumption of raw materials, fuels, machinery, and chemical dyes. Its repercussions on the world agricultural sector are extremely important, given its demand for natural fibres — mainly flax, silk, cotton, wool, and jute.

- A substantial proportion of industrial production and employment is derived from the textile and clothing industry.

- For developed countries, the share of manufacturing labour involved in the textile sector ranges from 9 per cent to 17 per cent, and from 10 per cent to 40 per cent in the developing countries.

- The textile and clothing industry is, by and large, located in slow-growth regions where alternative employment opportunities are limited.

Canadian imbalance — In Canada, the textile and clothing industry is one of the most important manufacturing industries. It is modern, efficient, and on a par technologically with its counterparts in other countries. It is a fully integrated industry, supplying a wide range of prod-

ucts from fibres, yarns and fabrics to apparel and industrial and household goods. Although the industry has kept pace generally with changing consumer demand and technological developments, its rate of adjustment continues to be restricted, in some cases seriously, by the large volume of imports - in 1971 these accounted for 52 per cent of total Canadian consumption, compared with 12 per cent in the U.S. In per capita terms, Canada is one of the world's largest importers of textile products, particularly from developing countries, importing three times as much as the U.S., twice as much as Britain and four times as much as the original six members of the European Economic Community (excluding intra-EEC trade). Despite serious efforts made by Canadian producers, exports have not increased as fast as imports. In 1973, Canada's trade deficit for textile manufactured products amounted to more than \$900 million.

The domestic industry has traditionally been one of the largest employers of manufacturing labour in Canada, accounting for 12 per cent or nearly 200,000 jobs. Most of its 3,600 plants are located in Québec and Ontario, with the balance in Manitoba, Nova Scotia, and New Brunswick. The industry has historically been particularly important to the economy of the Province of Québec where it is the largest single industry.

The high level of plant closures in recent years and the consequent decline in capital expenditures by the industry have intensified the economic problems of several provinces. Many of these closures have occurred in small communities in Western Ontario and the Eastern Townships of Québec where the major - often the only - source of employment is the textile and clothing industry. Rates of unemployment in many of these centres average as high as 21 per cent.

Background — It was during the early post-war period that textiles became a problem sector of world trade because of the low-cost nature and large volume of such goods and the resultant widespread restrictive devices employed by importing countries to deal with the problem of market disruption. Such trade also fluctuated greatly in response to changing consumer tastes in fashion and quality.

In light of this situation, industrial-

ITA will permit Canada to operate its national textile policy within an improved and recognized international framework

ized countries for the most part had recourse to illegal trade barriers in the 1950's when they were faced with disruptive imports of cotton textiles at prices so low that they were not materially affected by existing tariffs. Developing countries and state-trading nations were faced with unilateral and highly discriminatory non-tariff barriers in the form of import quotas, licensing controls, minimum price systems, and the denial of most-favoured-nation tariff treatment. Canada and U.S. were among the few importing countries to deal with this problem by means of bilaterally negotiated export restraint agreements.

In an effort to cope with the problem on a multilateral basis, the Short-term Arrangement on Cotton Textiles was negotiated in 1961 and replaced a year later by the Long-term Arrangement regarding International Trade in Cotton Textiles (CTA), both of which were conducted under the aegis of the GATT.

In general terms, the CTA fulfilled a useful purpose in that it constituted an exceptional and transitional measure designed to ensure the orderly expansion of cotton textile exports. Although Canada was not fully satisfied with the comprehensive manner in which the CTA was invoked by other importing countries, CTA did, on the whole, prevent the erection of arbitrary protectionist measures and enable exporting countries to increase their foreign exchange earnings in this sector.

However, in the ensuing decade the CTA declined as an effective instrument for regulating world textile trade as man-made fibre and wool textiles and blends of them became predominant. In addition, major importing countries resorted to long-term unilateral quantitative restrictions and comprehensive bilateral restraint agreements, particularly against Asian suppliers, which threatened to undermine the multilateral trading system established under the GATT and significantly contributed to an undue concentration of textile imports in the relatively open Canadian market. The introduction of the Mills Bill in the U.S. Congress in 1970 added to fears of an international trade war.

Against this background of mounting restrictions outside the framework of the GATT, the Director-General of the GATT succeeded in having the entire

matter of international trade in textiles taken up in June 1972 to bring it more closely into line with GATT's principles and objectives.

Key provisions of ITA — The ITA represents a significant advance over the former Cotton Textiles Arrangement in that it provides, for the first time, international sanction under the GATT to deal with problems of market disruption caused by low-priced imports on a multi-fibre basis to correspond with the current realities of the international textile trade. Secondly, it established a more liberalized framework for the conduct of such trade. Among the most important provisions of the accord are:

1. The phasing-out of all existing bilateral restraint agreements or unilateral quantitative restrictions within three years unless these are brought into conformity with the ITA provisions.

2. New safeguard measures to be permitted through the negotiation of bilateral restraint agreements on specific products based on proof of market disruption or, failing agreement, by unilateral action.

3. More liberal provisions on growth rates, base periods, carry-overs, and inter-product transfers to be granted in new bilateral restraint agreements of a comprehensive nature traditionally invoked by the U.S. and the EEC.

4. The creation of a Textiles Surveillance Body to supervise implementation of the accord and to make recommendations on the admissibility of restrictions imposed. Although it has no binding power to enforce its rulings, participating countries undertake to try to accept in full its recommendations.

5. A more explicit definition of market disruption based on the existence of serious damage, and the assessment of such factors as turnover, market share, profits, prices, export performance, employment, volume of disruptive imports, productivity, and investments.

6. Recognition of the need for preferential treatment in respect of disruptive imports from developing countries in terms of more favourable base levels and growth rates, special consideration for imports of cotton textiles, and exclusion from restraints of handloom and traditional handicraft textiles.

7. An annual minimum growth factor in restraint levels of 6 per cent unless

exceptional circumstances warrant a lower rate.

8. The base period for calculating restraint levels to be linked to the date of announcement of a public inquiry into imports for such countries as Canada that have an independent investigative body such as the Textile and Clothing Board.

9. The inclusion, for the first time, of primary textile materials such as wool tops and man-made fibres within the ambit of an international textile agreement.

Implications — The ITA represents an important step in meeting the long-standing objective of Canada's national textile policy to seek meaningful liberalization in the highly restrictive environment for world textile trade. Canada, by participating in the ITA negotiations, achieved its primary objective by obtaining an arrangement under which its present textile policy, internationally acknowledged as one of the most liberal in the world, could be pursued within an improved GATT framework. (Most of Canada's restraint arrangements are of one year's duration, covering fewer than three product items. Textile imports under restraint represent 10 per cent of total textile imports and less than 1 per cent of Canada's total imports.) Thus, the ITA will strengthen our hand in negotiating textile restraint agreements when required.

Of major importance also are the ITA provisions requiring importing countries such as the U.S. to grant more generous access rights and the provisions stipulating that unilateral restrictions be phased out within a fixed period unless justified under the ITA.

This should result in a more equitable distribution of textile imports among industrialized countries, thus reducing the excessive pressures of such imports in the Canadian market.

From the over-all perspective of Canada's trade policy, the ITA has removed the danger of a serious deterioration in the multilateral trading system by establishing internationally-agreed rules for taking safeguard measures in the sensitive textile sector which, together with agricultural products, accounts for the bulk of non-tariff barriers in the field of international trade. The ITA should thus facilitate progress in the forthcoming

Despite serious efforts by Canadian producers, exports have not increased as fast as imports

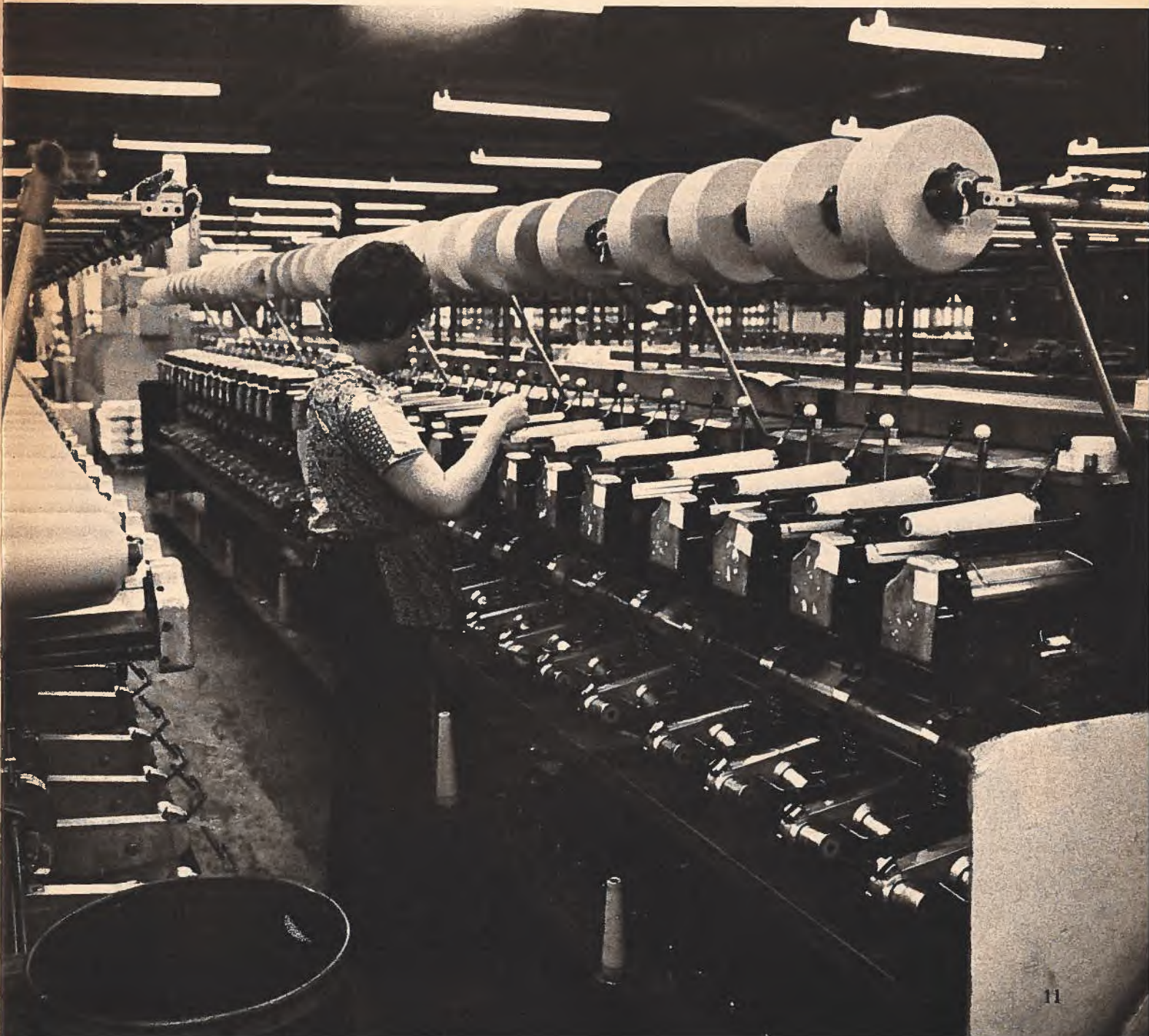
GATT Multilateral Trade Negotiations to secure further liberalization of world trade.

In conformity with the stipulations of the new agreement, the Government will be re-aligning its existing bilateral

restraint arrangements with the 19 foreign suppliers to meet the criteria of the ITA. At the same time, the Textile and Clothing Board will be guided by the provisions of the ITA in the conduct of its inquiries into particular textile and

clothing sectors where imports appear to be causing or threatening serious injury to Canadian production and employment. □

Worker selecting cones of yarn from storage area at textile fabric mill in Cowansville, Québec.



The Italian Aerospace Industry

O. A. SULZENKO, Commercial Counsellor, Rome

Italy's aerospace industry is located mainly in the north of the country within the so-called "industrial triangle" — Lombardy, Piedmont, Liguria. In the south, aerospace plants are concentrated around Naples and Brindisi, and in the central part a few in the province of Rome. The policy of moving any new aerospace industrial initiatives from the north to the south is being implemented gradually, but the project for a large Aeritalia plant in the Foggia area has not as yet materialized mainly because of economic issues. The Italian aerospace industry breakdown by speciality follows more or less the pattern of other countries and includes a variety of activities, from relatively simple air-frame manufacturing to very sophisticated avionics production.

The avionics and electronics sectors depend to a great extent on military

Modern housing in Naples, where part of the Italian aerospace industry is concentrated.

requirements. Only a handful of industries, such as Selenia, CGE-FIAR, Siemens and a few others are in a relatively independent position vis à vis military procurements. Microtecnica S.p.a., Nardi S.a., Secondo Mona, OMI S.p.a., Oleodinamica Magnaghi S.p.a. and Magnaghi Napoli S.p.a. have formed a consortium called CIRSEA S.p.a., headed by Microtecnica. Organizations such as Centro Elettronico Avio of Aeritalia have diversified their activities sufficiently to combine conception, design, development and integration of major aerospace systems with their activities in other advanced system applications such as traffic control, airport automation and other civilian applications. ELSAG S.p.a. has also developed some advanced technology, particularly in SCLAR rocket systems and ASW control systems. Though Selenia's technology is considerably defence-oriented, and includes activities such as missile development and fire-control systems, this company has also acquired world

prominence in many non-military applications such as digital computers and telecommunications. Elettronica S.p.a. is one of the fore-runners in the Italian electronics sector and is considered to be one of the leaders in Europe in the highly-advanced ECM techniques.

In the missile field, there is a long list of companies with a host of different equipment, most of it still in the design stage. Selenia (manufacturer of the Hawk missile) is now producing Sparrows, and is working on the Albatros missile system for the Italian Navy. New systems for the Air Force are also being developed by using the skills acquired in the Sparrow production. Other activities in this sector are being carried out by SNIA Viscosa (involved in the Italian TOW program), Contraves and SISTEL. The latter manufactures naval missiles (Sea Killer Mk1 and Mk2) and is designing the air-surface Marte weapon system for the Italian Navy. OTO Melara has excellent prospects in the missile sector with the ship-to-ship

Continued on page 13



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 May 17. 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	Country and Currency	foreign currency unit in Canadian dollars	Canadian dollar in foreign currency units
Algeria Dinar	.2380	4.20	Ecuador Sucre (official)	.0389	25.71
Arab Republic of Egypt Pound (official)	2.4631	.41	El Salvador Colon	.3855	2.59
Argentina Peso (financial)	.0966	10.35	Fiji Dollar	1.2048	.83
(commercial)	.1928	5.19	Finland Markka	.2654	3.77
Australia Dollar	1.4337	.70	France, Monaco, etc. ¹ Franc	.1986	5.04
Austria Schilling	.0548	18.25	French Pacific ² Franc	.0110	90.90
Bahamas Dollar	.9638	1.04	Franco-African Republics ³ Franc	.0040	250.00
Belgium and Luxembourg Franc	.0256	39.06	Germany D Mark	.3960	2.53
Bermuda Dollar	1.0397	.96	Ghana New Cedi	.8352	1.20
Bolivia Peso	.0482	20.75	Greece Drachma	.0333	30.03
Brazil Cruzeiro (official free)	.1484	6.74	Guatemala Quetzal	.9638	1.04
Britain Pound	2.3225	.43	Guyana Dollar	.4444	2.25
British Honduras Dollar	.6078	1.64	Haiti Gourde	.1928	5.19
Burma Kyat	.2002	5.00	Honduras Lempira	.4819	2.08
Chile Escudo (bank rate)	.0015	666.66	Hong Kong Dollar	.1895	5.28
(free)	.0013	769.23	Hungary Forint (official)	.0869	11.51
China, People's Republic of Yuan	.4188	2.39	Iceland Krona (official)	.0098	102.04
Colombia Peso (fixed)	.0374	26.74	India Rupee	.1251	7.99
Costa Rica Colon	.1453	6.88	Indonesia Rupiah	.0024	410.00
Cuba Peso		N.A. ¹⁰	Iran Rial	.0134	74.63
Czechoslovakia Koruna (fixed basic rate)		N.A. ¹⁰	Iraq Dinar	3.2555	.30
Denmark Krone	.1645	6.08	Ireland Pound	2.3225	.43
Dominican Republic Peso	.9638	1.04			

Country and Currency	foreign currency unit in Canadian dollars	Canadian dollar in foreign currency units	Country and Currency	foreign currency unit in Canadian dollars	Canadian dollar in foreign currency units
Israel Pound	.2295	4.36	Philippines ⁵ Peso (free)	.1441	6.94
Italy Lira	.0015	666.66	Poland Zloty (fixed basic rate)	.2577	3.88
Jamaica Dollar	1.0602	.94	Portugal & Overseas Provinces ⁶ Escudo	.0392	25.51
Japan Yen	.0035	285.71	Saudi Arabia Riyal	.2850	3.50
Kenya ⁴ Shilling	.1379	7.25	Sierra Leone Leone	1.2371	.81
Korea, Republic of Won	.0024	404.38	Singapore Dollar	.3358	2.98
Lebanon Pound (free)		N.A. ¹⁰	South Africa Rand	1.4361	.70
Libya Dinar	2.777	.36	Spain & Dependencies Peseta	.0165	60.60
Malawi Kwacha	1.2280	.81	Sri Lanka ⁷ Rupee	.1489	6.71
Malaysia Dollar	.4077	2.45	Sweden Krona	.2267	4.41
Mexico Peso	.0771	12.97	Switzerland Franc	.3339	2.99
Morocco Dirham	.2298	4.35	Syria Pound (free)	.2711	3.69
Netherlands Florin	.3738	2.68	Thailand Baht (free)	.0482	20.75
Netherlands Antilles Florin	.5384	1.86	Trinidad & Tobago ⁸ Dollar	.4839	2.07
New Zealand Dollar	1.4144	.71	Tunisia Dinar	2.2146	.45
Nicaragua Cordoba	.1377	7.26	Turkey Lira	.0684	14.62
Nigeria Naira	1.4700	.68	United States Dollar	.9638	1.04
Norway Krone	.1823	5.48	Uruguay Peso (free)	.0008	1,250.00
Pakistan Rupee	.0973	10.28	Venezuela Bolivar (official free)	.2250	4.44
Panama Balboa	.9638	1.04	Yugoslavia Dinar (official)		N.A. ¹⁰
Paraguay Guaraní (free)	.0078	128.21	Zaire, Republic of ⁹ Zaire	1.961	.51
Peru Sol (free)	.0225	44.44	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 Barbados and Leeward and Windward Islands.

9. Formerly Congo (Kinshasa).

10. Rates not available at press time.

Foreign Tariffs and Trade Regulations

Argentina

Decree 704/74 has laid down that trading in wheat, corn and grain sorghum is to be centralized under the National Grain Board as laid down in Law 20573. Other cases of foreign sale are to be made through the tender system, under f.o.b., c.i.f. terms, as determined by the Board.

On the internal market the Board may act on its own initiative or through authorized agents. The volume of operations shall be taken into account, as also the state of the market, storage capacity and protection for the local producer.

A National Register of Grain Dealers is set up, to be managed by the Grain Board. All operators engaged in activities connected with grain trading are now obliged to register, otherwise they are disqualified for the business.

Brazil

The Customs Policy Council has recently announced the following tariff changes:

Resolution 2008 of February 1, 1974 exempts from duty until December 31, 1974 Paraphthalic acid (terephthalic acid) (tariff heading 29.15.02.01), dimethyl terephthalate (tariff heading 29.15.02.02), hexamethylenediamine and its salts (tariff heading 29.22.31.00), dimethylformamide (tariff heading 29.25.99.00) acrylonitrile (tariff heading 29.27.03.00), and ethyleneglycol polyterephthalate (tariff heading 39.01.02.05).

Resolution 2009 exempts from duty until June 30, 1974 truck tires of the following sizes 8.25 x 20) 9.00 x 20; 10.00 x 20) 11.00 x 20 and 11.00 x 22 (tariff heading 40.11.01.02).

Resolution 2012 of February 4, 1974 exempts from duty a quota of 10,000 tons of dodecylbenzene (tariff heading 38.19.29.00).

Resolution 2013 of February 14, 1974 reduces the duty from 20% to 5% for one year on paper and paperboard for the manufacture of punched cards for statistical and similar machines (tariff heading 48.01.02.08).

Resolution 2014 of February 14, 1974 extends for one year the exemption from duty established by Resolution 1318 on calcium hydrogen orthophosphate (tariff heading 28.40.28.00) and exempts from duty for one year tricalcium diorthophosphate (tariff heading 28.40.33.00).

Resolution 2028 of March 4, 1974 exempts from duty for one year cellulose linter of a degree of viscosity higher than 60 CPS (tariff heading 47.01.99.00).

Resolution 2030 of March 4, 1974 exempts from duty for one year cellulose acetate not containing colouring matter, plasticisers or other materials (tariff heading 39.03.04.02).

Resolution 2031 increases the duty from 45% to 55% on rock drilling and similar augers and drills, whether or not incorporating metal carbides (tariff heading 82.05.03.00).

Resolution 2033 of March 4, 1974 extends for 180 days the reduction in duty from 55% to 5% on cotton, not carded or combed (tariff heading 55.01.00.00).

Resolution 2034 exempts from duty a quota of 2,700,000 tons of wheat in the grain when imported by CACEX (tariff heading 10.01.00.00).

Resolution 2035 of March 4, 1974 exempts from duty for 180 days naphthalene (tariff heading 27.07.04.00).

Resolution 2036 of March 4, 1974 exempts from duty a quota of 45,927.8 tons dry weight, of rubber and latex natural and synthetic, through special authorization of the Superintendancy for Rubber (tariff headings 40.01.01.00, 40.01.02.00 and 40.02.00.00).

Resolution 2037 reduces the duty from 70% to 40% on glass envelopes based on boron silicate for mercury vapour lamps (tariff heading 70.11.01.03).

Resolution 2040 of March 4, 1974 exempts from duty for one year raw or processed flax (tariff headings 54.01.01.00 and 54.01.02.00).

Resolution 2041 of March 4, 1974 exempts from duty for one year orthodichlorobenzene (tariff heading 29.02.44.01).

Resolution 2042 of March 8, 1974 exempts from duty for one year phenetidine (tariff heading 29.23.45.00).

Resolution 2045 exempts from duty until June 30, 1974 butyl benzyl orthophthalate (tariff heading 29.15.01.99).

Resolution 2046 exempts from duty for 180 days as of March 4, 1974 support for tubing of brake valves for railway vehicles (tariff heading 86.09.13.00).

Resolution 2048 of March 4, 1974 exempts from duty for one year coumaroneindene resins (tariff heading 39.02.02.10).

Resolution 2049 of March 4, 1974 exempts from duty for one year sodium tripolyphosphate (tariff heading 28.40.38.00).

Resolution 2050 reduces the duty from 55% to 7% for 180 days as of March 4, 1974 on acrylic synthetic textile fibres (tariff headings 56.01.01.03, 56.02.01.03 and 56.04.01.03).

Resolution 2052 reduces the duty from 60% to 15% on paper or paperboard covered with a layer of polyethylene or polypropylene, for the manufacture of sensitised paper for photography (tariff heading 48.07.99.00).

Resolution 2053 exempts from duty dimethyl ethylmercapto thiophosphate of ethyl (metil dimeton) with a minimum concentration of 50% of methyl isosystox isomer (tariff heading 29.31.18.99).

Resolution 2054 reduces the duty until December 31, 1974 from 55% to 25% on polyester filament, dyed in the mass, (tariff heading 51.01.01.06). Does not apply to texturized polyester filament.

Resolution 2055 of March 6, 1974 exempts from duty for one year pneumatic tires of the following sizes for agricultural tractors and machinery (tariff heading 40.11.01.04) 750 x 16; 750 x 18; 750 x 20; 10 x 28; 12 x 38; 13 x 24; 13 x 26; 13 x 18; 13 x 28A; 14 x 30; 15 x 30A; 15 x 34; 18 x 26 and 18.4 x 15 x 26 and some inner-tubes of various sizes (tariff heading 40.11.02.00).

Resolution 2056 of March 6, 1974 exempts from duty for one year kraft papers (tariff heading 48.01.02.03).

Resolution 2057 of March 6, 1974 exempts from duty for one year bags of paper or paperboard manufactured with a minimum of three sheets of natural kraft paper (tariff heading 48.16.99.00).

Chile

By a recent Central Bank resolution published in the Official Gazette No. 28,822 of April 8, 1974 the prohibitive 10,000 per cent cash deposit, which had to be made prior to obtaining import authorization, has been eliminated on most imports. The restrictive mechanism has been maintained on a short list of about 70 items which are considered as non-essential by the authorities. A further list of 25 items also remains subject to the 10,000 per cent deposit but is subject to exemption in special cases, such as food imports by Empresa de Comercio Agrícola (ECA).

Wanted: MANUFACTURERS

Ventilators

Swiss company is offering the rights for manufacturing under licence in Canada its centrifugal fans and roof ventilators. The fan housings are made entirely of acid-, alkali- and corrosion-resistant plastics. The fans are made in six sizes and come in twelve models. The largest may be fitted with a standard or twin turbine of minimal weight. The roof-mounted ventilators are equipped with guide vanes and automatic flaps to prevent rainwater, snow and cool air from entering and to provide protection against birds. Literature available. **Item 3011**

Aluminium louvres and grilles

Australian company seeks licensing arrangement with a Canadian firm to manufacture its range of aluminum louvres and grilles used in the air conditioning and building construction industries. The units are constructed of extruded sections. The outside frames are attached by an invisible joint. Several models are available in an infinite variety of sizes and of blade designs to suit each customer's requirements with respect to free airway and degree of obscuration. Door louvres are adjustable in thickness to suit the many variables of each door. Since these units are of aluminum construction they are aesthetically acceptable with surrounding materials in any situation but, if required can be anodized in a variety of colours for special applications. Company claims these products can be easily assembled in a light engineering shop. Literature available. **Item 3012**

Prefabricated floors

French company is offering to a Canadian company the rights to manufacture under licence its prefabricated floors. These floors consist of prefabricated elements in the form of embossed flags or slabs of reinforced concrete, resting on either small metal girders or reinforced concrete ribs with reinforced capping. This system makes it possible to dispense altogether with the slab concrete setting forms, to allow wider spacing between the girders and ribs resulting in less weight, and to permit the use of all types of suspended ceilings. The company maintains that these floors are strong, lightweight and easy to install. Literature available. **Item 3013**

Combination power saw

German company offers under licence the Canadian manufacturing rights to its automatic combination power saw designed for ripping and cross-cutting chipboard and wood fiber panels. Three sizes are available, the largest of which will accommodate panels up to 24 ft. 7 in. x 8 ft. 2 in. The machine is equipped with fully automatic electric program control, and fully automatic length measuring with digital readout in both longitudinal and transverse directions. The program setting and preselection of the dimensions to "out" is effected by punched cards. A claimed advantage of this equipment is its panel dividing head, with one saw blade which swivels up to 270°. Literature available. **Item 3014**

Gantry cranes

German firm wishes to have its tubular steel gantry cranes manufactured under licence in Canada. Designed for hoisting and mechanical handling operations in storage yards of all types, these portal cranes can be installed on a mono-rail bridge, a two-rail bridge with box type crab track, or a two-rail bridge with double T crab track. Company claims these tubular steel cranes offer less resistance to the wind, are lighter in weight, and are less expensive than solid steel cranes. Literature available. **Item 3015**

Physical training equipment

German firm is interested in a joint venture or licensing arrangement to manufacture in Canada its physical training and exercise equipment designed to provide a wide variety of exercises. Various-sized "training centres" accommodate 11, 15 or 22 individuals simultaneously, and permit more than 70 exercises to be performed. The patented concept employs a spring lever system wherein the weights are individually adjustable. This equipment permits training in rotation in minimum space conditions. Literature available. **Item 3016**

Ski lift equipment

Austrian manufacturer offers its complete line of ski lift equipment for manufacture under licence in Canada. This equipment includes T-bars, chair lifts, combination lifts and aerial tramway cabins. Systems are available with capa-

cities from 300 to 1,000 passengers per hour and speeds to 800 ft. per minute. Normal lengths range to 6,500 feet but additional lengths are possible. Literature available. **Item 3017**

Soil conditioning and stabilization

Belgian firm is offering under licence to a Canadian company its processes for soil conditioning and stabilization. One treatment consists in applying to the soil an aqueous solution of acrylamide polymer combined with an aqueous solution of a dialdehyde or hypochlorite salt which acts as a cross linking agent. A second treatment involves incorporating an aqueous emulsion of bitumen into the soil to a depth of two to four inches. These processes are useful for reclaiming agricultural land or the solidification of building land or the stabilization of soils. Literature available. **Item 3018**

Tire pressure detector

Belgian firm is offering the rights to manufacture under licence in Canada its small detonator device which warns drivers when the air in their tires becomes low. The device is simply screwed onto the existing tire valve. A detonator is struck by a lever which is activated when small bladders deflate to a preset pressure. The sound emitted by the detonator is audible inside the car. Two types of detectors have been developed — in the first, the detonator is replaceable; in the second, the device is discarded after each detonation. Made of brass, aluminum or nylon the detector is claimed not to interfere with normal tire changing. Literature available. **Item 3019**

Traffic delay meter

Canadian firm offers under licence the Canadian manufacturing rights to its electric traffic survey instrument. This unit is intended for surveys of traffic volume and for traffic signal timing. The basic model is a solid state portable device with digital readouts. It measures vehicle delay in seconds and by number of vehicles. Capacity is 1 million vehicle-seconds. The meter can be powered from three sources: 115 Volts, 60 Hz. standard power outlet, standard 12 Volt automobile battery, or internally contained rechargeable batteries. According to the company, there is no other known instrument on the market for the direct measurement of traffic delay. Literature available. **Item 3020**

Clamping devices

British inventor is offering the rights to manufacture under licence in Canada his two types of clamps designed for holding workpieces firmly in place on wood working or metal working benches. One clamp, made of steel, operates on the cam-lever principle and is quick and simple to secure, to release, and to adjust

by hand. It can be used to hold objects rigid on drilling, boring and milling machines as well as on work benches. A second clamp, made from $\frac{3}{8}$ in. diameter round steel bar in the shape of a T, is designed to hold objects rigid on wood working benches in order to enable sawing and drilling operations to be performed. Literature available. **Item 3021**

Disposable saliva ejector head

American inventor is offering under licence to a Canadian company the manufacturing rights to a disposable saliva ejector head which is claimed to remove saliva completely, noiselessly and painlessly during dental operations. The device is attached to the conventional saliva ejector and can be inserted along the whole of one side of the mouth between the cheek and lower teeth, or along both sides and under the tongue simultaneously. The head itself consists of a perforated plastic or rubber tube with an elbow to allow it to swing right or left. The tube is about 2 inches long with an outside diameter of about $\frac{1}{4}$ " to $\frac{3}{16}$ ". Literature available. **Item 3022**

Emergency indicator

Canadian inventor wishes to licence a Canadian firm to manufacture his tenant's emergency indicator. This device consists of a coloured print with seven flowers printed thereon, indicating the seven days of the week, e.g., sunflower for Sunday, morning glory for Monday. The print is inserted into a clear plastic holder, in the centre of which is located a pointer that is moved to point towards the respective day of the week. This device is a protection for solitary tenants. When attached to the outside doors of apartments, senior citizen residences, hotel rooms, etc., it can be checked every day at a specific time. An investigation can then be conducted if the device has not been changed to show the respective day. Inventor claims this indicator is easy and inexpensive to manufacture in mass production. Literature available. **Item 3023**

Magnetic motor and power generating device

Canadian inventor seeks a Canadian company to purchase his concepts or to undertake their future development. One consists of a motor which is powered only by a system of strategically placed magnets. It is claimed to have application as a portable power unit. The other concept involves a method of creating power by transferring the lift of air submerged in water to rotary motion. In this device an endless belt containing air sacs revolves around two pulleys — one on the surface of the water and another submerged. Air is forced into the sacs as they pass the bottom pulley. According to the designer, the lift thus created causes the apparatus to rotate. Sketches available. **Item 3024.**

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.

Equipment and Machinery

ARGENTINA — A project calling for the installation of two plants for a steel fabricating subsidiary. The first is to be a Midrex direct reduction system for the production of 350,000 tons per annum of sponge iron. The second plant will be a 250 ton per annum seamless tube fabricating facility. There are opportunities for the supply of machinery, equipment and engineering: Commercial Counsellor, Canadian Embassy, Casilla de Correo 3898, Suipacha 1111, Buenos Aires, Argentina.

ARGENTINA — Tenders for the purchase of two off-shore drilling platforms — one for depths of up to 200 meters, and the other for no more than 20 meters. A special technical backup vessel is also to be purchased: Commercial Counsellor, Canadian Embassy, Casilla de Correo 3898, Suipacha 1111, Buenos Aires, Argentina.

SINGAPORE — A self propelled or non-self propelled floating revolving crane driven by diesel, electric, hydraulic or steam, with a revolving capability of 360° full turn and a lifting capacity of 60 to 100 tons: Commercial Counsellor, Canadian High Commission, P.O. Box 845, Faber House, 230/236 Orchard

Road, Singapore 9, Singapore.

SINGAPORE — Automatic machinery and equipment used in the manufacture of automobile radiators, industrial heat exchangers and marine oil coolers: Commercial Counsellor, Canadian High Commission, P.O. Box 845, Faber House, 230/236 Orchard Road, Singapore 9, Singapore.

SPAIN — Gas turbine drive alternators for shipboard mounting in sizes up to 2,000 Kw; oil water separators from 1 to 50 tons per day: Commercial Counsellor, Canadian Embassy, Apartado 117, 35, Nunez de Balboa, Madrid, Spain.

SPAIN — Ventilation ducts made of plastic material, for auxiliary ventilation in mines and tunnels. Plastic flexible tubes reinforced with steel wire, for ventilation, airconditioning, fumes and dust moving. Plastic pressure reinforced tubes with perlon or mylon reinforcement net. Flexible metal tubes, of aluminum or steel, for ventilation. Plastic corrugated floating pipe for washing swimming pools. Turbo fans, especially for mines: Commercial Counsellor, Canadian Embassy, Apartado 117, 35, Nunez de Balboa, Madrid, Spain.

Materials

LIBYA — Web offset newspaper rolls, weight 55 grams, size 88 cm x 100 cm x 7.5, approximately 1,500 tons. For magazine, weight 60 grams, size 96 cm x 100 cm x 7.5, quantity 150 tons. Bright paper sheets, weight 109 grams, size 61 x 86 cm, quantity 250 tons: Commercial Secretary, Canadian Embassy, Kasr el Doubara Post Office, 6 Mohamed Fahmy El Sayed Street, Garden City, Cairo, Arab Republic of Egypt.

SINGAPORE — Veterinary/chemical raw materials and finished products required by company marketing vaccines, veterinary and chemical lines: Commercial Counsellor, Canadian High Commission, P.O. Box 845, Faber House, 230/236 Orchard Road, Singapore 9, Singapore.

OCEAN FREIGHT MARKET

Prepared by the Office of the Transportation Policy Adviser, May 22, 1974

Having opened comparatively quietly this year, the dry cargo charter market gained momentum in March. Record highs were established in certain grain trades from the United States, including the U.S. Gulf/Holland trade and the U.S. Northern Range/Continent (Germany) trade at U.S.\$22.00 and \$20.50 per ton respectively. This performance in the voyage charter market led to a strengthened demand (to hedge against further rate increases) in the time charter market, particularly for large bulk carriers and generally for ships with prompt delivery.

Charterers' resistance grew in April, and many rates declined, for example the U.S. Gulf/Holland grain rate dropped by U.S.\$5.00 per ton. Nonetheless, the decline was of short duration and rates again were pushed upward. Representative of these rapid fluctuations in the dry cargo market was the coal trade between Hampton Roads and Japan. From a March peak of U.S.\$21.00 per ton, rates eroded to a low of U.S.\$17.50 in April, and subsequently have advanced to \$27.00 by the middle of May. Rates in

Canadian dry cargo trades generally behaved similarly. For example, the rate for grain from St. Lawrence River ports to Belgium/Holland/Germany increased from a low of U.S.\$9.00 in April to \$15.00 in mid-May. One year ago a similar shipment was made for \$7.75.

In sharp contrast to dry cargo trades, the tanker market experienced a reduced level of inquiry and consequent rate softening. Tanker rates, particularly for Very Large Crude Carriers (VLCC's) from the Persian Gulf, have fallen substantially from 1973 levels. An April fixture for crude oil from the Persian Gulf to the U.S. Northern Range was arranged at U.S.\$8.01 compared to the reported 1973 peak of \$37.78 per ton. During early May, rates declined further, reaching \$7.24 per ton. In May 1973, rates were as high as \$27.57. Occasional tanker fixtures were still being reported between Vancouver and Portland, Maine, the terminus of the pipeline to Montreal. In this trade, rates declined from a December 1973 peak of U.S.\$12.33 per ton to \$9.94 in April and to \$9.63 in early May.

CHARTER RATES FOR REPRESENTATIVE CANADIAN AND WORLD TRADES

Trading

Voyage charters

A) St. Lawrence River Ports to Belgium/Holland/Germany:

Month	Rate	Fixture Tonnage
(Cdn. \$ per long ton)		
April 1973	8.49	19,000
November 1973	12.97 to 14.07	14,000 to 39,000
April 1974	8.71 to 11.61	25,000 to 70,000

B) Great Lakes Ports to Belgium/Holland/Germany:

April 1973	13.49 to 19.23	12,000 to 24,000
November 1973	30.93 to 40.92	9,800 to 14,500
March 1974	30.00 and 39.00	14,000 and 16,000
April 1974	20.80 to 38.69	9,600 to 16,000

C) British Columbia/U.S. North Pacific to Japan:

April 1973	15.58 and 16.48	14,000
November 1973	25.20	14,500
March 1974	33.92	14,100
April 1974	29.99 and 30.23	15,000 and 15,750

II. Coal

Hampton Roads, Virginia, to Japan:

April 1973	9.94 to 9.99	30,000 to 50,000
February 1974	13.19 to 20.51	30,000 to 60,000
March 1974	13.64 to 20.39	35,000 to 50,000
April 1974	16.93 to 20.31	37,500 to 50,000

III. Crude petroleum

A) Vancouver to U.S. Northern Range*:

January 1974	10.77 to 11.54	31,000 to 40,000
February 1974	9.71 to 10.92	28,000 to 40,000
March 1974	10.25	32,000 and 40,000
April 1974	9.61	19,000

B) Caribbean to U.S. Northern Range*:

April 1973	2.32 to 3.80	18,500 to 51,000
February 1974	3.09 and 4.36	22,000 and 52,000
March 1974	3.62	31,000
April 1974	2.74 to 3.71	19,000 to 39,000

IV Time charters:

A. Vessels from 15,000 to 20,000 tons deadweight for 6 to 12 months:

Month	Rate	Fixture
Cdn. \$ per ton per month		
April 1973	6.07 to 6.49	5 fixtures
February 1974	7.18 and 7.81	2 fixtures
March 1974	8.11 to 13.11	10 fixtures
April 1974	10.86	1 fixture

B. Vessels from 20,000 to 30,000 tons deadweight for 6 to 12 months:

April 1973	5.74	1 fixture
February 1974	5.55 to 8.55	9 fixtures
March 1974	6.80 to 10.44	3 fixtures
April 1974	8.71 and 8.95	2 fixtures

*Including Portland, Maine, the terminus of the Montreal/Portland pipeline.

International Projects

SYRIA — THERMAL POWER

The Kuwait Fund for Arab Economic Development and the World Bank are jointly providing \$43 million to help finance a thermal power station and associated facilities at the Mehardeh reservoir on the Orontes river. The World Bank share in this total is \$25 million. The Kuwait Fund is extending a loan of \$18 million.

The \$63 million project includes the construction of a 125 MW steam electric power station, four new 230 kV substations and expansion of existing stations and management engineering consulting services and staff training. The project is part of a \$460 million investment program for 1973-79 of the Etablissement Public de l'Electricité (EPE), the government agency established in 1965 for the generation, transmission and distribution of electric power in Syria.

Implementing Organization: Etablissement Public de l'Electricité (EPE), Rue Moutanabbi, Damascus, Syria

Procurement: All items financed by the Bank and the Kuwait Fund other than consultant services will be subject to international competitive bidding.

Consultants: Société Française d'Etudes et de Réalisations d'Équipement Électrique (SOFRELEC) France: feasibility studies and tender documents. These consultants will be retained for final design and construction supervision, project administration and initial operation of the Mehardeh station.

Malaysia plans \$52 million port.

With investments totalling some \$52 million, Malaysia is to construct a deep-sea port which could one day become a major calling port for the vessels of a proposed regional cargo and tanker fleet serving Southeast Asia.

The new port, the first deep-sea port on West Malaysia's east coast, is to be built at Tanjong Gelang, about 200 kilometres northeast of Kuala Lumpur and about 25 kms. north of Kuantan, a shallow river port.

The Asian Development Bank has approved a \$30.4 million loan for the project which is scheduled for completion in 1978.

Generally referred to as the new Kuantan port, it is expected to handle nearly 1.6 million tons of bulk and packaged cargo in 1980. The corresponding figure for 1990 is projected to be in excess of 2.5 million tons.

Oil Palm, Rubber, Timber

The economy of the new port's hinterland is characterized by small-scale farming, with fisheries dominating the coastal areas. There are also some large oil palm and rubber estates. Most of the region, however, is covered with forests.

The hinterland, whose population is expected to double to more than 1.2 million by 1990, has great potential for the development of oil palm and rubber estates as well as timber industry.

At present, the region is served by a few small river ports suitable for handling cargo using small barges only. Goods and produce to and from the estates on the east coast have to be transported for an average distance of 275 kilometres across the central mountain range to the ports and the main commercial centres on the west coast.

Unsuitable

The existing small ports and jetties on the east coast, including the small Kuantan port, lack natural deep water and are not suitable for development as major international commercial ports.

Historically, the western region has been the centre of economic activity in West Malaysia. The sparsely populated eastern region had, until recently, remained undeveloped. Consequently, its road and sea transport facilities have not been as well developed as those of the western region.

In recent years, however, the Government has taken measures to speed up economic development in the eastern region. The Government has launched several large-scale agricultural development schemes in this area. The Pahang Tenggara Development Scheme and the Trengganu Tenggara Scheme, for example, provide for the development of more than 400,000 hectares of land, mainly for oil palm and rubber cultivation. The schemes also envisage the establishment of several timber complexes in the region.

The new Kuantan port, to be located about midway along the east coast, would provide a convenient outlet to the world market for the increased production resulting from the development schemes.

The need for the construction of a deep-sea port on the east coast, possibly near Kuantan, was underlined in the Southeast Asian Regional Transport Survey (RTS). The \$2.9 million survey, jointly financed by ASDB, UNDP and

the United States, was completed in 1972 and had, among other things, recommended the establishment of a regional cargo and tanker fleet for Southeast Asia.

Eight Southeast Asian nations — Indonesia, the Khmer Republic, Laos, Malaysia, the Philippines, Singapore, Thailand and the Republic of Viet Nam — have formed a regional organization (Southeast Asian Agency for Regional Transport and Communications Development) for implementing the RTS recommendations.

The new Kuantan port project calls for the construction of a deep-sea commercial port, related access roads, storage and transit facilities for both dry and liquid cargoes, and pumping facilities. The new port will handle both liquid and dry cargoes such as palm and mineral oils, fertilizer, rubber, timber, tapioca and manufactured products.

The project provides for the construction of:

- Berthing facilities for vessels of up to 35,000 dwt (Dead Weight Tonnage), consisting of three general cargo berths, a multi-purpose berth, a dolphin berth and a mineral oil jetty;
- paved areas and roads;
- three transit sheds and a timber storage shed;
- port buildings and port-related facilities.

Also included in the project is provision for the procurement of two tugboats, a pilot launch, two mooring boats, two mobile firefighting units and cargo handling equipment. It also provides for the establishment of communications facilities, including a lighthouse and other navigational aids.

Where did the anchovy go?

Steps that could lead to an international study of the so-called "El Nino" current that threatens the world's biggest fishery have been called for by the Inter-Governmental Oceanographic Commission meeting in Paris.

The 10-million-ton-a-year anchovy fishery in the eastern Pacific has been hit by a change in the ocean's behaviour. In normal years, the cold Humboldt Current moving north to the equator is driven offshore by trade winds from the southeast.

When it moves away from the coast, deep water wells up to replace it, bringing along nitrates and phosphates to fertilize the growth of plant plankton. The

Peruvian anchovies feed on the plankton, swarming in such numbers that they have made Peru the world's leading fishing nation.

In abnormal years, the trade winds weaken and warm water penetrates down from the equator. The upwelling stops, so does plant growth. The anchovies fail to appear and the fishermen return with empty holds.

The phenomenon is known as *El Nino* (The Child) because it usually occurs around Christmas time, the summer season in the Southern Hemisphere. It struck most recently in 1972 with effects felt around the world.

The Peruvian anchovies are convert-

ed into fishmeal for animal feed. Usually, they amount to two-fifths of the world's fish meal production, but the catch in 1972 dropped from 10 million to 4.5 million tons. Demand for protein then drove up the price of soya beans with widespread international economic and political repercussions.

Previously, the anchovies have always returned following an *El Nino*. Last year, they did not come back in their normal strength and the Peruvian Government closed the fishery in April as a safeguard.

No one really knows why the anchovies did not recover. A report by FAO's Advisory Committee on Marine Resources Research states cautiously:

"Most likely a combination of factors is responsible. The moderately low level of adult stock resulting from heavy fishing can still produce adequate offspring under average or favourable conditions, but a recruitment failure may occur when environmental factors are poor".

The decision to focus scientific effort into a study of the problem was taken by the Intergovernmental Oceanographic Commission which is to organize, jointly with FAO and WMO, a "scientific workshop" on *El Nino*, in a country within the region this year.

This study would be made as part of the International Decade of Ocean Exploration now under way.

Market Facts for Decision Makers

Analyses of Canadian imports of a variety of products are available, free, from the Import-Analysis Division, Department of Industry, Trade and Commerce, Ottawa K1A 0H5. The following list details the latest available. If you would like the Branch to prepare an analysis for you, write to its Chief or to the Industry Sector Division that handles the product you are interested in. A previous list appeared in the April issue of *Canada Commerce*.

Report No.	Class No.	Subject	Period
13-74	523-05) 523-27) 523-96) 524-69) 524-99) 525-60) 527-56) 529-09) 529-49)	Machine knives	March to May, 1973
14-74	589-10	Fifth wheels	January to June, 1973
15-74	730-69	Lifts/hoists, garage	January to June, 1973
16-74	369-47) 369-49) 369-78) 369-79) 369-98) 369-99)	Cordage products	March to May, 1973
17-74	522-47	Construction equipment	April to June, 1973
18-74	593-39	Paddles/oars	March to May, 1973
19-74	423-15	Polyamide resins	April to June, 1973
20-74	452-15	Copper pipe & tubing	April to June, 1973
21-74	832-38	Ski bindings	July, September & October, 1973
22-74	465-53	Butts/hinges	September to November, 1973
23-74	509-99	Marking/stamping machines	July to December, 1973
24-74	893-41) 893-45) 893-49)	Paperbacks	April to June, 1973
25-74	754-08	Precision gauges	October to December, 1973
26-74	146-40) 397-39)	Dill oil	June to August, 1973

Canadian sales of air industry equipment amounted to more than \$37 million

Otomat (jointly developed with the French Matra). The Italian Navy and many foreign navies have shown a great deal of interest in this equipment.

Meteor S.p.a. is the only Drone manufacturer in Italy. In addition to some relatively simple units developed on its own, Meteor is manufacturing a number of drones under licence from Aerospaziale (CT-20), Northrop and Beechcraft. Meteor is participating in the production of the Canadian AN /USD-501 and is developing the GUFO system, based on the U.S.-Northrop-Ventura MQM-74A Chukar.

The manufacturing of helicopters is the most important sector of the Italian aerospace industry, and Agusta is the leading firm. This company has licences for almost all of the Bell helicopters, the Boeing CH-47C Chinook and Sikorsky SH-3D and HH-3F. Some of the helicopters have been adapted to other tasks than those for which they were originally designed, especially the AB-204ASW used by the Italian Navy, and the AB-212ASW. Within its own resources, Agusta has designed one of the most advanced helicopters, the A-109 Hirundo, intended for both the commercial and the military market.

Airframe manufacturing used to be the backbone of the Italian aerospace industry, but this has changed because of the rapidly developing sophistication and advanced technology in other areas, particularly missiles and avionics. Notwithstanding the trend towards sophisticated production of missiles and other high technology equipment, Italy continues to make notable achievements in airframe manufacturing. For instance, the Aerfer division of Aeritalia is manufacturing the twin-jet fuselage skin panels for the DC-9, as well as the vertical stabilizer and rudder for the DC-10. The company has also been selected by Boeing to build engine pod sub-assemblies for the 747 jumbo jet. Most of the G91Y fighter and the control section of the fuselage and the wing panels of the F104S are also being manufactured by Aerfer.

Alfa Romeo, in addition to overhauling commercial and military jet engines, is manufacturing the G.E. J85-13A engines as prime contractor for the IAF, parts of the G.E. J79-11A engine for the European consortium of the

F104G aircraft, approximately 42 per cent of the G.E. J79-19 engine which will power the Italian F104S, and parts of the Rolls-Royce Dart engine as a sub-contractor of Rolls-Royce. FIAT Aircraft Division is engaged in the production of the Orpheus (FIAT 4023) G.E. J85-13A, G.E. J79-19, G.E. J79-11A and transmission boxes for the Super Frelon and SA 330 helicopters.

Programs — The most important civilian project is the one stemming from the Aeritalia/Boeing agreement for the joint development of a medium range aircraft known as the 7X7. Partenavia Co., Naples, is the most active in the light civilian aircraft programs and has recently delivered three 200hp P-64 single engine aircraft to the Italian Internal Security Force.

The major multinational defence program in which Italy is participating is the well-known multi-purpose swing-wing MRCA, developed by PANAVIA consortium which includes Italy, West Germany and Britain. A good portion of the Italian industry is involved in the MRCA program, with Aeritalia in the lead with the production of the aircraft wings. Italians are also participating in the production of airborne systems and equipment (CIRSEA) and some of the avionics (mostly CGE-FIAR and Microtecnica) while the Rolls-Royce RBO 199 engine, which will power the aircraft, was developed with the participation of FIAT Aviation Division within the Turbo-Union European Consortium. There is no doubt that a cancellation of the MRCA program would seriously affect the Italian aerospace industry, which looks upon this program as the only possibility — at present — to enter into a technically advanced project.

Considering that the MRCA has now evolved into a strike aircraft, the Italian Airforce will soon have to select a fighter to provide adequate cover for the MRCA. This explains why many foreign companies persistently seek out Aeritalia for involvement in a co-production program of a new fighter aircraft. In this connection, Dassault presented in late 1973 two offers containing 10 million and 16 million working hours respectively. Neither offer was accepted. Northrop has been offering for some time participation in the P530 Cobra program, but without any reported success.

On the other hand Lockheed, FIAT and now Aeritalia have been partners for many years, and Lockheed has offered to Aeritalia a participation in setting up an aerospace industry in Turkey for the production of F104S aircraft. In addition, Aeritalia would become involved in co-production of F204 Lancer fighter aircraft in Italy. According to the most recent information, Aeritalia has signed a contract with Lockheed for the manufacture in Italy of two F204 prototypes. This aircraft is intended to replace the F104.

Canadian participation — Despite Italy's policy of being as self-sufficient as possible, Canadian sales of air industry equipment during the period 1966-72 amounted to more than \$37 million. Navigational instruments accounted for almost half this amount at \$16.4 million. Other equipment included aircraft with engines (\$2.1 million), aircraft engines and parts (\$6.3 million), aircraft assemblies, equipment etc. (\$6 million), radar and equipment (\$3.2 million), telecommunications equipment (\$1.4 million) and electronic equipment components (\$1.4 million).

The 1973 figures, not published at time of writing, should exceed \$16 million. This is mainly attributable to the successful completion of the CL-89 co-production program, sale of PT-6 Twin Pack engines for the Italian helicopter program, and miscellaneous sales of Canadian air navigation equipment.

The future prospects for Canadian manufacturers of aerospace equipment will, to a great extent, depend on further development of the Italian industry, which faces, in common with similar industries elsewhere, a period of difficult adjustment. Outside defence activities in the aerospace field, Italy's domestic and international aerospace programs are limited. It follows that meaningful co-operation in the non-military field is rather marginal at this stage. In the circumstances, Canadian industries may find that co-operative efforts involving transfer and exchange of advanced technology will offer the best prospects.

This is not to detract from opportunities in the Italian market for the more staple products characterized as sub-assemblies for both military and commercial requirements.

Canadian manufacturers must recog-

co-operative efforts involving transfer and exchange of technology may offer the best prospects

nize that Italy's procurement policy on the defence side emphasizes some measure of co-production in purchase of major systems. This suggests the existence of good possibilities for joint ventures or some other contractual partnership in the sharing of production. Co-operation sought by Canadian in-

dustries and any proposals along these lines should be on a well-defined basis and should take into account third country needs. This applies particularly to programs where the Italian defence industry requires specific assistance and support.

The assistance of officials in the

Department of Industry, Trade and Commerce in Ottawa and in Canadian Missions in Rome and Milan is readily available to those Canadian firms who are interested in pursuing opportunities in the Italian aerospace industry. □

Food for Thought

Items in this feature are re-printed from the Department's in-house Technology Monitoring Journal and the Orba information Ltd. publication, Changes. The Department accepts no responsibility for their accuracy.

Energy use in the United States rose 4.8 per cent last year to a record despite the energy crisis, the Interior Department reports. The rate of increase, however, was down slightly from the previous year.

Globe and Mail

International competition for Persian Gulf oil will also contribute to further price escalation and it is not totally unrealistic to assume that by 1985, the price of crude oil might be as high as \$50 a barrel.

Ontario Economic Review

Some sectors of Canadian industry are being forced to substitute synthetic materials for wood products because world prices make the export market so attractive. Similarly, electric utilities are being forced to switch to costlier concrete poles because of a shortage of wooden poles of the height they require.

The Electric Power Communicator

A predictable list of topics has been announced by the Congressional Office of Technology Assessment for its first series of studies, with food production getting top priority, followed by energy,

the oceans, materials resources, technology and international trade, and costs of pharmaceutical drugs.

Science and Government Report

St. Louis has turned down plans for a computer-operated rapid transit system in favor of more down-to-earth means of improving public transportation. Plans for the 86-mile system were scrapped and planners requested to study the possibility of a vastly expanded bus service, and the potential of existing track. There had been little public enthusiasm for the computer system, which would have cost \$2 billion. The re-think has cost the city \$720 million in planning costs.

New York Times

More governments are likely to attend the August World Population Conference in Bucharest than any other international gathering has attracted, but even the five principles laid down by the UN to guide discussions beg the vital questions. A successful program to control world population would prevent the birth of as many people as there now are in China over the course of the next 25 years. Developing countries will be anxious to see that this burden is not left

at their door only.

New Scientist

Researchers in Uppsala, Sweden, have developed a contraceptive pill for men. Four capsules of testosterone are inserted under the skin in a simple operation; minute portions of the hormone are then continuously secreted into the organism, in combination with a synthetic hormone, noretisterone, which is administered regularly. In action, the two reduce the number, vitality, and mobility of the sperm, but without adverse effects on the sexual instinct, say reports.

SIP Newsletter

The U.S. shift in lifestyle has brought with it a change in drinking tastes. The American staples of whisky and beer are being increasingly replaced with the more European wine. Consumption of wine in the last five years has risen 65 per cent. In 1973, 1.4 billion litres of wine were sold for a total of \$1.5 billion. The most popular varieties are the California wines. Only one bottle in 12 comes from France, Italy, Spain and West Germany.

Der Spiegel

McKee president sees bright future for farm equipment manufacturers

Out of chaos, Paul Durish likes to say, comes opportunity. And out of an economic period draped in black for the energy crisis, the raw material shortages and a sprinting rate of inflation surface a few men like Durish with the cheerful word that things are fine, thank you, in their corner of Canada's manufacturing industry.

Mr. Durish (he's 39) is president and sole stockholder of McKee Bros. Ltd., a fast-growing domestic farm equipment manufacturer with production headquarters in Elmira, Ont. and a subsidiary plant in Lincoln, Neb.

In the past year he has hopped planes for business trips to East Africa, Europe and Australia. What he's seen and heard there and in North America have convinced him that the future never looked brighter for makers of agricultural-related equipment. And more to his purpose, he believes Canada, ahead of all other nations, is in a position to reap profits from an influx of modern farm machinery into the world's food producing countries.

Canadian exports of farm implements reached \$290 million in 1973. This

total, Durish says, may go well beyond normal growth progressions in the near future.

Search for more food — In the larger sense, one reason is that the population growth has been such that the world will never again be capable of adequately feeding its citizens. "Wherever you travel in the world, the farming sector has come under heavy pressure to enlarge its output," he said. "There are only two approaches open. Either the farmer must extract higher yields from his existing acreage, or he has to bring greater amounts of arable land under the plow.

"In the developed countries, his ability to expand in size is severely limited by the lack of suitable labour in the farm communities. College-educated sons don't always return to the farm, and farmers also find they can't compete with industry wage levels in the hiring market.

"In the emerging nations of the world, labour is often plentiful and cheap, but agricultural planners and the farmers themselves have come to realize their crop potential will remain sub-average unless sophisticated agricultural methods are allowed to take over. That

means, in many cases, replacing a team of oxen with a tractor — and applying other mechanized solutions to big farm management."

Record crop prices provide the incentive to develop more productive farms, and also put the money in the farmer's pocket for superior machines. The question remains, who will supply those machines?

Opportunity for Canada — Mr. Durish likes Canada's chances, for a number of reasons. One involves a partial misconception. On his visit to East Africa, for example, he found that the dominant impression of Canada was that of a huge agricultural producer, which is true enough, except "for that reason alone, our expertise in producing quality farm machines tends to be taken for granted."

"In actual fact, our record in this sphere has been quite modest," he says. "Sure, agronomists in Canada have done wonders over the years in developing more robust strains of wheat and refined planting methods. But we've done

The Stack 'n' Mover, McKee's kingpin product that seems to sell itself.



little, really, to supply the farmer with more efficient tools.

"Practically all innovative farm implements are born on a private farm, and then pass from the farmer on to the industrial manufacturer for the refinements needed for mass-production. There's been plenty of good machinery ideas at the grassroots level in Canada. But traditionally they either had to drift south for development or they died on the vine."

Yet by geographic association, he says, most foreign nations feel Canada shares its neighbour's talent for making technology work. And in tandem with this conviction, we now enjoy among foreign distributors a preferred status over U.S. rivals because we're known to be better

endowed with native natural resources.

Reliability — "Overseas farm distributors shy away from a commitment on a new line of imported machinery unless they're confident about the continuity of supply," Mr. Durish says. "Often, there's hard work in winning local acceptance for a new piece of equipment, and these efforts become a gamble if the manufacturer later reneges on his shipments."

"Canada, because it can boast of self-sufficiency, has credibility as a reliable supplier. I was surprised to find overseas businessmen had such a close knowledge of our situation. Right now, the U.S. ability to sustain production far into the future is suspect. Ours is not."

Canada's pursuit, current and intend-

ed, of farm equipment exports is symbolized in the experiences of Mr. Durish's own company, McKee Bros. Ltd.

Although other machines are in its repertoire, McKee's kingpin product is the Stack 'n' Mover hay harvesting system, which represents the mechanized element in an ongoing revolution which could in time remove the hay bale entirely from beef and cattle farms. The Stack 'n' Mover, which retails from about \$16,000, bundles hay into giant six- to eight-ton stacks which are weathered outdoors. The farmer buys for the reduced labour factor: stacking requires only one worker, where baling takes four to five.

The machine's retail volume, according to Mr. Durish, has progressed steady-

Some of the equipment waiting to be moved out to dealers.



ly from \$500,000 (1968) to a projected \$12 million in 1974, with sales split evenly between Canada and the U.S. McKee's growth prospects continue to be excellent in these close-to-home markets, but the unexpected arrival of major overseas orders has been a telling factor in the company's most recent expansion program.

This year McKee's plants in Ontario and Nebraska will push out their walls to take on another 110,000 square feet, a doubling of existing capacity. The company's sales potential will then be \$20 million, a level the company expects to attain immediately. Total work force will number 500 people, compared with 280 now (and only 27 in 1968).

What was that about "unexpected" overseas business? Mr. Durish says his company has been always the bride, never the suitor: it has yet to make the overtures itself in the penetration of untapped foreign markets.

Selling by merit — In both Australia and New Zealand, a local farm equipment distributor became aware of the Stack 'n' Mover by reading notices in U.S. farm publications that found their way overseas. Their written inquiries to Elmira were followed up in both cases by personal visits, and each man purchased one unit to take home for testing.

"Since our entire production was committed to serve our North American outlets, we weren't prepared to take an aggressive stance in these markets," Mr. Durish said. "As it turned out, the machine sold itself. In Australia, the single unit received extensive farm media exposure shortly after its arrival. The next year, the distributor was back to us for 20 units.

"Then last year an order arrived for 50 units, which we filled, and then another 50, which we couldn't. Next year we'll ship 100 units (worth \$1.6 million) to Melbourne. Potential for the Stack 'n'

Mover in the Australian market seems even greater than in Canada, and New Zealand is following the same pattern".

With similar "non-marketing", McKee now has a toehold, or expects to have one shortly, in South Africa, Algeria, France (the considered entry point into all of Europe), Tunisia, Kenya and Cuba. The company expects each to routinely develop into a major volume centre within the next few years.

In terms of international trade, the company's ace in the hole, Mr. Durish believes, is the U.S.S.R. — "a huge agricultural market".

When he talks about trade and farm equipment, he relates first and foremost to McKee. But he is convinced that the good times should happen to a large number of Canadian businesses. In East Africa he crossed paths with a western Canadian executive who had been months testing an Alberta-made grain elevator in strange environments — and he says other signs of Canadian salesmanship at work are visible all over.

Timid investors — A dedicated expansionist, Mr. Durish regrets the "basic conservatism" of Canadian lending institutions that has kept McKee's growth plans at bay and at times has forced him abroad for needed financing. A U.S. competitor in hay harvesting equipment has out-stripped McKee in U.S. market growth, something that would never have happened "if we had access to the more adventuresome Wall Street money".

And there's the familiar stumbling block of R. & D. Mr. Durish thinks Canada's domestic farm equipment industry will have to show more aggression about shaping embryonic products and then taking them to the mass market. "For too long we've let George, meaning the U.S., do it," he says. "Right now I know of an intriguing cultivator a man has built in B.C. It happens we're not interested, but somebody should be. The

time is ripe for Canada to move in a big way into foreign markets."

Mr. Durish has developed a blueprint for handling his company's overseas shipments.

For the initial stop in a new country, the company never releases more than a single unit. Different farming habits, soil conditions and climate could result in unpleasant surprises.

Credit terms are stringent: no machines leave harbour unless the shipment has been covered at least by a promissory note. "That's one advantage we have dealing in a seller's market," he says.

McKee's screening of a potential foreign distributor is especially diligent. Before granting representation, it examines the distributor's bank rating, dealer system, local reputation, the works — it may be a long way to travel to soothe unhappy customers.

McKee is prepared to be flexible on the commodity used for payment. Australian mutton contracts, for example, or African base metals are viable barter, provided they're obtained at wholesale prices and with ready resale value in home markets. "Cuba wants our machines, and we'd consider contra trades in rum and cigars," Mr. Durish says. "Why not? Cuba's are the world's best."

Above all, he suggests, never flinch when opportunity knocks. When Canadian equipment was exhibited at the Peking Fair in the People's Republic of China, Premier Chou En-lai was reported to have expressed surprise that there was no snow removal machinery. When Mr. Durish read of this (McKee is a large producer of this type of machinery, with its Snolander line) he called in an interpreter and sent off a long letter in Chinese to Peking. And he's willing to bet that the first foreign snowblower to arrive in China will have the red and white McKee markings. □

Points of Strain in the World Economic Picture

FORREST L. ROGERS, Economic Adviser, The Bank of Nova Scotia

The following is a speech given by Forrest L. Rogers at a one-day conference on "The Business Outlook in Canada". This seminar was sponsored by the Conference Board in Canada and was held in Winnipeg on April 3. While a few of the points made at that time may be out of date at time of publication, we believe the substance of the speech to be important and timely enough to be of interest to our readers.

For some months now the Canadian economy has been almost unique in maintaining a strong forward momentum at a time when the United States and major overseas countries have been experiencing a quite distinct though far from uniform pattern of business slowdown. And while Canadians have clearly not been able to avoid the world-wide waves of inflation, including the sharp escalation of world oil prices, our productive capabilities in energy and in many basic foods and materials have put us in a relatively favourable position both to ride through the near-term market pressures and to maintain a vigorous longer-run growth. The big catch, however, is that our economic position and prospects are so obviously dependent on the business trends in the U.S. and abroad and on the maintenance of a workable and effective international economic system. As should be abundantly clear, moreover, the international system is now operating under tremendous strains — some that have been with us over a period of years and the very serious new ones that have been thrust up by the recent developments in the world oil picture. If the international system proves able to adjust adequately to all these strains, then Canada's economic prospects must be viewed as being bright indeed. But if the system should sputter or fail, all our great potential will be to disappointingly little avail.

It is for this reason that I have decided to direct my comments today to what I believe to be the key points of strain in the current world situation. Fortunately, it is possible to start off on an encouraging note, for in many respects I believe that the international economy has been adjusting surprisingly well to the strains that have been placed upon it. Perhaps most obvious in this regard has been the way in which most major countries have

been able to get through this winter period of short oil supplies without nearly as much discomfort or industrial disruption as initially had been feared. For this, there have been many reasons, including unusually mild weather, a smaller cutback in oil supplies than originally threatened and a substantial conservation in use. Helped by these developments the business trends in most major countries have held up better than expected. Meanwhile, in the financial sphere, the process of market adjustment has been helped by the much-improved state of the U.S. balance of payments, by the relatively new-found flexibility of exchange rate movement, by the relaxation of capital controls and by the notable adaptability of the Euro-currency market.

Hopeful notes — Looking beyond just the immediate period, there are three

increasing likelihood that we are now at or close to a turning point in the world commodity price boom

other hopeful notes. One is that the oil shock seems to have come at a time when there was still scope for orderly adjustment of energy policies on this continent and abroad; and in the United States in particular, much is clearly now going to be done both to economize on energy use and to develop sources alternative to the Middle East. A second long-run hopeful note lies in the glimmerings of accommodative progress that have occurred in the Middle East, both through the political endeavours of Mr. Kissinger and through the rational stance taken by Saudi Arabia at the recent meetings of oil-exporting countries. A stepping-up of Saudi production promises to bring a lowering of world oil prices which, as I shall be trying to underline, is probably the most crucial point of concern in the whole international system at this time.

But I have one more hopeful note to voice before getting into the real problem of strain, and this is the increasing likelihood that we are now at or close to a turning-point in the world commodity

price boom. The key reasons for believing that such a turn may in fact be at hand include the significant slowing of demand that has occurred in most industrial countries (most particularly, of course, for auto producers) plus the indicated big plantings of grain in the key agricultural areas of the world. There are still some nice questions to be settled on both the demand and supply sides, and one has to recognize also that a price turn-around can bring problems of its own, as livestock producers have been finding in recent months. Yet there can be no doubt that, from a broad world economic standpoint, some lowering of basic commodity prices would help to take some of the heat out of the on-going world inflation and, hopefully, would also restore a healthier longer-run market basis for both consumers and producers alike.

Oil price levels — As I have noted, however, I believe that the most crucial point of strain in the current world economic situation is the prevailing level of world oil prices. There is no time here to go into all the history or complexities of world oil pricing. Suffice it to say that prices were relatively low for a long time, the basic price of Middle Eastern crude being well below North American prices and showing virtually no increase at all between 1950 and 1970. Since 1970, however, and mostly since last October, the basic price has been advanced to roughly seven times its earlier level; and in fact the average selling price in the past several weeks would appear to be at around eight to eight and a half times the earlier level. This is a completely unreasonable increase in terms of its size, of its suddenness, and of the pressures it is placing on the whole world economy; and it is irrational also, I believe, in terms of the real long-term interests of the producing countries themselves.

So far as the broad world perspective is concerned, I am sure that few serious people can now be unaware of the basic pressures that have been created. First, for the major industrial oil-consuming countries the higher oil price has added decisively to an already very serious inflationary spiral; and without going into all the income-flow complexities, the oil developments have also added greatly to the policy problems of these countries in trying both to curb inflation and to limit

incipient recessionary tendencies in their economies. Clearly, too, because of the swollen cost of oil imports, almost all these countries will experience deficits in their international trade and service transactions; and while it now looks as if West Germany will manage to stay in modest surplus (even this being quite a come-down) other countries that had been running into difficulty even before the oil shock are expecting very large deficits, with figures expected to run to as high as \$5 billion this year for Japan, \$6 billion for Italy and \$8 billion for Britain.

Beyond this, of course, there is the heavy additional oil cost burden on the less developed non-oil producing countries of the world, most of whom have been running sizeable payments deficits financed by development aid and credit. The clearest measure of the new burden on these countries is that, in the aggregate, their added oil import payments are likely to exceed the \$7 billion or \$8 billion annual volume of official development aid that has been flowing to them.

Producers' surpluses — The problems for some of these countries are already very acute; but before I say anything more about them, I want briefly to take note of the other side of the new world payments picture which of course consists of the rising payments surpluses of the oil-producing countries. These may be variously estimated from a low of \$30 billion (on the most moderate price assumptions) to a high in the order of \$50 billion. Perhaps the key consideration here is that these countries will be gaining income far more rapidly than they can possibly spend it; but to the degree that this is so, they accumulate funds which they can keep in the currency of payment or recycle into some other currency or form of investment. From a broad world standpoint, indeed, the most immediate payments problem can be said to be one of achieving a structure of recycling that more or less happily matches the surplus funds with the pattern of payments deficits.

In considering the particular ramifications of this problem, and the points where the most serious strains are apt to occur, it is probably most helpful to start again with the position of the major industrial oil-consuming countries. These countries may cut back directly on oil

use; and to the degree that they do so, they not only lessen their import costs but also tend to weaken the market support for the current high world oil price. Since many of these countries have also been experiencing a general business slowdown (whether from oil or other causes) they may permit this process to continue relatively unchecked, hoping in this way to restrain imports generally and also to encourage more exports. Resort to competitive currency depreciation could be a further extension along this line but [this] would add to the already-oppressive rates of inflation in the countries concerned . . .

Last resort — In general, indeed, the major countries have felt it best largely to accept the inevitability of big current payments deficits and to move energetically towards lining up the financing of these deficits. In most cases, it should

other countries that had been running into difficulties even before the oil shock are expecting very large deficits

be noted, these countries do have sizeable exchange reserves on which they could draw, but the general feeling has been that these should be kept as a last resort. What in fact most have been doing is to bulwark their attractiveness to capital inflows through high interest rate policies, even though such policies can be expected to add to the sluggishness of internal business conditions. Also, of course, a few of these countries have been undertaking very large direct borrowings in the Eurodollar market.

Such financing arrangements clearly make a good deal of sense as a temporary means of adjustment, and they can be backstopped as well by drawings at the I.M.F. or through the central bank swap network that has been in operation for many years. The flexibility of exchange rate adjustment and the opening up of the U.S. capital market should also facilitate this sort of recycling activity. But already it is clear that the volumes of transactions involved, and the considerable uncertainties overhanging the whole econo-

mic picture, can produce a greater volatility and unpredictability in both currency and credit markets — the net results of which will only become clear with the passage of time.

More fundamentally, there is the question of how far it is appropriate to extend the large direct borrowing operations, having in mind not only the costs for the borrowing country but also the new sources of much of the funding involved and the severely increased credit problems of many of the non-oil-producing less developed countries.

Most people, I believe, are aware that the less developed countries are being particularly hard hit by the rise in oil prices. The pattern does vary considerably, with some having benefitted greatly from the recent commodity boom, and some having at least a moderate financial cushion to help them. The all-too-common picture, however, is of a seriously stretched economic and financial situation, of heavy dependence on aid and on credit, and of a gigantic new addition to import costs. To make matters worse, there have been serious crop problems in a number of these countries, and now their needed supplies of fertilizer have become both scarce and expensive. Here clearly is a very disturbing picture, and one that poses a serious threat to the effective functioning of the world economic system, as well as to the lives and hopes of the poor peoples most directly concerned.

Joint action — One kind of response that is commending itself to at least a few of the less developed countries is to try to secure joint producer action to raise prices of basic export products in a manner similar to that achieved by the oil-producing countries. Jamaica and some other countries are now attempting to accomplish something of this kind in bauxite; and one has to acknowledge that in a world of persisting inflation, and at least insofar as it concerns mineral products, action of this kind may have some chance of success. But apart entirely from what the spread of such marketing tactics might imply for world economic and political relationships in general, the history of world commodity agreements suggests that one can easily exaggerate what action in this area is likely to achieve, especially for agriculturally-produced commodities.

Indeed, when one carefully examines the possible steps that are open to most less developed countries, it is very difficult to escape the need for a really major strengthening in the flow of aid and credit to them. Yet it is difficult also to see that enough will be forthcoming. There have been some hopeful notes, including the efforts of the World Bank and the I.M.F. to mobilize a larger international flow of funds to the countries hardest hit, and the willingness of some oil-producing countries to channel credit both directly and through international agencies to the same poor countries. But what has been indicated so far falls far short of projected needs, especially at the prevailing level of oil prices.

One of the obvious obstacles lies in the sharply weakened payments position of most industrial countries. In the circumstances, these countries will find it increasingly difficult to maintain public support even for existing aid programs; and, as we have noted, some of them have been making sure that they get first crack at the available supplies of international credit. Meanwhile, many developing countries have for some little time been stretching the limits of their effective credit-worthiness, urged on by aggressive extension of official export credits from industrial countries and by the equally aggressive lending policies of Euro-currency banks.

The dangers here are, first, that the neediest countries will not be sufficiently good credit risks to justify a recycling of funds via a credit route; and second, that in fact the chances of credit defaults on existing indebtedness are substantially increased. One can only guess at what the secondary repercussions of such a development might be. But in my view this is one of the more worrisome of the many points of strain in the present and immediately prospective world economic situation.

Widespread hope — I should at this stage, perhaps, note that there is a fairly widespread view now that the various strains which I have been describing will be kept within manageable proportions, in large part through the continued lubrication of expansive economic policies and inflation. The simplest expression of this view is that the general world price level will in effect adjust up towards the level implied by the new world oil prices,

so easing potential financial strains and minimizing the ultimate real transfer of resources from oil-using to oil-producing countries. The oil producers, in turn, argue that their pricing policy is aimed at compensating for unfair price relationships in the past and that, if world inflation continues, they will just escalate their prices accordingly.

In my view there is much absurdity and, indeed, real danger for all concerned in such inflation-geared attitudes. For while many countries have now shown that they can apparently adapt to a surprisingly high rate of price advance, this has been accompanied by growing strains both within countries themselves and in relationships among them. And there is much indeed to suggest that, if prices do not in fact show a fairly early and distinct moderation now, the prospects for order-

the chances of credit defaults on existing indebtedness are substantially increased

ly market and policy adjustment ahead will become increasingly dim.

Oil price roll-back — It is in this broad general context, as well as from the parameters of the oil situation itself, that I would underline the crucial importance of trying to secure some roll-back of world oil prices now, if need be in return for sensible quid pro quos to the producing countries looking to the years ahead. In particular, those countries should be at least as much, if not more, concerned about the level of oil prices over, say, a five- or ten-year horizon as they are about prices now. And the fact is that current prices will not only foster desirable economies in oil use but will also encourage the build-up of alternative energy production, the extent of which no one can predict exactly but much of it undoubtedly being assured of effective protection against imports. It would surely be better for all concerned to settle upon a more reasonable price now, with assurance of equitable treatment in years ahead. Many of the producing countries also have interests in longer-run development programs, which industrial countries are clearly in a position to facilitate in many ways.

But perhaps most significant of all is the fact that as a class of "nouveaux riches", the oil countries themselves now have a growing stake in the maintenance of orderly world trade and financial conditions. It should be possible to strengthen their recognition of this fact through open-minded and rational discussion of ways to handle their new-found surplus income, and part of this process ought to focus on ways of relieving the now-threatened serious strains upon the world economic system.

In conclusion, may I repeat my belief that a drop in world oil prices to a level something like that now agreed in this country is the most urgent single step required to keep the world economy on a manageable course. Even with such a move, it will still be necessary to facilitate a very large recycling of funds, and to match up surplus payments receipts with the on-going pattern of payments deficits. Hopefully, too, that pattern of deficits will tend to become a little more manageably distributed, as countries like Britain and Italy achieve a needed moderation of the aggregate demands on their economies, and as commodity markets in general lose some of their inflationary fire.

Last, but certainly not least, there are the obvious needs to give special support to a number of less developed countries and to strengthen the co-operative defences against disruptive trade and monetary developments. Ambitious longer-run plans for trade liberalization and monetary reform may well have to be delayed until market conditions become more settled, but the very nature of current strains and uncertainties lends that much more importance to the on-going processes of policy consultation and co-ordination, and to the reinforcement of existing joint operational agreements and techniques. □

Scrap iron and steel export permits

Revised administrative procedures for issuing export permits for scrap iron and steel under authority of the Export and Import Permits Act are in effect. They are as follows:

- (1) Export permit applications will only be entertained from those applicants who are exporters of record of scrap iron and steel in 1973. Tonnages in excess of those exported to any single destination or place during the corresponding month of 1973 by exporters of record will not normally be permitted.
- (2) All export permit applications covering scrap iron and steel must be substantiated by affidavits certifying that the applicant owns or has an option to buy the scrap iron and steel intended for export and evidence of refusal to purchase by Canadian consumers will be required. Export permit applications for the export of stainless steel will not normally require letters of refusal but will

require affidavits as to ownership or option to buy the scrap in question.

- (3) Export permits will normally be limited to permit shipments of no more than 1,000 net tons per month by each exporter to each destination or place.
- (4) Export permits may be issued for the re-export to the country of origin of scrap imported into Canada for processing, provided that conclusive evidence of the importation of the scrap tonnages in question is supplied. Such re-exports will be subject to the same export permit procedures as all other scrap iron and steel exports.

Export permit application forms to export scrap iron and steel are available from Regional Offices of the Department of Industry, Trade and Commerce, offices of Canadian Customs officials across Canada or from the Export and Import Permits Division, Department of Industry, Trade and Commerce, Empire Building, 124 O'Connor Street, Ottawa, K1A 0H5.

Theme Is Canadian Unity

For the sixth consecutive year, the Canada Committee, a non-profit, non-political organization, the objective of which is to promote Canadian unity, is sponsoring Canada Week.

Co-chairmen Pierre Jérôme and H.M. Turner Jr. said that the chief purpose of Canada Week is "to engender national pride through many and varied activities, culminating in the celebration of Canada's national birthday, July 1."

Prime Minister Pierre Elliott Trudeau is the Honorary Chairman of the Canada Week Committee and in his official statement he said: "Many Canadians these days are preoccupied with the question of our national identity. We find ourselves probing for definitions, searching through our works of literature and science for major themes and directions, studying our habits, interests and values through statistics, reports and con-

ferences. We are a young and energetic country, intent on discovery and in meeting — with courage and hope — the many challenges which face us.

"I share with you all a pride in being Canadian and I extend to members of the Canada Week Committee my appreciation for their fine work. May we all find in Canada Week a time to experience in renewed depth our rich heritage."

Something to think about

The changing work week

E.C. BUTTON, Managing Editor

Hardly a week goes by without some short item appearing in the news about some company, a public service, or a whole government changing from the normal nine to five, five-day work week. Some opt for floating time, others select a four-day week, some even move to a three-day week. In some cases total hours remain the same, in others shortened. In all cases there are consequences and side effects to be considered, both positive and negative.

Canada Commerce takes a look at these changes — exploring the history of the work week leading up to the present trend, delves into some of the implications, pros and cons of these changes, and takes a brief glance into what the future may hold. For today's executive it is indeed something to think about.

This article is basically an updated summary of an extensive study prepared by a group on the spring 1972 Career Assignment Program course of the Federal Government. A very extensive study that was published in full by *Optimum*, it has been part of the reference material used by the Federal Government preliminary to the current use of floating time.

Work, and the ethics that surround it, are as old as man. We will start with work and the New World, and the "Protestant work ethic" that was an integral part of this country's formative years. It was not surprising that the work ethic was readily accepted in the United States and Canada. The frontiers of the New World were great equalizers. Work from sun-up to sun-down was a way of life. When the first factories were built in the United States the work ethic was an established fact. The long hours and unhealthy working conditions described by Dickens also existed in the American factories.

Real pressure to reduce working hours began to grow during the mid-1800's. In general, the pattern of the reduction of work hours over the past 120 years falls roughly into three periods: the 19th century, which evidences a slow and gradual decrease in work hours both in the United States and Canada; the period between 1900 and 1940 with a rapid decrease per week in the United States and slower decrease in Canada; and the period after World War II with the work week decreasing to 40 hours

both in the United States and Canada (again at a slower rate in Canada).

The first significant change came in 1926, when the Ford Motor Company decided to establish the eight-hour day and five-day week for the purpose of maintaining the economy at a high level and even stimulating it through increased leisure and greater consumption.

Shrinking week — There has been no dramatic decline in the length of the work week, in total hours, since the end of World War II, but there is considerable evidence that workers and unions are showing marked interest in larger blocks of leisure time. The preference for "blocks of leisure" — extended vacations, for example — rather than small reductions in daily and weekly hours has dominated negotiations throughout the

Management must alter its style to effectively cope with the productivity problem

sixties. The legal arrangement of national holidays, in order to increase the number of three-day weekends, is another indication of the interest in blocks of leisure. The traditional norm of eight statutory holidays in Canada is now being raised by many firms to 10 or 11. In effect, virtually all of industry and government are now working a four-day week 15-20 per cent of the year. A number of firms have already transformed the week between Christmas and New Year into vacation time.

Within the past two or three years there has been a mounting campaign for a shorter work week. To the trade unionist it is one more skirmish in the continuing battle for higher standard wage rates, improved work conditions, and improved benefits for leisure, retirement and health. But one point should be clarified: the "rescheduled work week" is a week rescheduled either into fewer but longer days, or staggered or floating hours during the work day, but with the total work hours remaining the same; whereas a "shortened work week" is a reduction in both days and hours.

In 1970 Riva Poor, a management consultant, published a book entitled *4 days, 40 hours* — in which she reported

on the trials and tribulations of 27 firms who had reallocated their work hours from five days to four days (most since 1969 but one as far back as 1940). There is little doubt that this publication has played a major role in the current revolution in work and leisure.

From the modest numbers reported in 1970 there are today thousands of firms in the U.S. on a shortened work week. Because the Canadian economy closely parallels that of the United States, it is not unexpected to find the shortened work week appearing on the Canadian scene. Many firms and governments in Canada are now employing rearranged working hours in some form to provide a shortened or rescheduled work week.

Growing acceptance — In June 1971, a Gallup Poll showed that 59 per cent of the Canadian public still preferred a five-day 40-hour week, but solid support came from 34 per cent for a week comprising four 10-hour days. A survey of companies showed even more positive support. A consultant firm (Samson, Bèlair, Riddell, Stead Inc.) conducted a national survey in which 152 companies participated, representing more than 10 per cent of the total Canadian work force. Companies were invited to choose one or more of seven statements representing their attitudes about the shortened work week. The majority (52.7 per cent) chose the following: "The rearranged shortened work week is a practical, viable arrangement and will gain general acceptance"; and 15.2 per cent felt that it would be adopted but would take many years to implement. An additional 8.7 per cent felt it would be adopted generally within a very few years. In other words, more than three quarters of the responses were positive. Seventeen of the responding companies had already adopted a shorter work week. These 17 companies ranged in size from one with 15 employees to one with 9,500 employees. It appears that the shorter work week is being accepted in Canada more rapidly than was the five-day week several decades ago.

Major labour unions generally oppose compressing the work week while retaining 40 as the total work hours. Walter Reuther, president of the United Auto Workers, tried to include a four-day week in contracts he negotiated back

in the fifties. I.W. Abel, the Steelworkers' president, stated his target in 1969 was to get his whole union onto the four-day 32-hour week by 1974. As Mr. Able put it: "We're talking about less hours and fewer days, not less days and more hours." More and more unions are pushing for a cut in daily hours, and many favour a four-day, 32-hour week. Most of the initiative for the four-day work week has come from management. But in most cases they are looking for a "rescheduled" work week, where the same number of hours are worked in fewer days. A shorter work week does place great stress on management despite some of its benefits, which we will discuss later. U.S. economist Kenneth E. Wheeler has stated that if a company is forced into the shorter work week without prior preparation, the probability of financial loss will be high. Management must not only consider the scheduling problems that come with the shorter week, but it must alter its style to effectively cope with the productivity problem.

What of the future? — By examining some quantitative data about Canada's population, and in particular its labour force, one can forecast that, by the 1980's, the labour force will have increased by over two million, will be younger and have more women, and that the average family unit will be smaller. The trend towards increased urbanization is expected to continue.

Future projections of the number of hours worked by the average employee indicate a drop from 38.3 in 1967 to 34 in 1981 and 29.4 by the year 2001. These figures indicate that by 1981 the average worker will have some 204 more hours per year free time at his disposal and 461 hours by the end of the century. During this same period, output per manhour is expected to show a continual rise, though there will be a very gradual reduction in rate.

The variation in hours of work and degree of productivity could have an unquestionable effect on economic growth in general. Continued shortening of the work week and/or a reduction in total hours could conceivably cause production loss that would be only slightly offset by increased efficiency. Applied to the

economy as a whole, such a reduction could still be accompanied by an increase in national income as a result of other economic growth factors; a reduction in hours would not halt the progress of other factors.

Pros and cons — Surveys conducted in firms using a rescheduled or shortened work week generally indicate common advantages and disadvantages.

Employees in general feel that the advantages outweigh the disadvantages. Among the advantages, the long weekend was found to be the most attractive feature. Other advantages include the increased time available for the family, housework and travel, savings in babysitter costs, and easier commuting. Disadvantages include the pressure of long working hours, the upsetting of regular schedules, car pool problems and increased spending on the extended periods off.

Higher output is attributed to reduction in starting and closing time relative to operating time

Management found that the shortened work week aided them in recruitment, cut down on absenteeism and tardiness, reduced work turnover, improved morale and, in some instances, resulted in more efficient use of equipment. Disadvantages, on the other hand, included difficulties in scheduling production and in including office, shipping, receiving and supervisory staff in a shorter work week.

Sceptics point out that the aid in recruitment is temporary: it can only last while companies on a four-day week are in the minority. Sceptics agree also that improved morale and employee attitude are temporary advantages, until such time as all employees are on a four-day week and the novelty wears off.

Greater productivity and lower unit costs are the most telling arguments put forward by management for the shorter work week. Higher output per man hour is ascribed partly to improved morale, resulting in reduced absenteeism, tardiness, and labour turnover. Higher output is also attributed to the reduction in

starting and closing time relative to operating time, and increased ability to key work schedules to processing time. On the other hand, some top executives feel that increased productivity would be exceedingly difficult to obtain. Furthermore, there is almost unanimous belief that if the four-day 40-hour week becomes a reality, the 32-hour week would not be far behind. While most experts concede that the 4-40 might work, they feel the 32 hour week, with the accompanying labour demands for maintenance of wage levels, would result in a marked drop in productivity. Such a situation could offset competitiveness in the world markets.

Side effects — The decreased work week will prompt an increased public awareness of needs unrelated to work. More leisure time indicates more leisure activities. The desire to escape the confinement of urban life will mean increasing demand on parkland, water facilities, highways, and secondary roads. One fact alone illustrates a problem — in the past four decades the total area of our national parks has increased by 3.5 per cent but the annual number of visits has increased by 2,300 per cent. The demand for bus, train, and plane service will expand significantly. How then, will these needs for increased transportation devices — devices that place a demand on our energy resources, pollute the air and the tranquility of the people — become reconciled? The demand for better urban life will also increase, with a population that has more leisure time, requiring more recreational resources, efficient transportation, convenient health and educational centres, and the availability of cultural centres. Services to the working populace will change — shopping, schools, public transportation are but a few that will have to adjust.

The world of the 1980's is already here. Inroads are being made daily. A changing work week is not a minor change — it will not be limited to our work life, but will go beyond that and affect the way we conduct our business, the places we live in, the way we spend our leisure time, the way our children grow-up — perhaps our whole economy.

Suggested reading

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From the Librarian's Desk

The 1974 edition of *Bottin International* is the 177th edition of an international directory of products and services, embracing a wealth of information on its approximately 3,000 pages. It is published by Didot-Bottin in Paris, France, and presumably is revised annually. Bottin is an international organization having its head office in Paris and agents in more than 100 countries.

The directory is published in French and divided into two main parts, "The World by Trades", and "The Countries of the World". The general arrangement is according to the French alphabet but advice to users of the directory and an index to products and services are given in four languages: French, English, Spanish, and German. If you want to find producers or manufacturers, dealers or distributors, importers or exporters of a particular item, start with the yellow pages of the "index to Products and Services" preceding the first main part, "The World by Trades". The entries in the index are followed by reference numbers leading to the subjects, which are numbered as running titles on the top of each page and in the text. The index is the key to this section, and since it is quadrilingual it crosses linguistic barriers and can be used by anybody having facility in one of the four languages.

The first part's subject entries are subdivided by country and again by city. Then the name of a firm and its mailing address is given, with a trademark included as well. Only large firms appear in the directory.

The second part of the directory provides a geographical approach and is called "The Countries of the World". The use of this part is facilitated by the "Index to Countries and Towns" on green pages. It lists in French, English, Spanish, and German the names of countries and cities, e.g. Albania — Albanie, Moscou — Moscow — Moskwa, etc. After each country or town a page number is given, where one can find the names and addresses of the organizations or firms whose standing warrants insertion in this directory in the opinion of the editors.

The geographical part lists countries in alphabetical order according to the French alphabet. The articles are written in two parallel columns in French and in English and provide data on the country's area, population, geographical position, administrative divisions, chief products, minerals and manufacturers, activities, trade (exports — imports), legal holidays, business hours, currency, customs, means of communication, and which language commercial transactions

are conducted in.

There is abundant information on each country in this part of the directory. Embassies, consulates, chambers of commerce, agencies engaged in activities directly or indirectly assisting international trade, such as customs agents, shipping lines, travel agencies, insurance companies, banks, hotels, restaurants, etc., are listed here.

Most articles on countries have included maps of the countries and of the major cities. The capital cities are given with population figures, airport location, places of interest, diplomatic corps, etc.

There are some short special features included in this directory: conversion table of weights and measures, British and U.S. to metric; list of car plates, letter symbols under the heading: Where does this car come from?; and air distances between 25 major cities of the world.

The register contains very few advertisements. It was compiled with the traveller in mind and would be useful to government executives, commerce and business people, and tourists. Because it is international in scope it has its limitations and cannot be very inclusive. However, if its data is revised annually it is a very useful reference work. It is well organized, legible and easy to consult.

Cameroon Buys Its First Canadian Aircraft

Earlier this year a contract was signed in Paris, France, between de Havilland Aircraft of Canada and Air Cameroun for the purchase of a series 300 Twin Otter DHC 6, with the possibility of the African airline buying another two. It is expected that the aircraft will be in service in Cameroon this summer, when it will bring to 51 the number of countries using the Twin Otter. Shown in this photograph are Canada's ambassador to France, the Hon. Leo Cadieux (standing), Jacques Loriaux, de Havilland's director for Europe (left) and S. Eboua, president of Air Cameroun.



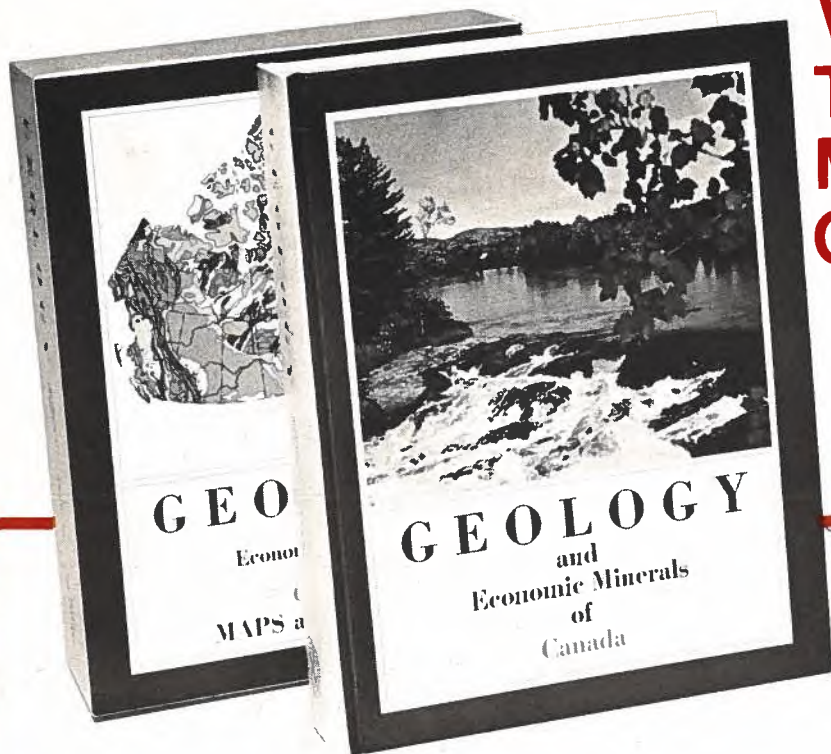
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conclusions are clearly separated.

Geology and Economic Minerals of Canada may be purchased from the publications offices of the Geological Survey of Canada in Ottawa (601 Booth Street, K1A 0E8), Calgary (3303 — 33rd Street NW), Vancouver (100 West Pender Street) or from any of the Information Canada bookshops. Cheques or money orders should be made payable to the Receiver General for Canada.

FRENCH EDITION

The first volume of a 2-volume translation of Geology and Economic Minerals of Canada is now available. Known as Part "A", it comprises 408 pages and is priced at \$6. Also available, at \$2 each, are French editions of seven of the 1: 5 million scale maps.

DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA, CANADA

Donald S. Macdonald, Minister

J. Austin, Deputy Minister