



# 35 YEARS OF POLICE RESPONSE

## *Bringing hi-tech to the frontier of law enforcement*

by *Simon Martin*

When Rinaldo Darolfi came to Canada in 1958 from Italy he fancied himself an artist. A master plasterer, it didn't take him long to realize plastering in Canada was mind-numbing work.

"In Rome, plaster was an art. When you finish your apprenticeship you're a maestro. You would do a lot of fancy stuff," he said. "Here it was work, not art. I was 21 years old and I said I wouldn't be able to do this the rest of my life."

His artistic training served him well later in life when he founded D & R Electronics in 1976, molding it into one of the most innovative manufacturers in product design for police and other emergency vehicles. Over the years, Darolfi artist's eye helped him sculpt one of the first police car consoles and the first electronic emergency lighting switching panel in Canada.

After giving-up on plaster, Darolfi turned his interest toward the field of electronics, helping design language laboratories for schools across Canada. Since he had no for-

mal education in electrical engineering the learning curve was steep. Luckily for him, he began working with an engineer who he described as good and lazy. "He would spend a day teaching me something that he could do in half an hour because he didn't want to do any work," said Darolfi. "For me it was beautiful."

Eventually, the funding dried up for schools building language labs and Darolfi felt there was no future in the business. He did, however, realize that there was a market for servicing and upgrading them. That's when he started D & R Electronics, which was essentially a high-end stereo equipment repair shop; a very good one that counted Oscar Peterson as one of its many customers.

It wasn't until an innocuous meeting with a Smith and Wesson sales rep at a restaurant that Darolfi turned his pioneering mind towards servicing emergency vehicles. Smith and Wesson was diversifying and trying to get into the emergency lighting and sound business. They had a contract with the Ministry of Health but needed some electronic expertise, said Darolfi.

"It was my introduction into emergency lighting. There was nobody in Toronto doing that service. Nobody knew anything about it because before they were using old mechanical and manual sirens."

New light bars hit the market in 1977 that nobody really knew anything about,

said Darolfi. He was inundated repairing unreliable electronic sirens for the ambulance service and Ontario Provincial Police. "I started repairing stuff for the OPP in 1977. I was keeping them going."

Darolfi started supplying the OPP with electronic parts from a US manufacturer but found them to be of poor quality. "So I went to Mark Thompson (director of fleet operations) and I suggested he give me a chance to design a custom panel for them and make it right here in Canada," he said. "Basically after his consent the OPP was my start. That's when I started manufacturing electronics for police vehicles."

Darolfi started with arrow boards and electronic controls. From there, he designed the first console that went in-between the seats and the first electronic switching to control everything. Before that time, Darolfi said everything was mechanical switching, which had a tendency to break down more frequently.

"The console was something that I introduced to the market. Electronic switching too. Everybody basically followed."

Today, the company designs and manufactures a broad range of light and sound control systems. It also produce cabinets and various other products for police, fire, ambulance and other "amber" vehicles. Darolfi said D&R services customers in Canada, United States, Europe and Australia.



**Left:** D&R Electronics founder Rinaldo Darolfi stands by a 2012 Chev Caprice. Currently unavailable in Canada Rinaldo obtained one to study and measure for the future needs of Canadian policing. **Above:** D&R head office in Bolton Ontario. A staff of 75 work diligently to full-fill orders for emergency vehicle aftermarket equipment on a global scale.

“We have a place in the market. It is a fast moving market but as long as we are progressing with technology and coming out with new better products we will be good,” he said. “We have to evolve with the market.”

That doesn’t seem to be a problem for Darolfi. The latest innovation from D & R is a roof light bar that converts into an arrow board which can display custom messages to motorists. Darolfi expresses his pride in the patented package, which has the same appearance on the roof as a standard low profile LED based light bar. With a flick of a switch the centre unit raises an LED board.

The company is continually trying to find ways to make the police car better. It is currently developing the use of tablet computers as part of the console so as to streamline emergency lighting and records management with a unified touch-screen technology.

What Darolfi is most proud of is that with all the competition in the industry his products are still made in Canada. “We start from scratch. We build stuff ourselves,” he said. “We make the molds and everything.”

The headquarters in Bolton ON is out-fitted with top-of-the-line equipment like a metal laser-cutter and automated turret punch press. Darolfi said the company employs 75 people. Around 90 per cent of the business is police and amber vehicles, eight per cent ambulance and two per cent fire. Customers

include the RCMP, OPP, Toronto Police Service and US police and sheriffs departments.

At the mature age of 74, Darolfi said he has no intention to retire because he still enjoys what he is doing. That being said, when he does retire there is a plan in place for the kids to take over the company.

“Massimo is good at sales. Alfredo is

good on the mechanical side,” he said. “The kids have the intention to spend and to grow. I will help as much as I can.”

You may obtain more information about D&R Electronics by going to [www.dandrelectronics.com](http://www.dandrelectronics.com). **Simon Martin** is an assignment writer with *Blue Line Magazine*.