

**NATIONAL MUSEUM FIELD WORK:** An expanded program of field work will be undertaken this year by the National Museum of Canada according to an announcement by the Minister of Mines and Resources, Mr. Gibson. Eighteen parties will conduct archaeological, botanical, ethnological, and zoological research.

Five archaeological parties will work in British Columbia, Saskatchewan, Manitoba, Ontario, the Arctic and Yukon Territory. Dr. Jean Michea, with Henry Collins Jr., Smithsonian Institution, will investigate the ancient habitations of Eskimos who, hundreds of years ago, moved in the area between Boothia and Greenland. The work will be carried on at Resolute Bay and Cornwallis Island, N.W.T. Transport will be supplied by the R.C.A.F. and the U.S.A.A.F.

Dr. Douglas Leechman, archaeologist, will work in British Columbia north of Prince George on a continuing study of migration routes from Asia to North America.

#### YUKON STUDIES

Three parties will be assigned to zoological work in Yukon Territory, Prince Patrick Island, N.W.T., and Newfoundland. A study of birds and mammals in the Kluane Lake region (Yukon), an area from which little zoological information has been collected in the past, will be made by W.E. Godfrey. Austin W. Cameron will investigate the mammals of Newfoundland while Stuart A. MacDonald will carry on zoological field work on Prince Patrick Island, with the Smithsonian Institution.

Three biological parties, under Museum supervision, have been assigned to the following areas; Lake Winnipeg-Winnipegosis; Quebec; the east coast of Hudson Bay; and Islands of Foxe Channel, N.W.T.

Ethnological work will be carried on by the Museum in Ontario, Quebec and Nova Scotia. A study of rituals, ceremonies, and the Handsome-Lake religion of the Iroquois in the Grand River area, will be made by Marcel Rioux. Research and collection of folk songs and music are also being done on behalf of the Museum. Miss Margaret Sargent will work on transcription of folk music and Iroquois songs.

**BORDER TRAFFIC:** Highway traffic between Canada and the United States was 14 per cent heavier in April than in the same month of 1948, according to the Bureau of Statistics. The advance was principally due to Canadian traffic returning from the United States which increased by 40 per cent. United States traffic entering Canada advanced only five per cent.

The comparison between traffic in the two years is influenced by the fact that Easter occurred in April this year but in March last. For that reason a more valid comparison can be made by considering the aggregate volume of traffic for the two months of March and April. Data for the two months show an increase of 10

per cent in total traffic across the border, United States vehicles increasing by two per cent and Canadian vehicles by 32 per cent.

The aggregate number of border crossings in April was 613,800, consisting of 415,400 foreign entries and 198,400 Canadian vehicles returning. Of the foreign inflow, 83,500 vehicles entered on traveller's vehicle permits, 315,600 were non-permit or local entries, and 16,300 were commercial vehicles. The Canadian traffic comprised 23,100 units remaining abroad for more than 24 hours, 160,400 staying for shorter periods and 14,900 commercial vehicles.

Cumulative totals for the four months place highway border crossings at 1,891,000 as compared with 1,722,300 in the similar period a year ago, showing an advance of 10 per cent. As in April, a large part of the rise was due to increased volume of returning Canadian traffic, up from 469,800 a year ago to 625,800. In the same period, United States entries rose from 1,252,500 a year earlier to 1,315,200.

**COAL OUTPUT DOWN:** Production of coal in Canada in May was about three per cent lower than in the corresponding month last year, a decrease in Alberta counterbalancing gains in all other producing provinces. Despite the fall in the month, output for the five months ending May rose eight per cent over the similar period of 1948. Imports were down .04 per cent in the month and one per cent in the cumulative period.

Preliminary figures released by the Bureau of Statistics place the all-Canada output at 1,326,700 tons in May as compared with 1,352,393 a year earlier. During the five-month period, production rose to 7,765,300 tons as against 7,177,830 in the same period last year. Imports during the month totalled 3,347,099 tons compared with 3,348,579 in May last year, bringing total imports for the year-to-date to 7,724,959 tons against 7,794,524 in 1948.

Mines in Nova Scotia produced 557,000 tons in the month as compared with 538,001 a year ago, and in Alberta, 506,000 tons compared with 587,771. Total for British Columbia and the Yukon was 158,500 tons compared with 143,951, Saskatchewan (62,200) (50,695), and New Brunswick 43,000 (41,975).

**SAULT STE. MARIE ARMOURY:** The first post-war armoury to be built in Canada will go to the city of Sault Ste. Marie, Ont., for the use of its 49th Heavy Anti-Aircraft Regiment, the Minister of National Defence, Mr. Claxton, has announced. Construction is expected to start early this Fall, and will take about one year to complete at a cost of more than \$750,000. (This figure erroneously appeared as \$750,000,000 in last week's Bulletin)

**NEW AIR DEVICES:** Two devices to help aircraft land in bad weather conditions have been approved as standards for world-wide use by the Council of the International Civil Aviation Organization, which at a meeting in Montreal has approved international standards on aeronautical telecommunications.

The two devices are the Instrument Landing System (ILS), which permits a pilot to land in low visibility by following the indications of two pointers on his instrument board, and Ground Controlled Approach (GCA) which allows a ground radio operator to talk the aircraft down while watching a radar screen which shows its exact position. ILS is specified for all regular international airports where an instrument landing system is required, with GCA as supplementary equipment wherever air traffic control will be materially assisted or wherever it is likely to be needed by aircraft not equipped with ILS. The only equipment required in the aircraft itself for GCA use are a radio receiver and transmitter.

#### OTHER PROVISIONS

Other provisions of the aeronautical telecommunications standards include the selection of the very-high-frequency omni-range as a short-distance radio aid to navigation for use where traffic conditions justify an aid of that character. The omni-range gives a continuous direct reading of the aircraft's bearing from a fixed ground station. Standardized distance measuring indicator is to be added when available. Both the aircraft's distance and bearing from the ground station will then be continuously available to the pilot, thereby providing him with precise tracks along which he may fly, and keeping him advised at all times of what track he is on and how far he is from the fixed ground station.

The standards do not include any long-range navigational aids, as no completely satisfactory aid is yet sufficiently mature for international adoption as a standard, but the ICAO Council recommends that research and development continue on this problem, and that in the meantime the present types of long-distance aids be continued in operation.

The aeronautical telecommunications standards are the 10th set which ICAO has adopted. Others include such subjects as Rules of the Air, Personnel Licensing, Dimensional Standardization, Maps and Charts, etc. Standards are designed to foster air safety in two ways: by producing world wide uniformity of air navigation services and procedures, so that wherever an aircraft may fly it will find familiar facilities; methods of operation and regulations; and by ensuring that each nation's aviation practices are maintained at a high standard of quality.

The aeronautical telecommunications standards will be effective on March 1, 1950, unless

they are previously disapproved by a majority of the member nations of ICAO. Authority for the establishment of the standards comes from the Convention on International Civil Aviation, concluded at Chicago in 1944. ICAO Council adoption of a set of standards gives it status as an Annex to this Convention. Any state which finds itself unable to comply with any of the standards in an approved annex must notify ICAO, so that other member nations may be warned of the divergency.

**WHOLESALE SALES UP:** Dollar volume of wholesale sales advanced slightly less than two per cent in April over the same month last year, following a gain of seven per cent in March, an increase of one per cent in February, and a slight decline in January. Cumulative figures for the first four months of this year stand 2.7 per cent above the similar period of 1948.

According to figures released by the Bureau of Statistics, the general unadjusted index of sales, on the base 1935-39=100, stood at 290.3 in April, 283.4 in March, and 285.4 in April last year.

Trends in the different regions of the country showed considerable variation in April. Wholesalers in the Prairie Provinces recorded the greatest increase at 14 per cent, while sales of wholesalers in Ontario were up two per cent. A decline of four per cent was reported for Quebec, while in British Columbia, sales were down six per cent, and in the Maritime Provinces by eight per cent.

Footwear wholesalers recorded a sales advance of 21 per cent in April over the same month last year, while fruit and vegetable wholesalers registered an increase of 18 per cent. Clothing wholesalers reported an increase in sales of 10 per cent in the month after having been below 1948 for the first three months of the year. Drug wholesalers' sales were up nine per cent, while automotive equipment and tobacco and confectionery wholesalers both reported gains of eight per cent.

Dollar sales of hardware wholesalers were two per cent below last year, the only part of the country to register increased sales in this trade being the Prairie Provinces with a gain of six per cent. The same situation prevailed in the wholesale dry goods and groceries trades, where all regions recorded decreases except the Prairie Provinces.

Dollar sales of dry goods wholesalers for all Canada were down three per cent from last April, while the western provinces showed an increase of seven per cent. In the grocery trade, sales for Canada registered a drop of seven per cent, while sales in the Prairie Provinces were up five per cent.

Stocks in the hands of wholesalers in the nine trades surveyed were valued 10 per cent higher at the end of April than at the same date last year.