

# High-tech export key to survival

By Deborah Read

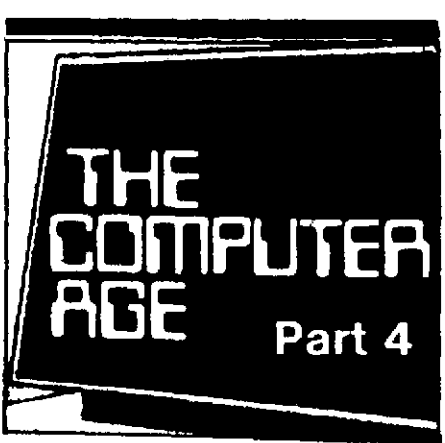
Manitoba's computer firms are unlikely to ever rival multi-national electronic giants like IBM or Data General, even though they sell their products world-wide.

This province is still "pretty small potatoes on the world scene," said Michael Clarke, manager of electrical and mechanical industries for Manitoba's department of economic development and tourism.

There are 55 electronic companies in Manitoba, making a variety of electronic units, including computers, but "about 10 per cent account for 70 per cent of the employment (in the industry), and very few of those are locally owned and controlled," said Clarke.

Since the domestic market is not large enough to be the sole support of a Canadian electronics industry, more than 75 per cent of these companies depend heavily on exports. Half of them make the majority of their sales outside the country.

"The markets available to us are as remote from here as any place else in the world, so there's no market restrictions. Our competition is other countries, not other provinces," said Clarke.



Computers are rapidly becoming a tangible presence in our work lives, our schoolrooms, and even our homes. An entire generation of children are growing up for whom the computer is the television set of the 80's — a luxury that is fast becoming a necessity. This four-part series looks at the effects of the new computer age.

For instance, France is now working on a semi-conductor that may make possible a system superior to Canada's Telidon videotext system, he said. "If they attack us in the world marketplace, will we make it? I can only hope we will, and be able to get our fair share of that business."

The provincial government wants to encourage industry here to move into high technology; it's been official policy for several years. It uses a combination of "moral suasion" and government assistance programs to that end, said Clarke.

But most Canadians identify "Silicon Valley North" — the Ottawa Valley — as the Canadian home of microelectronics. It receives the most publicity because many of its companies are Canadian-owned and controlled, said Clarke. "That's what makes them interesting and exciting."

Here in Winnipeg, although two of the largest microelectronics firms are U.S.-based Sperry-Univac and Burroughs, the biggest is still home-grown Northern Telecom Canada Ltd. But, "if you take Northern Telecom out of the statistics, there's not much left," said Clarke.

Few of the Manitoba electronic firms are involved in the burgeoning, and over-crowded, home computer market. "We're talking about an industry that didn't exist five years ago," said Clarke. "There are some reports now that the home computer market is saturated. The logical extension is to move into small business computers, but then you start to rub up against the establishment; companies that were strong in the 60s and are even stronger now."

Winnipeg's half-dozen computer firms such as Patrick Computer Systems usually concentrate

# Business

on a specialty line. For example, Kraus Industries Ltd. makes a computer for industrial application, and Homestead Computer Services Ltd. for agri-business. "No one (here) is pretending to be in the Apple or Commodore business," said Clarke. "The people who tackle the big market are asking for big competition."

### World seller

All Winnipeg firms sell their electronic equipment outside Canada. "None of these firms exist on the local market; you would never survive," said Clarke.

Northern Telecom, which manufactures electronic telecommunications equipment, sells its equipment in Canada, the U.S., Japan, and South Korea, among others. "We're bidding on a few others," said plant manager Klaus Floch.

"The business volume that one can get in Canada forms a good base; you can certainly stay viable on a small scale. But you'd have some difficulty expanding in the Canadian market."

A naval defence systems computer made at the Sperry-Univac plant on Saulteaux Cr. is also a world-seller. Sixty-five assemblers at the plant spend their days on the painstaking, eye-straining work of assembling some 23 different units, including the micro-computer.

One circuit board assembly alone, "we build about 1,000 to 1,200 a week and send them to the U.S. Navy," said engineering manager John Westergren.

The computer — called the UYK-502 — is currently used in Canada, the U.S., Great Britain, Japan, Australia and Malaysia. Ten to 15 other countries, mostly NATO members and countries in southeast Asia, buy other Sperry-Univac electronic items manufactured in Winnipeg.

The naval defence computers are used to control combat systems, air traffic, gunfire, radars, sonars, data processing and message processing, among other duties, said Westergren.

### U.S. market needed

"The Department of National Defence here in Canada cannot support a defence system industry; that's why we sell to the U.S. and other friendly countries," said Westergren. Restrictions from both Canadian External Affairs and the U.S. State Department — since Sperry is a U.S.-based company — determine who may buy, but "our markets are governments," said Westergren. The company also sells to other computer companies which have contracts to supply either the Department of National Defence in Canada, or foreign users.

Sperry-Univac, which came to Winnipeg in 1977, employs 130 people here. A second Canadian factory is in Dorval, Que. "We find the people we need are right here in Winnipeg," said Westergren. The engineers are University of Manitoba graduates, the technician force from Red River Community College. Others received on-the-job training, he said. "We are very satisfied with the Winnipeg area."

Sperry-Univac not only makes computers, it depends on them to run its business. The 23 computer terminals at the Winnipeg factory are tied in a main computer in St. Paul, Minnesota, which monitors the four North American factories producing naval defence systems — in Clearwater, Fla.; Salt Lake City, Utah; St. Paul and Winnipeg — and co-ordinates their efforts. The system keeps track of everything in the building. Management can

determine in seconds where any component is in the manufacturing process, how long it will take, and the exact cost of producing it to date. Inventory, personnel information, filed documents, data stored on microfilm, and other information on the four factories is all available instantly.

"We try to have as much automated work as possible," said Westergren. In that respect, Sperry-Univac is only one example of how North American manufacturing is learning to decentralize.

### Good for economy

"You walk through plants now and more and more you find computer terminals on people's desks," said Clarke.

With the aid of computers, the massive factories of the past are ceasing to exist. Communities will not be dependant on the payroll of one huge company, and the companies in turn will not be paralysed by a single strike.

"I think all major companies spread their operations around like that," said Westergren.

Northern Telecom also uses computers extensively to control production.

"When I think back to what we were doing five or six years ago, I would say the application of computers has increased tremendously in manufacturing technology," said Floch. The computers allow better control of the manufacturing process, resulting in higher productivity and lower costs, he said.

The company uses computers, "to be able to stay competitive," he said.

"One of our largest competitors is the Japanese, and that's how they do it." Last of a series.



John Westergren shows a finished computer board at Sperry Univac's plant in Winnipeg. The company manufactures components used in naval defence systems.

# Newsline

## Lift lid on growth, ECC urges

The Economic Council of Canada will urge the federal government to loosen the lid it has slammed on the Canadian economy, says council chairman David Slater.

The council's annual economic review and forecast, to be released Sept. 30, will recommend "restrictive pressures" on the economy — such as high interest rates and facets of the National Energy Program — be eased to encourage renewed growth.

Slater told a news conference in Calgary the council will argue that inflation is gradually coming under control and that the federal government must look ahead and oil the wheels of growth.

□□□

Government handouts to deserving and undeserving companies have brought Canada to the brink of bankruptcy, says Henry Knowles, chairman of the Ontario Securities Commission.

The government is too involved in the basic workings of the country's business community, Knowles told a panel discussion at the annual conference of the Canadian Institute of Chartered Accountants in Calgary.

The private sector, he said, is as much to blame for government involvement in business as are the much-maligned bureaucrats in Ottawa.

Various governments, Knowles said, have used "overt assistance" from a number of professions to "develop ever-increasing restraints on business and taxes on those who are productive."

□□□

Brandon-based Intronetics Ltd. reports sales of \$4.4 million in 1981, a 40 per cent increase over 1980. However, net income decreased from \$268,000 to \$125,000 because of greater interest payments and increased product development costs.

The company will be listed on the Toronto Stock Exchange within the next few months.

### SALE BY TENDER

Sealed tenders, clearly marked "Tender, Gibb Farms Ltd." will be received by the undersigned until 2:00 o'clock in the afternoon on Friday, October 8, 1982 for the purchase, individually or en bloc, of the following assets: Lot 1 - 1975 Ford F-350 1 Ton Truck Lot 2 - Case 1945 Series Front End Loader Lot 3 - Truck Cap Lot 4 - 26' Fertilizer Tank Trailer, c/w 3 - 1,000 gal. Spherical Fibreglass Tanks and Modifications, License 91ES Lot 5 - 24' Fertilizer Tank Trailer, c/w 3 - 1,000 gal. Spherical Fibreglass Tanks and Modifications, License 453AX Lot 6 - Flat Dock Trailer 24' x 7' x 6" - Fruehauf Lot 7 - Fertilizer Lot 8 - Chemicals - Tropoxol, Bomstar Plus, Stampede, etc. Lot 9 - Seed - Sunflower and Rapeseed.

Tenders must be submitted on the forms provided. The tender information package, which includes the form, conditions of sale, and detailed asset information may be obtained from the Receiver and Manager. The assets may be viewed at Farmland Services, Elm Creek, Manitoba on Wednesday, October 6, 1982 between the hours of 8:30 a.m. and 12 noon. Dated at Winnipeg, Manitoba, this 24th day of September, 1982.

**THORNE RIDDELL INC.** TRUSTEES IN BANKRUPTCY  
RECEIVER AND MANAGER  
300-308 Broadway,  
Winnipeg, Manitoba R3C 0A8  
(204) 957-1770

**Credit Foncier**  
CREDIT FONCIER TRUST

**13 3/4%** 3 years paid annually

**GUARANTEED TERM INVESTMENTS**  
Rates subject to change without notice.

Winnipeg  
288 Smith Street (204) 942-5515

MEMBER: CANADA DEPOSIT INSURANCE CORPORATION

**A. E. LePAGE**

**ANNOUNCEMENT**

Glenn Ponomarenko, Manager of the Charleswood-River Heights Branch (1824 Grant Ave.) is pleased to announce that TRUDY JOHNSON has joined his LePage sales team of professionals.

TRUDY has been successfully involved in the Winnipeg real estate industry for six years and specializes in the Charleswood area.

TRUDY's combination of knowledge, experience and professionalism will ensure her clients receive the dedicated effort they require.

TRUDY invites her friends, associates and past clients to contact her at her new office (234-9500) or 24 hour answering service at 895-8733.

**TRUDY JOHNSON**

**ANNOUNCING**

**PHOTO MAGIC COLOR LAB**

1087 KEEWATIN AT INKSTER  
NORWIN BUSINESS PARK  
WINNIPEG, MAN.  
PH. 632-9106

We are a complete fully modern Photo Finishing Lab located in Winnipeg

**Dealer Inquiries Welcome**

**Call**  
**Brian Fear**  
Production Manager  
632-9106 or 632-9107

Quality Guaranteed

We use Kodak paper. For the good look.

**WOULD YOU LIKE TO MAKE AN INVESTMENT WITH YOUR INCOME TAX DOLLARS?**

Consider Cameron Tower, a completely constructed M.U.R.B. investment, in Burnaby, B.C. Minimum subscription is \$10,000 payable over 5 years.

	1982	1983	1984	1985	1986	1987	TOTAL
*Annual Investment Return	\$ 4545	\$ 1355	\$ 1105	\$ 1041	\$ 1108	\$ 856	\$ 10,010
Annual Equity Payments	4000	1500	1200	1200	1100	1000	10,000
Investment Returns Exceed Payments By	+545	+400	+305	+146	+154	+10	

\*Assumes a 50% marginal income tax rate

A total development and investment package from Qualico  
For more information and a prospectus call  
**QUALICO SECURITIES LTD.**  
30 SPEERS ROAD  
WINNIPEG, MANITOBA  
233-2451

This is not to be construed as an offering as such may be made only by prospectus.

**WESTCOAST TRANSMISSION COMPANY LIMITED**

Notice of Partial Redemption

To the Holders of First Mortgage Pipe Line Bonds 5 1/2% Convertible Series (Series E)

NOTICE IS HEREBY GIVEN that pursuant to the provisions of the Eighteenth Supplemental Indenture dated as of September 1, 1964 to the Debt of Trust and Mortgage dated as of June 1, 1956 between Westcoast Transmission Company Limited (herein referred to as the "Company") and Montreal Trust Company (herein referred to as the "Trustee"), as Trustee, providing for the creation of and issue of First Mortgage Pipe Line Bonds of the Company, \$531,000 principal amount of First Mortgage Pipe Line Bonds 5 1/2% Convertible Series (Series E) due November 1, 1984 of the Company bearing the undermentioned distinguishing letters and numbers and in the respective undermentioned principal amounts, namely:

**Coupon Bonds for \$1,000 each bearing the distinguishing prefix ECM:**

No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
00113	\$ 1,000	02615	\$ 1,000	04860	\$ 1,000	05921	\$ 1,000	07546	\$ 1,000	08805	\$ 1,000
00119	\$ 1,000	02707	\$ 1,000	05010	\$ 1,000	06120	\$ 1,000	07856	\$ 1,000	09400	\$ 1,000
00290	\$ 1,000	04030	\$ 1,000	05234	\$ 1,000	06531	\$ 1,000	07879	\$ 1,000	10098	\$ 1,000
00294	\$ 1,000	03140	\$ 1,000	04301	\$ 1,000	05470	\$ 1,000	06661	\$ 1,000	08169	\$ 1,000
01194	\$ 1,000	03331	\$ 1,000	04397	\$ 1,000	05672	\$ 1,000	07233	\$ 1,000	08211	\$ 1,000
01830	\$ 1,000	03493	\$ 1,000	04633	\$ 1,000	05884	\$ 1,000	07416	\$ 1,000	08465	\$ 1,000
02301	\$ 1,000	03651	\$ 1,000	04702	\$ 1,000		\$ 1,000	07416	\$ 1,000	08465	\$ 1,000

Bonds registered as to both principal and interest bearing the distinguishing prefix EFR which have been called to the extent of the following respective amounts, namely:

No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
0085	\$ 1,000	1473	\$ 1,000	2498	\$ 1,000	4024	\$ 1,000	5646	\$ 1,000	5838	\$ 2,000
0428	\$ 1,000	1479	\$ 1,000	2519	\$ 1,000	4034	\$ 1,000	5662	\$ 1,000	5839	\$ 2,000
0547	\$ 1,000	1511	\$ 1,000	2523	\$ 1,000	4132	\$ 1,000	5679	\$ 1,000	5840	\$ 15,000
0672	\$ 1,000	1556	\$ 1,000	2557	\$ 1,000	4139	\$ 1,000	5600	\$ 10,000	5841	\$ 2,000
0709	\$ 1,000	1664	\$ 1,000	2578	\$ 1,000	4140	\$ 1,000	5601	\$ 5,000	5843	\$ 38,000
0718	\$ 1,000	1785	\$ 1,000	2592	\$ 1,000	4266	\$ 1,000	5631	\$ 1,000	5844	\$ 64,000
1016	\$ 2,000	1806	\$ 1,000	2608	\$ 1,000	4301	\$ 1,000	5643	\$ 3,000	5845	\$ 12,000
1053	\$ 1,000	1809	\$ 1,000	2612	\$ 1,000	4338	\$ 1,000	5650	\$ 3,000	5846	\$ 11,000
1103	\$ 1,000	1985	\$ 1,000	3133	\$ 2,000	4621	\$ 1,000	5652	\$ 2,000	5848	\$ 3,000
1209	\$ 1,000	2104	\$ 1,000	3138	\$ 1,000	5005	\$ 1,000	5655	\$ 1,000	5850	\$ 9,000
1241	\$ 1,000	2302	\$ 1,000	3259	\$ 1,000	5056	\$ 1,000	5627	\$ 1,000	5852	\$ 4,000
1342	\$ 1,000	2445	\$ 1,000	3334	\$ 1,000	5155	\$ 1,000	5632	\$ 1,000	5854	\$ 3,000
1353	\$ 7,000	2445	\$ 1,000	3378	\$ 1,000	5156	\$ 1,000	5634	\$ 1,000	5855	\$ 3,000
1444	\$ 1,000	2495	\$ 1,000	3536	\$ 1,000	5436	\$ 1,000	5635	\$ 14,000	5857	\$ 10,000
1446	\$ 1,000	2496	\$ 1,000	3546	\$ 1,000	5457	\$ 1,000	5636	\$ 1,000	5859	\$ 35,000
1465	\$ 2,000	2497	\$ 1,000	3580	\$ 1,000	5521	\$ 1,000	5637	\$ 1,000	5860	\$ 23,000

have been selected by lot or pro rata by the Trustee for redemption on the 1st day of November, 1982 for Sinking Fund purposes only and that such Bonds of the respective portions of the principal amount thereof selected will therefore be redeemed on the 1st day of November, 1982 in lawful money of Canada, at the principal amount thereof, upon presentation and surrender of the said Bonds (accompanied, in the case of Bonds not registered as to both principal and interest, by the interest coupons appertaining thereto which mature after November 1, 1982) at the option of the holder, at any branch in Canada of The Royal Bank of Canada, from the Bonds before presentation and should be cashed by the holder in the usual way. Interest on Bonds registered as to both principal and interest will be forwarded in the usual manner, in the case of any Bond of which part only of the principal amount thereof is hereby called for redemption, the holder thereof shall, upon presentation and surrender of such Bond, be entitled to receive (in addition to said monies payable to him by reason of such redemption), and the Trustee shall forthwith, without expense to such holder, certify and deliver to such holder one or more new First Mortgage Pipe Line Bonds 5 1/2% Convertible Series (Series E) due November 1, 1984 of the Company in aggregate principal amount equal to the unredeemed portion of the principal amount of the Bond so surrendered.

NOTICE IS ALSO HEREBY GIVEN that, in accordance with the terms of the said Supplemental Indenture, all interest on the Bonds so called for redemption or on the portion thereof to be redeemed shall cease from and after the said 1st day of November, 1982 and coupons for interest to accrue after such date upon said Bonds shall become and be void.

DATED AT VANCOUVER this 20th day of September, 1982

WESTCOAST TRANSMISSION COMPANY LIMITED  
G.W. Lede, Secretary