

ACCESS

MANITOBA

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Are You Considering the Cyber World and Becoming an e-Preneur?

by Josie Tinkler

The Internet is proving to be the great equalizer. It has removed distance barriers and enabled even the smallest business to compete side-by-side with large corporations. It has thrown open the doors to the vast global marketplace to anyone willing to take advantage of the opportunities it offers.

The new challenge arising from the technology boon is how to compete in the fast-paced, rapidly changing world of on-line business. That's where the **Canada/Manitoba e-Business Service Centre (e-BSC)** steps in and guides Manitoba businesses through the steps needed to go from "on-land" to "on-line."

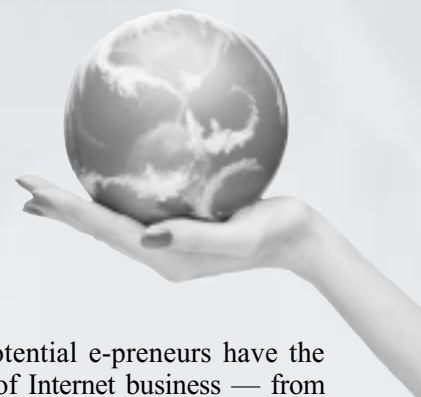
Just as a good network depends upon many different components, good information providers rely on a network of partners. With the support of its founding partners — Western Economic Diversification Canada, Industry Canada, Industry Trade and Mines Manitoba, and the Canada/Manitoba Business Service Centre — the e-BSC teamed up with private sector companies such as Qunara, IBM, Manitoba Hydro and Canada Post to offer small and medium-sized entrepreneurs with access to the most up-to-date information available from numerous industry experts and solution providers.

The end result? Manitoba's potential e-preneurs have the opportunity to learn all aspects of Internet business — from how to protect your networks from hackers, to legal issues surrounding e-commerce and designing dynamic Web sites.

The e-BSC has been in operation for two years and assisted over 5,000 clients, offering more than 75 seminars covering a broad range of topics. It continues on its innovative path to encourage and support e-business start-up and expansion throughout Manitoba.

Recently, in an effort to expand its outreach, the e-BSC unveiled its "REACH for Knowledge" initiative. Working in conjunction with the Canada/Manitoba Business Service Centre's 24 satellite offices throughout the province, e-BSC offers rural business people the opportunity to see and hear digitally recorded e-business presentations held in Winnipeg without having to travel outside of their community. This new initiative reaffirms that distance barriers are a thing of the past.

Partnerships are the key to the success of e-Business Service Centre and, ultimately, the success of Manitoba's e-businesses. For more information, contact (204) 984-2272 or 1-800-665-2019, or visit their Web site at: www.e-bsc.ca 🍁



Innovation is

by Karen Hurst

Competitiveness in today's global economy is tied to innovation. Innovation is about coming up with new ideas and ways to do things better and smarter. It's about putting new ideas to work in our business and industries. It's about aggressively pursuing new markets for our products and services. And it's about government creating a climate that supports success, celebrates effort and safeguards the public interest.

Western Economic Diversification Canada (WD) is proud to be part of the government-wide effort to help Canada become more innovative by investing in innovation across the West. WD-Manitoba Region is especially pleased to have been involved with the public/private sector partnership that worked to establish the **Stevenson Aviation and Aerospace Training Centre – Red River College**. The Centre will ensure that Manitoba has the skilled labour necessary to maintain and expand its reputation as an aviation and aerospace centre of excellence in North America.

Manitoba boasts Canada's third largest aerospace/aviation industry, employing more than 5,000 people and producing gross revenues of roughly \$1.2 billion in 2002. The single largest impediment to continued growth in the industry is the availability of trained and certified workers – specifically Aircraft Maintenance Engineers - Aircraft and Structures graduates.

With WD assistance of \$2.25 million under the **Canada/Manitoba Economic Development Partnership Agreement**, the Centre will train workers to fill the more than 650 positions required to offset retirements and to fill new jobs over the next five years — highly qualified jobs

with starting salaries in the range of \$50,000 to \$60,000. The Province of Manitoba and industry also provided \$5.25 million to the Centre.

Primary employment destinations for the Aircraft Maintenance Engineer graduates are Transport Canada approved aircraft maintenance organizations throughout the West, Ontario and Quebec. While the Air Canada maintenance base is by far the province's largest employer, there are numerous small and medium-sized aviation businesses in Winnipeg and throughout rural and northern Manitoba.

"This story is a great example of what can be accomplished when federal and provincial governments work together alongside the private sector and post-secondary educational institutions," stressed Paul McGeachie, vice-president of Partnership, Training and Development at Red River College. "The College works hard to provide education and training opportunities in response to needs identified by industry that will result in jobs for Manitobans."

Other aerospace/aviation training programs offered at the Centre include:

- Gas Turbine Repair and Overhaul;
- Aerospace (Composites) Manufacturing;
- Aircraft Maintenance Engineer Apprenticeship;
- Aircraft Structural Repair Technician;
- Level 1 Aircraft Maintenance (Introductory Course);
- Aircraft Maintenance Engineer Recurrent Training;
- Canadian Aviation Regulations;
- Non-Destructive Testing and Inspection; and
- Human Factors Training.

s Flying High

This centre was possible thanks to a partnership between WD and the Province of Manitoba, Red River College, Stevenson Aviation, Manitoba Aerospace Human Resource Coordinating Committee, Manitoba Aviation Council, Manitoba Aerospace Association, Air Canada, Boeing Canada Technology, Bristol Aerospace Limited and Standard Aero Limited.

Western Economic Diversification Canada recognizes that there are challenges in competing effectively in today's global economy. And it recognizes that today's actions impact tomorrow's success. WD has been a strong supporter of the aerospace industry in Western Canada for 15 years. By effectively investing in the aviation/aerospace industry in Manitoba, WD is helping to put new ideas to work in our businesses to positively impact the economic growth and competitiveness of the Manitoba economy, now and tomorrow.

WD's ***Western Canadian Aerospace Industry Capabilities Guide*** contains over 300 company profiles of aerospace and related technology companies, including profiles of 50 Manitoba aerospace companies or organizations. The guide promotes and direct sells western Canadian companies in



The Stevenson Aviation & Aerospace Training Centre at the Red River College is the result of a public/private sector partnership.

the aerospace and other technology industries to major domestic and international companies looking for qualified suppliers.

For more information on training opportunities at the Stevenson Aviation and Aerospace Training Centre, check out the Red River College Web site at: www.rrc.mb.ca, or contact the Program Information and Advising Centre at (204) 632-2335 or 1-800-903-7707.✱

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From Nano to Infinity

by Lee Gregg

What do anechoic chambers, nanotechnology and wind tunnels have in common? They represent three new research facilities at the **University of Manitoba's Faculty of Engineering**, thanks to \$1.065 million in funding from Western Economic Diversification Canada (WD).

Anechoic chambers, found in the Antenna and Microwave Labs at the University, provide an environment that is free of all external noise and vibration. These labs are researching next generation radio telescopes that will be able to look 15 billion years into the past. They have also developed a device to detect and disable landmines.

With WD assistance, a third lab is under construction. "With this new lab, we will be researching and designing telecommunications of the future," said Dr. Lot Shafai who heads both the Antenna and Microwave Labs. "We are looking at smart vehicles that will be able to adapt to changes in road conditions and communicate with your smart refrigerator to see if you need milk."

Nanotechnology is molecular manufacturing or, more simply put, the building of objects one atom or one molecule at a time. The Nano-Fabrication Laboratory will give students



Dr. Lot Shafai with electrical engineering students in an anechoic chamber, analyzing a microwave device on a network analyzer.

and researchers hands-on expertise in the design and fabrication of micro-systems and microstructures, such as microscopic medical devices. From computers that work billions of times faster to molecular food syntheses, the possibilities are endless.

"We are very grateful for WD's assistance," said Dr. Shafai. "The nano-lab will be the best in Canada. This will generate research projects

and bring researchers and scientists together from many disciplines."

The devastating ice storms that struck parts of Ontario and Quebec in 1998 demonstrated the impact of losing power grids. Over one million people were without electricity, in some cases for over a month. The new Thermofluids Laboratory (ice spray wind tunnel) will allow researchers to study the formation of ice on equipment and structures. "This will lead to the development and design of products that will prevent ice build-up on hydro lines, aircraft and other structures," noted Dr. Shafai.

From minute molecules to infinite space, the University of Manitoba's Faculty of Engineering will be at the forefront of innovative technologies. ♦