

New wheelchair helps handicapped

The following item has been reprinted, in edited form, from Transport Canada, November/December 1977.

Life for a severely handicapped person is not easy at the best of times but a new design in wheelchairs may make it a little less difficult.

Transport Canada's electric wheelchair can climb curbs, negotiate fairly rough terrain, and can also handle narrow passageways.

Designer Doug Ball, who developed the wheelchair for the Transportation Research and Development Centre, says "the chair is not only the key to transportation for the disabled, but also the key to a whole new way of life. There's a new dimension of freedom in work and play that was never available in the conventional electric wheelchair"

The new chair is not the result of technological breakthroughs — an outboard starter motor and an automobile windshield-wiper gearbox turn the power platform; sealed automotive batteries power it, and the same type of balance switch found on a quadraphonic sound system steers it. Even the seat is borrowed — it's part of an office furniture system Mr. Ball designed for a furniture company.

The new configuration allows the user to negotiate a 57-cm-wide doorway, an escalator or a vertical-level change of over 20.32 cm. The occupant's reach can be improved by raising the seat level 25.40 cm and the seat angle can be changed for increased comfort. For easy transportation, the wheelchair can be broken down into pieces which are easily stored in the trunk of a car.

The project originated at the University of Toronto with senior year electrical engineering students. TDC then directed Doug Ball Inc. to take over the design and assemble the components.

At present, the prototype is undergoing final testing and evaluation. TDC is searching for a manufacturer and distributor. The price should be about \$2,000, a few hundred dollars more than existing models. Until final results are in and performance measured, satisfaction can be measured in terms of user comments.

For example — the little boy who said "Now I really know what the flowers and woods smell like" or the war veteran who said "For the first time I can go to the corner store alone."

