

BUSINESS

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BRIGITTE BOUVIER OTTAWA CITIZEN

In Ottawa yesterday, Gerry Turcotte, president of the Communications Research Centre Canada, shakes hands with MPB Technologies' Claudette Linton in Geneva. The two companies were showcasing their technologies at the Telecom World 2003 trade show.

Feeling the pulse of virtual reality

OTTAWA, GENEVA LINK UP FOR TRADE SHOW

Two Canadian companies use robotic arms to let people shake hands over the Internet

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CANWEST NEWS SERVICE

OTTAWA — Two Canadian companies used the magic of the Internet to reach out and virtually touch someone in Geneva yesterday.

The two companies were using motorized devices to shake hands, check for a pulse and control two robotic arms through the Internet, from a lab in Ottawa's Communication Research Centre Canada.

MPB Technologies Inc. of Montreal provided hardware for two robotic arms and **Handshake Interactive Technolo-**

gies of Kitchener, Ont., provided software needed to make the devices work.

The two companies were invited by Industry Canada to showcase their technologies at the International Telecom Union's Telecom World 2003 trade show yesterday.

The companies' two robotic arms mimicked each other. If one was shaken up and down in Ottawa, its counterpart in Geneva did the same. If the robotic arm in Geneva was abruptly stopped, its counterpart in Ottawa did likewise.

This way, the thousands of people who stopped at the Cana-

da Pavilion at the Geneva trade show yesterday were given the chance to shake hands with people in Ottawa.

A full-motion video and audio Internet link allowed the people in Geneva to see and speak with researchers in Ottawa while shaking hands.

"You can see it, you can hear it, and now you can feel it," said Gerry Turcotte, president of the Communications Research Centre Canada. "It will open up a lot of applications. The most practical thing is operations."

On Feb. 28, a surgeon at St. Joseph's Hospital in Hamilton, Ont., successfully performed a complex stomach operation on a woman in North Bay, 400 kilometres away, using a remote controlled robot named Zeus.

The procedure was the first of its kind in the world, and the hos-

pital plans to try more in the future.

Turcotte said the "handshake" technology could benefit procedures like this because the surgeon would be able to virtually feel human tissue and receive feedback about the pressure being exerted during the remote-controlled operation.

To illustrate its practical side, yesterday's demonstration saw people in Geneva use the robotic arm to feel the contours of a mannequin in Ottawa.

By positioning the arm over the mannequin, every bump and contour was transmitted to the arm in Geneva and mimicked, allowing a person to feel the mannequin's body. People trying the procedure were also able to feel an artificial pulse within the mannequin.

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