CANADA

# CANADIAN WEEKIY BULLETIN 

INFORMATION DIVISION • DEPARTMENT OF EXTERNAL AFFAIRS • OTTAWA, CANADA

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## ${ }^{0}$ IL AND GAS IN THE YUKON

The Minister of Northern Affairs and Nation${ }^{2}$ R Resources has announced that the first discovery of oil has been made in the Yukon Territory and the first in the Far North since the discovery of Norman Wells (Northwest Territories) in 1920.
Oil and gas have been discovered at Westem Minerals' Chance No. 1 Well, at present drill${ }^{\text {ing }}$ la a depth of 4,415 feet in the Eagle ${ }^{P} l_{\text {ain }}$ area of the Yukon Territory. The disco$V_{\text {Very }}$ was made in the interval from about 4, 250 $f_{\text {eet to }} 4,370$ feet. On drill stem tests this interval yielded flows of gas of up to ten million cubic feet per day and light gravity oil from the lower part of the section. Drilling and testing are continuing at the well.

The discovery area is approximately 450 miles from tidewater on the Pacific Coast and is rapidly being made accessible by the cons$t_{\text {ruction }}$ of a resource development road originating in Flat Creek near Dawson. The closest ${ }^{\text {a irfields are at Dawson and Inuvik, both }}$ approximately 150 miles away.

The Minister expressed pleasure that the discovery had been made by a Canadian company and that its initiative, as one of the pioneers for oil in our northern territories, appears likely to be rewarded.

## CABINET CHANGES

Mr. David Walker, a Toronto lawyer and M.P. for Toronto Rosedale, and Mr. Pierre Sevigny of Quebec, M.P. for Longueuil, were sworn in by the Covemor-General on August 20, as Minister of Public Works and as Associate Ministe: of National Defence, respectively.

Mr. Walker takes over the Public Works portfolio from Mr. Howard Green, who was appointed Secretary of State for External Affairs on June 4, 1959, and has held the two posts since then. Mr. Sevigny is the first Associate Minister of National Defence in the Conservative Government.

Mr. J.M. Macdonnell, M.P. for TorontoGreenwood, has retired from the Cabinet as Minister without Portfolio. In making the announcement, Prime Minister Diefenbaker paid tribute to "this outstanding Canadian for his success in so many fields and for the service he has given as Minister of the Crown...." Mr. Macdonnell will continue to sit in the House of Commons.

The Prime Minister also announced that Mr. Churchill, Minister of Trade and Commerce, will succeed Mr. Green as Government House Leader in the Commons and that Mr. Wallace Nesbitt, M.P. for Oxford, will act as parliamentary secretary to Mr. Green.

## BOTANTCAL CONCRESS

Some 4,000 delegates representing universities and research laboratories in 72 countries are attending the Ninth International Botanical Congress which opened in Montreal on August 19, andwill continue for ten days. Held every five years, the Congress is meeting in Canada for the first time, with McGill University, the University of Montreal and Sir George Williams College as hosts.

In his opening address, the president of the Congress, Dr. W.P. Thompson, President of the University of Saskatchewan and a world authority on cereal genetics, said that Canadians had made a number of important contributions to botany but that this country lacked funds and facilities for pure research in this field.

At the opening ceremonies an award was made posthumously to the late Dr. K.W. Neatby of Saskatchewan for research in plant genetics. Dr. Neatby, who died last October, was the first Canadian to win this medal awarded to scientists of outstanding merit by the Cranbrook Institute of Science in Chicago.

A number of the papers presented were of general interest. In an address on Botany and Human Affairs, Dr. E.C. Stakeman, a distinguished U.S. : botanist, warned of the O - bomb the over-population bomb - and of the need for increased food production. He suggested that the United States and Canada were neglecting agricultural research, while undertaking to instruct less-developed countries in agricultural methods.

According to Dr. Stakeman about 25 per cent of crops planted in the United States - enough to feed 50 million people - are destroyed or wasted each year. In his opinion, if nations now spending huge sums on atomic research spent equivalent amounts on agricultural research, the world would be a better and more promising place for future generations.

## DARWIN CENTENARY

This year the Congress is celebrating the 100 th anniversary of the publication of Charles Darwin's "Origin of the Species". Exhibits devoted to the theory of evolution have been on display at, McGill University and centennial lectures and symposiums have been part of the programme.

## BOTANICAL DRAWINGS

Consular representatives of many of the 70 countries represented at the Congress were present at the opening of an exhibition of botanical watercolours on August 18 at the Montreal Museum of Fine Arts. Four Canadian artists are represented in the exhibition of paintings of flowers and fungi. They are: Mrs. Agnes Chamberlain who illustrated the nature books of Catherine Parr Trail, circa 1885; Henry Jackson, a Montrealer who painted native fungi, Robert Holmes of Toronto whose subject

## SALE OF URANIUM

Mr. Gordon Churchill. Minister of Trade and Commerce, has issued a statement of Government policy with respect to the sale of uranium, as follows:
"In compliance with Govemment policy that every efforr be made to sell to friendly countries or organizations of friendly countries, the production of Canadian uranium that is not required to fill existing coritracts, it was announced on May $7 \mathrm{th}, 19.58$, that private producers would be permitted to sell such material in lost of not more than 250 pounds to a country not holding an agreement with Canada for co-operation in the peaceful uses of atomic energy, the total of such sales to a country not holding such an agreement to be limited to 2500 pounds.
"It has now been decided that it would be to the advantage of the Canadian uranium industry to allow any part of, or the entire 2500 pourds to be supplied by one producer. This change in policy will become effective immediately.
"It will continue to be necessary to obtain a permit from the Atomic Energy Control Board and the Department of Trade and Commerce and there will be no change in the 2500 -pound limit to one country."

## * * * *

## TRADE WITH JAPAN

Mr. D.M. Fleming, Minister of Finance, has announced the conclusion of discussions with the Ambassador of Japan relating to the export of textile fabrics and garments to Canada from Japan. The Japanese Government has decided that for the remainder of this year their license approvals for garments of spun rayon will be kept down to very low levels. In addition the Japanese Government has undertaken a comprehensive check system designed to keep under surveillance the whole field of textiles and to ensure that Japanese exports to Canada are kept on an orderly basis and that no "flooding" should occur in the future. In the operation of this system the Japanese authorities have undertaken to keep in close contract with representatives of the Can adian Government.

Mr . Fleming expressed the hope that, as a result of the understanding now reached, a firm basis would be laid for orderly participation by Japan in the Canadian market and for the sound development of beneficial two-way trade between the two countries. He noted that Japan was a valuable and growing market for Canadian wheat, barley, metals and pulps and looks forward to the further development of exports in other fields including coal and uranium.

## NATIONAL RESEARCII COUNCIL

In the past year, the National Research Council:
provided $\$ 5.9$ million to support pure research in the universities (including 681 grants; 435 scholarships, fellowships and associateships); employed 613 scientific research staff (including 149 postdoctorate fellows), 883 technical personne 1, and 887 general service and administrative staff; operated five laboratory divisions in the sciences: Applied Biology, Appl ied Chemistry, Pure Chemistry, Applied Physics, and Pure Physics; operated four engineering Divisions: Building Research, Mechanical Engineering, the National Aeronautical Establishment, and Radio and Electrical Engineering; operated two regional laboratories, one at Halifax and the other in Saskatoon: and operated a Division of Medical Research to award grants and fellowships in support of research in this field; sponsored 32 Associate Committees, operating in such diverse fields of science as Aquatic Biology, Corrosion Research, Plant Breeding, Radio Science, and Soil and Snow Mechanics; answered 9,000 technical enquiries from Canadian industries.
This information is in the forty-second annual report of the National Research Council of Canada, 1958-1959. Excerpts from the report of the President, Dr. E.W.R. Steacie, follow:
"As science has become necessary to government, two quite distinct types of organization have been developed. First, there are government departments that need experimental facilities in order to do their job. On the other hand many countries have set up a quite different type of body, in Canada represented by the National Research Council, whose duties are rather like those of a national academy; these duties include support and encouragement of research in pure and applied science, together with a residual responsibility for scientific research in all fields, and especially in those not covered by the more narrowly defined objectives of government departments. Such bodies need, and in general have been given much more freedom than a government department. They are very complex organizations, intimately connected simultaneously with government, with industry and with universities.
"The National Research Council was set up by Order in Council in 1916 (Act of Parliament, 1917) and is a corporate body, not a Department of Government. It has no Minister in the usual sense, but reports to the Committee of the Privy Council on Scientific and Industrial Research, which is composed of nine Ministers whose departments have to do with research or whose departments have to The Chairman of the

Comittee has for a considerable time been the 3 Minister of Trade and Commerce. It should be emphasized, however, that the Council has no specific connection with the Department ofnu Trade and Commerce as such. It is, in fact, one of the first examples of a Crown Corporation. The Act gives the Council a number of powers which are not possessed by Government departments: in particular, the Council is outsi.te the Civil Service, has a governing body of independent, non-government scientists, can earn revenue and spend it, etc. All these powers have been used with discretion, but they are absolutely essential for the operation of a first-rate scientific organization with broad responsibilities. Above all, it is scientific the very high reputation of the selection being in the to the control and Council, a group of the most distind non-government scientists in Canada.
"Canada is in fact one of the few countries which has recognized the fundamental fact that the control of a scientific organization must be in the hands of scientists. It is a major accomplishment of the Canadian Government that many of our scientific agencies are controlled by people familiar with their needs. Certainly the Research Council is envied by many foreign laboratories on this account, and Canada has had a great deal of influence on the organization of many foreign government scientific bodies.

## RESEARCHIIN UNIVERSITIES

"In 1916, the original members of the Council realized that before they could foster or co-ordinate scientific-research in Canada there must be active groups of scientists in universities and a supply of trained research workers coming from university graduate schools. They therefore decided that their first duty was to encourage science students to continue their post-graduate work in Canadian graduate schools. To promote the development of university science the Council provided grants to members of university staffs for equipment and supplies, and scholarships to post-graduate research students.
"The programme has indergone steady, and in recent years spectacular expansion. It started with the modest expenditure of $\$ 14,000$ in 1917-18. Since then a total of $\$ 34,000,000$ has been provided by the Council to aid university research. Some idea of the rapid expansion in recent years can be seen from the fact that approximately half of the total of $\$ 34,000,000$, has been spent in the last four years, that $\$ 6,000,000$ is being spent in the current year and that a further $\$ 8,200,000$ will be spent next year. Continued expansion, and rapid expansion, is certainly necessary, but the programme is already of very conside-
rable dimensions. There is no question that the Council has had a decisive influence in aiding the development of science in Canadian universities.
"One result has been to produce a reverse flow of students of great magnitude. Forty years ago it was almost unthinkable that a bright student in science, engineering or medicine should take his post-graduate education in Canada. His basic training was taken here, but he was always 'finished off' in Europe. Today there is far more movement in the opposite direction, and very large groups of foreign students 'finish of $f$ ' in Canadian universities. They come to many government laboratories as well. The National Research Council. for example, has at all times postdoctorate scientists from 20 or more countries completing their education in research in its laboratories. In fact in its pure science divisions the Council has a more cosmopolitan group of younger research workers than could be found in any European university. The traditional isolation of Canadian scholars is long past, especially in science.

## LABORATORIES

"The second major function of the National Research Council is the operation of laboratories. These form by far the largest industrial research laboratory in Canada. The general organization is complex and very much decentralized. Since governments tend to centralization, this presented many problems. Decentralization has, however, been accomplished because of two main factors. The first of these is the development of an administration whose main function is the protection of the scientist to the greatest possible extent from the red-tape inevitable in government operations. The second factor has been the very far-sighted attitudes of successive governments in leaving the Council free of many hampering restrictions. In every field the problems differ and each scientific division thus has special features of its own. Nothing could be worse than the 'Big Organization' point of view, which regards uniformity of administration as an end in itself. Financial control is, of course, essential. The balance sheet, however, is no more the criterion of efficiency for a scientific organization than it is for a charitable one.
"The activities of the laboratories cover the whole technical range from pure science to consulting and testing services. The problems range all the way from pure chemistry and physics to testing lubricating oils, and from calibrating surveying tapes to getting the William Carson into Port-aux-Basques harbour. In view of the complexity of these operations it is desirable to ask how the functions of a government laboratory dovetail into those of a university and an industrial laboratory. It
can beconvincingly argued that the Larger, and in many ways more expensive laboratories which carry on long-term applied research which has applications to industry as a whole should be sponsored by government or public bodies, and in many countries this has happened. Also, if all private incustries could afford to operate research laboratories, they would naturally take care of their own immediate ad hoc problems, since such activities show an imnediate profit. All very large industries and many moderate-sized industries should and usually do operate such laboratories, but in Canada and most other countries over 95 per cent of all industries are so small that it is entirely impracticable for them to operate their own research laboratories. This problem can only be solved by some form of public support.
"Over the years in Canada a network of Research Councils has been built up, starting with the National Research Council in 1916 (with laboratories of its own in 1932), and now extending to more than half the provinces. All these have followed the tradition of having much more freedom of action than does a no rmal government department, and they have constituted a considerable Canadian achievement.
"Based on the experience of the National Research Council, there are a wide variety of types of work which such organizations are called upon to do. As far as the National Research Council is concerned the list includes fundamental work, long-term applied work with no specific objective, work on specific industrial problems, short-term industrial problems (i.e., ad hoc investigations), investigations for the Services, consulting, testing, specifications, and miscellaneous enquiries. All of these are important but it is essential if the organization is to develop any reputation or scientific self-respect that the ad hoc and routine-enquiry type of problem shall not be allowed to force real research out of the door. It is very easy for this to happen and in many laboratories of similar type in other countries it has happened. As far as the National Research Council is concerned, long-term in ${ }^{-}$ vestigations, fundamental or applied, must constitute the major effort of the laboratories if they are to keep the scientific reputation they have earned.
"A most vital feature of the Research Council has been its dual function. By being responsible both for university support and the operation of laboratories it has been able to avoid two pitfalls. In the first place as an operating laboratory it can retain first ${ }^{-}$ rate scientists, and avoid a narrow bureaucratic outlook in dealing with the university programme. Secondly, by maintaining the interest and active participation of univers ${ }^{-}$ty people, it can maintain the scientific standards of its laboratories.

## AWARDS AND COMMXTTEE SERVICES

The Awards and Committee Services Branch administers all activities associated with the support of research in science, engineering and medicine in Canadian universities provided by the Council and the Atomic Energy Control Board.

The university support programme began with the establishment of the National Research Council in the year 1917, and continued at a modest level up to and during World War II. Comenencing in 1946, the programme has shown an accelerating growth in keeping with increasing enrolments at the universities, and the resulting expansions of university staff and facili$t_{i}$ es for research. The greatest growth has taken place in recent years. The total budget for the fiscal year 1958-59 was almost 6.7 million dollars: five years earlier it was 2.6 million.

The types of university support provided are: DIRECT, consisting of research and travel grants for members of university staffs, and postgraduate scholarships for students; and INDIRECT, consisting of contributions, grants and subsidies to Canadian and international scientific organizations and functions, the publication of Canadian Journals of Research, and the administrative expenses of the programme.

The 1958-59 budget for DIRECT support was $\$ 5,950,000$, of which 82 per cent $(\$ 4,880,000)$ provided for approximately 700 research grants of varying types and amounts to members of university staffs. The remaining 18 per cent $(\$ 1,070,000)$ provided for postgraduate scholarships awarded to more than 400 students; an additional large number of students received varying degrees of remuneration from research grants to members of university staffs.

The 1958-59 budget for INDIRECT support was $\$ 700,000$, of which 38 per cent $(\$ 265,000)$ was for contributions, grants etc. 37 per cent ( $\$ 260,000$ ) for the publication of the research journals and the remaining 25 per cent ( $\$ 175,000$ ) for the administrative costs of the programme.

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## Immi gration figures

Statistics released by the Department of Citizenship and Immigration show that a total of 57,089 immigrants came to Canada in the $\mathrm{f}_{\text {irst }}$ six months of 1959, a decrease of 10,655 from the same period in 1958. People of Italian origin were the largest group, numbering 15, 354 ( 14,396 in 1958), followed by ${ }^{1} 0,817$ British ( 16,292 in 1958), 5,899 Germians ( 8,475 in 1958), 3,310 Netherlanders ( 5,013 in 1958), 2,178 Poles ( 1,249 in 1958). ${ }^{1}, 816$. Portuguese ( 1,066 in 1958), 1,345 Chinese ( 1,075 in 1958), 1, 198 Yugoslavs $\left(\begin{array}{l}(2,437 \text { in 1958), and } 1,166 \text { Jewish people } \\ (1,146 \text { in } 1958) \text {. }\end{array}\right.$

## EMPLOYMENT AT MID-JULY

Another substantial increase in activity raised the employment level by 153,000 to 6, 206,000 between June and July this year, according to a monthly joint news release by the Department of Labour and the Dominion Bureau of Statistics. Male workers accounted for almost all of this increase; two-thirds of it resulted from a seasonal expansion in agriculture.

A larger number of students and other workers entered the labour market between June and July this year than for several years, many of the additional jobs being filled by this group. As a result, there was only a small drop in unemployment. The number without jobs and seeking work was estimated to be 228,000 in July, compared with 234,000 in June and 291,000 in July 1958. The number of workers on temporary layoff fell slightly to 12,000 from 19,000 a year ago. Those working short time or changing $j$ obs were estimated at 50,000 , some 26,000 less than in July last year.

An estimated 199,000 more persons had jobs in non-farm industries than a year ago. The service industries and to a lesser extent manufacturing, trade and transportation were the chief gainers. Farm employment was slightly lower than last year.

Toward the end of the month, unemployment rose in several West Coast areas where strike action was concentrated, and in some parts of the central provinces where plants began to shutdown for stocktaking and model changeover. There were decl ines in unemployment in smaller, less industrialized areas, with unemployment being lower than a year ago in almost all regions. The classification of all labour market areas at the end of the month was as follows (last year's figures in brackets): in substantial surplus, $1(5)$; in moderate surplus. 31 (56) ; and in balance, 78 (49).

## LABOUR FORCE

Canada's labour force was estimated at $6,434,000$ in the week ended July 18 as compared with $6,287,000$ a month earlier and 6,314,000 a year earlier. Some 5, 879,000 or 91.4 per cent of those in the labour force usually worked 35 hours or more at the jobs they held in the survey week, 327,000 or 5.1 per cent usually worked less than 35 hours, and 228,000 or 3.5 per cent were without jobs and seeking work. Classed as not in the labour force are such groups as those individuals who are keeping house, going to school, retired or voluntarily idle, too old or unable to work, and these numbered $5,138,000$.

Of those who worked less than full time and were not regular part-time workers, some 50,000 or 0.8 per cent of the labour force worked less than full time on account of short time and turnover ( 27,000 being on short time). 12,000 or 0.2 per cent were not at
work due to temporary layoff, while 584,000 or 9.1 per cent worked less than full time for "other" reasons. The "other" reasons included holidays $(426,000)$, illness $(79,000)$, industrial disputes $(24,000)$, and "other" $(55,000)$.

During the corresponding week of 1958, there were $6,314,000$ in the labour force of whom $5,686,000$ usually worked 35 hours or more at the jobs they held during that week, 337,000 usually worked less that 35 hours, and 291,000 were without jobs and seeking work. There were $5,055,000$ people classed as not in the labour force.

## botanical congress <br> (Continued from Page 2)

was wild flowers, and Louis Muhlstock of Montreal, who painted various botanical subjects.

## SPECIAL MCGILL CONVOCATION

A special convocation was held at McGill University when honorary degrees were conferred upon five distinguished United States and Commonwealth scientists - Dr. C.W. Wardlaw, head of the Department of Botany, University of Manchester; Prof. Panchanan Maheshwari, head, Department of Botany, University of Delhi; Prof. Irene Manton, Department of Botany, University of Leeds; Dr. Fritz Warmolt Went, Director of the Missouri Botanical Garden; and Professor W.H. Weston, Harvard University.

## FIELD TRIPS

Before the Congress started numerous field trips were made in British Columbia, the Prairies, the Sub-Arctic, the Great Lakes region and Quebec's Gaspe Peninsula. There have been short field trips in the Montreal area during the sessions and longer ones will be made to the Maritimes when the Congress closes.

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## NEWFOUNDLAND ELECTION

The Liberal Covernment of Premier Joseph R. Smallwood was returned to power on August 20 , in Newfoundland's fourth provincial election since Confederation.

The final results were as follows:
Liberals - 31
Progressive Conservatives - 3
United Newfoundland Farty - $\frac{2}{36}$

## TREASURY BILLS TENDERED

Mr. Donald M. Fleming, Minister of Finance, announced on August 20 that Tenders had been accepted for $\$ 103,544,000$ of Government of Canada Treasury Bills, to be dated and issued on August 21, 1959.

| Amount <br> of <br> Issue | Maturity <br> Date | Prices |
| :---: | :---: | :---: | | Equivalent |
| :---: |
| Yields |

\$91, 544,000
Nov. 20, 1959 - Average 98.516
6.04
12,000,000
Feb. 19, 1960 Average 96.711
6.82

Tenders will be received on Thursday, August 27. 1959 for $\$ 95$ million of Government of Canada 91 day Treasury Bills to be dated and issued on August 28. Bills maturing on August 28, 1959 amount to $\$ 115$ million.

Mr. Fleming said the reduction in next week's offering reflects the Government's view that the recent rise in interest rates on Treasury Bills has gone farther and faster than conditions warrant. At this week's tender, for the same reasons, a number of bids were not accepted as involving too high interest rates. The total of new Bills sold was $\$ 103,544,000$ as compared with $\$ 135,000,000$ the week before. The Government's strong cash position has enabled it to draw on its current bank balances which are in excess of $\$ 400$ million and to rely less on Treasury Bill financing for the time being. In the result the average Treasury Bill rates have decl ined from 6.16 per cent and 6.87 per cent last week to 6.04 per cent and 6.82 per cent this week for 3 and 6 months' Bills, respectively.

## U.A.R. AMBAS SADOR

His Excellency Abdel Hamid Ibrahim Seoud has presented his Letter of Credence as Ambassador Extraordinary and Plenipotentiary of the United Arab Republic to the Deputy GovernorGeneral,Mr. Gerald Fauteux, LL.D. The ceremony took place at the Supreme Court of Canada on August 19.

Mr. Seoud was born in 1906. He obtained a law degree from the University of Cairo and joined the foreign service as an attaché. He was secretary-general of the Egyptian Delegation to the United Nations in 1951. He has also held the positions of chief of the Office of the Minister of Foreign Affairs; Minis-ter-Counsellor, London, 1952; Ambassador, Karachi, from 1954 to the present.

