Metric monitor

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U.S. Metric Board passes resolution to plan sale of gas by the litre

The following is a resolution approved by the U.S. Metric Board at its meeting in Boston on June 21, supporting metric conversion of gasoline pumps to sell gas by the litre instead of the gallon in the U.S.

"The petroleum retailing industry generally indicates a willingness to dispense gasoline by the litre. Several states are taking independent action in requiring or recommending litre dispensing. Therefore the United States Metric Board declares that this is an opportune time for the development of a planned and coordinated voluntary program of dispensing gasoline by the litre and the Board urges all affected parties to participate in the planning process. It calls attention to the need for adequate public information in connection with litre dispensing. Without taking this action, metric usage is likely to proceed in a haphazard fashion leading to public confusion, disparate end results and a negation of the positive cost advantages that a nationally-planned and coordinated program offers."

Most of the nation's 1.5 million gasoline pumps cannot compute a price higher than 99.9 cents per gallon and will have to be changed when prices pass that point — as now seems assured.

In California, the state weights and measures division is already coordinating a move to litre sales of gas. A statewide survey of major gasoline companies and independent distributors showed the overwhelming majority feel that metric conversion of California's gas pumps would be easier and substantially less expensive than other alternatives.

Board Executive Director Dr. Malcom O'Hagan, said that the gas pump conversion is an example of how increased metric usage in the U.S. can be accomplished to provide economic advantages with a minimum of disruption for the consumer.

Intergovernmental meeting highlights conversion in the mining sector

The following report was prepared by Carl Rockburne, sector plan manager, MCC, Sector 4.01, Mines, and was tabled at the Intergovernmental Metric Conversion Committee meeting held 1979-06-06/07 in Dawson City, Yukon.

The mining industry, by nature, is an extremely conservative industry located in the more remote areas of Canada. The industry is a large buyer of a number of finished goods from a number of industries and sells essentially a bulk product in various stages of processing to relatively few industrial customers.

The industry is regulated on the federal level but to a greater degree on the provincial level. There is a lack of uniformity in the respective provincial mining regulations. Thus it was determined from the outset that conversion of legislation and regulations affecting the mining industry would be critical if the industry was going to meet its stated target date of operating externally in SI by 1981-01.

It was emphasized that there would not be any changes in capital equipment, surface buildings etc. nor would any piece of processing equipment be retired before its useful life. Further it was stated that the failure to plan for conversion would lead to the highest possible cost and at the very least lead to confusion within the industries the mining companies serve.

Thus the objectives for metric conversion in the mining industry were set out as follows:

— To establish a means whereby external operations can be carried out in SI by the beginning

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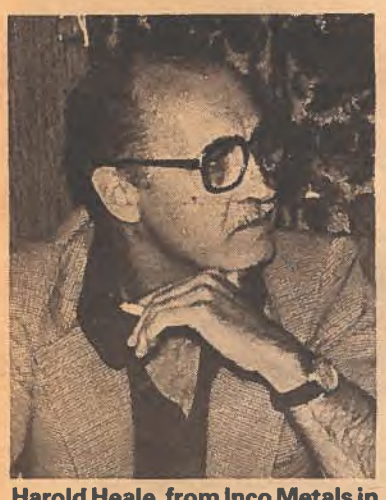
Photo Courtesy of the Government of the Yukon Territory, Tourism and Information Branch.

Open-pit mining for lead and zinc at the Cyprus Anvil Mine in Faro, Yukon, about 400 km northeast of Whitehorse, where the mill operations are in metric.Cyprus Anvil intends to open new deposits in the Yukon within the next few years which will be totally metric.



Harold Heale, from Inco Metals in Copper Cliff, Ontario, chairman of Sector Committee 4.01, Mines, gives an overview of progress in metric conversion in the mining sector at the last Intergovernmental Metric Conversion Committee meeting held 1979-06-06/07 in Dawson Dity, Yukon. The Canadian mining sector plans on being essentially metric by 1981.

Background on IMCC

The Intergovernmental Metric Conversion Committee (IMCC) is composed of representatives from each province and territory, the Standards Council of Canada, the Interdepartmental Committee for Metric Conversion and Metric Commission Canada.

The IMCC meets on a regular basis to exchange information on the progress of metric conversion within the individual representative bodies.

The committee also hears progress reports from each province and picks main topics of concern to the provinces for discussion.

The IMCC holds its meetings in the various provinces and territories and hopes the continual exchange of information will help all the members in their metric conversion programs.

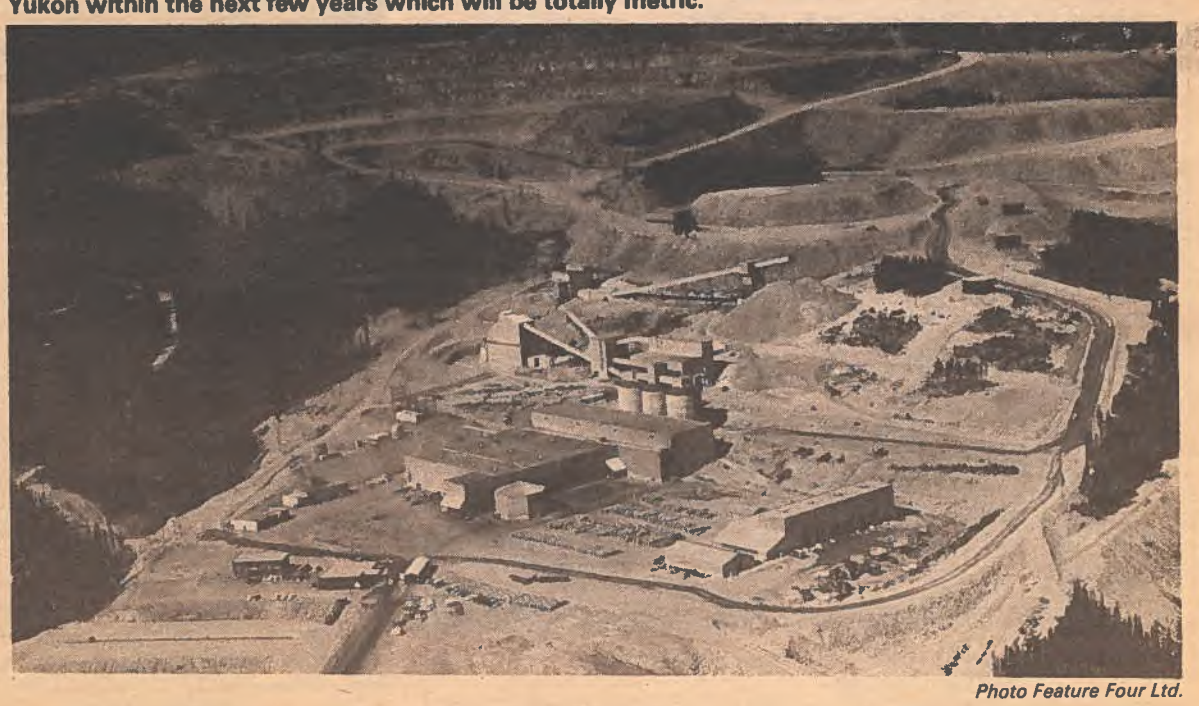


Photo Feature Four Ltd.

Brenda Mines Ltd., majority-owned by Noranda Mines Ltd. in Toronto, mines and mills copper and molybdenum, an alloying agent used in high-strength line pipe for natural gas transmission. Brenda Mine, in B.C.'s Okanagan Valley, operates totally in metric.

Case History No. 11

Rail transport

This is the eleventh in a monthly series of case histories illustrating the findings of various learning theories coupled with practical experience in Canada and other countries converting to metric.

by P.C. Boire
Executive Director
Metric Commission Canada

Despite the fact that their sector plan was completed in 1977, Canadian railroads report that until 1980 their business systems cannot accept bills-of-lading data in metric units only from their customers. A number of industrial sectors now ship and/or receive goods in metric units and others plan to before that date. Difficulties arise from the fact that Canadian railway freight operations are almost completely integrated with those of the U.S. because railways on both sides of the border use a single common computerized business system. Indications are that the American Association of Railroads plan to adapt their computer system by 1983.

Faced with this seemingly immovable object Canadian railways have adopted a policy of negotiating with sectors of the Canadian economy, and agreeing to handle goods designated on shipping documents in both the old and new measurements, once the modalities of operations are agreed by both sides.

Negotiations have been completed with the grains, textiles, chemicals, chemical fertilizers, cement, petroleum and pulp and paper sectors. Sector representatives have been asked to submit new formats for bills-of-lading showing both measurements. By the use of pre-processors and post-processors on Canadian railway computers during the interim period using dual units the rail sector will ease the problems of the transition period for many other sectors of the economy.

Nothing sacred about the mile anymore — *Gorman*

The following remarks were made recently by David Gorman, executive vice president of the National Association of Canadian Race Tracks, to race track publicists.

I'm not a salesman for metric — nor, I think, need racing be a salesman for metric. So, you might ask, what are we doing even thinking about it?

Our schools are almost totally metric now, and the day is not far away when teenagers, and the 20's crowd, will not know what a mile is, or a foot, or any imperial measurement. If we in racing are going to pay more than lip service to the elusive "youth market" we've got to start talking their language, and their language is kilometres and metres, not miles and yards and feet.

And while I'm on the subject of language, did you ever get the impression that the jargon we've created for racing only adds to the confusion of the potential fan? If you went to Woodbine this afternoon and started asking racing fans how far is 6 furlongs — they'd probably say "It starts over there" and that would be the best most of them could do.

So I sometimes wonder who we're really talking to — who we're impressing with terms like furlongs.

In the history of the world, any change is usually the result of some overpowering necessity to affect a change — in other words, or in one other word — Motivation. What then, is the motivation to change our sacred mile, to not so sacred kilometres?

Well, I'd suggest there are several motivating factors. And perhaps the first is this: wouldn't it be nice if racing could react to something, in a positive way, before it becomes a crisis? That should be pretty strong motivation — we'd finally be able to make a significant change without having to call emergency meetings all over the country.

If money is to be the motivation, let's take a longer-term look.

By going metric, we should increase interest in our game. We can vary the distances, as do the thoroughbreds, and is there anyone here who wouldn't like to be doing the business the thoroughbreds are doing back home? There probably are some, but I can't think of a single situation — competitive situation — where the standardbreds do more business than the runners. In most cases we do substantially less.

So, motivation in the form of potentially increased interest, and thus more dollars, is there. We've simply got to exploit it. By going metric, we'll in one stroke, create a

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Postage stamps in Singapore commemorate metric conversion

Courtesy Metrication Digest

A set of metric postage stamps commemorating the progress of metric conversion in Singapore was issued in February 1979.

Conversion to the metric system is essential and inevitable for Singapore has close commercial and industrial links with most of the metric countries of the world.

The Singapore Metrication Board was set up on 1970-12-13 "to guide, stimulate and coordinate the work of the country's metric conversion programme".

The issue of these stamps on metric conversion marks the completion of the conversion programme for the public and industrial sectors, and marks the final phase of metric conversion in the retail trade.

The three special metric postage stamps, in denominations of 10 cents, 35 cents and 75 cents feature the kilometre, centimetre and kilogram. These will remind us that the metric system has replaced the imperial and traditional systems of measurements.

Atmospheric pressure is now measured in kilopascals (kPa) in Canada. From 98.0 to 103.0 kPa is the normal range.

The day-to-day change in pressure – rising, steady, falling – is more significant as a weather indicator than is the specific barometric reading.

Rising pressure usually indicates the approach of a fair weather (high pressure) system. Falling pressure indicates stormy weather ahead.

The unit of pressure, pascal (Pa), is named after Blaise Pascal, a French scientist who carried out experiments in this field in the 17th century.

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Commission du système métrique Canada

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Business machines specialists discuss metric conversion

The Sub-Committee on Business Systems of Sector 9.30, Services to Business Management, under the Chairmanship of Louis Desjardins from the Quebec Computer Bureau, met in Dawson City, Yukon in June. J.C. Stranart, from S.P.M. Consultants in Toronto, chairman of the Intersectorial Committee on Data Processing presented a report to the Intergovernmental Committee for Metric Conversion. Subjects discussed included the conversion of data processing printing hardware, numeric dates, decimal markers, the use of the oblique, programs, historical data, metric information exchange mechanism and triad separation. L. to r.: A Tateishi, Federal Government EDP Standards Committee; Judy Saunders, Information Office, Yukon Government; Ken Gordon, Digital Equipment Company of Canada; Rob Fuller, Yukon Government; Louis Desjardins; Don Schuster, Saskatchewan Systems Centre; C. L. Willman, N. W. T. Government; and J. C. Stranart, S.P.M. Consultants. Mr. Don Mason, B. C. Systems Corporation, was absent when the picture was taken.

Metric or not, the game is the same

By Bob Mellor

It was billed as "A piece of history and a glimpse of the future" — and it might have been — but as far as the Ottawa Rough Riders were concerned, the first professional football game ever played in metric measure was like finding out that your blind date is somebody you know.

"I honestly couldn't see any difference at all", Ottawa head coach George Brancato told a group of Eastern sports writers and broadcasters who attended the event during the CFL team's training camp in Peterborough, Ontario.

While many high school teams in various parts of the country have been playing metric football for some time now, the intra-squad game, a benefit performance that raised more than $5000 for local charities, was the pros' first look at it.

Ottawa general manager Jake Dunlap, whose decision it was to try the experiment, explained it this way: "Since everything is going metric, we thought this was an ideal situation to give it a try.

"We wanted to determine if it would change the game and I couldn't see any changes. In fact, I was surprised that the metric field was so close to our regular field."

The metric field plan — which has been endorsed by the Canadian Amateur Football Association — calls for a 100 x 60 m field. Width remains virtually the same. The playing surface comes out shorter at each end by about the length of a football, and the 50 m line becomes the centre stripe.

It fits easily into all existing fields, a fact that surprised members of the Peterborough Parks and Recreation Dept. who painted the lines on the Thomas A. Stewart High School field, site of the experiment. They were most surprised by the fact they didn't even have to move the goalposts.

Up to now, the Canadian Football League has been somewhat reticent to look at metric conversion of the game. Commissioner Jake Gaudaur has expressed fears that conversion might change the unique flavor of Canadian football.

In particular, Gaudaur has fretted that the 10 m distance required to make a first-down — an extra step for a ball carrier — would lend weight to the argument by some factions that the game should go to four downs. He has always felt that Canadian football must remain with three downs to preserve its exciting aspects from the spectator point of view.

Nothing happened in Peterborough to give the commissioner cause for worry. To help explore that aspect of converting football, the exhibition contest was played with three downs in the first half, and four in the second.

Almost nobody liked the four downs.

"The difference in length between metres and yards is so small it really doesn't affect the way the game is played at all," said coach Brancato.

"Four downs really slows things down a lot. One of the great things about Canadian football is the constant exchange of control. You have to make things happen quickly or give up the football and that makes it a whole lot more entertaining."

Brancato's contention was backed up by quarterback Condredge Holloway, a graduate of University of Tennessee, who grew up on four-down football in the U.S. But with four CFL years under his belt, Holloway is now a convert.

Of four downs, he said: "It's boring, it's slow..... and it's like cheating."

The Ontario Colleges Football League, which has announced it will play metric football in 1979, favors the three-down game. A major college experiment in Halifax, to take place September 8 between St. Mary's and Concordia Universities will be conducted similar to the Rough Rider experiment, with three and four-down halves.

Bob Mellor, sports consultant for Metric Commission Canada, shows how slight the difference is between the old and the new field at a recent MCC meeting in Toronto.

The Canadian Amateur Football Association, which adopted the 100 x 60 m field as its official metric conversion plan at its 1979 annual meeting, has left the downs issue to be settled after results of a statistical study to be conducted this year are completed.

In the meantime, press reaction to the Rough Rider experiment, which for the record was a 27-0 lopsided victory for one half of the training camp, reflected the opinions of the participants.

The Ottawa Citizen's Tom Casey observed: "It could have been yards for all the Ottawa Rough Riders noticed. Their introduction to metric football via the club's intra-squad game — pro football's metric debut — had little impact."

The Ottawa Journal may have hit on the definitive statement. "Pro football," said the Journal, "was introduced to the metric system Saturday, and almost no one noticed."

Mr. Mellor is a freelance writer and independent sports consultant to a number of Canadian sports organizations.

What the Riders had to say about the metric field

Penny Tennenhouse Photo

"Surprised the metric field was so close to the regular field" — **Jake Dunlap, General Manager**

Ottawa Citizen Photo

"Doesn't affect the way the game is played" — **George Brancato, Head Coach**

Ottawa Citizen Photo

"Yardsticks appeared just as far apart" — **Condredge Holloway, Quarterback**

Penny Tennenhouse Photo

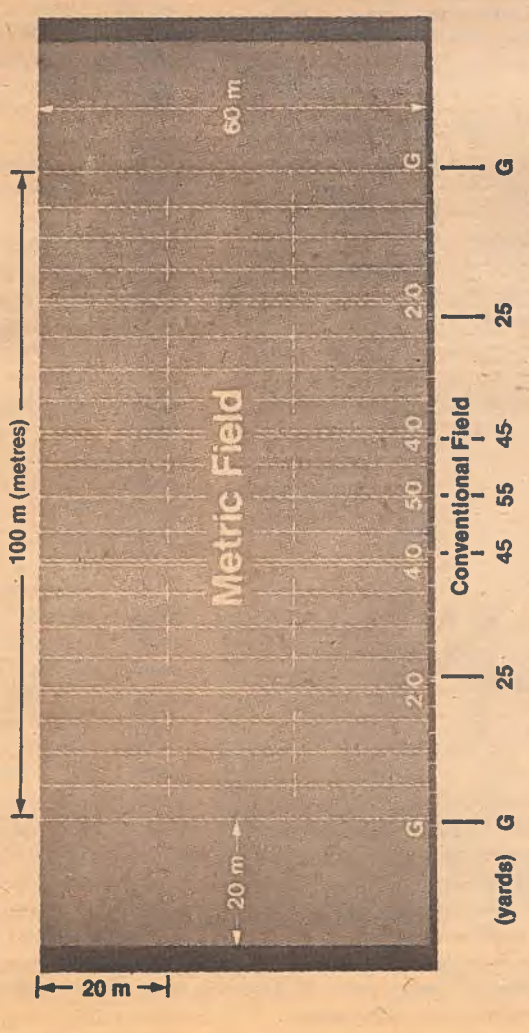
"You take the ball as far as you can anyway" — **Mike Murphy, Fullback**

The Metric Field

Canadian Football

A metric field of 100 m x 60 m easily fits into all conventional Canadian fields. Width is virtually the same. The playing surface is shorter by about the length of a football at each end. End zones of 20 m are slightly shorter by about two strides. Goalposts remain the same.

Making a first down in 10 m requires about an extra stride.



The Rules

Except for experimental purposes, basic rules for Canadian football apply, with these minor differences:

- A team must gain 10 m in three downs to achieve a first down.
- The point of kickoff is the 40 m line.
- The convert attempt will be originally scrimmaged no closer than the 5 m line.
- After a single point, the ball will be scrimmaged from the 30 m line.
- After a field goal, the team scoring may kick off from the 40 m line; or the team scored against may elect to scrimmage or kick from its 30 m line.
- After a safety touch, the team scored against will kick off from the 30 m line.
- On punt returns, the receiver must be allowed 5 m.
- On a scrimmage play the teams must line up 1 m apart.
- Penalties will be 5 m, 10 m, 15 m and 20 m.

Sector Plan 63.03, Soft Drinks, approved by MCC

The Soft Drinks Plan was approved by Metric Commission Canada meeting in Charlottetown in June. Committee members, l. to r. (front row): Lorice Haig, Pop Shoppe, co-chairman, Sector Committee 63.03; Tibor Gregor, executive director, Canada Soft Drink Association, chairman of Sector Commitee 63.03; Sinclair Volk, director of industry & service plans, MCC; (Back row) Doug Mercer, sector plan manager, MCC; and Ranjam Banerjee, planning manager, MCC.

Sector plan 63.03, Soft Drinks, was approved by Metric Commission Canada at its meeting in Charlottetown on June 26, bringing the total plans approved to 85 out of a present total of approximately 100. Many more plans are in preparation and nearly completed.

These sector plans are the result of the combined efforts of members of sector committees, all volunteers from various industries and organizations.

As sector committees complete plans for conversion, they recommend them to their respective steering committees for concurrence. The steering committee concerned then presents each plan to Metric Commission Canada for review and approval. Following approval, the plans are published and made available to individual organizations for their guidance in instituting their own metric conversion program.

Soft drink industry metric by 1981

Metric Commission Canada is pleased to announce the approval for publication of a plan for the metric conversion of the Canadian soft drink industry. The plan was approved at a meeting on 1979-06-26 in Charlottetown, P.E.I.

The Soft Drink Sector Committee which developed and recommended the plan is composed of members of the Canadian Soft Drink Association as well as non-member bottlers. The Association represents 168 soft drink manufacturers and distributors and accounts for over 90% of all soft drinks manufactured and sold in Canada. The Sector Committee comprises, in addition, representatives from the federal Department of Consumer and Corporate Affairs and all Sectors allied to the industry.

The sector plan calls for completion of the conversion of the soft drink industry to metric by December 1981. The plan recommends the adoption of rounded metric sizes for soft drinks sold in bottles. Most soft drinks sold in bottles are packaged in one of the five following sizes: 200 mL, 300 mL, 750 mL, 1 L and 1.5 L. A straight mathematical conversion has been adopted for soft drinks sold in cans. There is only one size of can in which soft drinks are currently sold, i.e., 284 mL, and for cost reasons, it has been decided to retain that size.

In 1972, the soft drink industry agreed to certain "rounded" metric sizes for soft drink bottles. A 200 mL bottle was introduced as a replacement for the old 6.5 fl. oz. size, a 300 mL bottle as an alternative to 10 fl. oz., and 750 mL as an alternative to 26 fl. oz. The consumer is getting slightly more product with each of the new sizes now on the market.

Some companies were able to redesign the bottles to accommodate the increased amount of product without having to change their moulds. The primary objective in this step was to make the move to metric with a minimum number of changes and at a minimum of cost.

In order to achieve this, some bottles were redesigned with no changes to the outside dimensions or to fill heights. This enabled bottlers and branches using pre-mix filling equipment to introduce the glass package into their inventory without the expense of investing in change parts for their bottling line, and it permitted them to run bottles simultaneously. This was accomplished by the removal of a small amount of glass from the inside of the bottle while still maintaining its strength within the safety limits prescribed by the Glass Container Council of Canada.

For those few bottles using post-mix filling equipment, where production runs must use exclusively Imperial or exclusively metric bottles, manual sorting of the refillables is necessary. This operation has been made easier by timing the introduction of metric glass bottles with a design change to the ACL label. The sorter can then readily identify the metric bottles.

The soft drink cans will not change in size. This is because the equipment changes required to produce a 300 mL can are to significant and costly for a limited market. The can will carry 284 mL of product, which is a soft or arithmetical conversion of 10 fluid ounces.

The soft drink industry is successfully managing the move to metric by effecting a smooth conversion to metric sizes, with little or no expense to bottlers and company-owned operations. There have been a few unfortunate accidents involving the explosion of some new 1.5 L bottles when tipped over or dropped on a hard surface. This is being investigated at the moment by the Department of Consumer and Corporate Affairs.

Key events in 63.03

Throughout the implementation of this Sector Plan, there are a number of key events and these points of achievement, which serve as benchmarks of progress of sector metric conversion, are as follows:

1972-09 — Metric conversion policy and strategy identified
1972-12 — Revisions in metric design and engineering practices started
1973-03 — Standards requiring revision identified
1973-03 — Federal measurement-sensitive legislation and regulations identified
1973-04 — Industry consensus on preferred package sizes obtained
1973-10 — Supplementary metric practice guide published
1973-12 — Full-swing production in metric started
1973-12 — Replacement/installation of metric equipment started
1973-12 — Marketing of products in metric sizes started
1974-04 — Implementation of public awareness programs started
1977-04 — Provincial regulations identified and implementation started
1979-06 — Metric conversion plan approved by Metric Commission Canada
1979-10 — Metric materials and supplies procured
1981-12 — Business systems modified
1981-12 — All products produced in SI units

Most of the key events have already been achieved.

You too can measure up
Metric — make it a daily habit
Metric — it's worth the change
Metric — measure for measure, it's a better way to measure
1000 mm = 100 cm = 1 m
1000 m (metre) = 1 km (kilometre)

min is the symbol for minute
h is the symbol for hour
km means kilometre
m means metre
cm means centimetre
g means gram
mm means millimetre

Stats Can reports on effects of conversion

Jack MacKinnon, metric coordinator for Statistics Canada, reports below on the effects of metric conversion on consumer prices. Here are the highlights.

It should be stated, as a preface to what follows, that Statistics Canada does not have a specific responsibility to monitor effects of metric conversion on consumer prices. However, cases of apparent profiteering on conversion of products to metric are, it is understood, investigated by Metric Commission Canada and Consumer and Corporate Affairs Canada.

Many reasons, ranging from world price rises and declines to competition in supermarket specials, can contribute to ups and downs in the Consumer Price Index for a particular commodity, against the general background of the cost-push and demand-pull inflation which we have been experiencing in Canada over the past several years. Below are some comments by the Chief of our Consumer Prices Section regarding price changes during 1977 and 1978 of those products which have converted to metric. None of these suggest metric conversion as a reason for the price movements.

If increased costs are incurred for any reason by a manufacturer, wholesaler or retailer, these tend to be shifted to the consumer. However, for instance, changing the shape of a carton from quart-size to litre-size, or to contain 500 g rather than a pound, should involve no additional expense to a package manufacturer, and subsequently through the manufacturer to the consumer, except for the re-design cost, which is not large and is spread over perhaps many millions of items of the product. Apart altogether from metric conversion, re-design of packages takes place anyway from time to time in the case of many products in order to keep the advertising message from getting stale. Therefore a manufacturer who wants to keep his costs in line, hence his prices competitive, should time his switch to metric packaging to coincide with a package change which is due for other reasons.

Officers of our Prices Division have reported only one case where metric conversion has involved a complaint regarding increased cost. This concerned the new litre carton for milk, which could not be stowed as conveniently in the container which has been built for imperial sizes, thus entailing a certain loss of storage space. There will undoubtedly be similar cases of trying to fit metric objects into imperial slots, but this does not appear to me to be a serious problem.

It is noted that Canadian industry is not discarding re-usable containers in imperial sizes, such as soft drink bottles and milk jugs, but rather using them up while phasing in the introduction of metric sizes. There is therefore, no extra expense involved here. On capital equipment, the procedure followed by industry in this country so far, and as planned, is generally to continue using imperial machinery but to replace it when it wears out with metric equivalents. This procedure should eliminate, or at least keep down, the fixed costs to industry of metric conversion, thus ensuring that these do not contribute to costs of products to consumers.

In summary, I would state that the observation made by the Assistant Director, Retail Prices and Living Costs, of our Prices Division on 1976-08-20 concerning the effects of metric conversion on the Consumer Price Index is still valid: "to date the impact appears minimal".

Here are comments by the Chief of the Consumer Prices Section, Prices Division, Statistics Canada, on price changes in 1977 and 1978 for those items in the consumer price index whose quantities are on a metric basis.

Ice Cream
Price movements are very erratic, influenced significantly by specials.

Prepared Breakfast Cereal
Increase in July 1978 reflects price increase due to supply conditions of winter wheat.

Peanut Butter
Increases in July and August 1978 due to higher cost of peanuts and devaluation of Canadian dollar.

Oral Hygiene Products
Increases since September 1978 reflect higher costs for ingredients, shipping and packaging.

Fluid Whole Milk
Increases in October and December 1978 due to increased prices awarded farmers by provincial dairy boards. In October 1978, increases were awarded in Ontario and Alberta; in December 1978, Saskatchewan and Quebec followed suit.

Confections for Home
General increase in the price of chocolate bars in December 1977 and January 1978.

Floor/Furniture Polish/Wax
General increases due to higher prices for petroleum.

Soft Drinks at Home
Price behaviour affected by price wars among major competitors.

Snack Foods
Increases after May 1977 reflect increased potato prices.

Sugar
Price movements reflect the international sugar situation.

Mines to be operating in metric by 1981

Sector 4.01 plan summary

The primary objective of Sector 4.01, Mines, is to set out a means whereby external operations of the sector will be substantially carried out in SI by the beginning of 1981 and will be in harmony with other sectors of the economy in order to minimize the cost to the industry.

A secondary objective is to provide guidelines for individual companies planning internal conversion.

Policy

- To leave as many conversion decisions as possible to the discretion of individual companies, but to coordinate all those activities in which a company communicates with another company or with the government.
- To minimize the time during which two systems of measurement are in use.
- The time span of the plan is short and it has therefore been decided to exclude reference to changes in capital equipment. Such changes will be on a normal replacement basis at the discretion of individual managements, and will be paced by the manufacturing and supplies producing sector.

Key Events

Training
Conduct Metric Seminar 1977-10
Conduct employee general awareness programs 1977-10

Measurement Units
Publish first draft of Mining and Metallurgical Industry Supplementary Metric Practice Guide 1977-12

Legislation and Regulations
Start receiving priority legislation 1978-01

Design and Engineering
Start revising in-house standards and practices for developing projects 1978-01

Standards
All measurement sensitive standards peculiar to the industry to be converted 1979-06

Sector capable of operating externally in SI. 1981-01

Associations

The Mining Association of Canada
Suite 705, 350 Sparks Street
OTTAWA, Ontario K1R 7S8

The Coal Association of Canada
Three Calgary Place
355 - 4th Avenue S.W.
CALGARY, Alberta T2P 0H9

The Mining Association of British Columbia
104 - 1075 Melville Street
VANCOUVER, B.C. V6E 0H9

Saskatchewan Mining Association
730 Avord Tower
REGINA, Saskatchewan S4P 0R7

Mining Association of Manitoba
405 - One Lakeview Square
155 Carlton Street
WINNIPEG, Manitoba R3C 3H8

Ontario Mining Association
10th Floor, 199 Bay Street
TORONTO, Ontario M5J 1L4

Canadian Copper & Brass Development Association 1612 - 55 York Street
TORONTO, Ontario M5J 1R7

Canadian Diamond Drilling Association
Suite 719, 74 Victoria Street
TORONTO, Ontario M5C 2A5

Prospectors and Developers Association
406 - 25 Adelaide Street W.
TORONTO, Ontario M5H 1N3

British Columbia & Yukon Chamber of Mines
840 West Hastings Street
VANCOUVER, B.C. V6E 2W4

Chamber of Mines of Eastern British Columbia
371 Baker Street
NELSON, B.C. V1L 4H6

Alberta, Northwest Chamber, Mines-Oils-Resources
10009 - 105 Street
EDMONTON, Alberta T5J 1C8

Quebec Asbestos Mining Association
320 - 580 Grande Allée E.
QUEBEC, Quebec G1R 2K3

Quebec Metal Mining Association Inc.
704 - 2 Place Quebec
QUEBEC, Quebec G1R 2B5

This leaflet provides a summary of the metric conversion plan developed by the sector committee representing the Canadian mining industry, including government agencies and concurred in by the steering committee representing related sectors and subsequently approved for publication by Metric Commission Canada. For your copy write to:

Metric Commission Canada
Box 4000
Ottawa K1S 5G8

For many people, the sector plan flyer may provide sufficient information about the sector plan and the key events in it. Individual organizations within the sector or in related sectors may obtain the complete plan documentation through the association of which they are members. Others requiring a copy of the complete plan should address their request under their letterhead to the:

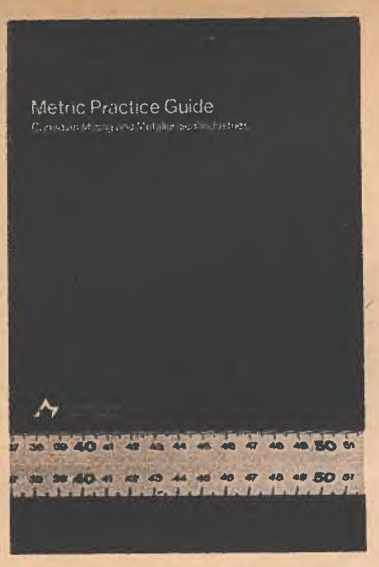
Sector Plan Manager,
Sector Committee 4.01
Metric Commission Canada
235 Queen Street,
Ottawa, Ontario
K1A 0H5.

Intergovernmental

(From page 1)

of 1981 and remain in harmony with other sectors of the economy in order to minimize the cost to the industry.
— to provide guidelines for individual companies planning internal conversion.
Contact was made with the various provinces regarding the conversion of provincial mining legislation and regulations. The sector presented:

a) the sector plan to the provincial Mines Ministers' Conference in Quebec City in 1977-09.
b) a brief to the Provincial Mines Ministers' Conference in Toronto in 1978-19 (on this page). This brief was presented by M. N. Collison, Hudson's Bay Mining & Smelting, chairman of the legislation subcommittee on mines; W. O'D. Costello, The Mining Association of Canada, and H. Heale, INCO Metals Company, co-chairmen of Sector 4.01, Mines.



In order to provide the mining industry with a uniform basis from which to implement metric conversion, Units Sub-committee 4.01, Mines, published and distributed a comprehensive *Metric Practice Guide* for the Canadian mining and metallurgical industries. The guide will assist in making the change to metric and will promote the uniform use of SI in mining, milling, smelting and refining operations in Canada. The guide is available in French or English at $3.50 from:

The Mining Association of Canada Suite 705
350 Sparks Street
OTTAWA, Ontario
K1R 7S8.

Read next month's Metric Monitor for a story on conversion of retail food scales in the three pilot regions, Kamloops, B.C., Peterborough, Ont., and Sherbrooke, Que.

Report on legislation

The following was submitted by M.N. Collison, P. Eng., Hudson's Bay Mining & Smelting, to the Mines Ministers' Conference held 1978-09 in Toronto. Mr. Collison is chairman of the legislation subcommittee for Sector 4.01, Mines.

With the advent of the immersion of the Mining Industry across Canada, into the use of SI by 1981-01-01 the various legislative bodies have the opportunity to standardize their respective legislative acts and regulations. Although each provincial body has its own area of specific concern, separate and distinct from others, there is an opportunity in this conversion process to standardize on both the unit used and the measured quantity. The safety aspects and intent of each particular segment of the legislation must be given consideration.

As a result of the cooperation received from various provincial authorities this sub-committee, in reviewing proposed legislative action, considers the following points as being worthy of consideration in preparing the final draft of legislation and regulations concerned with adoption and application of the SI system of measurement in the Canadian Mining Industry.

1. Adhere to the rules for the use of SI.
2. Hard convert where practical.
3. Provide national uniformity, as far as practicable, of converted quantities and units.
4. Include grandfather clause in SI version of legislation and/or regulations.
5. Give consideration to the industry's target conversion date of 1981-01-01 when establishing the date for implementing the SI statutes.
6. Use SI units only. Do not use dual units.

Comments relating to items one to four are contained in letters of 06-26 and 07-18 1978 from this sub-committee to various provincial and federal authorities. One final comment concerning the desirability of uniformity in legislation and regulations — miners, technical personnel and contractors do move around the country. Uniformity minimizes the chance of mistakes and accidents. Following the rules and practices recommended in the Metric Practice Guide will promote uniformity and understanding of the converted legislation and regulations.

The Metric Practice Guide for the Canadian Mining and Metallurgical Industries prepared by Sector Committee 4.01 (Mines) of Metric Commission Canada and published by The Mining Association of Canada has been prepared to assist in making this change and to promote uniform and correct use of SI. Sector 4.01 includes the mining, smelting and refining of metals and minerals and the exploration for same, with the exception of aluminum, which is in Sector 4.05. It has experienced active participation in its activities by many companies and universities as well as the Mining and Coal Associations of Canada and Metric Commission Canada. This practice guide should be a valuable tool both in the conversion process and toward standardization.

Upcoming meetings

1979-07-10 & 11	Sector Committee 3.06	St. John's
07-11	Sector Committee 61.08	Winnipeg
07-16	Sub-Committee 61.05	Minneapolis
07-17	Sector Committee 1.04	Calgary
07-20	Sector Committee 63.01	Montreal
07-24	Sector Committee 1.02	Montreal
08-09	Sub-Committee 2.08/2.09 (Monitoring)	Toronto
08-09	Sector Committee 63.01	To be determined
08-15	Sector Committee 61.03	Toronto

Exhibits

1979-07-06-15	Calgary Stampede	Calgary
07-19-29	Klondike Days	Edmonton

Sector Target Dates

July

Sector 3.10, Working Group on Scales in the Retail Food Industry
Scale conversion starts in the first three areas: Peterborough Ont., Sherbrooke, Québec, Kamloops, B.C. (The conversion will be completed in Kamloops on 1979-07-31).

Sector 7.49, Luggage & Leather Goods
They convert to metric this month.

Sector 8,45, Paper & Allied Industries, Printing & Publishing
Paper mills will receive all raw materials in metric units by 1979-07-01.

August

Sector 3.10, Working Group on Scales in the Retail Food Industry
Completion of the conversion in the two other pilot areas, Sherbrooke and Peterborough, on 1979-08-31.

Racing (From page 2)

healthy change in the very nature of our game, and that in itself should be motivation enough. As harness racing goes through its good-business, bad-business cycles, the complaint most often heard when we're at a lower ebb is that all the races are the same, thus people are bored and are staying away.

So much for some of the philosophy. Now for some of the practicalities of metric racing.

In harness racing, the only thing we really need concern ourselves with, is distance. And we could either soft convert, or hard convert.

Soft conversion is easily done. We simply take the existing mile, leave it exactly as is, call it 1609 m and nothing changes, except the name. Very, very easy, you'll agree. Or we could hard convert — go to rounded hundreds of metres, such as 1 600 m, 1 700, 1 800, 1 200, or whatever.

And in my opinion, hard conversion, albeit a little more difficult, is by far the preferable way to go. Because, that's what will get us away from the mile — and get us into healthy, if somewhat controversial, change. To simply rename what we're doing now would accomplish nothing.

Oh, we'd have to adjust starting points: a 1 600 m race is about 30 feet short of a mile, or about 0.4 or 0.5 s (second). And breeding records would have to be adjusted, and you'd have to establish how sales catalogues would be printed, but that's not a big deal.

Because, try as I might, I can't find very much that is sacred about the mile anymore. It's dull, 10 times nightly at most tracks, the same old thing. Several tracks have experimented with odd distances: Connaught Park, a half-mile track, races once or twice each night at 3/4 mile, and Rideau Carleton, a 5/8 track, races once or twice a night at that distance and it doesn't affect the wagering one whit. And of course, the shorter distances tend to make cheap horses look good. There are all kinds of horses who struggle through a "2:10 mile", but who can go 3/4 in 1:34, and 5/8 at a two-minute clip.

And what about the two-minute mile? That magic mile, that standard of excellence, that amazing performance that packs race tracks and brings fans to their feet? Well, do fans jam your track in anticipation of a two-minute mile? And do they applaud like mad if they see one?

Not in Montreal they don't, where Governor Skipper and some of the best horses in the world drew only 11 000 people to the Blue Bonnet challenge last year. Not in Hamilton, where the same Governor Skipper drew only 3 500 to the Confederation Cup last year. And not in Toronto, where a cheap conditioned race went in 1:58.3 recently, and nobody in the crowd so much as applauded politely, and the track announcer scarcely took notice of the fact. So, what good is the mile, the magic mile? I submit it isn't any good anymore, as an attraction. It's time for a change!

And how we effect that change, and how quickly, is all a matter of where we want to position ourselves.

Are we aiming for the youth market? Then let's change now, the sooner, the better. Have you watched the Commonwealth Games from Edmonton? It's all in metric, and it's all youth-oriented.

Or, are we aiming for the mass market, the working class? Most of those people, when you think about it, are already working in metric. If they work in an automobile plant, any manufacturing industry, grocery stores, almost all, already work in metric.

How about the horsemen themselves? How do we effect the changeover while still keeping their best interests at heart? The most important single entity in racing, from the horseman's side, is the owner; and most owners just want winners, they aren't looking ahead to breeding. And thus times, and distances, are relatively unimportant to them. I don't think most owners would have any trouble adjusting.

Trainers? Can't foresee much of a problem for them — and assuming the majority of races would be at 1 600 m, we're only talking 0.4 to 0.6 s difference. What they would have to do is train their stock for the 1 700 m distance, or 1 800 m — but as already noted, a lot of them are now training for odd distances anyway. And, have you ever seen a horse race actually 1 mile, anyway? Unless he leaves from the rail, and never comes off the rail, he'll go something further than a mile, anyway. So, no sweat for trainers.

Breeders? Some of the big ones might object. I've seen somewhere one of the big breeders saying that conversion would cause chaos — and if it would, then one must wonder how this particular breeder ever got as big as he is, given the mobile starting gate, night racing, etc.

However, for people like this, conversion tables would exist and they could continue to convert all times to a mile rate. I think, however, we must be careful not to let the squeals of a few breeders throw us off the track, because by going metric we're really trying to please the public — those people who pay all our bills, incuding the breeders'.

In thoroughbred racing, fans seem to be able to adjust very rapidly to different distances and different surfaces. At Woodbine, there are "about" distances. And yet their fans seem to have no trouble betting on past performances that include "abt. 1 mile, 70 yards" Woodbine, and 1 1/8 on the grass at Belmont. And I don't think for a minute harness fans are not as clever as thoroughbred fans.

I don't think for a minute Canadians or Americans are any less smart than Australians, either, and Australia converted overnight with virtually no problems.

We must put new life into harness racing. We must get a new image for harness racing. We must not leave ourselves in the position of going metric by legislation.

Metric conversion is inevitable so let's look at, and embrace its good points. There is no point at all in worrying about its negatives.

One of my fondest wishes is to go into a bar and not hear this conversation: "That so-and-so driver stiffed my horse in the eighth race tonight."

What I'd much rather hear is "They just beat him at 1 600 m but he was coming at the end. I'll bet him first time he's in at 1 700 m."

Metric can do it for us.

Doors and frames available in metric

Following a national meeting on April 9, 1979, the Canadian Steel Door and Frame Manufacturers' Association is pleased to announce that hard metric-sized steel doors and door frames are now available from all members.

In addition, the Association has prepared a *Metric Guide* for *Steel Doors and Frames*, detailing recommended sizes and dimensions for metric modular construction; the Guide, available in 1979-07, should help eliminate any problems of interfacing steel doors and frames with other modular metric wall components.

Nfld information office helps organizations during conversion

The newest member of Newfoundland's Metric Conversion and Standards Division is David J. Walsh, Metric Conversion Officer. David, who has just recently returned from Ottawa, having undergone a period of metric training at Metric Commission Canada, joins Judith Kelsey, Metric Conversion and Standards Officer as staff member of Newfoundland's Metric Information Centre.

Photo Hélène Champagne

David Walsh

The prime purpose of this centre, as per a federal/provincial agreement, is to provide information to and reply to requests from individual enterprises and organizations directly involved in the economic process.

The large geographical area of Newfoundland and Labrador (greater than the combined area of the three other Atlantic Provinces) along with its relatively small population has resulted, in many cases, in vast distances separating Newfoundland communities. As a result, from time to time, a metric exhibit visits those population centres that do not have ready access to the information centre in St. John's.

"I have been quite busy", David says of his new position, "I spend a lot of time answering questions on subjects such as construction, tools conversion supporting programs, and responding to general metric information requests".

"When I meet people in social situations and they ascertain that I am with the provincial metric division, I usually get a deluge of work-related questions. I find that letting people know where I work is a great way to start a conversation. They always have lots of questions and comments".

If you would like more information on SI conversion in Newfoundland, feel free to contact either David or Judith at the centre which is located within the Department of Consumer Affairs and Environment, Elizabeth Towers, Elizabeth Avenue, St. John's, Newfoundland or telephone 737-3527.

Are you sure its safe to measure in metric?

Photo Hélène Champagne

This youngster didn't seem too sure as he was measured in centimetres this winter by MCC booth attendant Michel Chapdelaine at the shopping mall exhibit on body measurements in Shawinigan, P. Q.

If you would like your copy of this poster please write to Metric Commission Canada, Box 4000, Ottawa, K1S 5G8.