
Skaters win in England

Canadian skaters took three titles at the recent St. Ivel figure skating championships held in London, England.

Tracey Wainman of Toronto claimed her first major international title in winning the competition. The 14-year-old, who is Canadian senior women's champion, won with a program which included a triple salchow and three double axels. She finished the competition with 3.6 points.

Canadian men's champion Brian Orser came from behind to defeat world silver medallist David Santee of the United States to take the men's singles crown at the championships. Orser, 19, of Penetanguishene, Ontario, skated a program that included five triple jumps. One of the jumps was the first triple axel to be performed in Britain. Orser, currently is the only skater at the international level to include a triple axel in his competitive repertoire. He finished with 3.2 points in the competition.

In addition, the Canadian team of Lorri Baier of Mitchell, Ontario and Lloyd Eisler of Seaforth, Ontario won the pairs title. Miss Baier and Mr. Eisler, both 18 finished with 1.8 points over an American team.

Taxi of the future

It looks like a packing crate on wheels, or a tall Jeep; maybe a small Sherman tank, reports the *Canadian Press*.

But it is a taxi and its inventor, Morley Smith, thinks it is the door-to-door people-carrier of the future.

It is particularly good for the handicapped, people in wheelchairs or people who just want lots of room and a high, wide ride to see the sights.

Mr. Smith says that when the GSM taxi goes into production it will cost \$20,000 and be good for a heavy-duty ten-year life.

Mr. Smith is an industrial designer from Montreal and his firm is Guillon, Smith, Marquart and Associates Limited.

The company designed Montreal's subway cars, the LRC (light, rapid and comfortable) high-speed train for Via Rail and the Alouette racing snowmobile.

The new taxi has a space beside the driver, reserved for luggage. Passengers sit behind on a high, padded bench with goldfish-bowl visibility from the wrap-around windows.

The taxi holds five passengers, three on the bench seat and two on jump seats. It has a ramp to accommodate one wheelchair and three other passengers.

"The first units will have front- or rear-wheel drive, with a gasoline engine or a four-cylinder diesel fixed to a heavy-duty automatic transmission," said Mr. Smith.

The taxi is more than 4 metres (13 feet) long, 2 metres (6.5 feet) high and 2 metres wide. It weighs 1,575 kilograms (3,472 pounds).

Extra-wide doors

Some parts, such as the lower body section made of large fibreglass moldings and the metre-wide doors, are detachable for easy repair. The only chrome is on the door handles.

"There's no separate tooling and that saves on cost," said Mr. Smith. The bumper and side panel system are made of resilient, shock-absorbing urethane plastic.

The GSM taxi goes into limited production this fall. Mr. Smith said his firm is looking for venture capital of \$4 million to start an 18-month testing program in 100 areas in the United States, Canada and Europe.

Railway tunnels planned

CP Rail is asking for federal government approval of a \$500-million project that will include two tunnels under the Selkirk Mountains in British Columbia.

The project, to lay 33 kilometres of new main-line track through the Rogers Pass area of the mountain is designed to eliminate the restrictive bottleneck on CP Rail's main line between Calgary and Vancouver.

The railway would like to see the project start next year; it would take four years to complete and employ up to 800 workers.

The Rogers Pass project would be part of a ten-year, \$7-billion capital investment program planned by CP Rail. It would reduce the gradient on the west-bound line to a maximum of 1 per cent from the existing 2.6 per cent helping increase capacity on the line by 50 per cent.

The two tunnels would each be about 16 kilometres in length and 11 bridges would have to be built. CP Rail now uses the Connaught tunnel under Rogers Pass; the tunnel was opened in 1916.

The proposed line would begin at Rogers, British Columbia about 240 kilometres west of Calgary. It would parallel

the existing main line for about 13 kilometres, then enter a 1.6-kilometre tunnel to pass under the Trans-Canada Highway.

At the base of Mount Macdonald it would enter a 14.5-kilometre tunnel which would be the longest in North America passing almost 100 metres under the existing Connaught tunnel. The proposed line would reconnect with the existing main line about six kilometres west of Glacier, British Columbia.

Furnaceless office a success

When Gulf Canada Square opened a few years ago it had its share of people who wondered how a huge complex could stay warm without a furnace during Calgary's frigid winters.

But, after some initial problems, it appears Toronto architect Kenneth Cooper's \$75-million building is working as planned.

The 190,000-square-metre centre, considered by Gulf the world's most energy-efficient structure, operates on a heat-exchange system with water playing the key role.

Heat generated within the office building from people, lights and machinery is stored in four basement tanks which hold a million gallons of water.

The heat is either stored in the water until needed or expelled through an outdoor waterfall in front of the building.

An incinerator on the roof, which burns the centre's garbage, provides additional heat.

Heats and cools

Not only does the system heat the building, but it can also serve as an air conditioner in the summer.

But like any project, there were start-up problems, which had some workers complaining about bone-chilling cold while those in another area were sweating out tropic-like temperatures.

The architect stood by his design, saying all that was needed was a tune-up. Building manager Joe Leung says the problems have been rectified since the building opened in late 1979.

The initial difficulties arose because construction was still going on in parts of the building and the computer control unit — the brain of the heat-exchange system — had not been installed.

Ross Davis, building manager for major tenant Gulf Canada, said everything is now running well and the company is "really pleased".