Information Division
Department of External Affairs
Ottawa Canada

Canadian Weekly Bulletin

Vol. 25, No. 6 February 11, 1970

METRIC SYSTEM FOR CANADA?

Before tabling in the House of Commons on January 16 a White Paper proposing that Canada adopt the metric system of measurement, the Minister of Industry, Trade and Commerce, Mr. Jean-Luc Pepin, made the following statement:

...In this paper, the Government sets out its proposed general policy for conversion to the metric system of measurement from the traditional inch-pound system. To quote from the White Paper: "The Government believes that adoption of the metric system is ultimately inevitable – and desirable – for Canada. We also consider it appropriate for the Government to assume a leading role in the planning for and in the implementation of this change."

This matter is of direct concern to all Canadians, to our industry and to all levels of government.

Today in Canada, although the metric system and units such as metres and grams are being used in many important sectors, it is the inch-pound system which predominates. In the world at large, however, the great majority of countries have already adopted the metric system or are now in the process of converting to it.

CONTENTS

TIMING APPROPRIATE

The White Paper addresses itself to the importance of timing in connection with metric conversion in Canada and to the complexities involved. For example, in a modem industrial country such as ours, there will be costs associated with a move to the metric system. These costs will be offset by benefits which are expected to accrue from metrication. They will also be reduced to the extent that the change takes place over a reasonable period in relation to the real needs in the various sectors of activity in Canada. We must be aware of the possibility of incurring even greater costs if we do not start to plan now for the ultimate adoption of the metric system.

Metric units today form the accepted basis for international measurement and standardization. A country employing the metric system is, therefore, in a favorable position in an increasingly interdependent world economy. The countries of the European Common Market are long-established users of the metric system. Both Britain and Japan, two of Canada's leading trading partners, have already embarked on a changeover. The United States, our principal customer, is now conducting an extensive study of this subject.

BENEFITS FORESEEN

As a matter of fact, just four countries – Canada, the United States, Australia and New Zealand – are still using the inch-pound system at this time. Canada's ability to maintain and expand its vital export trade with countries in the metric sphere will directly benefit from the move we have decided to make.

Changing to the metric system will have important benefits for the Canadian consumer. These benefits will derive principally from the inherent simplicity of the system and its convenience in general use. The ease in converting from one metric unit to another – from kilograms to grams, for example – will simplify the arithmetic in making value

comparisons of competitive consumer products.

For these reasons and many others, which are indicated in the White Paper, as I have remarked earlier, the Government believes that adoption of the metric system is ultimately inevitable – and desirable – for Canada. However, no legislative action is contemplated which would make mandatory a general use of metric in place of inch-pound units.

PLANNING AND PREPARATION

The White Paper outlines what is the start of a long process on the road to metrication. It proposes certain organizational arrangements to plan for and encourage conversion. For example, the Government intends to appoint a preparatory commission which will act at the federal level to co-ordinate the study and planning. A mandate will also be given to the proposed Standards Council of Canada (a bill on this subject is now before the House) so that it may fill a similar role in the more limited area of its responsibilities – that is, the industrial sector and physical standards. Planning and preparation will be encouraged so as to obtain the maximum benefits at the minimum cost to the consumer, to industry and to government at all levels.

Our intention is to study and consult extensively and so to determine what is the best process for this transition. It will be necessary, for example, to decide on the timing of changes appropriate to each individual sector of the economy. In issuing this White Paper, the Government is inviting comments from all interested parties. We hope to obtain the widest possible involvement and co-operation of the community as a whole. Participation of other levels of government, of industry, and of the public at large in this effort will be welcomed and will be of the greatest importance in the attainment of the ultimate objectives for Canada in this area of measurement and standards....

PORT OF CHURCHILL POTENTIAL

Transport Minister Don Jamieson recently tabled in the House of Commons a report entitled *Port of Churchill – Potential for Development,* which was commissioned jointly by the Department of Transport and the National Harbours Board, in co-operation with the Manitoba Royal Commission on Northern Transportation.

The report notes that a major impediment to the use of the port has, up to now, been the severe weather conditions that create several different kinds of ice hazards which have restricted the open season to an average of 82 days a year, usually from July 26 to October 15.

TYPE OF TRAFFIC

Grain exports, particularly wheat, have formed the bulk of port traffic. For example, from 1958 to 1966 an average of 710,000 tons of commodity traffic moved through the port each year. Outbound traffic during this period accounted for 93 per cent of all port activity. Relatively small and sporadic quantities of mineral products and miscellaneous cargo represent the remaining outbound commodities.

There is little likelihood that any potash or petroleum will be exported through Churchill from 1970 to 1985.

The products of forest and mineral resources in Manitoba and Saskatchewan could possibly be shipped through the port to Britain and Western Europe. However, because of forwarding costs and market outlook, it is not expected that the volume of these particular commodities will be substantial; the effect on total potential traffic through the port will not be very great.

Prairie region imports are not expected to assume a major role, at least until 1985. Also, coastal shipping cannot be expected to contribute significantly to the total potential of the port.

It is technically possible to navigate Hudson Bay throughout the year using conventional, strengthened vessels with icebreaker assistance. However, the cost of providing sufficient icebreaker service and other related technical aids would make 12-month operation uneconomic. The technical costs of operating the port for any season in excess of 105 days cannot be justified in economic terms.

DEVELOPMENT PLAN

The consultants recommend a two-phase development program. The first phase, to 1973, would involve promotional effort and minimum investment, directed to increasing port traffic in the present operating season to the point where the existing port facilities are operating at capacity. It is noted that, despite a savings of 5 cents a bushel in forwarding costs on wheat exports to Britain through Churchill, buyers have been hesitant and have never ordered sufficient wheat through Churchill to test the port capacity. It is possible that this could be attained by allowing buyers a still greater cost advantage compared to other Canadian ports.

The report finds that, if port facilities were to be employed to their capacity, a bottleneck that might occur after 1973 in the grain-cleaning facilities could be avoided by shipping grain that required less thorough cleaning at Churchill.

If, after 1973, the ice problem in the harbor is solved, and the cleaning bottleneck is removed, then the export potential could probably be handled by the existing rail and ocean transportation systems in a 105-day season extended to November 7.

Finally, the consultants recommend that any direct development expense at the port be delayed until at least 1973. At that time, the first-phase development program can be assessed.

CANADIAN GAS-LASER DISCOVERY

A research team at the Valcartier, Quebec, establishment of the Defence Research Board (DREV) has developed techniques for operating carbon-dioxide lasers at atmospheric gas-pressure instead of the near-vacuum conditions hitherto required by gas lasers. The invention has already led to the construction of prototype lasers producing pulses of radiation with 100 times more power than any other existing gas laser.

The energy is produced in a narrow, invisible beam of radiation with peak powers up to 100 million watts lasting less than one millionth of a second. This power is so high that any material such as wood, steel or asbestos is vaporized instantaneously when exposed to the beam.

The Defence Research Board's discovery is also expected to have major economic importance as well as its obvious scientific significance. Since lasers of this type operate at atmospheric pressure, they can be constructed of many kinds of inexpensive material, such for example, as plastics; even plywood has been used.

GREAT POTENTIAL

The DREV research team of about 20 scientists and engineers is very optimistic about achieving an even more impressive performance from its laser in the near future. The potential fields of application extend well beyond defence and could include special communication by satellite. It is believed that high-power, inexpensive lasers that are easily controlled will replace conventional machining, cutting and welding tools in many industrial processes. Visions of tunnels being bored by a laser beam may even be realized if the very high powers theoretically predicted for these lasers are achieved.

ADVANTAGES OF EXTREME SIMPLICITY

Many of the advantages of the DREV lasers result from their extreme simplicity. They consist of small plastic containers holding gas mixtures and fitted with mirrors at opposite ends. When an electrical discharge is passed through the mixture, by means of a unique electrode assembly invented at DREV, a powerful surge of infrared radiation is emitted through one of the mirrors, which is semi-transparent. This energy takes the form of a parallel light-beam that can be directed to relatively distant targets for range-finding or focused to a small point near the laser for processing materials.

Lasers were first developed in 1960 and are light sources with unique properties, such as high bursts of energy and the ability to emit very fine beams. They are considered to be the most exciting scientific discovery since the transistor and are used for eye surgery and cancer research. In industry they are used as ultra-precise cutting and welding tools. Among other things, lasers are being used for accurate measurements of the distance from earth to the moon using reflectors placed on the moon by the *Apollo XI* astronauts.

INFLATION BATTLE

Finance Minister E.J. Benson made the following statement in the House of Commons on January 13:

As part of the national effort to curb inflation, the Prices and Incomes Commission is working to secure the support of the business community and professional groups for a program aimed at limiting price increases and charges for services. If meaningful progress can be made in this direction, this initial step will be followed by efforts to restrain increases in wages, salaries and other cost elements that affect prices. This will help to restore a balance between total money incomes and the total quantity of goods and services produced in the economy.

It is important that major discretionary price changes in the Canadian market should be avoided while these discussions are taking place. Such price increases, even if planned well in advance, could easily be interpreted as being made in order to avoid the scrutiny which would follow the adoption of a program of price restraint.

With this in mind, the Government has requested the copper producers and the railways to suspend the price changes announced around the turn of the year and they have agreed to do so. On behalf of the Government, I have also had discussions with representatives of the two banks which had announced increases in their interest rates on instalment loans for consumers; they also have agreed to meet the Government's request to suspend these increases.

I want to make it very clear that the Government will adopt the same attitude toward any similar proposals to raise prices between now and March 1.

STRATFORD SPRING TOUR

The British actor James Donald will play Sir Peter Teazle in the Stratford National Theatre of Canada production of *The School for Scandal* when the company goes on tour this month. Portia in *The Merchant of Venice* will be played by another newcomer to the Stratford Company, Maureen O'Brien, who comes to Canada from Chichester and the West End

(Over)

of London. Pat Galloway, who scored a widely-acclaimed success when she portrayed Dorine in Stratford's production of *Tartuffe* last year, returns to play Lady Sneerwell in *The School of Scandal*.

JAMES DONALD

Mr. Donald, whose career in the theater spans more than 30 years, has appeared with Sir John Gielgud at the Old Vic and has played in notable productions in most of London's leading playhouses and on Broadway. His roles have been both classical and modern, among them Sir Colenso Ridgeon in *The Doctor's Dilemma* in London, Merton Densher in *The Wings of the Dove* at the Lyric, Richard Gettner in *The Dark is Light Enough* at the Aldwych and Simon de Grange in *Face of a Hero* in New York.

Perhaps best known to North American audiences for his work in films, Mr. Donald's long list of credits in this medium includes such productions as *Bridge on the River Kwai, David Copperfield, The Great Escape, King Rat, The Royal Hunt of the Sun* and *The Gaunt Woman*. He has appeared on television both in England and the United States in major dramatic productions, including *The Cocktail Party* in England and *Pygmalion, Victoria Regina*, and *Three Soldiers* in the U.S.

MAUREEN O'BRIEN

Miss O'Brien, who was born in Liverpool, was with the Chichester Festival for the 1967-68 seasons playing Sibley in *The Farmer's Wife* and Dorinda in *The Beaux Stratagem* during the first season, and Miranda in *The Tempest* and Gladys in *The Skin of Our Teeth* during the second. Her television work in England includes the play *Light Blue*, for the BBC. Among her stage roles was Isabelle in *Ring Around the Moon* in the West End.

PAT GALLOWAY

Miss Galloway has played in several Stratford productions since 1960, when she appeared in *A Midsummer Night's Dream*. Her roles have included Valeria in *Coliolanus*, Anne Boleyn in *Henry VIII*, Lise and Sister Claire in *Cyrano de Bergerac*, the Goddess Iris in *The Tempest* and a witch in *Macbeth*, Queen Anne in *The Three Musketeers* and Dorine in *Tartuffe*. She has played with several of Canada's leading theater companies, including the Manitoba Theatre Centre, the Canadian Players, the Crest Theatre, the Comédie Canadienne and Le Théâtre du Nouveau Monde. She is a revue artist as well as a dramatic actress and was a leading member of *Spring Thaw '69*. Miss Galloway has worked extensively in television and radio on such productions as *Cinderella*, in which she played the stepmother (1969) and the Stratford-CBC production of *The Three Musketeers*. Her most recent television work was an episode of *McQueen*, for the CBC.

CAST MEMBERS

Other members of the cast not formerly announced are Patrick Christopher, who was with the company last year in *Hamlet, The Alchemist* and *Measure for Measure;* Stanley Coles, a newcomer to Stratford who has performed with the Vancouver Playhouse and with CBC television; Leon Pownall, who played Laertes in *Hamlet* at the National Arts Centre in Ottawa last autumn and *Four Plays* in the company's Studio production there.

Formerly announced members of the cast for the two productions include Donald Davis, Leo Ciceri, Helen Carey, Robin Gammell, Barry MacGregor, Bernard Behrens, Mervyn Blake, James Blendick, Pamela Brook, Blair Brown, Jane Casson, Patrick Crean, Eric Donkin, Ronald East, Mary Hitch, Joel Kenyon, Stephen Markle, Robin Marshall, Melanie Morse, Gary Reineke, Don Sutherland, Powys Thomas, Joseph Totaro and Kenneth Welsh.

The Stratford company tour opens on February 10 in Urbana, Illinois, for a one-week engagement, followed by four weeks at the Studebaker Theater, Chicago, sponsored by the Chicago Associates for Theater and the Illinois Arts Council from February 18 to March 14. The tour includes two weeks at Théâtre Maisonneuve, Montreal, March 17 to 28, and a month at the National Arts Centre in Ottawa, March 30 to April 25.

WHEAT EXPORTS

Sales of some 375 million bushels of wheat before July 31, 1970, now appear assured, Mr. Otto E. Lang, the Minister responsible for the Canadian Wheat Board, told a recent press conference in Regina, Saskatchewan. Mr. Lang said that the sales program ensured that exports both from the Lakehead and Vancouver would be at near record rates.

The Minister also reaffirmed the determination of the Federal Government to maintain the Board marketing system for wheat, oats and barley and to enforce all regulations under the Wheat Board Act. "The prospect of rapid movement of both wheat and barley to export markets during the coming months should substantially reduce the pressure on farmers to move grain outside Board regulations," Mr. Lang said.

Exports so far in the crop year total some 115 million bushels and producers can expect to see further exports of about 260 million bushels before the end of the crop year on July 31.

Movement of grain to the Lakehead is now scheduled and in progress to fill the available space of about 60 million bushels before navigation opens in April. The rate of movement will be as even as possible, at a slightly increasing rate from now until the Lakehead storage is filled.

Mr. Lang added that, after navigation opens, grain movement from the Lakehead will be near the record levels of 1966.

CANADIAN FURS – THE BEAVER

The beaver has been the main fur-bearer during much of the history of the Canadian fur-trade. The early Canadian fur-traders found themselves in a land whose forests abounded in beaver from coast to coast and north to the tree-limit.

A strong European demand for the rich underfur for the manufacture of beaver hats encouraged fur-traders to arrange extensive native hunts for beaver. The rodents, which spent most of their lives in and around their lodges, fell easy prey to the hunters. Even in the early years, large areas were quickly emptied of beaver.

The traders were not concerned, believing that there would always be more beaver as trappers and hunters continued to push further west and then north.

Before conservation controls were imposed, unlimited trapping almost eliminated the beaver throughout much of its former range. However, enlightened wildlife-management techniques, including restocking of depleted areas with beaver from other parts of the country, have been effective in helping the animal to make a comeback.

The Canadian Beaver

Today, in fact, the beaver population in Canada is larger than at any time in the last 50 years, despite an annual "take" of pelts during the past decade that was several times larger than the annual output in the 1920s.

Beaver is again the most important Canadian wild fur-bearer, and fur-buyers agree that Canadian beaver is the finest in the world. In the 1967-68 season production amounted to 420,437 pelts valued at $6,328,648.

HABITAT

Beaver, the largest of the North American rodents, is found everywhere throughout the forested areas of Canada, in the vicinity of lakes and streams where birch, willow and aspen grow abundantly. Beaver families live in stout lodges with underwater entrances, which they build in streams and in the smaller lakes.

Because fluctuating water levels would make the lodges untenable, beavers build dams to provide a constant water-level.

Beavers lay in their winter supply of food before freeze-up. Their store-house is the bottom of the river or the lake-bed, where they anchor small trees and branches in the mud. During the winter, they pull the wood, piece by piece, into their lodges, where they nibble away the tasty bark before discarding the bared wood.

(This article is one of a series on the Canadian fur industry and fur-bearing animals.)

NEW NATIONAL SCIENCE BODY

A new national scientific organization, known as SCITEC (a contraction of *science* and *technology)* came into being in Ottawa on January 17. Its first president is Dr. N. Grace, president of the Chemical Institute of Canada and general manager of the Dunlop Research Center.

The purpose of SCITEC, according to the founding motion, is, "to marshal the scientific and technological community to provide leadership, to communicate, co-operate and work within itself, with government and the public in the national interests".

Two vice-presidents were elected – Dr. Louis Berlinguet, president of l'Association Canadienne-Française pour l'Avancement des Sciences (ACFAS), and Dr. Donald D. Betts, president of the Canadian Association of Physicists. Other executive members are: Dr. R.C. Quittenton, vice-president of the Engineering Institute of Canada and president of St. Clair College, Windsor; Albert Melancon, associate professor of economics, University of Montreal; and Dr. J.A.F. Stevenson, president of the Biological Council of Canada.

A youth committee was appointed, composed of David Rogers, University of Toronto graduate student; M.J. Yedlin, University of Alberta undergraduate; and Jean-Marc Rousseau, University of Montreal student who is vice-president of Jeunesse Scientifique Inc., the youth division of ACFAS.

Dr. John B. Armstrong, executive director of the Canadian Heart Foundation, was named honorary treasurer, and John H. Hall was named public relations counsel.

There will be initially a congress composed principally of English-speaking members and an

(Over)

assembly comprising the present assembly of ACFAS. The SCITEC council will include 22 members from the congress and seven from the assembly.

Dr. Quittenton said that the main difference between SCITEC and the Science Council of Canada (the body that advises the Government on scientific matters) was that the former was a private organization, whereas the latter was a creation of government. The chairman of the Science Council, Dr. Ormond Solandt, who addressed the SCITEC founding conference, said that his organization welcomed the creation of the new body.

The membership of SCITEC includes scientists, doctors, engineers, social scientists and technicians. According to Dr. Betts, the membership may grow eventually to as many as 100,000.

ACFAS, the French-Canadian counterpart of SCITEC, expressed its enthusiasm on joining the new organization by offering $1,000 to the starting fund and also by making available the temporary or permanent use of its own secretariat.

CYPRUS TROOP SWITCH

The 1st Battalion, The Royal Canadian Regiment, will replace the 2nd Battalion, The Black Watch (Royal Highland Regiment) of Canada in Cyprus at the end of March 1970. This rotation follows a recent announcement that the United Nations mandate for UN forces in Cyprus has been extended to June 15, 1970.

Some 524 members, including support troops, of the RCR from Canadian Forces Base London, Ontario, will be flown to Cyprus by *Yukon* and *Hercules* aircraft.

Returning to CFB Gagetown, New Brunswick, will be 511 Black Watch.

The Canadian contingent is responsible for an area in the Kyrenia district of Cyprus of 55 square miles, which extends from the capital, Nicosia, north to the Mediterranean coast.

Canadian troops have been engaged in peacekeeping operations in Cyprus since the UN contingent first went to the island in 1964. Troops have been rotated twice yearly since that time.

COPPER CONTROLS

All forms of copper and copper-scrap have been placed under export control to all destinations, effective January 13. This measure had become necessary because the price of refined copper in Canada has dropped lower than that obtaining in any other country. The control is designed to prevent any abnormal flow of Canadian copper required for consumption in Canada to higher-priced markets in other countries.

LABOR FORCE

Employment declined less than is usual at this season last November and December; the unemployed estimate for December was 7,712,000, 49,000 fewer than in November. Unemployment rose less than usual during the month; the unemployment estimate in December was 383,000, up 29,000 from November. The labor force decreased 20,000 to 8,095,000. Compared to that of a year ago, the labor force was up by 155,000, or 2.0 per cent. Employment increased by 145,000, or 1.9 per cent. There were 10,000 more unemployed persons than there were a year earlier.

INDUSTRIES

Employment developments in most major industry groups did not diverge significantly during the month from the usual seasonal patterns. Employment declined by 34,000 in agriculture from November to December. In non-farm employment, decreases in manufacturing (39,000) and construction (28,000) more than offset increases in other industries, the largest of which occurred in trade (24,000), transportation, communication and other utilities (17,000), and public administration (15,000). The employment decreases in the Atlantic region, Quebec and British Columbia were of about the normal size for this time of year. There was little change in the number employed in Ontario and the Prairie region, whereas there are usually small decreases between November and December. Compared to that of a year earlier, employment in community, business and personal service showed by far the largest increase (98,000); employment in trade was up by 33,000, and in finance, insurance and real estate by 27,000. Farm employment was down by 10,000. Regionally, the largest relative year-to-year increase in employment was recorded in British Columbia (3.1 per cent). This compares to gains of 2.6 per cent in Ontario, 1.7 per cent in Quebec and 1.2 per cent in the Atlantic region. Employment in the Prairies was virtually unchanged from last year.

The number of unemployed persons in December was 383,000, or 29,000 more than in November. Nearly half (13,000) of this increase was in Ontario. Compared to that of a year earlier, the number of unemployed persons was up by 10,000 for Canada as a whole. Of the total unemployed in December, 139,000, or 36 per cent, had been unemployed for less than one month, 39 per cent for one to three months, and 25 per cent for four months or more. Unemployment in December 1969 represented 4.7 per cent of the labor force, the same as in December 1968. In December 1967 it was 4.6 per cent of the labor force. The seasonally-adjusted unemployment rate in December 1969 was 4.8 per cent.