

there were a number of others: diesel cars for the Chicago suburban network, manufactured from a design supplied by the client — The St. Louis car — and the New Jersey suburban trains, manufactured according to the technology of Pullman-Standard, which had abandoned its activities in the area of mass transit. For the steel-wheeled New York subway, the technology was acquired from Kawasaki of Japan.

Profitable corporate policy

In pursuing a policy of diversification, Bombardier is only following the example of many other international firms. Where the company has innovated is in the method of applying that policy.

The Chairman of the Board and Chief Executive Officer, Laurent Beaudoin, has very clearly defined that method: "Creative invention and research, in the strict sense, today are almost out of reach for the private sector, considering the enormous means that must be assembled to undertake creation, design and engineering and, afterward, the long and costly phases of development, testing and certification.

"Moreover, it must be remembered that most of the great innovations of this type are spinoffs from giant military, aerospace or other billion-dollar programs. The spectacular developments in electronics and micro-computers, for example, resulted from extensions of the NASA program. This is true of several high technology sectors.

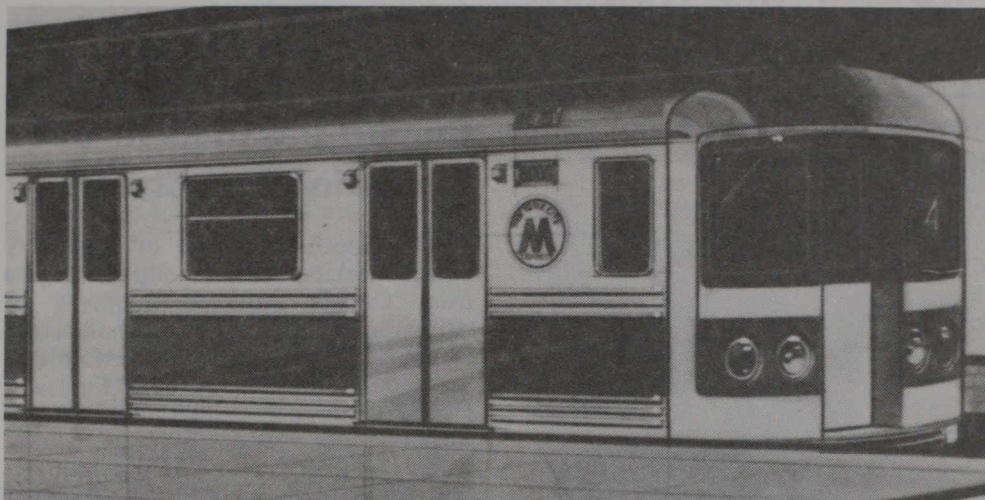
"At the risk of appearing prosaic, it is not this type of innovation that I want to mention, but rather the technological or industrial innovation that consists essentially in improving and perfecting existing products or techniques in order to adapt them to specific market needs that have been identified as clearly as possible.

"Of course, innovation is also accessible and can be made profitable through technological transfers. That's the choice we made at Bombardier for the domain of mass transit.

"Our method consisted in acquiring proven technologies that we afterwards adapted, domesticated so to speak, and rethought in terms of North American manufacturing techniques, in terms of the markets we were aiming at, and, finally, in terms of our operating conditions. From the technologies thus acquired under license for limited periods of time, which give us access to export markets, we succeed in developing a technology of our own which we control."

A promising future

With nearly \$1.4 billion worth of orders on its books, Bombardier is one



New York's METROPOLITAN TRANSPORTATION AUTHORITY (MTA) chose Bombardier to build 825 subway cars for more than \$650 million U.S., the biggest mass transit order ever placed in North America. These graffiti-resistant stainless steel cars will be built partly in Canada and final assembly will be done in the U.S. Delivery will be made over the next 5 years to replace 20% of New York's existing fleet.

of the few firms fortunate enough not to be suffering too much from Canada's current economic difficulties. In fact, Bombardier is one of the few firms in Canada presently maintaining a relatively steady rate of employment. Its public transit division is going full steam ahead and many major development projects are under way in its rail and diesel division. It has undertaken a research program designed to develop a new generation of diesel-electric locomotives (including a new motor) to meet the needs of the North American market. This seven-year program will cost \$54 million, half of which will be financed by the Canadian government.

In the meantime, Bombardier is profiting from a lucrative market for the renovation and supply of spare parts for the 8,000 diesel-electric locomotives in service in many countries around the world.

Finally, in recent months Bombardier has made headlines with another potential project. This time, it's the proposal it made to Singapore for creation of a consortium with other Quebec and Canadian firms in order to delineate a proposal for a turnkey subway project for that Asian country.

There is also the possibility of forming a consortium for construction of LRC trains for Florida's inter-city transport system.

Bombardier's dynamism is an example of the possibilities open to small and medium-sized firms. It is also a reflection of the young small and medium-sized firms in the various regions of Quebec and of the Beauce region in particular which have penetrated international markets and about which we are hearing more and more.

Four major sectors of activity

Bombardier Inc. comprises four major sectors of activity:

1. Recreational and industrial products sector (Valcourt plants)
 - snowmobiles (Ski-Doo and Moto-Ski)
 - motorcycles (Can-Am)
 - tracked off-road vehicles
2. Mass transit sector (plants in La Pocatière, Quebec; Barre, Vermont; Vienna, Austria)
 - subway cars on rubber wheels
 - subway cars on steel wheels
 - suburban push-pull trains
 - streetcars
 - suburban diesel trains
 - LRC coaches
3. Rail and diesel products sector (Montreal plant)
 - diesel-electric locomotives
 - diesel motors
4. Logistics equipment sector (Valcourt plants)
 - 2½-ton trucks
 - 4 x 4
 - snowmobiles
 - motorcycles
 - tracked off-road vehicles

Note: Nearly 6,000 people work for Bombardier Inc. and its subsidiaries in Canada, the United States and Europe. At October 31, 1982, the company had \$361 million in assets and orders worth \$1.4 billion on its books.

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