

CANADA ve the other. W vertable condenses

CANADIAN WEEKLY BULLETIN

INFORMATION DIVISION . DEPARTMENT OF EXTERNAL AFFAIRS . OTTAWA, CANADA

Vol. 15 No. 5 of a realsh Illiv at sadd days

Land Valvage Section February 3, 1960

meter, a Canadian development, has been unaTRONTENTS. Treat a height of 500 feet and relative

| Succor For Grain Farmers 1 | Canadian Exports In 1959 |
|-------------------------------|-------------------------------|
| inadiometer Ibyeiled 2 | Commonwealth Social Research |
| Commissioner For Nigeria | Eskimo-English Circular |
| Regional Price Indexes | Passamaquoddy Fish and Power |
| Maritime Research Directorate | Envoy To European Communities |
| Newfoundland Map Complete | Stratford Casting Continues |
| hiversity Grants Proposal 3 | Professors' Salaries |
| 1960 Stratford Music Season | Navy 1959 Roundup |
| 1960 Stratiord Music Season | |

residence West to be a design of the Succon For GRAIN FARMERS selection of the land design of the second residence of the seco

The following statement was made in the House of Commons on January 19 by Mr. Gordon Churchill, Canadian Minister of Trade and Commerce:

duties in Lages Phy April Parel Posar the lough

"The Government has been concerned in recent months with the problem faced by western grain farmers who, because of abnormal and unreasonable rain and snowstorms, have been prevented from harvesting their crops.

"The Wheat Board undertook a survey of unharvested grain and flaxseed as at October 16. This survey indicated that 250 million bushels of wheat, oats, barley, rye and flaxseed remained unthreshed as at mid-October. This represented about 27 per cent of the estimated 1959 harvest in the Prairie Provinces. It was more serious for producers in wide areas in Central and Northern Alberta; in Northern Saskatchewan and in Northern and Eastern Manitoba, where from 50 per cent to 100 per cent of the 1959 grain crops were unharvested.

"In November, and again in the first half of December, weather conditions were such that producers, in many areas, could get on with harvesting operations. The Wheat Board surveyed the position again in the first week of December and at that time it was estimated that 100 million bushels of grain remained unthreshed. Thus, according to the best estimates available, the quantity of unthreshed grain diminished by about 150 million bushels, between mid-October and the first week of December.

E. dispendindberg, internationally-"While the overall problem has diminished in extent, there are many producers in each of the western provinces, especially in the more northerly areas, who have been unable to complete a major part of their harvesting. These producers must await the spring before they can thresh the grain under the snow. The proposed legislation is designed specifically to meet the needs of producers whose income is deferred until they have an opportunity to complete harvesting operations. The fact that considerable progress has been made in harvesting since mid-October does not in any way subtract from the problems of producers who have been unable to make substantial progress in threshing their 1959 grain crops.

the planet, information necessary for the

"In the light of the experience with cash advances under the Prairie Grain Advance Payments Act, the Government feels that the principle and procedures of that Act can be applied in meeting the exceptional circumstances which now exist in respect to that portion of the 1959 wheat, oats and barley crops which remain unthreshed or partially

unthreshed.

"In the case of unthreshed grain the future position cannot, of course, be precisely defined. Neither producers nor elevator agents know how much grain will ultimately be threshed, or to what extent weathering will affect the grades. However, it is felt that this element of uncertainty can be overcome through the practice of endorsing permit books

when advances are made, and by prudent limitations in the amount of advances on unthreshed

"I would like to make it clear that the Resolution does not anticipate legislation which in any way will interfere with the Prairie Grain Advance Payments Act, which provides for cash advances on threshed grain. The proposed legislation will have a limited operative period and will be supplementary to the legislation now on the Statute Books...."

1/2 1/2 1/2 1/2 1/2

GRADIOMETER UNVEILED

The world's first airborne gravity gradiometer, a Canadian development, has been unveiled to leading scientists from all over the

world and the Canadian public.

A closely-guarded classified instrument, the gradiometer has already proved effective in hitherto unannounced major aerial surveys throughout North and South America and Africa.

The gravity gradiometer will be a vital aid

1. The search for essential oil, gas and minerals, by providing fundamental gravity data revealing geological structure.

2. The determination of the true shape of the planet, information necessary for the navigation of nuclear submarines, intercontinental ballistic missiles, rockets and

"space ships."

Dr. Hans Lundberg, internationally-recognized geophysicist, recently demonstrated the device in Calgary, Alberta, to the first international symposium of arctic geology sponsored by the Alberta Association of Petro-

leum Geologists.

Scientists say the gradiometer will be extremely valuable in the Canadian Arctic. The Canadian Government recently announced a crash programme to map the continental shelf of the Arctic and survey the natural resources of the Arctic islands, about which, it is recognized, the U.S.S.R. knows more than Canada. Vast concessions have recently been granted in the Canadian Arctic to petroleum exploration

companies.

The gravity gradiometer was flown to Calgary from Toronto in one of the survey aircraft operated by Lundberg Explorations Limited. En route, the gradiometer recorded changes in the earth's gravity in the mineralrich Precambrian Shield and across the sedimentary basin of Western Canada to the Rockies. Results of the Toronto-Calgary flights and local flights were made for the benefit of the scientist-delegates and proved of considerable interest.

The gravity gradiometer was developed in the Toronto research laboratory of Lundberg Explorations, who intend to operate it around the world. Half a million dollars were spent in developing the device in research over the last three years alone. Extensive testing has removed the "bugs".obno to soldand and deports

The gradiometer is basically a sensitive electric balance composed of two substantially similar masses suspended on thin filaments one above the other. A variable condenser is located near the two masses. When the instrument is flown over density differences, the masses change their relative positions. This movement may be measured electronically with considerable accuracy, to a hundred millionth of a centimeter. Geological masses or conglomerations of masses that have different densities from their surroundings are thus identified by movement of the electrical mechanism. The instrument's sensitivity is such that it will detect a few million tons of iron ore at a height of 500 feet and relatively small but potentially oil-bearing geologic structures under favourable conditions. Gradiometer Unveiled * * * *

Commissioner For Nigeri

COMMISSIONER FOR NIGERIA

It has been announced by Mr. Howard C. Green, Secretary of State for External Affairs, that Mr. T. LeM. Carter of the Department of External Affairs has been appointed first Canadian diplomatic representative in Nigeria. Mr. Carter, who will take up his duties in Lagos in April, will bear the title of Canadian Commissioner, which will remain the designation of the head of the Canadian post in the Nigerian capital until the country

becomes independent.

Mr. Carter has served in several diplomatic posts, including Warsaw, where he spent a twoyear term as Chargé d'Affaires. During 1957-58 he was the Canadian Member of the International Commission for Supervision and Control in Vietnam. Last year he attended the

Imperial Defence College in London.

and unixeasonable with tage shows torms, have been prevented from harvesting their crops.

REGIONAL PRICE INDEXES

Eight of the ten regional consumer price indexes were lower between November and December 1959, with decreases ranging from 0.1 per cent in Saint John to 0.5 per cent in Saskatoon-Regina and Edmonton-Calgary. The indexes both in St. John's and Montreal were

unchanged.

Decreases in foods were mainly responsible for changes at the total level. Food indexes were lower in all ten cities, with declines ranging from a fractional 0.1 per cent in St. John's to 2.0 per cent in Saskatoon-Regina. Shelter indexes rose in seven cities, were unchanged in two, and declined in the other city. Clothing indexes showed mixed results, as five regional-city indexes were up, three were down, and two were unchanged. Householdoperation indexes were higher in seven cities, lower in one, and unchanged in the remaining two centres. "Other" commodities and services indexes were higher in four cities, and unchanged in six.

MABITIME RESEARCH DIRECTORATE

Increased interest in maritime activities by Canada's defence forces, together with expanding technology in the fields concerned, has necessitated the establishment of a Directorate of Maritime Research (DMR) at Defence Research Board Headquarters.

The small new directorate will concern itself with co-ordinating maritime research generally and, in particular, with scientific aspects associated with ocean surface and subsurface environments, underwater acoustics, submarine detection, tracking and killing, and countermeasures against the submarine threat.

Scientific advances in maritime warfare involving the Royal Canadian Navy, along with greater participation by the Royal Canadian Air Force in similar activities, were factors in dictating establishment of the new directorate. Its object will be to effect closer co-ordination of scientific research relevant to maritime defence activities.

NEWFOUNDLAND MAP COMPLETE

Publication of the last map-sheet completing the topographical 1/50,000 (1.25-inch to the mile) map coverage of the island of Newfoundland has been announced by Mr. Paul Comtois, Minister of Mines and Technical Surveys. The map-sheet, Dashwood Pond, covering an area in the southwest corner of the island a few miles inland from St. Georges Bay, is the last of the series of 170 map sheets of the island to roll off the presses at the Map Compilation and Reproduction Division of the Department's Surveys and Mapping Branch.

Completion of the topographical mapping of Canada's tenth province in less than ten years reflects much co-ordinated planning and extensive field work by the Branch's Geodetic

Survey and Topographical Survey.

At the time of Newfoundland's entry into Confederation in 1949, such mapping as had been done covered only limited coastal areas and certain regions of military importance. The Federal Government was faced with the urgent task of establishing geodetic control and of the topographical mapping of the island proper, an area of over 42,000 square miles, and of Labrador, almost four times that area. Topographic mapping is an essential tool for general economic development, and particularly that of natural resources.

Within two years, the aerial photography of the entire area and much of the basic geodetic survey work had been successfully carried out. Confronted with great, all-but-inaccessible areas of rough terrain that could only be crossed by means of a 547-mile rail line, topographical ground-survey parties worked from improvised bases on the fringe of such areas and, with the valuable aid of helicopters, completed their part of the job by 1954.

The Dashwood Pond map-sheet depicts an area of approximately 408 square miles (half-sheets cover half the area) giving particular emphasis to such features as natural drainage, elevation heights and contours, permanent and winter roads, rapids, falls, bridges, dams, harbours and wharves, and the general outlines of wooded areas, urban centres, etc. Such maps are a valuable working aid for the surveyor, geologist, prospector, engineer, in addition to meeting many other civilian and military requirements. 1960 STRATFORD MUS.

UNIVERSITY GRANTS PROPOSAL

A new proposal was recently advanced by Prime Minister Diefenbaker to the premiers of all Canadian provinces which will, it is hoped, make it possible for universities in all provinces to participate in the uni-

versity-grants arrangements.

During the past eight years, universities and colleges in all provinces other than Quebec have been accepting grants offered by the Parliament of Canada. The universities in Quebec have not felt able to accept these grants because of the attitude widely held in that province that federal tax revenues should not be collected and distributed to higher educational institutions. The sums allocated to Quebec universities and colleges have been accumulating, and the National Conference of Canadian Universities (the disbursing agent) now holds some \$17.5 million in trust for the Quebec universities.

If approved by Parliament, the new proposal would allow any province which wished to do so to provide these additional grants, amounting to \$1.50 per capita, out of an increase of one per cent in the provincial corporation income tax. In return, the Government of Canada would allow an abatement of one per cent in the federal corporation tax paid by corporations in that province. Provinces accepting this new offer would undertake to provide the eligible universities and colleges in the province with grants at the same rate as at present.

The reduction of the federal corporation taxes and increase in provincial taxes would not exactly equal the amount of the university grants payable by the provincial government under the new plan. Consequently, there would be a supplementary adjustment. If a province received from this additional one per cent tax an amount more than was required to pay these additional grants, the difference would be returned to the federal treasury. If the province received less from the tax than was needed to pay the grants, the province would receive a supplementary amount from the fe-

deral treasury.

The words of Mr. Diefenbaker is announcing the new offer bear repetition: "There has been a deep desire to devise an equitable plan that would make it possible for universities in all the provinces to benefit. I am confident that

this new plan will achieve that objective. Thereby it will strengthen our national unity. It takes fully into account the jurisdiction and responsibilities of the provincial legislatures in the field of university education, while at the same time giving effect to the desire of Parliament and the Canadian people to see the universities of Canada assisted in their important work."

to meeting * * * other civilien and

1960 STRATFORD MUSIC SEASON

A new production of "H.M.S. Pinafore," a continuation of the Musicians' Workshop, concerts by the National Festival Orchestra with Glenn Gould, Oscar Shumsky and Leonard Rose as resident artists, and an international conference of composers will be among the features of the 1960 Stratford Music Festival, according to Music Director Louis Applebaum.

The production of "Pinafore," one of the most popular Gilbert and Sullivan light operas, will be staged by Tyrone Guthrie, who returns to the Festival for the first time since 1957. Although Dr. Guthrie has not yet indicated what his approach to the work will be, it will open on July 15 in the Avon theatre and continue there for three full weeks. With sets and costumes designed by Brian Jackson and with musical accompaniment by the National Festival Orchestra under the direction of Mr. Applebaum, "Pinafore" is expected to have an even wider appeal than "Orpheus in the Underworld," which was presented during the 1959 Festival. Casting will begin within the next few weeks.

This will be the first time that Dr. Guthrie has undertaken a musical at the Stratford Festival, although he has won considerable international renown for his staging of opera at the Metropolitan in New York and at both Covent Garden and Sadlers' Wells in London. Three seasons ago he also directed a modern musical version of "Candide" on Broad-

"Pinafore," will be presented in addition to Mr. Guthrie's production of Shakespeare's "King John," which will be staged in the Festival Theatre, where his previous productions have won acclaim since the beginning of the Festival in 1953.

TO * * * * Tarmen agos & ed

CANADIAN EXPORTS IN 1959

With another substantial gain in December, Canada's total commodity exports in 1959 increased 5.1 per cent in value, to \$5,179,600,-000 from \$4,928,300,000 in 1958, to reach new record value for a year. The previous peak was \$4,934,400,000 in 1957, only slightly above the 1958 total.

Most of the gain in the 1959 total was owing to increased exports to the United States. These rose by \$292,200,000, or 10 per cent, from \$2,914,700,000 in 1958 to a new record total of \$3,206,900,000. As in the case of total trade, the previous peak for shipments to the United States was 1957, when the value was \$2,941,700,000.

Total exports to the United Kingdom were also larger in the year, as the result of increases in November and December, totalling \$797,100,000 compared to \$781,000,000 and comparing with the peace-time peak of \$818,-400,000 in 1956. Commodity exports to other Commonwewlth countries declined moderately to \$277,500,000 from \$285,500,000 in 1958, and to all other countries were down to \$898,100,000

compared to \$947,100,000.

Total exports in December increased by 8.2 per cent to \$486,600,000 from \$449,700,000, and were at the highest value ever recorded for the month. Shipments were up in value to all main areas. Exports to the United States increased to \$285,300,000 from \$273,100,000 in December 1958, and to the United Kingdom to \$78,100,000 from \$68,300,000. There was a moderate gain to other Commonwealth countries to \$22,500,000 from \$20,000,000 and a substantial rise to all other countries to \$100,-700,000 from \$88,300,000. ing the topographics

COMMONWEALTH SOCIAL RESEARCH

A Commonwealth Institute of Social Research is to be established in Ottawa as a centre for fundamental research in the social sciences and humanities and will serve the Commonwealth as a whole. The executive of the Institute is entirely Canadian and is composed largely of professors. Officers include the Hon. Mark R. Drouin, Honorary President; Dr. John E. Robbins, President; and Mr. Bernard Ostry, Executive Secretary-Treasurer. A small research and administrative staff will be appointed and a library and statistical laboratory are to be set up. Plans include the raising of a \$10-million endowment fund, to produce the required \$500,000 per year. It is hoped that the Institute will bring to Canada, leading Commonwealth scholars and that it will enrich and strengthen cultural development throughout the Commonwealth.

ESKIMO-ENGLISH CIRCULAR A "circular of enlightenment" is the way biologists of the Fisheries Research Board of Canada describe a publication soon to be issued by the Board's Arctic Unit, Handwritten in both the Eskimo and English languages, and illustrated with descriptive drawings, the circular explains to the Eskimo in his native language the work being done by the Fisheries Research Board to conserve the walrus, as well as pointing out ways the Eskimo can help the Board in this endeavour. For instance, the Eskimo is asked to take a simple census count of the walrus, observing the number of males and females, and also the number of pregnant members of the species.

The circular, the first prepared by the Board in the Eskimo language, can be conveniently carried. RCMP officers stationed in the north will assist the Arctic Unit when the circular is ready for distribution to the Eskimos.

PASSAMAQUODDY FISH AND POWER

The completion of fishery investigations of Passamaquoddy Bay on the Atlantic Coast has shown that a proposed tidal-power project for that area would have only minor effects on the herring fishery of the bay, scientists attending the Fisheries Research Board of Canada's annual meeting in Ottawa were told recently. This statement was based on three years of intensive study by Canadian and United States specialists, the Canadians being members of the staff of the Board's Biological Station at St. Andrews, New Brunswick.

For almost three decades, American and Canadian engineers have been interested in the economic feasibility of harnessing the tremendous tides of the bay to produce electric power. The reason for this interest was based on the fact that four times a day about two billion tons of water cascade through the deep, narrow passages connecting Cobscook and Passamaquoddy Bays to the Bay of Fundy and in so doing alternately raise and lower the water levels by as much as 26 feet. Passamaquoddy is an Indian word meaning "great pollock waters" and is highly descriptive of this 140 squaremile bay, situated on the International Boundary between the State of Maine and the Province of New Brunswick.

However, besides the power potential the Bay may possess, it has for over a century nurtured one of the most productive herring fisheries and processing industries in the world. Each year the fishermen of the general region land more than 50 million pounds of "sardine" herring - over a third of the whole Gulf of Maine and Bay of Fundy catch. In addition, there are fisheries for clams, scallops, lobsters, pollock and haddock.

Since fishermen of the Bay derive as much as \$1,500,000 a year from the fishery, it was only natural that they, as well as federal fisheries officials, should press for an investigation of the possible effects that a power project would have on this valuable resource. In 1956, at the request of the Canadian and U.S. Governments, two international boards were established. One was the International Passamaquoddy Engineering Board, set up by the International Joint Commission to consider the engineering aspects of the proposed power project. The other was the International Passamaquoddy Fisheries Board, designed to forecast the effects that power

construction would have on the fisheries of the region. This fisheries board instituted programmes of research in oceanography, biology, and economics that were carried out jointly by the staffs of the Research Board's Biological Station at St. Andrews and the United States Bureau of Commercial Fisheries. The programmes carried out by both bodies provided a basis for the forecasting of effects of the proposed power project on the fisheries of the Passamaquoddy.

ENVOY TO EUROPEAN COMMUNITIES

On January 27, the Secretary of State for External Affairs, replying in the House of Commons to a question as to whether the Government had "taken any steps to establish official and continuing relations with the European Common Market, " made the following statement:

"... In view of the growing importance of the institutions of the Communities and of our relations with these six-nation arrangements, the Canadian Government has now decided to seek accreditation of our Ambassador in Brussels as the Canadian representative to the three Communities. The Canadian request was submitted some weeks ago, and in accordance with the usual procedure a formal reply is expected within the next few weeks. It was our intention to make a joint announcement in Ottawa and in Brussels when these procedures were completed.

"The accreditation of a Canadian representative will not involve the opening of a new mission, and it involves no changes or commitments with respect to Canada's relations, with these Communities. It is an indication of our interest in these European arrangements, and is intended to facilitate the work of our mission in Brussels in keeping informed of Community developments and in making the Canadian view on particular problems known when-

ever appropriate."

STRATFORD CASTING CONTINUES

Michael Langham, Artistic Director of the Stratford Festival, has announced further casting for this season's Festival Company.

In addition to the casting of Julie Harris and Bruno Gerussi as Juliet and Romeo, the following roles have been negotiated: The title role in "King John" will be played by Douglas Rain, with Julie Harris as Blanche and Max Helpmann as Hubert. Mr. Rain, who returns to Stratford for his eighth season, will also play Tybalt in "Romeo and Juliet."

The nurse in "Romeo and Juliet" will be played by Kate Reid, last year's notable Emilia in "Othello", while Friar Lawrence will be played by Tony van Bridge. In "A Midsummer Night's Dream", Mr. van Bridge will appear as

Bottom, Miss Reid as Helena, Mr. Gerussi as

Oberon and Mr. Helpmann as Theseus.

The 1960 Stratford Festival season will run from June 27 to September 17, featuring three Shakespearean plays - "Romeo and Juliet", directed by Michael Langham and designed by Tanya Moiseiwitsch, "A Midsummer Night's Dream", directed by Douglas Campbell and designed by Brian Jackson, and "King John", directed by Tyrone Guthrie and designed by Tanya Moiseiwitsch.

* * * *

PROFESSORS' SALARIES

An advance release by the Dominion Bureau of Statistics shows that the median salary of full-time teachers at Canada's four largest universities (Toronto, British Columbia, McGill and Alberta) has risen 6.2 per cent from 1958-59, to \$8,035 in 1959-60. Current median salary for deans is \$15,875; for professors, \$12,175; associate professors, \$9,141; assistant professors, \$7,251; lecturers and instructors, \$5,502. Twenty-seven (out of 40) deans are paid salaries of \$15,-000 or more, as are 25 (out of 488) 'full' professors. Total salaries paid to full-time teachers in these four universities in 1959-60 will be approximately \$19 million.

非非非非

NAVY 1959 ROUNDUP

For the Atlantic Command of the Royal Canadian Navy, 1959 was a year of many accomplishments, operationally, administratively and

Warships of the Command steamed a total of at least 720,000 miles, the equivalent of three one-way trips to the moon, and spent about 3,400 days at sea on voyages, exercises and patrols.

Naval aircraft afloat and ashore, fixedwing and rotary, logged better than 25,000

hours in the air.

Naval divers were underwater for some 6,000 hours, 700 of that total achieved by

frogmen operating in the Far North.

Twelve ships were commissioned for the RCN Atlantic fleet, including five ultra-modern destroyer escorts of the Restigouche-class fresh from the Canadian shipyards where they were built. Others were modernized escorts brought forward from reserve or activated after lengthy refits. One, the 10,000-ton Cape Scott, emerged in a new role as the RCN's first mobile repair ship.

The Command now has 39 seagoing warships in commission, ranging from the 20,000-ton air-craft-carrier Bonaventure to 390-ton wooden-

hulled minesweepers. There are also in commission three 79-ton Bird class patrol vessels.

The fleet has five escort Squadrons, one having the newest Restigouche-class destroyer escorts, two with modernized destroyer escorts and two with modernized frigates. There is also a squadron of coastal minesweepers built and commissioned since the Second World War. Six squadrons of naval aircraft operate on the coast, including jet fighters equipped with supersonic missiles, twin-engine monoplanes for anti-submarine warfare, a helicopter anti-submarine squadron, a composite fixed-wing squadron and a helicopter utility squadron. The latter two are used for training.

Ashore, another important milestone was reached in the development of the defence organization on the East Coast. On July 1, Dominion Day, an integrated Maritime Headquarters was established in the dockyard at Halifax, whose unified RCN-RCAF staff exercises operational control over naval forces and maritime aircraft of the RCAF. Rear-Admiral H.F. Pullen, Flag Officer Atlantic Coast, is Canadian Maritime Commander Atlantic, Air Commodore W.I. Clements, Air Officer Commanding Maritime Air Command, in Deputy Commander.

Of the more than 700,000 miles steamed by warships of the RCN Atlantic Fleet, the aircraft carrier Bonaventure logged the most. Her total of 35,921.7 miles is the equivalent of six round trips across the ocean between

Halifax and the United Kingdom.

NATO exercises at sea with other navies found the ships of the Atlantic Command ranging from the eastern seaboard of North America to the shores of Europe. Three of the major NATO exercises in which the RCN participated included NEW BROOM (carrier and escorts) SWEEP CLEAR (minesweepers) and SHARP SQUALL (carrier and destroyer escorts).

Canadian warships were by no means idle when not involved in NATO activities at sea. From the middle of January to the middle of December there was a series of fleet, squadron, and other exercises. Forces were directed at times from Bermuda, St. John's, Nfld.,

and Sidney, in addition to Halifax.

The mobile repair ship Cape Scott roved far in her first year of commission. She logged 11,963 miles in journeys from the Caribbean to Newfoundland. Although she spent only 63 days at sea, an additional 41 were spent in isolated anchorages as she provided support to elements of the fleet on extended operations.

There are approximately 12,000 uniformed personnel serving afloat and ashore in the Atlantic Command and more than 6,000 civilian

employees.

* * * * *