

## Suited for survival: *the World's Best Bomb Suit*



*Dress codes are seldom more strictly enforced than when one handles a bomb. Just ask Richard L'Abbé, who occasionally dons one of his company's own bomb disposal suits in order to demonstrate how well they can take a live blast.*

His company, Ottawa-based Med-Eng Systems, produces what is now regarded as the world's best protective gear for anyone who has to deal with explosives. Developed in close collaboration with the RCMP, the product has given this police force and the Canadian research community an international profile for its unrivalled expertise in the field.

The centrepiece of this collaboration was a series of complex and expensive tests that made it possible to set unprecedented standards for design. The quality and quantity of these tests were vital to the ultimate success of this venture, something Mr. L'Abbé credits to the participation of the

Canadian Police Research Centre at the National Research Council.

"We ended up doing many test series that neither Med Eng nor the RCMP could have done on their own", he says. By sharing expenses with CPRC, the company and the government partnered to ensure that the testing was as thorough as it could possibly be. They just did it!

Among other findings, the testing revealed the best ways to protect some of the most vulnerable parts of the human body from the effects of a blast. Innovative boot supports distanced the foot from an explosion while still providing support for the user. Suits and helmets were integrated to a much more significant extent, addressing problems that had

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*"If you design a piece of equipment just for Canadian police forces, you can come up with a piece of equipment that will do very well. If you then take that piece of equipment and show it off to a wide array of end-users around the world, what then happens is that your product turns from being good to being exceptional." — Mr. Richard L'Abbé*

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previously been overlooked in personal protective equipment. Med-Eng even incorporated a body-temperature control system to keep the user cool in hot climates.

Mr. L'Abbé notes that the CPRC nurtured an interaction that regularly astonished people elsewhere.

"This working relationship was absolutely legendary", he says. "People in other countries couldn't believe that a private company and the government could work in such close cooperation and come up with such a fabulous output. The net effect of that is that we're always pushing the envelope of knowledge, we're always leading edge. People around the world look up to both the RCMP and Med-Eng and expect us to come up with the next generation solutions."

The company's latest offerings likely exceed those expectations. Med-Eng now makes specialized gear for mine-clearing operations and riot control. Meanwhile, its bomb suit is sold in some 140 countries, representing most of the global market for such products. In fact, Mr. L'Abbé recalls that it was the need to expand internationally that led the suit to become so outstanding.

When the company began in 1981, manufacturing a very basic helmet for use in bomb disposal, it could not survive without looking beyond Canadian borders. By listening closely to what customers abroad were seeking, Med-Eng was able to refine its product even more.

THE CANADIAN POLICE RESEARCH CENTRE (CPRC) IS A PARTNERSHIP BETWEEN THE ROYAL CANADIAN MOUNTED POLICE (RCMP), THE CANADIAN ASSOCIATION OF CHIEFS OF POLICE (CACP) AND THE NATIONAL RESEARCH COUNCIL OF CANADA (NRC) — [www.cprc.org](http://www.cprc.org) 