

of the firms. This company announced at the Fair the availability of middle-range intensities from 5 to 40 curies per gram in bulk or, to use a term of the trade, kilocurie quantities. The Canadian firm is one of the few in the world able to offer an assured supply in any desired range. The same firm displayed a gammacell, an industrial irradiation unit permitting the treatment of laboratory-size specimens. The exhibit, in colloquial style, urged prospective purchasers to consider the advantages of "doing it yourself" because the gammacell unit is self-contained, requiring no additional shielding, and small enough to make possible transportation to any desired part of the plant. This equipment aroused considerable interest and several serious inquiries resulted.

Other equipment featuring radioisotopes included apparatus used by a firm offering piping inspection *in situ* while the plant is in operation and without disturbing production. The inspection technique employs patented equipment developed by the firm and is used to inspect for corrosion and build-up within the piping, as well as to inspect newly erected piping. This service is now being exported and several further contracts were developed in the course of the AtomFair.

Process control is a further application of radioisotopes. A firm showed a unique measuring-head for incorporation into equipment for the automatic control of production of paper, rubber, etc., without contact with the material being measured. The head is an original Canadian design and exports are being promoted for use in Canadian or foreign-built production-control equipment.

RAILWAY-CAR SORTING

Everyone loves a model train--especially boys of all ages. An attraction to schoolboys (privileged visitors on a Sunday) and nuclear engineers alike was a model railroad consisting of three model trains on a track system. This was set up to demonstrate railway-car identification and sorting by a skilful combination of radioactivity and electronics.... Trains passing a check point were automatically identified by number on the control tower in the center of the photograph and automatically routed onto the proper siding. The system is quite simple in both theory and application: on the underside of the car there is a pattern of radioactive dots read by geiger tubes located under the track and interpreted by an electronic circuit. The system has obvious practical applications for the railway industry and already several major railway systems--some as a result of the exhibit--are interested in the possibility of using it in freight-yard operations and other railway applications.

RADIATION DETECTION EQUIPMENT

A range of radiation detection equipment and components was on display. This equipment, which may serve to monitor for harmful radiations or the detection of radioactive ores, uses either geiger tubes or a combination of photoelectric tubes and materials that phosphoresce when irradiated. Geiger tubes of Canadian design and constructed to close tolerances were exhibited, as well as scintillation plastics and chemicals in a variety of shapes for inclusion in instrumentation. A number of visitors to the Canadian display examined these components, with specific applications in mind. Among the scintillometer-type instrumentation was a newly developed beryllometer for the detection of beryllium. This new device, the first portable-type ever developed, was shown for the first time at Cleveland. In fact, it had just come off the production line. Also shown was a fully transistorized detection meter incorporating some of the latest advances in such instrumentation.

The prominent role played by the Chalk River establishment in the development and sustaining of Canada's nuclear industry was symbolized by a large model of the NRU reactor, one of the most advanced--and the largest--of its kind in the world today....

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AIR AGREEMENT WITH U.K.

The Minister of Transport informed the House of Commons on May 13 that discussions had taken place in Ottawa between the aeronautical authorities of the United Kingdom and Canada, with a view to bringing the air agreement of August 1949 between the two countries up to date.

Mr. Hees went on to say:

"The problems confronting the two Governments on the next phase of international transport were examined, and it was decided that the traffic rights under the present bilateral should be broadened to meet the new situation.

"The United Kingdom granted Canada the right to originate flights in Toronto destined for Hong Kong; to originate flights in Western Canada destined for the U.K.; the rights in Europe between London and Brussels, Dusseldorf, Zurich and Vienna. Canada granted the United Kingdom rights in Toronto on the North Atlantic service. The airlines of both countries will be able to exercise the new rights on March 1, 1960.

"I am very pleased with the outcome of the discussions with the United Kingdom and expect that the new services will greatly contribute to the convenience of the travelling public".