

doc
CA1
EA933
C17
ENG
1973

Sept/Oct

Canada Today

LIBRARY DEPT. OF EXTERNAL AFFAIRS
MINISTÈRE DES AFFAIRES ÉTRANGÈRES

Volume 1 No. 3
Sept/October 1973



JAN - 9 1974

LIBRARY E A / BIBLIOTHÈQUE A E
3 5036 01029854 8

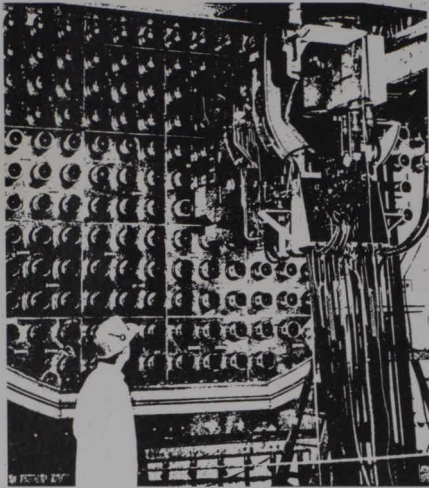
~~REFERENCE~~



60984 81800

Cover picture shows
The Pickering nuclear generating station
fuelling machine and reactor force.

Canada Today



CONTENTS

	Page
Energy: Canada achieves nuclear power success	2
Sales drive on for CANDU plant	5
More heavy water is on the way	6
Klondike Bard honoured	6
Assessment: New Commonwealth spirit is seen at Ottawa	7
Housing: Here's how Canada handles its housing	8
Canada in brief	10
Urban Profile: Vancouver is Canada's visual paradise	11
Canadians gather Russian secrets about fine wines	13
Economic Digest	14
Books: Mike Pearson tells his own happy story	16

Views expressed are not necessarily those of the Canadian Government. Unless specifically noted, articles are not copyrighted and may be reproduced.

Acknowledgement to Canada Today would be appreciated but is not essential.

'Canada Today'
Published by:
The Counsellor (Press),
Canadian High Commission,
Canada House,
Trafalgar Square,
London SW1Y 5BJ

Design: Dennis Fairey, F.R.S.A. N.D.D.
Production: Osborne BC Public Relations
Printed in England by:
C. Nicholls & Company Ltd

Energy

Canada achieves nuclear power success

During the last year or so, Canada has achieved a unique place among world leaders in the commercial generation of electricity from nuclear energy.

The Canadian Government agency responsible for nuclear research and development and the marketing of the programme's products, Atomic Energy of Canada Limited (AECL), says in a recent assessment of the Canadian nuclear power system:

"Canada has pioneered and brought to the stage of large-scale commercial application a nuclear power system that is without equal among proven, present-day types in making efficient and economical use of uranium fuel."

There is considerable evidence to substantiate this claim. Not the least of this evidence was the commercial sale last spring to Argentina of a Canadian-designed reactor against competing offers by two United States companies and one in West Germany. Canada is also hoping to win its second commercial export sale to Italy against tough international competition by the end of this year. It would also like to make a deal with Britain for joint exploitation of a co-operative nuclear reactor programme in future, but this proposal remains under consideration.

Perhaps the most convincing evidence is the Pickering nuclear power station in Ontario, now the largest in the world. Its four units have an installed capacity of 2,160,000 kilowatts. The second largest is the Dresden plant in the United States with an installed capacity of 1,910,000 kilowatts. The largest nuclear power plant currently operating in Britain is at Wylfa, on the Isle of Anglesey, with installed capacity of 1,001,000 kilowatts; four new ones under construction will have installed capacity of 1,320,000 kilowatts each.

Since entering full production, the Pickering station has operated for long periods at 95 to 99 per cent of installed capacity. The average for U.S. nuclear stations in recent years has been between 50 and 70 per cent.

Canada's connection with the atomic age may be dated from May 1930 when a rich deposit of uranium-bearing pitchblende was discovered on the isolated shores of Great Bear Lake, in the Northwest Territories. When the atomic age dawned a dozen years later this find gave Canada nearly all of the free world's then known resources of uranium ore - and ensured that Canada had a degree of access to the early decisions about nuclear policy by Britain and the United States enjoyed by no other countries.

The true birthday of the atomic age was 2 December, 1942, the day the Italian refugee Enrico Fermi achieved the first chain reaction in his crude reactor in a converted squash court in Chicago. By coincidence on that same day, a joint British-Canadian research team moved into quarters in a run-down mansion in Montreal to pursue a similar nuclear goal.

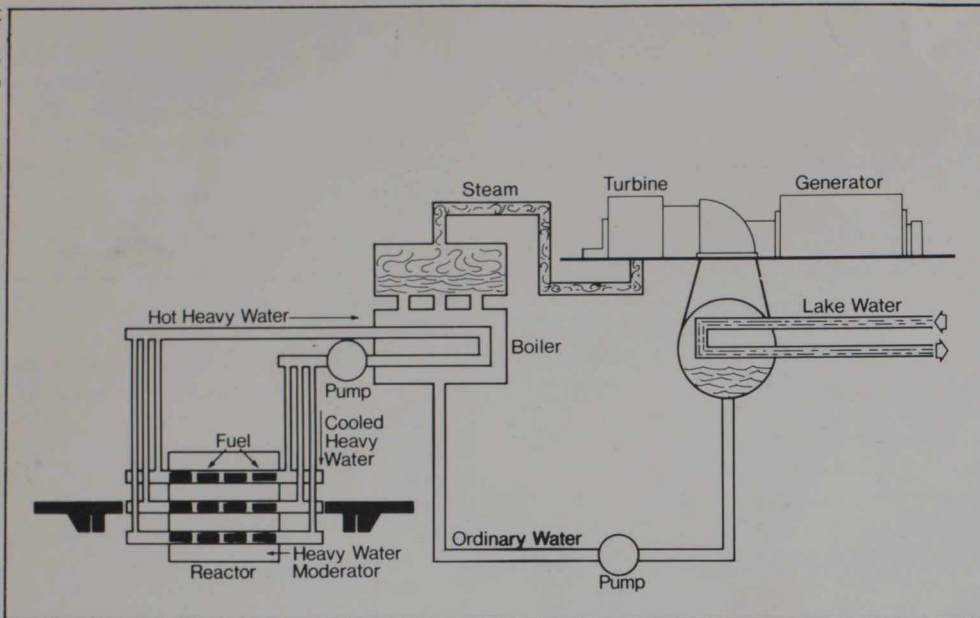
British team in Canada

Britain had decided to move its whole nuclear team to Canada, to be out of the way of the blitz and nearer the American team of scientists in Chicago and New York. In 1943 a three-nation committee was established to co-ordinate the deadly race to produce an atomic bomb. There were two known methods of designing a reactor to make plutonium, the artificial radioactive element which was the stuff of one of the first atomic bombs. The one that looked quicker and easier was undertaken by the United States, using graphite as the moderator. Canada was assigned the task of studying reactors using deuterium oxide - 'heavy water' - as the moderator.

The other element that could be used to make an atomic bomb was highly enriched uranium. This led the United States to develop a gaseous diffusion process for uranium enrichment. Canada went ahead with development of a reactor using natural uranium as fuel and heavy water as moderator and coolant. In 1953 Britain, feeling the need for new sources of electricity, started the Calder Hall design and in 1966 brought into operation the world's first full-scale nuclear power plant, based on the well-proven design using natural uranium fuel with graphite as moderator and gas as coolant.

A main factor in Canada's decision in the early 1950s to proceed with a natural uranium-heavy water system was its economic potential as an electricity generator compared with estimates by the U.S. Atomic Energy Commission of costs for enriched-uranium reactors. This indicated that the enriched-uranium systems could be built for less than the natural-uranium systems, but that the fuelling cost would be two or three times as much. The heavy-water system also avoided the huge cost of building a uranium enrichment plant. Canada thus decided to set out virtually alone among advanced industrialized nations to develop the natural-uranium heavy-water nuclear power reactor.

(Atomic Energy of Canada Ltd.)



This simplified diagram shows how electricity is generated by the CANDU natural uranium reactor. The natural uranium fuel in the reactor heats the heavy water, which in turn heats the ordinary water. The steam from the heated ordinary water drives the turbine, which in turn drives the generator producing the electric power.

was established in the nuclear laboratories at Chalk River, Ontario, headed by H.A. Smith of Ontario Hydro and composed of engineers drawn not only from AECL, but from five Canadian electric utilities. Construction began of a station called Nuclear Power Demonstration - NPD - on the Ottawa River a few miles away. The original design called for a pressure vessel to contain the high-pressure coolant. Later, to simplify scaling up to larger plants, the design was changed to the novel pressure-tube concept in which each string of fuel bundles is contained in its own slim tube, rather than using a single huge thick-walled vessel to contain the entire reactor core. The pressure tube was to become the unique basis for all future designs of Canadian reactors.

Pickering success story

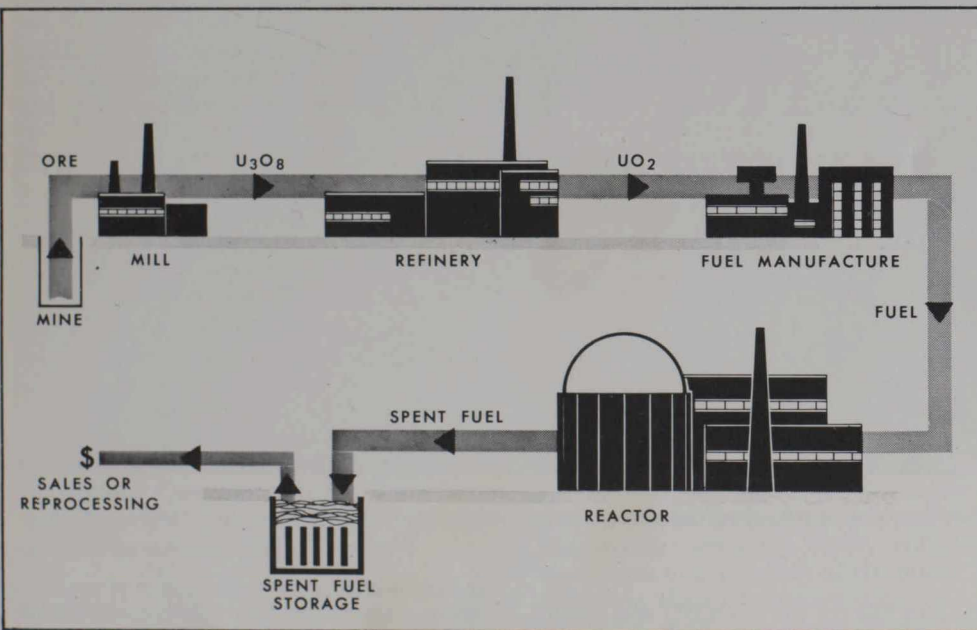
NPD had the usual teething difficulties of any new design, but they were gradually overcome and it played the role intended, as a test-bed, to demonstrate the feasibility of the Canadian nuclear power system. It continues to be used for valuable training and testing purposes and remains one of the world's major developmental reactors.

Drawing on NPD experience, a full-scale prototype plant was built, starting in 1962, at Douglas Point, Ontario, on the shore of Lake Huron. With a capacity 10 times that of NPD, Douglas Point was built to test the design and components of the Canadian system on a scale in which they would be used commercially. As intended, the experience gained in the design, construction and operation of these two pioneer plants proved to be of great benefit to the Pickering project, and others to follow.

The real Canadian success story surrounds the performance of the Canadian nuclear station at Pickering, on Lake Ontario just east of Toronto. Built at a cost of about \$750 million, this is among the most advanced and sophisticated engineering projects ever undertaken in Canada. Since the first of its four reactors went into operation in 1971, the Pickering station has established what is described by Canadian authorities as an almost unbeatable record.

Since December 1972, Pickering has been producing more power than any other nuclear station in the world and doing it with exceptional efficiency. In one month this year the station fed more than 1,000,000,000 kilowatt hours into the Ontario power grid.

(Atomic Energy of Canada Ltd.)



This diagram shows the process of producing electric power from natural uranium through all its stages, from the mine onwards. The plutonium in the spent fuel can be used further for other purposes, including as fuel for breeder nuclear reactors should they become economical in the next few years.

In the meantime, military necessity and the vast resources of the U.S. developed a light-water (that is, ordinary water) enriched-uranium submarine reactor to a high state of technological development at an early stage. A land-based version for electrical generation followed quickly, and today holds a dominant position in terms of generating capacity in operation or under construction around the world.

But Canada remained committed to the natural uranium-heavy water reactor, even though at times it seemed of greater interest to research scientists than to electricity boards.

The Canadian reactor system is called CANDU - which stands for CANadian-Deuterium-Uranium. As natural uranium offered the lowest fuelling cost and heavy

water is the most efficient moderator, these were retained as the basis for power reactor development.

Canada began early to study nuclear energy as a source of electricity. One of the earliest proposals came in August 1951 from Dr. W. B. Lewis of AECL. The Ontario Hydro Electric Power Commission became the major utility participating in the programme, a natural development because Ontario, an energy-rich province, was nearing the end of its economic water-power resources in the 1950s and faced the prospect of importing large supplies of coal from the United States. It leaped at the chance to participate in a programme to develop Canadian uranium resources.

Early in 1954 a nuclear power branch

A vice-president of Atomic Energy of Canada, Dr. A. J. Mooradian, said the commissioning of the reactors at Pickering had established Canada firmly in the world of commercial nuclear power. "It is a clear demonstration that Canada has the capacity to stay at the forefront of a technology and the industrial competence to profit by it."

At the annual conference of the Canadian Nuclear Association in Toronto last summer, Mr. George Gathercole, chairman of Ontario Hydro, said that as far as his utility was concerned, the CANDU system had matured to the point "where we are now fully prepared to depend upon it almost exclusively, if need be, to meet out future energy requirements." He observed that it took 24 years and the construction and acquisition of 39 generating stations for Ontario Hydro's generating capacity to reach the equivalent of just one of the nuclear units that were being installed now at Bruce, where one of the new heavy-water production plants is also being build in Ontario.

Economically competitive

A recent AECL publication says Canada has "brought to maturity a nuclear power system that is economically competitive with other power-generating systems, nuclear and conventional, in many parts of the world."

"It is an established fact that the raw uranium requirements and actual fuelling costs of a nuclear power reactor of Canadian design are very much less than those of any other commercial reactor of equivalent capacity. The Canadian reactor thus is easily the best in the world at conserving a prime energy resource, uranium. It is also a reactor whose fuelling costs are least affected by any increase in uranium prices.

"A further feature of the Canadian system is that it lends itself more to domestic manufacture of components and equipment than do most other current systems. For a country aiming at independence in the design and construction of nuclear power stations, the Canadian way is the shortest. It also imposes the least amount of strain on foreign exchange requirements.

"More than anything else what sets the CANDU system apart from its contemporaries is its economical use of neutrons, the fundamental particles that sustain the fission process in a reactor. Neutron economy is achieved through highly-disciplined design, the selective employment in the reactor core of materials of low neutron absorption and the use of heavy water as the moderator.

"The cost of building nuclear power plants now varies little from type to type. The CANDU reactor can be built for the same cost and in the same time schedule as other systems. For operation, however, it must be charged with heavy water and fuel. Alternative systems need only fuel, but fuel enriched in uranium-235. The cost of the enriched fuel charge is less than the combined cost of heavy water and natural



Marshland near the Pickering Generating Station—a haven for wild ducks.

uranium fuel for the CANDU and has led to the contention that CANDU reactors have a higher capital cost than enriched systems. Within a few years after start-up, however, the saving in the cost of fuelling a CANDU more than compensates for any difference in capital cost, and over the lifetime of the station CANDU offers generating costs that are lower than those of other systems."

Nuclear power today occupies a place of increasing importance among the sources on which Canadians rely for supplies of energy.

In Ontario, where most of the present nuclear generating capacity in Canada is concentrated, some 17 per cent of generating capacity is nuclear. This will increase to 28 per cent by 1980, to 59 per cent by 1990 and to 62 per cent by the year 2000. The four units of the Bruce plant are scheduled to come into operation successively between 1975 and 1978, with an ultimate production capacity of 3,000,000 kilowatts. Plans were announced in June to double the capacity of the Pickering

plant, Canada's first fully-commercial, utility-owned nuclear plant. The first new unit is scheduled to begin operation in 1980 and the fourth in 1982. A duplicate station is planned at Bruce and another near Bowmanville, Ontario, with the first of its four units to go into service in 1982.

One nuclear power station has been built outside Ontario, a 250,000-kilowatt prototype plant at Gentilly, Quebec, owned by Atomic Energy of Canada and operated by the Hydro-Quebec Power Commission. Gentilly, on the St. Lawrence River about halfway between Montreal and Quebec City, is the world's first nuclear power station to combine natural uranium fuel, heavy water moderator and ordinary water as the coolant. It performed well for 18 months after going on stream in 1971, but was shut down temporarily because of a shortage of heavy water. It is due to resume operation by the end of this year or early in 1974.

Canadian reactors make especially effective use of an important by-product. When fertile U-28 atoms capture neutrons, small

quantities of plutonium are formed inside fuel bundles. In the CANDU design, much of this plutonium is consumed while still in the reactor, thus adding significantly to the energy produced by a single fuel bundle. What remains after the fuel is removed can be stored, sold for reprocessing or recycled through Canadian reactors.

Atomic Energy of Canada has sold spent fuel containing plutonium to France for use in experimental reactors. This by-product, worth up to \$30 a gram, will be a bonus for Ontario Hydro which by 1981 could have a "plutonium mine" of 8,000 kilograms.

In addition to producing electricity economically, a station such as Pickering will provide radioactive cobalt for use in agriculture, medicine and industry, as for example, in Canadian-made cancer therapy machines sold around the world.

A federal government energy analysis, tabled in the House of Commons in Ot-

tawa last summer, forecasts that by the century's end, nuclear power will replace hydro-electric power as Canada's prime source of electrical energy. Then, in what some visionaries describe as the "electrical society" of the 21st century, nuclear energy will supply up to 90 per cent of energy needs compared with the present 25 per cent.

One of the most novel features of the CANDU system may not be demonstrated for several decades to come. In most other countries, it is envisaged that in the 1980s or 1990s the "fast breeder" reactor will take pre-eminence because of its much greater efficiency in using the energy locked in uranium. For every pound of fuel consumed, the fast breeder produces an additional pound or more of new fuel – an idea so unusual as to seem almost magical! Unfortunately a great many difficult technological problems remain to be solved before a full-scale commercial station can

be designed; British experts, who are among the world leaders in this new field, are now heavily engaged in seeking solutions. Canadian studies indicate the possibility that these difficult problems may be avoidable by an ingenious adaptation of the CANDU design which would operate with a combination of thorium and uranium, producing only a little less than a pound of new fuel for every pound consumed – almost as magical as the fast breeder. Many of the latter's difficult technological problems – such as the use of molten sodium metal as coolant – would be avoided, and because thorium is so abundant in the earth's crust, the world's electric energy needs would be satisfied for many years, or even centuries, to come. ♦

Energy

Sales drive on for CANDU plant

Canada is conducting an international sales drive to follow up the success of its CANDU nuclear reactor system.

A sales seminar has been held in Iran and others are planned in Israel and Turkey to explain Canadian nuclear know-how and highlight the performance of the generating station at Pickering.

Four technical experts are demonstrating what Canada has to offer. Although the sales pitch is likely to be couched in superlatives, one problem for the salesmen is to convince international opinion that Canada is producing economically competitive commercial power from reactors that use natural rather than enriched uranium.

"We're playing in the nuclear big league and it's hard to persuade people that a country with a small population like Canada may have found the best answers," said one Canadian nuclear expert.

The international seminars follow the sales breakthrough Canada achieved last spring when Argentina agreed to buy a 600-megawatt CANDU reactor worth C\$220 million (about £90 million). This was the first commercial export sale for Atomic Energy of Canada Ltd., the crown company which runs the Canadian programme.

Argentina was said to have regarded CANDU's use of natural uranium as a big selling point. Of its four possible choices, three involved reactors using

enriched uranium, for which the United States is almost the only source. Argentina has its own uranium reserves. (Canada for its part has one-quarter of the world's known reserves).

The sale to Argentina was made in conjunction with Italmimpianti, an Italian engineering company which will build the conventional section of the plant. The Canadian share of the contract – to build the plant itself – is worth about C\$100 million.

Italmimpianti is also involved with AECL in a bid to sell a 975,000-kilowatt nuclear plant in Italy. Two rival groups are offering enriched uranium reactors on the U.S. pattern. A decision is expected by the end of this year.

Canadian nuclear technology is also involved in Pakistan, India, and Taiwan.

Canada's first offshore nuclear power project was RAPP (Rajasthan Atomic Power Project) in northwest India, about 325 miles from New Delhi. Canada provided loans to cover non-Indian content in the plant. The association between the two countries goes back to the 1950s when Canada built a duplicate of its NRX research reactor for India; the Canada-India Reactor (CIRUS) began operation in 1961. The first reactor in RAPP started operation in 1972. India is also building a CANDU station near Madras. The concept is Canadian, the design and most of the content Indian.

In Pakistan, a Canadian private company, in agreement with the Pakistan Atomic Energy Commission, built KANUPP (Karachi Nuclear Power Project) at Paradise Point just outside Karachi, as part of Canada's international development assistance programme. It is Pakistan's first nuclear power station.

In Taiwan, an up-to-date version of Canada's first large research reactor, NRX, has been built for the Taiwan Atomic Energy Commission, which will use it for fundamental and applied research. Canada is supplying the 40-megawatt high-flux reactor.

Although Britain has concentrated on graphite-moderated reactors, she is no stranger to the heavy-water system, having operated the SGHWR (Steam-Generating Heavy Water Reactor) at Winfrith for several years. Before building it, the U.K. Atomic Energy Authority purchased certain technology and know-how from AECL to aid in its design and construction. The SGHWR is one of the designs in the running for Britain's next generation of nuclear power stations, and is similar to the Gentilly station in Canada.

Canadian authorities have made an open-ended offer of co-operative development to Britain should the British government decide to choose heavy water reactors in future, and there has been talk of a joint effort to develop export markets. But further talks await Britain's decision. ♦

Energy

More heavy water is on the way

Canadian officials are confidently anticipating an increase within the next year or so in the available supplies of heavy water, one of the critical and distinctive elements in the Canadian nuclear reactor system.

Heavy water, technically known as deuterium oxide, occurs naturally as one part in 7,000 in ordinary water. It is separated from ordinary water in a complex manner and costs about C\$20 a pound more – currently as much as C\$39 from foreign sources.

Canadian reactors use natural uranium with heavy water as the indispensable moderator. Ordinary water (sometimes incorrectly called “light water”) would absorb too many neutrons to sustain a chain reaction. Heavy water looks and tastes like ordinary water but contains heavy hydrogen or deuterium atoms which are twice as heavy as ordinary hydrogen atoms. Neutron speed is reduced by collisions with deuterium atoms, like a ball ricocheting against others on a snooker table.

Heavy water is the most efficient moderating substance available. It slows down the speed of neutrons necessary for the fission process without capturing them. It is the use of heavy water, plus correct design and materials, that enables the efficient use of natural uranium fuel. Graphite works too, as a moderator of natural uranium, but not so efficiently as heavy water. And the

Canadian-style reactor can, of course, use enriched uranium as fuel as well.

In the early years of the Canadian system, after the decision to use heavy water – despite some criticism at the time – production difficulties arose in the first plant, designed and constructed by an outside company. Industry leaders had hoped and expected to see a heavy water industry established in Canada by 1966, in time to meet the requirements of the station at Pickering.

But success proved elusive at first. “Had all gone as planned,” President J. L. Gray of Atomic Energy of Canada Ltd., said in a speech in March 1972, “by now there would be two 400-ton-a-year plants operating at full capacity in Canada; instead there is only one . . .”

The result, he added, was that “we have had to scrounge all over the world for heavy water and have had to pay a lot more than we would have for Canadian production. And we still have not been able to get all we need. Heavy water is in short supply and will be for about another two years, until the output of Canadian plants begins to match the demand.”

The improved situation Mr. Gray forecast in 1972 is being realised today and there are now three heavy water plants operating or about to operate in Canada. The one at Port Hawkesbury in Nova Scotia has a production capacity of 400

tons a year, The Bruce Heavy Water Plant in Ontario 800 tons a year, and the rehabilitated first plant at Glace Bay, Nova Scotia, 200 tons a year.

Dr. Lew Kowarski of France, one of those who participated in the first demonstration of nuclear chain reaction, along with Frederic Joliot-Curie and Hans Halban, has described the Canadian system of generating electricity through natural uranium moderated by heavy water as the world’s simplest method, “providing you can get your heavy water production problem solved.”

“The fast breeder will always be more complicated and the thermonuclear reactor will be more complicated still,” said Dr. Kowarski, in a speech at Chalk River, Ontario. He forecast that heavy water, now an expensive rarity, would show its inherent cheapness when produced in large quantities. He also said that except for thermal effects, the “Canadian way still seems the safest for the environment.”

It followed, he said, that the Canadian effort was extremely important for the future of nuclear energy, and should be continued, but not in Canada alone. “It would be more fruitful if some other big industrial country joined; at present, unfortunately, hardly any signs of the prospect are in sight.”

Klondike Bard honoured

It was Service who wrote the haunting lines,

“There are strange things done in the midnight sun

By the men who toil for gold.”

He immortalized the heroes and villains of the Gold Rush days in ballads like *Dangerous Dan McGrew* and *The Cremation of Sam McGee*, legends of heroic proportions which were in fact largely invented by the old sourdough storytellers who remained behind after the end of that extraordinary era.

Service was not himself involved in the Gold Rush. An English-born Scot who arrived in North America as a young man, he led an adventurous life wandering up and down the west coast of Mexico, the United States and Canada, working at odd jobs like potato digging, gardening and dishwashing. He arrived in the Yukon after the Gold Rush was over and his imagination was fired by the legends and imagery of the old story-tellers who poured their tales into his ready ear.

He was working as a bank clerk when some of his best writing was done, but in 1909 he decided to give up clerking and settled down to “write seriously”. It was then that he rented the old miner’s cabin, where he wrote a novel, *The Trail of '98*, and his third volume of verse, *Rhymes of a Rolling Stone*. Later, the same cabin became a place of annual pilgrimage and reunion for old sourdough Klondikers. Thus its preservation serves a dual purpose: to commemorate both the poet and the way of life he immortalized.

It is now open to the public, furnished with the “monastic simplicity” which was the poet’s lifestyle: a bed, a desk made from crates, a stove, a small table and chairs, wallpaper to write on, a bookcase and a roller typewriter circa 1896. The aim is to give the impression that just as one enters the front door, Robert Service has ducked out the back.

The cabin forms part of Klondike Gold Rush International Park, simultaneously announced by Canada and the United States in 1969.

A miner’s cabin in the Yukon, thrown together out of crude materials by men with gold on their minds, has now been turned into a permanent memorial to Robert Service, the poet of the Klondike Gold Rush.

Assessment

New Commonwealth spirit is seen at Ottawa

by Derek Ingram*

If a graph were to be drawn of the Commonwealth's political fortunes since 1961 – the year of South African withdrawal – it would move down to its lowest point at 1966, rise markedly at 1969, drop back several points at 1971 and now, after the Heads of Government meeting in Ottawa August 2–10, stand at its highest for that whole period.

It was in the mid-Sixties that the Commonwealth came near to collapse following Ian Smith's Unilateral Declaration of Independence in Rhodesia. If any member country had withdrawn from the association at that time – and at one point in 1966 Zambia very nearly did so – a domino action would in all likelihood have followed. The atmosphere at the two Heads of Government conferences in 1966 – in Lagos and then in London – was bitter and for the next three years there was no summit meeting. It was a period of Commonwealth sickness and convalescence.

The meeting that followed in London in 1969 was largely low key and successful, with signs already of a better understanding and atmosphere developing.

The wind was set fair for the next conference in Singapore in 1971 until the South African arms sales dispute blew up a few months before. The issue bedevilled the entire meeting, though good also came out of it all and perhaps it is Singapore that will eventually be seen as the actual turning point meeting. As President Nyerere is reported to have said in Ottawa: "We all learned at Singapore".

For turning point there has almost certainly been, with the Commonwealth set on a new, constructive and rewarding path along which, with luck, it can now proceed.

After Ottawa the question is no longer asked by the doubters whether there will be another Commonwealth summit conference (or indeed a Commonwealth); the only questions now are where and when it will take place and whether the procedures that were developed so successfully at Ottawa can and should be further refined.

The ingredients for success last August were many, and the thorough planning which went on for most of the two and a half years between Singapore and Ottawa and the consequent increased informality

of the actual sessions, though of vital importance, was only one of them.

The conference could not have succeeded without the willingness of the participants to make a success of it. No amount of preparation could have avoided trouble if the participants had arrived, as in earlier years, in a mood for confrontation.

Luck plays its role too. The conference sat at a period of quiet in world affairs; if, for example, the shooting of Africans at Western Deep Levels gold mine in South Africa had happened during the conference instead of a few weeks later tempers may have risen somewhat.

The actual moment of Commonwealth truth probably occurred during the last day or two of the Singapore meeting. There was then a sudden realisation by those present that it was all going wrong. In the wearying sessions over South African arms sales, culminating in one meeting that went long into the night, the Commonwealth had almost torn itself apart. Yet no one in his heart wanted to tear it apart. The presidents and prime ministers looked over the brink and did not like what they saw, but looking the other way they also saw that because they were now over 30 in number their conferences were developing tendencies dangerously like those that dog the United Nations.

In those dying hours of the Singapore talks it was seen that drastic surgery was required and none was more certain about this need than the Canadian Prime Minister, Mr. Pierre Trudeau. Before he flew off he offered Ottawa as the next meeting place. It was an act of faith.

The conference asked the Commonwealth Secretariat to work out new procedures, and Mr. Trudeau, as the next host, set about preparations for the Ottawa meeting of a kind that the Commonwealth had never embarked on before. They included the despatch of his personal assistant, Mr. Ivan Head, to every one of the 32 countries of the Commonwealth where he discussed with all but two of the presidents and prime ministers detailed plans for the meeting.

Mr. Trudeau, who has himself confessed that he became a convert to the concept of the Commonwealth after he became Prime Minister, had seen at the 1969 conference in London – the first he attended – what was going wrong. He believed the meeting should much more take the form of a series of informal debates with interventions and questioning and without set speeches – certainly no long ones.

In 1969 Mr. Trudeau sat at Marlborough House and listened, making a point or two from time to time. At Singapore he played a vital role, but again he made no long speech, preferring to intervene every now and again.

Many of the other leaders, however, arrived in Singapore armed with texts which they proceeded to read out to the conference and then to issue to the press. Their words were directed as much at their public back home as at their colleagues round the conference table. Afterwards they would hold often emotional press conferences and give TV interviews. What was supposed to be a secret conference became almost a public one.

Each leader had four officials sitting behind him at the table, thus filling the room with something like 200 people. The informality of the occasion was lost and with it much of its value.

At Ottawa all this was changed. Only two officials could sit in and the room where all but two of the sessions took place was small and intimate in style.

Not all the texts disappeared and not everyone spoke briefly, but far fewer leaders brought prepared speeches and those who spoke at some length – President Nyerere of Tanzania on Rhodesia, for instance – were so good that their colleagues wanted to listen to every word. There was more of the atmosphere of a lively parliamentary debate, with points being picked up and queried as the discussion proceeded. Mr. Edward Heath, the British Prime Minister, a severe critic of the Singapore procedures, was often to be seen enjoying himself at Ottawa, scoring points here and there in a parliamentary manner.

Only once in the ten days at Ottawa did there return for a brief moment any hint of the old bitternesses and that, predictably, was on Rhodesia. But by now the overall atmosphere was so good that within a few minutes tempers were damped down, with Mr. Heath and Dr. Nyerere taking the lead in doing so.

If there was criticism this time about the mode of procedure it was to the effect that so much care had been taken by Mr. Trudeau and others to ensure a smooth conference that there could be a danger of inducing in the proceedings a state of such calm and equanimity that the whole exercise would be rendered meaningless.

This was not the case at Ottawa, where a greater variety of subjects was tackled than perhaps at any Commonwealth conference for more than a decade. It had been a favourite criticism of previous conferences that they were always domin-

*Derek Ingram is Managing Editor of Gemini News Service in London. He was in Ottawa to cover the Commonwealth Heads of Government Conference last October 2–10.

ated by one subject, and that usually Rhodesia or South Africa.

At Ottawa the discussions ranged over multinational companies, terms of trade, British entry to the EEC and its consequences for the developing countries, nuclear testing, Rhodesia, comparative techniques of government, and a dozen more topics, and the fact that no one subject emerged as more important than the others is proof of the change that had taken place.

But the new procedures would have been of little use without the changes in view and attitude to topics of vital importance that have been taking place within the Commonwealth in the last few years – and markedly since Singapore.

The Sixties was the decade of the rush to independence, and in the wake of this came a natural headiness among the new countries. In the Seventies this is wearing off. Also, in Australia and New Zealand new governments have moved in. They hold views that are much more acceptable to the newer members of the Commonwealth than those of their predecessors and are more in tune with those held by Canada.

Then again, since Singapore the British Government has been slowly but perceptibly changing its views on black Africa vis-a-vis white Southern Africa, and such matters as the rejection of a Rhodesian settlement by the Pearce Commission have brought Britain and black Africa a little closer. British entry into the EEC is now a fact, and Commonwealth countries have reconciled themselves to British membership and the possible consequences for themselves. Finally, Britain has now taken its place alongside other Commonwealth members as a medium power; it is no longer seen as a dominating force in a Commonwealth that is composed entirely of medium and small powers.

All these are reasons why the time was propitious for a better Commonwealth atmosphere. The leaders came to Ottawa determined to try to make a go of it, but it would be only fair to say that some were doubtful whether the procedures and the preparations that had been worked out so carefully on paper would work out in practice. There is no doubt that all went away agreeing that they had indeed worked out and that Mr. Trudeau, as chairman, had displayed high skill in executing the procedures he had helped to father.

General Gowon of Nigeria coined the phrase "The Spirit of Ottawa" and it caught on. Already it is being taken to mean the opening of a new chapter of Commonwealth history.

It is much too early to judge whether Ottawa witnessed a rebirth of the Commonwealth, but this could well prove to be the case.

What, happily, seems to be happening is that the type of understanding and co-operation that has been maturing increasingly in the Commonwealth at lower levels in such non-political fields as technical co-operation, education, professional matters and so forth, has now been translated upwards to the top political levels and this can only bode well for the future. ♦

Housing

Here's how Canada handles its housing

by Jenny Pearson*



A new residential area in Calgary, Alberta.

The Schultz cartoon book *Security is a thumb and blanket* has a drawing of Snoopy embracing his kennel, eyes closed in deep contentment, and across the page is the legend "Security is owning your own home."

If that is the case, and not many would dispute it, then it would seem that Canada is on the way to becoming a country where Snoopy and Charlie Brown and a host of others can begin to feel secure. For the new National Housing Act, passed by the Canadian Parliament last June, has brought into action a massive programme to help and encourage home ownership.

Here is a field in which it will be interesting and instructive to watch as the new country pulls away from the old in its manner of dealing with the vital issue of housing. While in England at this time many middle class and professional people have given up the struggle to own their own homes, even to the extent of moving into rent-assisted council houses, the Canadian government is going out of its way to subsidize home ownership in the lower income groups – both for people who want to move into houses of their own for the first time and for those who are struggling to maintain old homes.

When the recent rise in the British mortgage rate put so many in despair (One couple summed up the position on television, "It isn't a question of *how* we find more money: we simply haven't got it!") there was talk of a need for a government controlled mortgage system, which might then be subsidized to help those in need –

**Jenny Pearson is a former news writer for The Times who now works as a freelance journalist and writer of books. This is her personal interpretation of Canada's housing policy.*

people who under present conditions in Britain may be forced out of their homes by their inability to meet the higher mortgage rate.

Canada's Central Mortgage and Housing Corporation is just such a system, established by the federal government and working with federal funds. Under the new National Housing Act, the corporation is empowered to subsidize and help the very people who in Britain are feeling the pinch of the raised mortgage rate.

First, it helps lower income families with two or more children, adjusting the rates of repayment in accordance with the family's income from its market rate of 9½ per cent down to its lowest lending rate of 8 per cent. In addition, the corporation may make an annual contribution of up to C\$300 (about £130) to help the family meet its monthly payments of principal, interest and municipal taxes. Income levels at which assistance is given differ according to the locality, since costs of housing vary considerably from one area to another, but it is devised to help families with annual incomes ranging from 6,000 to 11,000 dollars (roughly £2,500 to £4,500).

The idea of this assisted home-ownership programme is to encourage lower income families to move into homes which will eventually belong to them several years earlier than they could otherwise afford. They can borrow up to 95 per cent of the cost of an approved house directly from the corporation, and the down payment can be in the form of cash, land, labour, provincial grant, or any combination of the four. Subsidies help them with their mortgage repayments up to the point when their income is sufficiently high to pay the whole shot.

The social philosophy behind the National Housing Act, of which these develop-

ments are the direct result, was summed up by Mr. Ron Basford, Minister of State for Urban Affairs, when it came before Parliament in March of this year. He said, 'The measures presented in this bill are designed, first of all, to give Canadians the kind of help that they have a right to expect in providing themselves and their families with adequate shelter.

'More particularly, they are directed first at those people whose need is most urgent - the old, the poor and those people who for one reason or another do not have access to the resources which this country can provide.'

Old people and others who are at an economic disadvantage are helped at one remove through loans, at the corporations' lowest rate of 8 per cent, to non-profit housing organizations concerned with building and buying homes for them to rent. The CMHC have also undertaken to give 10 per cent of the cost of these housing projects, thus reducing the repayable loan so that the tenants can feel a direct benefit in the form of lower rents.

Repairs encouraged

There is another programme to encourage people to improve and repair standard houses. Home owners earning C\$11,000 and less are eligible for loans and grants to this end; so are non-profit organizations and landlords who agree to rent controls. Home-owners may be lent up to C\$5,000 (about £2,000) at 8 per cent interest rate, with forgiveness of repayment up to C\$2,500 (about £1,000). In considering applications, priority is given to the repair of housing structure and the upgrading of plumbing, electrical and heating systems. It is a condition that the repairs and improvements 'should ensure a further useful life of the property of about 15 years.'

Social considerations underlying this plan were described by the Minister in Parliament before the housing bill became law. He said, 'We are all aware of the unnecessary disruption and suffering that results when families are uprooted and forced to leave older homes in which they have lived for years, or perhaps generations, because these homes have deteriorated below the minimum standards of health and safety.

'The moving of families and the destruction of older housing represents not only an emotional loss to the individuals involved but also an economic loss to society through the reduction of existing housing stock. I believe that considerable leverage can be gained, not to mention the avoidance of unnecessary dislocation, by allocating money to the repair of deteriorating houses and the upgrading of the plumbing, electrical and heating systems.'

Nor does the new deal for housing stop at the front door - or garden gate, as the case may be. The Minister also expressed concern over the larger aspect of the housing question: the problem of changing

and deteriorating neighbourhoods, which can spoil even the most well-cared-for home.

'In considering people's need for shelter . . . we cannot concern ourselves simply with a roof and four walls. Man is a social animal and we must look beyond his house to the community of which it is a part. The community, as well as the house, must be safe and healthy and must allow and encourage man and his family to achieve the fullest possible growth and development . . .'

The CMHC, implementing this policy, has made available a broad range of contributions and loans for municipalities to improve the physical environment and develop better social and recreational amenities in deteriorating neighbourhoods. They have undertaken to contribute up to 50 per cent of the costs of selecting neighbourhoods for rehabilitation, acquiring land for additional building, clearing unusable housing, relocating families and improving social and recreational services.

Other programmes simultaneously announced by the corporation include Cooperative Housing Assistance, Land Assembly Assistance (which is extended to supply building land in co-operation with the provinces and municipalities), a New Communities programme (to help the development of new communities in areas of planned urban growth), Housing for Indians on reserves (making all Indians and native peoples eligible for the benefits of the National Housing Act) and a Purchaser Protection Plan, which allows the CMHC to supply funds for the completion of a house if the builder declares bankruptcy before the work is completed but after the house is sold under the provisions of the NHA.

Urban sprawl worries

At first glimpse it looks like a happy bonanza for all: Papa Noel has walked through the housing ministry. Certainly a lot of individuals will feel the benefit. But another, more far-reaching aspect of the new deal must be observed. Behind the white whiskers of Papa Noel can be described, benign but not uncalculating, the all-seeing eye of Big Brother. If a central corporation has the power to give, it also has the power to decide (in conjunction, we are assured, with local government) the where, when and how much of its giving. The background thinking which underlies the National Housing Act goes far beyond the humanitarian sentiments expressed by the Minister. It looks beyond the needs of individuals and communities and neighbourhoods to an environmental problem so vast that in its shadow individuals look like ants: the national problem of uncontrolled urban sprawl, which Canada suffers from in common with so much of the world today.

Canada is no longer a land of people spread out and breathing freely in wide open spaces: it is rapidly heading towards

being 90 per cent urbanized, or more. The Government, worried at the problems that arise out of this trend, have not been slow to see that the existing centralization of housing funds gives them a lever with which they are now attempting to influence the manner in which urbanization proceeds.

This was also made clear by the Minister of Urban Affairs as long ago as last January. He warned Parliament of a situation in which unconstrained urbanization, and so far really unmanaged urbanization, was being concentrated in a relative handful of larger cities and metropolitan areas and could, conceivably, lead to 'congested chaos in some areas and isolated rustic poverty in others.'

The Minister said 'The British, who have been attempting to cope with heavy urbanizing trends for a long time, know this. I quote the Chairman of the Greater London Council:

"Cities are indeed national assets, but they are not permanent assets. Like all assets, they need to be preserved and developed, and it is time that central governments recognized more clearly that investment in the future of their cities is as vital to national prosperity as it is to the well being of the cities themselves."

'The federal government appreciates that national investments are required for the future of urban Canada and for the future of the nation. *We are talking here of investments of planning and co-operation and setting of priorities, as well as investments of money. We have made major moves in these directions.*

He went on to define the corporation's new role as an instrument of government. Since World War II, he said, its function had been to encourage and facilitate the supply of housing - with the result that Canada was now in a better position over homes for its citizens than most other countries. It was now moving on to new ground. It would no longer be simply a banking institution for the building industry. It had moved from concentrating on supporting the building of middle class housing and having to treat housing as an economic commodity. 'The corporation, under this government, is the instrument of federal social policy in the field of housing and community planning.'

It remains to be seen how that plan will work out in practice. Certainly there will be some opposition from the provinces, which do not all take kindly to the idea of Ottawa's intervention in housing. The national newspaper *Globe and Mail* made this point in a leader immediately after the announcement of the Central Housing and Mortgage Corporation's ten-point plan.

The leader concluded, 'On paper it all sounds splendid. Whether it can be translated from paper to housing will depend, chiefly, on how much of it is strangled by federal, provincial, municipal and community red tape. Ottawa may be too far away to co-ordinate such a massive programme: the provinces may be right.

'It is going to be fascinating to watch and see.'

canada in brief

Compiled and written by Jenny Pearson

New National Park

With the opening of Canada's latest national park, Gros Morne, in the province of Newfoundland, there is now a necklace of parks with over 150 miles of shorelines round the Gulf of St. Lawrence.

Plans for the new park, in one of the wildest and most beautiful parts of Canada, aim at preserving its natural beauty while making it more accessible — both to visitors and to the sparse local population. They include improvement of roads, development of camping grounds, nature trails and ski touring trails, and a large reception and interpretation centre for visitors. A longer term goal is the development of a lift system to the plateau of the Long Range Mountains. An area will be opened up for Alpine skiing. Between 10 and 12 million dollars will be spent over the next five years.

At the same time, the people already living along the coastline — some 120 families, many of them third and fourth generation, who earn their living from the sea and soil — have been given assurances that their interests will be safeguarded and they will be left in peaceful occupation of their homes for as long as they wish. Tourism will also give them a chance of new occupations. The fish landing sites are expected to become centres for boating as well as lobster and fish sales.

The new park covers an area of 750 square miles. With it, Canada can now boast the largest system of national parks of any country in the world. ♦

Should doctors have licences reviewed?

Regular efficiency testing of doctors in medical practice is proposed in a report recently released in draft form by the Science Council of Canada.

The report, certain to arouse some deep controversy within the medical profession, is the outcome of a background study by a surgeon and former principal of McGill University in Montreal, Dr. Rocke Robertson.

Why, Dr. Robertson asks, should not a

doctor's capacity to perform be tested regularly, just as an airline pilot's capacity is tested? He argues that the two professions have a similar responsibility for protecting lives and that "unless he is constantly refreshed, a practitioner loses, over a period of time, his capacity to function well."

He suggests, therefore, that every doctor's performance should be reassessed at five-year intervals. For this purpose, he proposes the setting up of regional review boards, including lay members as well as doctors, which should check up on doctors through hospitals, local medical colleges and the doctor's own "provincial computerized medicare profile." If these preliminary checks should give rise to any doubts, then a full examination should be made of the doctor's work both in his own office and in hospital — despite the resulting invasion of privacy for doctor and patient.

What should happen to doctors who fall below the minimum standards? The report is not specific, but implies that the best course might be some sort of limitation of practice, coupled with remedial education.

In support of his arguments, Dr. Robertson quotes another Canadian report which found that "the quality of practice of older doctors tended to be poorer than that of their younger colleagues."

Dr. Robertson's report has no official backing, but will no doubt be widely noted and discussed. ♦

More protection for prisoners

A prisoner's right in the face of police questioning needs to be more rigorously protected, according to a working paper of the Law Reform Commission of Canada.

The Commission finds the working of the present system unfair and discriminatory, in that only the sophisticated minority of prisoners maintain their right to be silent, while others can be trapped into making statements which help the police to incriminate them.

They propose to remedy this by setting up a new system by which police questioning would be conducted in the presence of a "protective arbiter" whose main function would be to assure that the accused knew his rights and to be "society's witness to the fairness of questioning."

According to the working paper, the right to remain silent and to have a lawyer, a right asserted with tedious regularity by crooks on television detective shows, is not often maintained in real life. Many prisoners brought in for questioning do not in fact know their rights or haven't the nerve to stand by them in the "inherently coercive atmosphere of police interrogation."

Few prisoners had confidence and self-assertion enough to withstand the pressures put on them by the police, so the law in fact discriminated in favour of the sophisticated criminal who was "less likely to be intimidated and more able to weigh rationally the advantages of silence or co-operation in the particular situation" Although statements given involuntarily or taken illegally during interrogation could not be used in the prisoner's trial, evidence gathered as a result of those statements could be. An involuntary statement confirmed by subsequent facts could also be used.

Commission protests unfair situation

The commission protests over the unfairness of a situation in which statements made by prisoners can thus be used against them while, on the other hand, the fact that an accused person chooses to remain silent cannot be used as circumstantial evidence of guilt. "Not only is the distinction irrational, but by permitting the accused to reserve his explanation or defence until the last moment, it may have the effect of depriving the court of important evidence that could otherwise be gathered and introduced by the prosecution to verify or rebut the accused's defence".

Under the proposed new system, there would be nothing to prevent police asking questions without an arbiter present, but no statements made by the prisoner in these circumstances would be admissible in court. He could at this point refuse to answer, or he could request, or be obliged by the police, to appear before an independent official for police questioning.

The official would ensure that the accused knew of his right to counsel and silence and would explain to him the exact crime with which he was charged. The accused could then make a statement, in which case he would be subject to the law of perjury; or he could refuse to make a statement or answer questions, in which case "the accused's refusal to answer proper and relevant questions would be noted and may also be used as evidence at trial". Such a refusal would not only weaken the defence, but could be interpreted to infer guilt.

The commission has invited comment and discussion on the working paper, which may in due course form the basis of a recommendation to Parliament for amendment of the law. ♦



The skyline of Vancouver is overshadowed by the Coast Mountains.

Ah, Vancouver! Of all Canada's cities, none evokes a warmer response or wins more extravagant praise. For this is visually at least, Paradise on the Pacific, a port city blessed with a superb conjunction of ocean, river, mountain, forest and parkland. Its deep-sea harbour has been compared with Rio de Janeiro, Hong Kong, and Sydney, Australia. It is, quite simply, one of the world's most visually attractive places; if there were beauty contests for cities this Riviera of Canada would be weighed down with trophies.

It holds a special place in Canadian affections. Montreal and Toronto outrank it in size and population, but few would grudge Vancouver pride of place for physical attractiveness. If you are given to extremes of activity, you can ski in the morning on nearby Grouse Mountain, swim in the afternoon, or skin-dive off its coast in one of the most interesting undersea areas in the world, then take a scenic drive at evening along sea-girt highways with fjord-like settings unsurpassed in North America.

Vancouver also has personality. Rich, handsome, expansive to the point of bombast, the city delights in a special conceit of itself, a self-sufficiency partaking per-

Urban profile: Vancouver

Vancouver is Canada's visual paradise

haps of a pinch of complacency. It arouses strong reactions: admirers sigh at the mention of its name, detractors sniff or shrug ruefully and mutter about its lingering provincialism.

And it may be true that Vancouver's pride, in its mauve and purple twilights, its bountiful topographical gifts and life-enhancing climate, gives way at times to a certain hauteur induced in part by a sense of isolation. For Vancouver, with its barrier of mountains, looks south and west more often than east towards the other nine provinces. Similarly, its economic lines of force run north and south rather than east and west; directly north of Washington state, it sometimes feels more American than Canadian. Yet paradoxically there is a strong element of Britishness in Vancouver, communicated by its near-neighbour Victoria, the Anglophile capital of British Columbia across the Strait of Georgia.

Vancouver likes to think of itself as having a distinctness, a separateness. It calls itself God's Country. A former B.C. Premier, Mr. W. A. C. Bennett, who ruled so long he seemed to be in power forever, spoke of the province as being "plugged into God." One of B.C.'s established

names, author and playwright Eric Nicol (who was born in Kingston, Ontario, but moved to B.C. as a child; he also once wrote radio scripts in London for the Vancouver husband and wife team, Bernard Braden and Barbara Kelly) described B.C., tongue-in-cheek, as a large body of land "entirely surrounded by envy."

Vancouver's euphoria and overwhelming self-confidence have been ascribed to a kind of frontier mentality. A Canadian magazine, *Maclean's*, calls British Columbia not so much a province, more a way of life. An article by Allen Garr and Bob Waller offered this diagnosis:

"Here we make most of our own rules. And, in our arrogance, with the spirit of Manifest Destiny that develops on any frontier, we know that everything on our frontier has been placed there just for us. They way we treat it is the right way, the only way."

Legend credits the Chinese with discovering Northwest America, but firm evidence awaited Sir Francis Drake's 16th-Century sailing up from Chile in search of the Northwest Passage. He named the territory New Albion

Then came Spanish expeditions followed by the Englishman, Captain James Cook, who landed in 1778 on the west coast of Vancouver Island at Nootka. Spain and England jostled for supremacy until Spain, in October 1790, relinquished her claim to the Northwest Coast in what became known as the Nootka Convention.

The man who gave his name to the City, Captain George Vancouver, sailed in April 1791 and formally took possession in August of the following year. Captain Vancouver came from Petersham in Surrey, just outside London, and his connection with Canada is still recalled in ceremonies there on the anniversary of his death May 18, 1798.

Vancouver, lying at the southwest tip of British Columbia, has 98 miles of waterfront. The city of 6,248,960 acres and population of over 1,000,000 is largely a creation of the 20th century with spacious streets and well-planned modern residential areas. However long you live there, it is said you can hardly lose a sense of inner excitement as, driving to work, you experience the sudden juxtaposition of water and mountain looming at the end of a downtown street. A New York *Times* writer once referred to Vancouver as one of the "gardeningest" spots in North America and said the whole town looks like a flower-seed catalogue. All this, plus plenty of sun and a climate as mild as that of western Europe. No wonder some companies are reported planning to relocate their offices in Vancouver because employees transferred back to eastern headquarters from the coast city sometimes prefer to stay put, even after their posting expires.

As a counterpoint to its coastal beauty, Vancouver has a 1,000-acre beauty spot within the city limits, known as Stanley Park. Here are miles of trails, celebrated rose gardens, towering Douglas firs and cedars, botanical gardens, facilities for golf, bowling, lacrosse and baseball and an open-air theatre where Broadway musicals are played.

Close at hand is Victoria, smaller than Vancouver but the capital of British Columbia, its Parliament buildings ablaze at night with lights lining its outlines. Of Victoria, Rudyard Kipling wrote that to realise it, you "must take all that the eye admires most in Bournemouth, Torquay, the Isle of Wight, the Happy Valley at Hong Kong, the Doon, Sorrento and Camps Bay; add reminiscences of the Thousand Islands and arrange the whole around the Bay of Naples, with some Himalayas for background . . . a little piece of England . . . but no England is set in such seas or so fully charged with the mystery of the larger ocean beyond."

If you tire of the cricket, crumpets and afternoon tea atmosphere of Victoria, you can board the Pacific Great Eastern Railway back in Vancouver for a trip through spellbinding scenery, a 95-mile panorama of oceans, mountains and greenery that takes in some of the province's most picturesque summer resorts. Or, east of Vancouver, you can visit the Fraser River Valley and canyon.

This was where explorer Simon Fraser came during his quest for a route to the Pacific Ocean in 1808. Later it saw the heartbreaking saga of men pushing north by mule, camel and rope ladder in search of gold.

Today Vancouver is growing fast. It is affluent, and is rapidly developing as a financial and commercial centre looking westward to the Orient and Japan. It has its own Chinatown, the second largest in North America after San Francisco. Also in the downtown area are Theatre Row, a remodelled section of Granville Street featuring top-class movies, and a two-block area called "Robsonstrasse", a predominantly Germanic district with a truly continental flavour. Vancouver's population is about three-quarters British in origin, with minorities of Scandinavian, German, Ukrainian, Polish and Chinese descent. Many of Vancouver's pioneers included Scots Canadians; a poet wrote of them that they had "oatmeal in their blood".

One of the city's colourful old areas grew up on the site of Gastown, named for a city pioneer called "Gassy Jack" Deighton who took over a hotel in the shantytown area in 1867, the year that Canada became a nation. Gastown now is a bustling section of antique shops, art galleries, boutiques and restaurants, lending further cachet to downtown Vancouver.

Square-riggers used to call

A century ago the Port of Vancouver was only a small settlement called Granville visited by a few square-riggers calling

to load lumber. The long 300-mile natural breakwater of Vancouver Island made it a difficult port for large sailing vessels as the winds are seldom strong in the Strait of Georgia. With the age of steam this drawback was turned into an advantage. Today Vancouver is Canada's busiest port. It handles 38 per cent of all cargo moved through Canadian ports.

Five major terminals handle the present traffic. Vancouver Wharves Ltd. is a diversified bulk loading facility, just inside the inner harbour, with five berths stretching about two-thirds of a mile along the water front. Neptune Terminals Ltd., on the north shore, was built on 70 acres of tidal flats in 1970 and was designed for combination with 105-car unit trains carrying coal, potash and other mineral products. The Seaboard International Lumber Dock nearby loads on average 12 million board feet of lumber every eight days. Pacific Coast Bulk Terminals Ltd., at Port Moody up at the head of Burrard Inlet is a \$17.5 million coal and sulphur operation with a recently-expanded 5-million-ton-a-year capacity.

Twenty miles south of Vancouver, but still part of the Port, is the vast Roberts Bank port of which the coal terminal completed in 1970 and connected to the mainland by a three-mile causeway, is only the first phase of a giant development. Dredged from 50 acres of tidal flats, it is served by continuous unit trains on a continuous loop-rail line. The terminal was the first of its kind in the western hemisphere, giving Canada a head start in Japanese coal markets. Three major new developments will expand the Port of Vancouver even further.

"There is much to do and see and marvel at in Vancouver," writes Edward McCourt, Canadian author and professor in his book *The Road Across Canada*.

"The shops are numerous and large, the crowds exciting . . . Vancouver's streets are wider . . . her parks more luxuriant and numerous, her gardens a glory not only in the summer but nearly all the year round, her Chinatown the largest in Canada. And in the background the Lions Gate Bridge hangs like a modified rainbow arch over the narrow entrance to the great harbour."

Professor McCourt adds that Vancouver may have grown too fast. Perhaps it should have shot straight up, like Manhattan, instead of spreading over mountainsides and valleys.

But a view over the city, from some high point just at sunset, after a stiff breeze has blown away the smog, silences criticism, adds the professor. "Whatever claims to our admiration Vancouver may establish must be in terms not of streets and skyscrapers and shopping centres, but of the firs in Stanley Park and the mountains and the sea and the great ships coming in to harbour from far-off places. The part of Vancouver that is enduring . . . is beyond praise or blame because it is no work of man."

Canadians gather Russian secrets about fine wines

Six Canadians have been gathering secrets in the U.S.S.R. — the secrets of fine Russian wine.

A six-man grape mission, representing the Canadian grape and wine industry and the federal government, spent two weeks this fall studying varieties and cultivation practices in Russia's grape-producing areas.

Tom Bennett, horticulture marketing economist with Agriculture Canada, in Ottawa, was a member of the mission.

"Our major objective was to discover new varieties of grapes that would improve the quality of Canadian wine, and be frost-resistant and winter hardy enough to let us extend our areas of production," Mr. Bennett says. "Before leaving Russia, we arranged for an exchange of plant materials between Canada and the U.S.S.R. There was also a strong interest, indicated on both sides, in having some of our researchers study and work at Magarach."

Canada mainly produces the American *lubrusca* type of grape that commonly has a foxy or fruity taste unpopular with some wine drinkers. European *vinifera* grapes cannot withstand Canadian winters, except for certain varieties in the most southern

regions of Ontario and British Columbia. The Russians, however, have had a great deal of success growing *vinifera* grapes in areas with cold winters.

The U.S.S.R. claims to be the third largest wine-producing country in the world, and by 1990 expects to be the largest. Altogether, 11 Russian republics produce grapes on 1,100,000 hectares (2,750,000 acres) of land. By 1990 they expect to have 4,675,000 acres in grape production. The Ukrainian Republic, which includes the Crimea, is the largest producer of grapes. The Crimea and the Georgian Republic produce the most famous Russian wines.

The Russian people consume most of the wine their country produces. The annual per capita consumption of grapes in all forms is 88 pounds, and 60 per cent of this is consumed as wine. This is roughly six gallons per capita. The per capita consumption of wine in Canada is only a little more than one gallon.

Some Russian wine is exported to eastern Europe, and soon Canadian and United States consumers will also be able to enjoy Russia's vintage wines, Mr. Bennett says.

The grape mission first travelled to Moscow, where the Ministry of Food handles the marketing and distribution of grapes and wine. Then they went on to the grape-producing regions of Krasnodar, Yalta in the Crimea and Tbilisi in the Georgian Republic.

"Our visit at Krasnodar in the Russian Republic was one of the most productive," says Mr. Bennett. "Because of its cold winters, this region most closely resembles Canada's grape-growing regions."

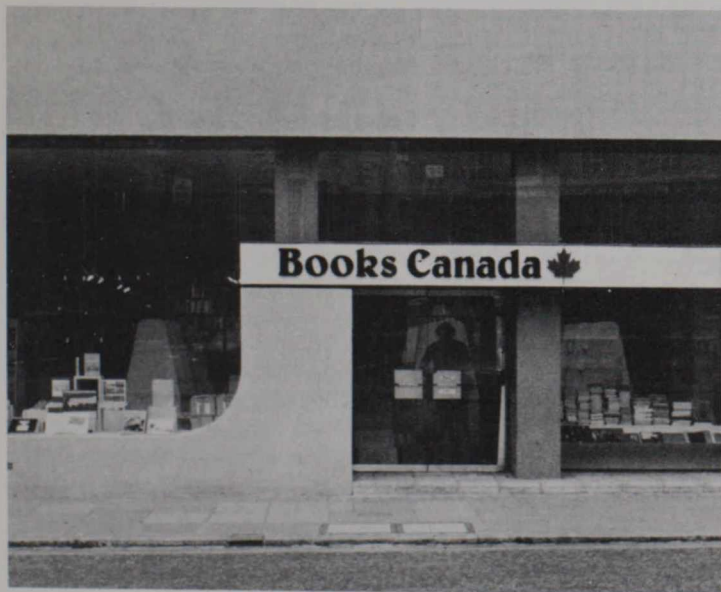
The state and collective viticultural farms in Krasnodar protect their vines from the cold by covering them with earth, Mr. Bennett says. The covering and uncovering of the vines is highly mechanized. Altogether 1,500,000 acres of Russian grapes are sheltered from the cold in this way.

Advanced technology, large, flat vineyards averaging 1,500 to 2,000 acres each (with some as large as 7,500 acres) and dry fall weather facilitate this kind of sheltering.

"It's possible that these methods could be adapted to a limited extent for use in Canada but the wet fall weather and the smaller vineyards would make operations less efficient than in Russia," Mr. Bennett says.

The government of the U.S.S.R. finances extensive research and development in the grape and wine industry throughout the country. Mr. Bennett visited a number of research institutes, including the important Magarach Institute for Viticultural and Vinicultural Research in Yalta. The 150-year-old Magarach Institute has a staff of 350. It also serves as a training institute. Three-quarters of the highly trained researchers and technicians at Magarach are women.

Mechanization is one of the main areas of research. Eighty per cent of Russia's vineyard operations are mechanized — only the harvesting now requires manual labor. The research institutes also breed new varieties of wine grapes and develop new, international award-winning wines. Many of the institutes have their own vineyards, wineries and wine museums, with artifacts dating back thousands of years.



A bookshop specializing in Canadian books was officially opened in central London on 19 October. It is located in quarters at 19 Cockspur Street, just off Trafalgar Square and across from Canada House, where Canadian railways have had tickets offices in years gone by and the Canadian Government Travel Bureau had its London office until earlier this year. The Books Canada store is operated on behalf of a consortium of 48 Canadian publishers, who were assisted in establishing this outlet by the Canadian Government. The store now has available a list of titles totalling 2,500. In officially declaring the store open at a special ceremony, the Canadian High Commissioner in Britain, Mr. J. H. Warren, said: "This is great for our authors. It will serve to give a greater idea — which is perhaps overdue here in London — of what is going on in literature in Canada."



(Books Canada)

Three Canadian writers were in London for the Books Canada opening ceremonies. Seen together here at a Canada House reception following the opening of the bookshop, they made themselves available for media interviews and other assignments intended to publicize this new Canadian venture in Britain. It is intended to widen the readership market available to Canadian writers, along with similar shops being opened in Paris and New York. Max Ferguson (left) is one of Canada's best-known radio broadcasters, but his books based on his radio career and the satiric sketches that have been his speciality, have also won the Stephen Leacock Award for Literary Humor. Earle Birney (centre) is considered Canada's leading poet. A selection of his poetry was recently published in Britain (Chatto) under the title *The Bear On The Delhi Road*. It earned the comment from Guardian reviewer Raymond Gardner that the quality of Birney's work "emphasises the disgrace that this masterfully articulate Canadian should reach the age of 69 before publication of his first British collection." Margaret Atwood enjoys international success as a poet, novelist and essayist. Her two novels, *The Edible Woman* (1969) and *Surfacing* (1973), have been published in Britain by Andre Deutsch.

(continued from back page)
Pearson's own story.

last one.' My friend's reply ended all further discussion of the matter: 'But, my dear chap, if it was the last one, we wouldn't lose it.'"

But of a later period during the war, when Hitler seemed bent on destroying British resolve by the terror of his air attacks, Pearson remembered that luncheon exchange. All Hitler's bombing did, he wrote, "was to strengthen that resolve. The British people do not give in to terror. Their qualities of calmness, stoicism, order, and discipline, and the confidence in winning through in the end (so irritating over that luncheon at the Travellers' Club), stood them in good stead now."

About Sir Winston

This volume offers thumbnail impressions of famous men Pearson encountered. Out of several references to Sir Winston Churchill, for instance, comes an impression that Pearson viewed him with definitely mixed feelings. Churchill's new wartime government gave Britain new hope, Pearson wrote, "largely because it had a new leader. Churchill himself made the difference." But Pearson also shuddered to think of Churchill at a peace conference. "What nonsense!" Pearson wrote in his diary of a Churchillian claim that the only guarantees of security in their children's lifetime would be the British navy and the French army. Pearson also writes, with modesty, about his own minor contribution to Churchill's famous "Iron Curtain" speech in Missouri in 1945. On Sir Winston's reluctance to see Britain enter the European Common Market, Pearson said he "seemed somewhat of a romantic reactionary in discussing this subject."

Pearson never lost his first love for Britain. During one of his last visits to Britain, for a conference on Anglo-Canadian relations at Windsor Great Park, he recalled, in a pensive moment with reporters at the end, his first sight of England as he arrived aboard a Canadian troop ship in 1915. "I looked out at the green fields beyond Plymouth," London reporter Alan Harvey recalls Pearson saying, "and I think I fell in love with England then and there. I never lost that love." On his last visit to London, where in June 1972 he delivered the last two formal speeches of his life, Pearson told a friend happily: "I've always thought London was the only liveable big city in the world. I've always loved coming back here."

Some of that feeling runs through these memoirs. Recalling his two years at Oxford after World War I, he wrote: "Oxford University, and St. John's in particular, turned out to be all that I had hoped and dreamed. Seldom are expectations so completely fulfilled as were those of my two years at Oxford. I loved it all, from the day I reported at the porter's lodge to the celebrations with friends at the Mitre after we wrote our last examinations at 'schools.'"

To some who knew Pearson, the paradox of his personality to which Barbara Ward

referred was simple enough to explain. A hint of the explanation can be found in a quotation he used in one of his last London speeches from something James Branch Cabell had written in 1926: "The optimist proclaims that we live in the best of all possible worlds. The pessimist fears this is true." Pearson's realism was neither optimistic nor pessimistic but a careful balance of both.

His instinctive affection for human existence, bittersweet always with dreams of tomorrow beyond today's grasp, gave him an unusual capacity to make the most of the way things were, while never giving up the struggle to build the better world man's imagination could always conceive. Perhaps no reference in his autobiography underlines more vividly the determination of his faith in humanity's capacity to improve than one about the United Nations.

He had never wavered in his belief that developing the UN into a truly effective world organisation was the best, and perhaps last, hope if mankind was to end "the savage tradition that the strong do what they can and the weak suffer what they must." The UN was at least a foundation on which to build; its weaknesses were no more than the weaknesses of its member states "and the system of international anarchy in which they had to operate."

Lord Snow wrote of Pearson: "For all his outgoingness he has streaks of profound discretion." It was perhaps this profound discretion that enabled Pearson to survive all the bitter experiences of his era without losing his grin, and to remain cheerful and positive even though he perceived as clearly as any contemporary "the savage tradition" and the "system of international anarchy" in which he worked all of his public life.

The pages of his book are filled with examples of his profound discretion. ♦

Opera

New Opera Premiered

The Canadian Opera Company in Toronto presented the world premiere of a new work, *Heloise and Abelard*, as a feature of its six-week season that opened in September.

The new opera was written by Charles Wilson and Eugene Benson, both of whom teach at Guelph University in Ontario. Wilson was the composer and Benson the librettist. The work was commissioned by the Canadian company, which is celebrating its 25th anniversary this season.

Benson drew for his libretto on a radio play he wrote 20 years ago. It was tentatively accepted by the BBC but finally rejected on grounds that the castration of Abelard in the work was too explicit. No such inhibitions were a factor in the staging of the opera version, which has since been presented in the National Arts Centre in Ottawa as well.

The new opera has attracted generally approving reviews from critics in New York and London, as well as in Canada. ♦

Economic Digest

Bank rate

The Canadian bank rate was increased by $\frac{1}{2}$ per cent to $7\frac{1}{4}$ per cent on September 12, the fifth increase since last April, when it stood at $4\frac{3}{4}$ per cent. Mr. Gerald K. Bouey, governor of the Bank of Canada which sets the rate, said the action was necessary to meet pressures in financial markets for higher interest rates. The move was interpreted as another step in the central bank's continuing attempts to stem inflation without threatening economic growth and employment.

Economic review

During a special debate on inflation in the Canadian House of Commons on September 10, the Minister of Finance, Mr. John Turner, provided these statistics about the performance of the Canadian economy up to that time in 1973:

Though the rate has since slowed somewhat, the economy was expanding during the first six months at a seasonally-adjusted annual rate of 9.2 per cent in real terms, better than any year since 1966.

During the first seven months, 411,000 new jobs were created, a rate of increase unsurpassed by any other industrial nation. In July the year-over-year growth in new jobs was 31 per cent greater in Canada than in the United States. This despite a record 4.3 per cent expansion in the size of the Canadian labour force in the same period. The seasonally adjusted level of unemployment was 5.2 per cent of the labour force in July (4.8 per cent for those seeking full-time jobs). It rose to 5.5 per cent in August and 6.0 per cent in September.

Real personal disposable income (after payment of direct taxes) was up 6.2 per cent for the first six months.

Consumer spending showed a real increase (after deducting inflation) of 8.6 per cent in the second quarter, while personal savings were also up $8\frac{1}{2}$ per cent.

Foreign trade

Canadian exports during the first seven months of 1973 were up 25.2 per cent and imports rose 23.8 per cent. Although Canadian exports to Britain increased 6.3 per cent to C\$823.1 million, Japan moved into the role of Canada's second-biggest customer that Britain has usually played. An unusual increase of 85.7 per cent in Canadian exports to Japan, from C\$502.3 million in 1972 to C\$932.8 million this year, accounted for the change. The United States remained by far Canada's most important customer, accounting for

C\$9,864 million (up to 24.2 per cent) of Canada's total exports of C\$14,039 million in the period.

Housing

Canada's housing starts were at a seasonally-adjusted annual rate of 273,200 for all areas in September, according to preliminary figures released by Central Mortgage and Housing Corporation.

In July the rate reached an unprecedented 304,200 following first and second quarter levels of 262,500 and 284,300 respectively.

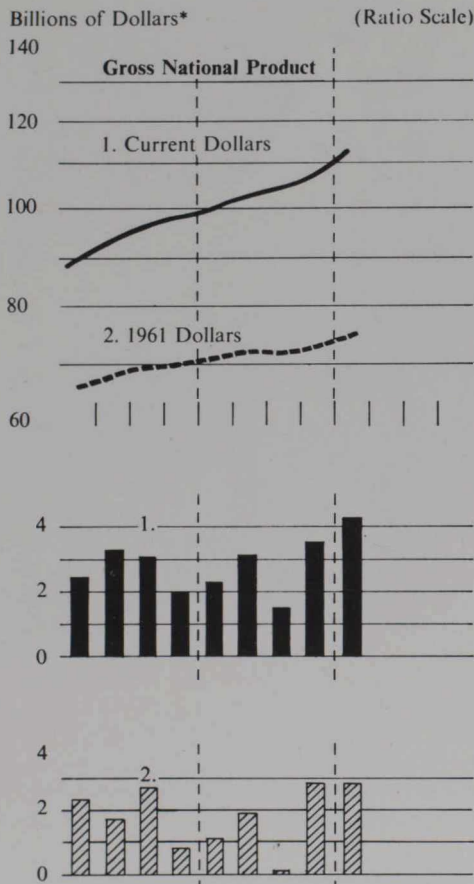
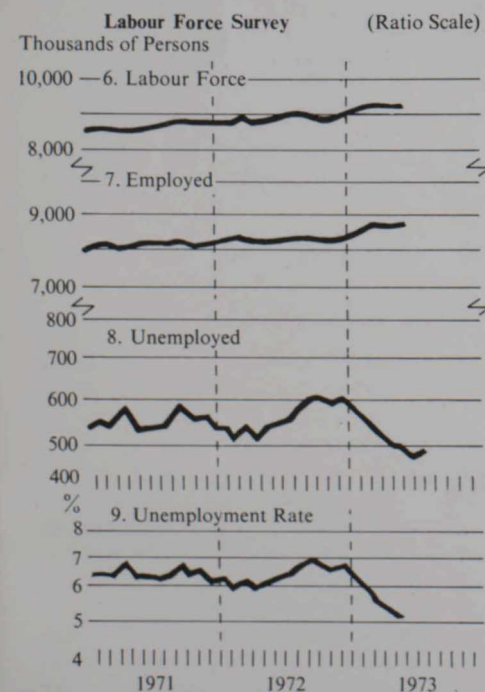
The CMHC survey indicated total housing starts for 1973 could climb above 260,000 units. Canada's annual record was set in 1972 when starts numbered 249,914.

Actual starts in August totalled 19,924 in the urban areas alone, up four per cent from the August, 1972 figure of 19,082. For the first eight months of 1973, actual urban starts numbered 134,563, an increase of three per cent over the 130,470 total for the same period last year. Single-family housing activity increased six per cent while multiples were up one per cent.

Productivity

Labour productivity (output per worker) increased notably more in the 1950s than in the 1960s in most Canadian manufacturing industries, according to a study released in September by the Canada Department of Labour, but showed a better rate of increase again through 1968 to 1970.

The study covers 22 manufacturing



industries and all manufacturing for the period from 1949 to 1968, with additional data for 1969 and 1970 added in supplementary tables.

Over the entire period, 1949 to 1968, productivity for all labour in all manufacturing, increased at an annual rate of 5.8 per cent. For the 1961-1968 period it was 3.9 per cent, but supplementary data for 1961 to 1970 show a somewhat higher annual rate of increase, at 4.4 per cent.

Compensation (wages and salaries) per worker increased at about the same annual rate in the 1960s as in the previous decade. This, combined with somewhat lower rates of increase in labour productivity in the sixties in most of the industries studied, meant that unit labour costs of production increased more rapidly in the more recent period. Thus, for total labour in all manufacturing, the annual rate of increase for the whole 1949-1968 period was 0.7 per cent, but for 1961-1968 it was 1.9 per cent, and supplementary data for 1961-1970 show a slightly higher rate, at 2.2 per cent.

Unit cost of production for other than labour, described as unit residual cost, increased much more than unit labour costs for all manufacturing over the full period, but during the 1960s, many of the industries studied experienced a greater

climb in labour than in residual costs.

On the average, costs of raw materials, wholesaling and retailing rose more rapidly than costs of production in the plant.

Copies of *Productivity, Costs and Prices*, Catalogue Number L41-1173, are available from Information Canada, Ottawa, at \$3.75 each. The supplementary tables may be obtained, upon request, from the Canada Department of Labour.

Cost of living

The Canadian consumer price index (1961=100), spurred by a 3.2 per cent surge in food prices, advanced 1.3 per cent in August to 153 from 151 in July. Nearly two-thirds of the advance was due to increased food prices. The movement represented an increase of 8.3 per cent, Statistics Canada reported, from the level 12 months earlier. Sharply increased meat poultry and egg prices were major contributors to the larger-than-usual rise in the index, which is treated as a major indicator of the rate of inflation in the Canadian economy. The index rose at a slower rate in September, up six-tenths of one per cent at 153.9

Pensions

Increases in family allowances and old age and civil service pensions in Canada were approved by Parliament in September.

Effective October 1, the basic old age pension for a single person rose to C\$105.3 a month from C\$100. This is universally available to Canadians at age 65. Persons receiving the guaranteed income supplement to the basic pension, as most Canadian pensioners do because of their income level, received an increase to C\$179.16 from the previous rate of C\$170.14.

Parliament also legislated that hereafter, these pensions will be increased quarterly at the same rate as increases in the consumer price index - Canada's main indicator of living costs. Should a day come when this index goes down, the pensions would remain at their latest level.

Also effective October 1, the family allowance, paid universally without regard to income, was raised from an average of C\$7.21 monthly per child to C\$12 monthly for every dependent child up to age 18. (check) A proposal still before Parliament would raise this further to C\$20 monthly per child effective 1 January 1974.

Another bill removed a two-per-cent ceiling on annual increases in pensions for retired civil servants. The increases now will be by the full percentage of increase in the consumer price index in a year.

Books

Mike Pearson tells his own happy story

A big cheerful grin, a jaunty bow tie and a repertoire of self-effacing quips were the outward manifestations made famous by the Canadian everyone came to know as 'Mike'. But behind the untiring good humour of Mr. Lester B. Pearson, there worked, just as tirelessly, a mind capable as any in his time of judging the realism of a diplomatic or political aspiration.

The qualities of happy, kindly wit and shrewd judgment of human affairs are both evident in the first volume of memoirs by the former Canadian Prime Minister, now out in London: *Memoirs 1897-1948, Through Diplomacy to Politics* (Victor Gollancz Ltd. £4.50).

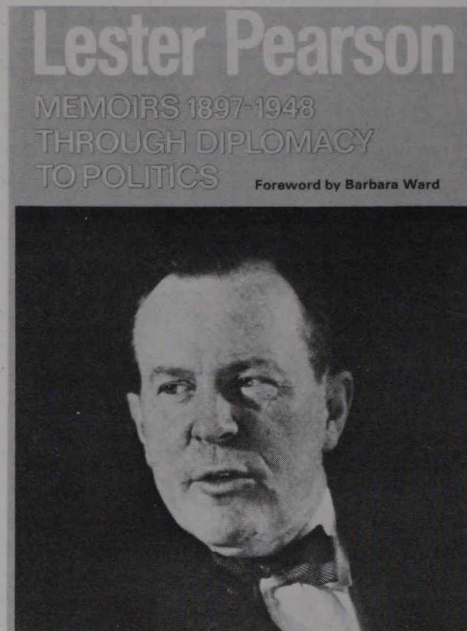
The self-effacement is evident from Pearson's preface onwards. "Whether I have done anything of excellence or properly resembling it is not for me to determine. I certainly have had many opportunities so to do. The years of my life have been filled with interest, variety, and excitement," he wrote.

In her foreword, Mr. Pearson's good friend, the British writer-economist Barbara Ward, puts his career in more precise perspective.

"Lester Pearson's life presents a paradox. He spent most of his career - as a diplomat, as Minister of External Affairs and finally as Prime Minister - in areas strewn with the land-mines of prejudice, bitterness, jealousy and misunderstanding.

"The chief task of Canadian diplomacy between 1920 and 1947 - the years during which Pearson rose from a junior officer to the permanent head of the Ministry - was to disengage the country from a 'colonial' relationship with Britain, define its role in the world in the midst of a total war and find a working partnership with its economically overwhelming and amiably indifferent American neighbour. To these complexities Pearson added, when he entered politics as Minister of External Affairs, a successful intervention in one of the great boneyards of diplomatic reputation - the Arab-Israeli dispute - for which he received the Nobel Peace Prize. Then for ten years he led the Liberal Party through the rigours of opposition, election and minority government - all activities calculated to bring out any latent strains of aggression, thwarted ambition or personal ungenerosity, either in the leader or the led.

"But here is the paradox. After a life of such total exposure, it is probably more true of Lester Pearson - of 'Mike' as he was universally known - than of any other public figure of our time that he had virtually no enemies and that he was



Published by Victor Gollancz Ltd., London £4.50

sincerely loved and profoundly mourned by a planet full of friends."

Enjoyed affection

C. P. Snow, another Pearson acquaintance, made a similar point in his review of the book for *The Financial Times*. "He earned a quite remarkable amount of affection anywhere, and even more remarkable, left few enemies to rejoice that he had gone."

The first volume of the Pearson autobiography appears here posthumously. He died last December, aged 75, shortly after completing a second volume, covering the years he was Minister of External Affairs. A third volume, devoted to his career as Prime Minister, was uncompleted at his death.

This first volume provides a variety of examples of the Canadian struggle to "disengage" itself from a colonial past and further the evolution of its own independence. Lord Snow's review refers to the high reputation the Canadian foreign service acquired during the years Pearson was one of its leading lights.

"They judged the situation of their country with much realism, and decided how much influence it could (and, quite as important, couldn't) bring to bear. They never overplayed their hand. . . . We couldn't define our real power position

in the post-1945 system with anything like the precision that the Canadians managed."

There are many examples of Pearson's realism in this volume. At one point he summarizes the Canadian evolution in which he was himself an important catalyst in these words:

"When we lament today the lack of a Canadian identity, of a strong sentiment of Canadian national pride, we should remember that we are not long removed from colonial subordination and that for us there has been only a relatively brief interval between the limitations of dependence on Great Britain and the fear of domination by the United States. Further, we achieved our political independence, our sovereignty, precisely at a time when, demonstrably, sovereignty and independence gave no assurance of security or of progress. We had to learn that the aspirations of independence often had to be reconciled with the necessities of interdependence. It was a difficult time to come of age, in foreign as well as in domestic affairs."

Technique of compromise

Another reviewer was Sir Robert Jackson, husband of Barbara Ward and a Briton long associated with the United Nations, where he was personally acquainted with Pearson's work. It was out of these special Canadian difficulties arising from these historical and geographical factors, he wrote, and out of the Canadian struggle for independence that "there evolved that special Canadian technique of compromise, based on reason, respect, and common sense." Sir Robert, writing in *New Society*, added: "Small wonder then that to this day, the United Nations, as an organisation, and international officials, first turn, almost automatically, to Canada as the most likely source of the needed compromise."

Pearson is both critical and affectionate in the attitudes toward Britain revealed in his book.

He recalled lunching one day in the Travellers' Club, shortly before the collapse of France during World War II. His companion, British, chided him for being too pessimistic and told him to remember that the British always won the last battle. "I finally exploded at this attitude which seemed to me to be not calmness in the face of crisis so much as a silly smugness in the face of catastrophe. 'One day,' I replied, 'you people will lose a battle and only then realize it was the

continued on page 14