

New Olympic record – for spectators

Competing athletes were not the only people to give their all and establish new horizons during the Montreal Olympics last summer. Spectators, too, did their bit – especially the chair-bound television variety.

Recently it was revealed that the 1976 Olympics became the most widely viewed event in history with an estimated one billion audience following the sporting progress on TV. Tele-globe Canada transmitted about 800 hours of television programs *via* satellite to Asia, Europe, Latin America and Africa. On some days more than 60 programs were transmitted and as many as five programs were transmitted across the Atlantic simultaneously during peak periods.

For global distribution, two satellites over the Atlantic were used as well as one over the Pacific and one over the Indian Ocean. All in all, the arrangements worked very satisfactorily, enabling the world at large to enjoy what was regarded as a highly successful Games.

Toronto's tube transit energy savers

The first two subway cars of a 134-car order recently delivered to the Toronto Transit Commission, are equipped with regenerative chopper controls through which energy consumption will be reduced by at least 30 per cent.

After experimenting for about three years the TTC has discovered that, with the use of this equipment, energy lost through acceleration is almost entirely eliminated and much of the energy usually lost in braking is returned to the third rail.

The exterior design of the units is generally similar to the 328 cars built previously for the Commission by Hawker Siddeley Canada Ltd., the company constructing the present order, which will cost some \$6.5 million. Important new features include an enlarged driver's cab, brighter colours, a new heating system and improved seating. Also, for the first time in Toronto, the new vehicles will be air-conditioned.

The units will be put into service on the new Spadina subway extension in Toronto.

Glassblowing art for science

Robert Ducourneau, Agriculture Canada's first and only scientific glassblower, who makes glass equipment for the department's research laboratories, says glassblowing is essential to research.

His craft is precise, combining glass-working skills with a knowledge of the sciences. Unlike the artistic glassblower, who uses only a few types of glass, the scientific glassblower has 70 kinds at his fingertips.

"Original research demands new types of equipment not available from manufacturers," Mr. Ducourneau says.



Robert Ducourneau, Agriculture Canada's only scientific glassblower, fuses the neck on a flask. Mr. Ducourneau makes glass apparatus for Research Branch laboratories across Canada.

Working with scientists, he styles equipment needed for experiments and modifies it as continuing research demands. Assignments vary. He makes coils of tubing for gas chromatographs, apparatus for distilling liquids and jars in which the action of a ruminant stomach can be simulated.

One apparatus, a device to measure mercury levels, built by Mr. Ducourneau is now used in laboratories in other parts of the world.

North America's 800 scientific glassblowers – 65 of them in Canada – are employed in industry, universities and government.

Youthful diggers find history in their own backyards

During the past year, some 30 youngsters in Halifax, Nova Scotia, most of whom have at one time or another run afoul of the law, have been finding history, and themselves, in their own backyards.

The kids live in an area referred to as "the old north end diversion", settled about 1760 by German farmers.

Their interest in history awoke only when some of them began visiting vacant lots and demolished building sites with Barry Edwards, a recreation worker and long-time digger. Intrigued with the idea of buried treasure and impressed with their finds, the youngsters soon wanted to display their collections.

A committee of four young people and four adults including Barry Edwards, found that various organizations were prepared to help them with donations for a museum and they collected about \$5,000 towards the establishment of the centre.

Instead of tagging the various articles in the collection, the kids "run the museum" and it is they who tell the story of each piece to visitors. Rare items have been donated to the museum, but the remaining artifacts belong to the youngsters who found them and they can be removed at any time. Top diggers have collections worth \$3,000.

Feedback from parents is all positive; in fact, they want to help. Schools are beginning to think of classes on the subject and Halifax historian Lou Collins is expected to become more and more involved.

Youngsters benefit

The greatest success, however, is what has happened to the young people themselves. Because of their interest, they have been reading about Halifax history in the archives and talking to old timers in the area. Also, they have developed a new-found respect for private property and a pride in the worth of their own project.

Next summer, the youngsters plan to tour the province for possible dig sites, but for the present they want to stay in their own backyards where one man's garbage of long ago becomes an excited kid's treasure.