

These tests are expected to provide information on the deep structure of the earth's crust and provide data valuable for designing new seismic instruments.

A seismic party is attached to the Polar Continental Shelf Project to assist in obtaining data on the underlying structure of the shelf.

GRAVITY SURVEY

In Quebec, a field party is gathering information on gravity or the earth's pull. This is the third year of a five-year programme to gain gravity data on the Province of Quebec and Labrador, which will be used to publish gravity maps at a scale of 1:500,000. Such maps are in constant demand to assist in locating promising areas for mineral exploration. Information of this nature also possesses considerable importance for defence purposes.

In northern Saskatchewan, geophysicists are using helicopters and a "Beaver" plane to carry out gravity surveys. Results of their studies will help trace locations where rock formations lie close below the surface cover—a big assist to geologists in an area where rock outcrops are scarce.

In the Prairie regions, parties travelling by automobile are making gravity observations to supplement previous information obtained by oil-company gravity surveys. Data gained by company surveys were supplied to the Observatory during the International Geophysical Year.

A party is also attached to the Polar Continental Shelf Project to make gravity studies which, in conjunction with other geophysical and geological work, will present an overall picture of the earth's crust in the expedition's area of operations.

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INDUSTRIAL PRODUCTION

Canada's seasonally-adjusted index of industrial production advanced in May 1.1 per cent to 168.3 from the April level of 166.5. Manufacturing production showed a fractional rise of only 0.3 per cent. However, the output of Canadian mines was higher by 4.8 per cent, while electric power and gas utilities rose 1 per cent.

In manufacturing, the output of non-durables increased 1.5 per cent in May. Gains were recorded in foods and beverages (6 per cent), tobacco products (7 per cent), textiles (3 per cent), paper products and printing, publishing and allied industries (2 per cent). Declines were registered in rubber products (8 per cent), leather products (6 per cent), clothing (1 per cent), products of petroleum and coal (4 per cent) and chemical products (2 per cent).

The production of durable goods declined 1.1 per cent in May. Wood products were off

6 per cent, iron and steel 1 per cent, non-ferrous metal products and electrical apparatus and supplies 2 per cent. Gains were recorded in transportation equipment and non-metallic mineral products.

Significant movements within individual manufacturing industries included increases of 21 per cent in carbonated beverages, 3 per cent in newsprint production and 4 per cent in motor vehicles, and decreases of 11 per cent in woollen goods, 4 per cent in petroleum products, 9 per cent in sawmill products, 9 per cent in iron castings, 3 per cent in non-ferrous smelting and refining and 5 per cent in telecommunication equipment.

In the mining group fuels were higher by 10 per cent, reflecting increases of 13 per cent in natural gas and 10 per cent in crude petroleum. Non-metal mining showed a gain of 8 per cent, associated with an increase in the output of asbestos. However, metal mining remained relatively unchanged as offsetting movements occurred in the main industrial groups; a sharp decline in the output of uranium and lesser declines in nickel and zinc were largely offset by sizeable increases in the output of iron ore and some other metals.

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UNEMPLOYMENT CLAIMS

Claimants for unemployment insurance benefits numbered 296,400 on June 30, a reduction of almost 20 per cent from the May 31 total of 364,300 and almost 35 per cent higher than last year's corresponding total of 220,500, according to advance figures. More than 75 per cent of the increase over last year was accounted for by males, and 70 per cent occurred in Quebec and Ontario.

Initial and renewal claims filed during June totalled 128,500, compared to 165,600 during May and 107,100 during June 1959. Initial claims in the month totalled 76,900, a decline of 30 per cent from May, while renewal claims were down by 7 per cent.

The failure rate rose sharply from 11.1 per cent in May to 25.2 per cent in June. This was due to the termination of the seasonal benefit period. In June last year the rate was 26.1 per cent.

Benefit payments amounted to \$26.8 million in June, compared to \$52.2 million in May and \$18.2 million in June 1959. The increase of 48 per cent in payments over last year is substantially greater than the gain of 35 per cent in the month-end count of claimants and the advance of 39 per cent in weeks compensated. This is explained, in part, by the combined impact of the relatively higher male content (66 per cent in June this year as against 62 per cent last year) for whom the average weekly rate is substantially higher than for females, and the four new benefit rates arising out of the amendments of September 1959.