DOCS ----CA1 EA679 C13 November 1997

In Burnaby, British Columbia

E

JA

Germany's Canada's Ballard

million

joint venture

team up

The partners complement each other.

ne is Daimler-Benz, the legendary European transportation industry giant whose scope spans automobiles, buses, trucks and air and space systems.

The other is a Canadian pioneer in the commercialization and development of a new generation of pollution-free power systems, Ballard Power Systems Inc. of Burnaby, British Columbia. Ballard has become a world leader in the development of fuel cell-based power systems that convert natural gas, methanol or hydrogen fuel into electricity without combustion. Whether they power trucks, automobiles or stationary power-generating plants, fuel cell systems are environmentally friendly — so much so that the only emissions from their tailpipes or smokestacks are warm water vapour. Demand for such systems has been rising steadily to meet the continuing ratcheting-up of air quality standards in North America and elsewhere.

Please see BALLARD page 2

Also in this issue...

MBER

Three U.S. companies establish	
major call centres in Canada	3
Ewarld Dörken/Cosella Products:	
an \$8.5 million joint venture	4
Rolls-Royce Canada's \$20 million	
expansion in Quebec	5
Toyota's BC plant: rolling ahead	
on five million wheels	6
Alcatel Canada invests \$8 million	
in Saskatchewan plant	8
Ubi Soft's multi-media studio 👘	
in Montreal	9
Canada moves up fast in world	
competitiveness ratings	10
Furukawa Electric's \$14.4 million	
investment in Quebec	11
Growing with Canada	12

Canada

BALLARD • cont'd from page 1

develop with one to develop Ballard a major fuel cell engine

that trend, Ballard and Daimler-Benz cell engine s450 million in a the formation of and manufacture business in systems; the other and bus manufacturers. As part of the deal, Daimler-Benz will

invest \$198 million

to acquire 25 per cent ownership of Ballard Power Systems.

Mr. Firoz Rasul, Ballard's President and Chief Executive Officer, described the joint Ballard's history.

Dr. Ferdinand Panik, Senior Vice-President as "the alternative engine with the greatest chance of seriously competing with the combustion engine. Daimler-Benz wants to be the first to bring a fuel cell engine production automobile to market and to develop with

Ballard a major business in supplying

The joint venture is an extension of four years of previous collaboration by the two companies. in the development of fuel-cell powered vehicles. Ballard fuel cells power the NECAR II, the world's first traffic-ready fuel-cell car, which Daimler-Benz unveiled to German media last year.

Spokespersons for the two companies say it will be about eight years before production-scale fuelare a different story, not only because they are easier to build than cars, but because municipalities are more likely to pay a price premium for environmentally friendly equipment. In fact, Ballard is scheduled to deliver three fuel cell-powered buses in the fall of 1997, to the Chicago Transit Authority which is thinking about converting its entire 2,000-bus fleet to the system as vehicles come up for

The company has also made an impact on the car-building side of the industry. Ballard recently landed a \$4 million contract to supply fuel-cell integration in a test vehicle for Chrysler Corporation. In March 1997, Japan's Nissan Motor Company placed a \$2-million order for Ballard fuel cells

and test equipment for its own research and devel-Ballard and the Ford Motor Company are teaming up to build an environmentally friendly sedan that will look

At the heart of Ballard's

fuel-cell system is the

company's proprietary **PEM** (Proton Exchange Membrane) which has significant cost and performance advan-

available

PEM (Proton **Exchange Membrane**) Oxidant **Fuel Flow Field Plate Flow Field Plate** Exhaust 🔌 **Fuel to Recirculate** Water Vapour (No Pollution) Low Temperature C Electrochemical Process (90°C) Heat (90°C) 🔸 Water-cooled Air Fuel (Hydrogen)

Output **Rotary Mechanical** Power (45% Efficiency) **Electric Motor**

much like the Ford Taurus except below the hood.

Power plants

Ballard's market also includes utility companies: in 1996 the company signed a \$31.2 million joint venture agreement with GPU, a U.S.-based electric company, for commercialization of fuel cell-based power plant systems.

Ballard's history is a case study in growth by innovation. In the early 1980s, the firm's primary business was the development of lithium batteries for the military, but the company was keeping an eye on wider horizons: even extraterrestrial ones. In the 1960s, NASA had been using proton exchange landing program. Ballard was one of the first companies to recognize the commercial possibilities of bringing PEMs in from space to meet the environmental challenges of energy use on earth. Since then, the company has become the acknowledged world leader in PEM cell development. Its 300-member fuel-cell research and development unit in

> Burnaby is believed to be the world's largest group of professionals working on PEM fuel cells. •

2

Single Cell Ballard Fuel Cell Engine

Dapi. of External Attainers AT&T Canada OTTAWA JAN 12 1/8 Telespectrum Worldwide RETURN TO BEAM ENTAL LIBRARY Lacson Corporation

establish major call centres

CANADA

in

The result has been an explosive growth in the call centre industry. The trend is particularly evident in Canada where an estimated 5,000 centres are now in operation.

Among the most recent new arrivals is AT&T Solutions Customer Care, which announced in July it would open a major new call centre in Halifax, creating 1,000 full-time and part-time jobs over the next two years.

The Province of Nova Scotia plans to invest \$12 million in recruitment and training support over five years. AT&T will make an initial capital investment of \$9 million. Its annual operating costs are expected to be about \$35 million.

The centre will serve clients in Canada and the United States. AT&T Solutions Customer Care is one of the largest professional communication service bureaus in the world and manages 12 centres globally, including a major facility in Winnipeg which has increased its workforce to 1,400 in just three years.

Two other U.S. companies that have recently come to Canada are Telespectrum Worldwide Inc. of Philadelphia, Pennsylvania, and Zacson Corporation of Pleasanton, California. Both companies are in the teleservice bureau business.

Telespectrum Worldwide's Canadian entry is a \$4.3 million call centre in Winnipeg, Manitoba, employing 400 people. In an interview with *Canada Investment News*, Mr. Parry Rosenberg, President of Telespectrum Canada, says the company chose Winnipeg because it had

"all the assets we need in order to be competitive specifically a good labour force, reasonable costs overall, and a favourable exchange rate. Put all those items together and costs are substantially less than they would be in U.S. cities."

In Saskatchewan, Manitoba's neighbouring prairie province, Zacson Corporation, one of America's largest telemarketing companies, opened a call centre in Regina in January 1996. The company workforce increased to 100 by mid-1997 and is expected to reach 200 by the end of the year.

About Zacson's choice of Regina, President Rick Hoefert says: "One factor was SaskTel's internationallyrecognized technical leadership, as evidenced by its 100-per-cent digital network, and its track record of partnering. These attributes, along with a highly skilled workforce, make this an attractive location."

Another element in the Canadian call center competitive edge is lower costs relative to the United States, notably in human resources. The June 1997 issue of the U.S. magazine *Area Development* quantified the advantage thus, "American companies with call centers in Canada save more than 25 per cent on pay for agents." ◆

How efficiently a company uses telephone systems for selling makes a difference, and it shows on the bottom line. With that in mind, many firms have established elaborate call centre operations of their own. Others have gone the out-sourcing route, contracting out telemarketing and other phone-based sales activities to companies specializing in that field.

Conterence

\$3.5 million joint venture records a big first year

year after its grand opening, the Cosella Dörken Products plant at Lincoln, Ontario, is increasing production and market share rapidly and management is projecting a banner year for sales in 1997.

Two partners, Canada's Cosella Products Inc. and Ewarld Dörken AGH of Germany, launched the facility as an \$8.5 million joint venture in March 1996. Located in the prosperous Niagara Peninsula less than an hour from the Canada-U.S. border, the plant's main products are heavy-duty liners made of polyethylene which incorporate sophisticated "air gap" and other protective technologies. Builders use the liners to sheathe basements and other foundation structures from the destructive impacts of ground water, cold and condensation. Demand for these products is keeping pace with construction in North America which is to say, it is booming.

The German partner, Ewarld Dörken AGH, started in the paint, varnish and enamel business 105 years ago and expanded into roofing felt and plastic liners in the 1960s. The company is now Europe's largest manufacturer of scientifically-designed protective membrane sheets for the construction industry.

Dörken's liners protect major structures throughout the world such as the Chunnel linking Britain and France, the Carmelite Tunnel in Israel, the Thika Dam in Kenya, Japan's Shiroyama Tunnel and subway tunnels in Germany, Turkey, Greece and other countries.

์เน โม้ดูโม-teelu โม้นคเซ

The Canadian advantage

Canadian businessman Joseph O. Vaccarella founded Cosella Products Ltd. in 1990, as a distributor of products for the construction industry. Even before the joint venture, Cosella had teamed up with Ewarld Dörken in 1992 in the first introduction of Dörken's unique DELTA MS® air-gap lining material in Canada. The Lincoln plant now manufactures this product for the Canadian and U.S. markets, selling it through concrete and building material dealers in both countries.

"Why did Cosella Dörken choose Canada as its base for the North American market?", *Canada Investment News* asked Mr. Joseph Vaccarella, president of the joint venture company.

"Several reasons", said Mr. Vaccarella. "To name just four: closeness to the U.S. market, a knowledgeable workforce, good transportation links and the welcoming attitude of an interested and accommodating municipality. Lincoln saw the opportunity to create a new business and more jobs and went to great lengths to make us welcome here." ◆

CANADA INVESTMENT NEWS

Rolls-Royce Canada marks 50th birthday with a \$20 million expansion in Quebec

olls-Royce Canada has completed a \$20-million expansion of its turbine engine overhaul and production facility in Lachine. Ouebec one of the largest of its kind in North America. The expansion gives Rolls-Royce Canada 13 per cent more working area, bringing the total to 510,000 square feet, including five engine test cells and 70,000 square feet of warehouse space.

Within this added space Rolls-Royce Canada will be able to repair more of the engines it already services and also to take on new models, notably the recently developed Rolls-Royce Industrial Trent.

Designed in Canada by **Rolls-Royce Gas Turbine** Engines Canada Inc., the Industrial Trent is a land-bound turbine with ancestral ties to the skies. In developing the engine, Rolls-Royce incorporated design principles the company pioneered in the aero version of the Trent, one of the world's most powerful jet engines. Combining efficiency and environmental friendliness, the natural gas-fed Industrial Trent has already set a world record, of 55 MW for power output, for an aero-derived gas turbine.

To accommodate the new workload, Rolls-Royce Canada will add 100 new employees to the present workforce of 1,000.

A world market

The new expansion coincides with Rolls-Royce

Canada's fiftieth anniversary of operations in Canada the company set up shop in 1947 and moved into its present location in 1952. Today, Rolls-Royce Canada serves over 500 corporate airline, military and industrial customers in 30 countries on five continents.

In addition to the repair and overhaul work on industrial gas turbines, Rolls-Royce Canada has been designated by Rolls-Royce plc as the worldwide new production assembly and test centre for all Rolls-Royce aero-derived industrial gas turbine engines, notably the Industrial Trent, RB211 and Avon.

On the aviation side, the Lachine facility provides service support for engines powering a variety of aircraft, including such established workhorses as the Gulfstream business jets, the Fokker 70 and Fokker 100, the Boeing 757 and the U.S. Navy's F405 trainer.

In its expanded facilities, Rolls-Royce Canada will also be providing service backup for engines that will power a new generation of aircraft. The company has a five-year exclusive contract to provide North American service support for the BMW-Rolls-Royce BR 710 engine which will power the Bombardier Global Express and the Gulfstream V business iet.

Rolls-Royce Canada is part of Rolls-Royce North America Inc., which brings together all Rolls-Rovce operations on this continent. Rolls-Royce North America is a wholly-owned subsidiary of Rolls-Royce plc. The parent corporation is a worldwide, high technology engineering company. It specializes in power generation for aerospace, industrial and marine applications; in the generation, transmission and distribution of electrical power; in materials handling, and in nuclear power generation.

Rolls-

Royce Canada serves over SOO corporate, airline, military and industrial customers in 30 countries on five continents.





The plant produces aluminum-alloy wheels from British Columbia aluminum using low-pressure diecasting technology.

> ince 1985, the \$100million plant that Canadian Autoparts Toyota operates in Delta, British Columbia, has produced five million

wheels, enough — counting spares — to keep a million vehicles on the road. Reaching the five-million level was a historical marker in the history of a company that is a milestone in its own

right, and the company (known as CAPTIN in the automotive industry) took an afternoon off to celebrate the event in formal ceremonies held at the plant last May.

ROLLING AHEAD On

BRITISH

Dignitaries on hand included Mr. A. Takahashi, Executive

Vice-President for Worldwide Production of Tovota Motor Corporation (TMC), who flew in from Japan for the event. Joining him in Delta were the presidents and vicepresidents of virtually every Toyota operation in North America. As CAPTIN Vice-President

Gary Smallenberg explains, the CAPTIN plant dates back to the mid-1980s, when all the Toyotas on North America's highways were products of plants in Japan.

"In a sense CAPTIN was a test case for Toyota," said Mr. Smallenberg, in an interview with

FIVE MILLION WHEELS

COLUMBIA PLANT:

Canada Investment News.

to include Toyota's North

including the company's

award-winning facility in

Commenting on TMC's

choice of British Columbia

as the site for production,

Mr. Smallenberg says: "Being

Pacific gateway — is a plus

because we still ship a

substantial share of our

through NAFTA."

production back to Japan.

We're also less than an hour's

drive from the U.S. border and

we have access to that market

close to Vancouver — Canada's

Cambridge, Ontario.

American assembly plants,

Iovota'S

America."

Power, people and aluminum

"In addition," says Mr. Smallenberg, "all the critical inputs are close at hand and plentiful. Energy — both hydroelectric and natural gas is reasonably priced and abundant. British Columbia is also one of the world's leading sources of aluminum, our most important raw material. And we enjoy the benefits of a highly motivated and productive workforce." These advantages are

reflected in a superlative track record. The **CAPTIN** plant came into operation in 1985 and hit the road running. Production increased from 250,000 units in the first year to 500,000 in 1988-1989 and reached 750,000 in 1992.

The plant now employs 185 people.

"It was the first manufacturing operation of any kind that TMC had established in Canada and the second in North CAPTIN's first assignment was to meet the needs of Toyota's manufacturing plants in Japan. The company has since broadened that mandate

Ontario-assembled Solara sports coupe scheduled for roll-out in the fall of 1997. CAPTIN's production rate keeps rolling along. "We expect to produce one million wheels in 1997," says Mr. Smallenberg. ♦ "All the critical inputs are close at



Set in a 25-acre site, the 19,000 square-metre plant at Delta, British Columbia, supplies Toyota facilities in Canada, the United States and Japan.

> With Toyota sales booming and the new Cambridge.

hand and plentiful. Energy — both

hydroelectric and natural gas — is reasonably

priced and abundant. British Columbia is also one of

the world's leading sources of aluminum, our most

important raw material. And we enjoy the

benefits of a highly motivated and

productive workforce."



CANADA WIRE

Eight-million dollar investment triggers sales surge at Saskatchewan plant

at Alcatel Canada Wire's plant at Weyburn, Saskatchewan, in the wake of a recentlycompleted \$8-million expansion and upgrading project which added eight new machines and 35 new jobs to the cable-manufacturing facility.

"We had sales of about \$40 million in 1996 and we are on target to exceed \$60 million in 1997," Plant Manager John Murray told Canada Investment News in a recent interview.

Based in Markham, Ontario, Alcatel Canada Wire is the Canadian subsidiary of Alcatel Cables of Clichy, France.

The plant's history has been one

of steady growth, both in sales and product line diversity. Located in prairie wheat-farming country, the factory first opened in 1956, under the management of Western Wire and Cable and was purchased by Alcatel Canada Wire in 1960. In

1992, to meet soaring demand, the company spent \$11 million to expand production space by 30,000 square feet while installing a state-of-the-art manufacturing line for production of mediumvoltage power cable.

With the latest expansion, the plant has increased production of heavy-duty overhead and underground electrical cable for power-utility companies in Canada, the United States and offshore markets.

Speaking at commissioning ceremonies for the upgraded facility, Dr. Gordon Thursfield, President of Alcatel's Cables Group said: "This second major expansion increases this plant's capability and also expands the plant's product line to cover the full range of power cables required by the North American utility industry."



Renowned in the industry for its cost-effectiveness, the Weyburn lant won ISO 9002 certification in 1994.

People and positioning

John Murray attributes the plant's growth to a superlative track record, which stems in turn from competitive edges in terms of labor and location. "As I see it, our most important single advantage is workforce quality," says Mr. Murray.

"In this part of Saskatchewan we're in farm country, in a culture where people are self-reliant and resourceful and hard-working - it's a tradition that says if the combine breaks down, you fix it and keep on going. These traits have given our plant an outstanding reputation for cost-effectiveness, both within and outside the Alcatel world. We also benefit from a very low employee turnover rate: two to three per cent per vear."

"In general, Saskatchewan has proven to be a favourable business

environment. The provincial and municipal governments have been supportive and we have our long-term business partnership with the Saskatchewan Power Corporation which has given us a solid and ongoing base."

> "Another benefit is market access," says Mr. Murray. "We have good road and railway links to markets — in all directions. "For years, our largest single customer has been a federal utility company in Phoenix, Arizona, where the state population has been growing at something like 3,000 per month and demand for industrial cable has kept pace. Because of the excellent north-south highway links, we can deliver to Phoenix in three days maximum and often in two."

"We also have good road and rail connections to eastern and western Canada where our customers include provincial power utilities."

With 1996 sales of US\$7.3 billion and 10 per cent of global market share, Alcatel Cable of France is the world's largest cable-manufacturing company.

"As I see it, our most important single advantage is workforce

quality."

In April 1997, Ubi Soft Entertainment S.A. of France, Europe's secondlargest manufacturer of CD-ROM-based computer videogames, announced that it had chosen Montreal as the site of a major multimedia studio to serve as its production base for the U.S. and Canadian markets. Ubi Soft plans to invest \$400 million in the centre over ten years.

Interviewed by Canada Investment News six months later, Ms. Sabine Hamelin, Vice-President of Ubi Soft Divertissements Inc., the company's Canadian subsidiary, says Montreal was an ideal choice. The first advantage she lists is cultural: "The bilingual environment of Montreal," she says, "makes this the perfect bridge for a European company entering the North American market."

Another benefit, says Ms. Hamelin, is workforce quality, a crucial requirement in Ubi Soft's business. "We create

products for very sophisticated and demanding customers. Meeting their requirements calls for a high level of creativity in a variety of fields. including graphic design, illustration, animation and software programming. By locating in Canada we have access to an impressively large France's

Ubi Soft

establishes multi-million dollar, multi-media studio *in* Montreal

pool of people with these qualifications — and they are also closely in touch with North American tastes and trends."

Checking off another Montreal plus, Ms. Hamelin says: "Geographically, this location is ideal — close to and well connected with the United States market, and also conveniently positioned in relation to Europe." Another attraction for Ubi Soft was a warm welcome from the federal and provincial governments, offered through an attractive array of investment incentive and job creation programmes.

Global teamwork

Ubi Soft Entertainment paints on a global canvas. The company creates its own videogames in 41 countries and also distributes other firms' products. In addition to Canada, Ubi Soft operates studios in France, China and Romania, all contributing



Sabine Hamelin, Vice-President of Ubi Soft Divertissements Inc., who heads operations in Canada, is also part of top management in the company's global organization. Ms. Hamelin joined Ubi Soft Entertainment S.A. in France in 1989 and, at age 26, became the Financial and Administrative Director for Ubi Soft International. In 1996 she organized the company's successful entry into the Paris Stock Exchange.

specialized skills to its final products: entertainment and educational videogames.

The new Montreal centre is part of this worldwide team and also has what it takes to develop and deliver products from scratch — including illustration, animation and integration.

By October 1997, the 22,000-square foot Montreal studio had more than 100 people on staff. It plans to employ 200 by April 1998 and expects that total to reach 550 by the year 2000. Ubi Soft has also signed an executive production contract with the German toy company Playmobil to produce three videogame lines: one for boys, one for girls and one for children in the pre-school age group. The company will be creating these products from start to finish in Montreal.

Summing up after six months of operation, Ms. Hamelin says: "Ubi Soft plans to be a major force in the North American videogame market. We are off to a good start."

Ubi Soft Entertainment S.A. rang up sales of \$80 million in 1996. The company employs 531 people worldwide.



Ubi Soft produces, publishes and distributes over 1,000 products for videogame players. The company's top-ranking original creations include *POD*, a racing game featuring advanced Intel chip technology, *Rayman*, *Tim* 7 (an educational CD-ROM

package) and *F1 Racing Simulation*. Riding the wave of success on these offerings. Ubi Soft was one of the first companies in its field to commit itself to development of networked games. Many of its videogames now have built-in Internet connectivity.

Canada moves up fast WORLD COMPETITIVENESS RATINGS 1997

Attention international investors: national economic climates have been changing fast and it's time for a new look at countries' comparative advantages.

Four separate reviews show Canada moving up through the pack to join The International Institute for the front runners in terms **Management Development** of economic health (IMD) and competitiveness. n its 1997 World Competitiveness

Foreign investment in Canada keeps rising

In 1996 Foreign Direct Investment (FDI) in Canada grew by \$12.4 billion to reach \$180.4 billion, an 88 per cent increase since 1986. U.S. companies continued to account for the greatest share of existing, foreign-owned assets (68 per cent). Europe placed second with 21.2 per cent (7.9 per cent for the U.K.) and Pacific Rim countries third with 6.5 per cent (3.6 per cent for Japan).

The Economist Intelligence Unit (EIU)

he internationally-respected EIU placed Canada third in a ranking of the business climates of 58 countries. Looking over the millennium horizon, the EIU says that within five years Canada will be one of the top places in the world in which to do business. The factors on which the EIU rates economies include governments' foreign investment and competition policies, taxes, labour market, infrastructure, political stability and market opportunities.

Yearbook, the IMD awarded Canada its highest mark yet - tenth place. IMD's analysis covers 244 criteria grouped into eight main factors: domestic economy, internationalization, government, finance, infrastructure, management, science and technology, and people.

The IMF picks Canada as winner for this year and next

he International Monetary Fund (IMF) predicts that Canada will have the fastest-growing economy in the G-7 group this year and next. The Fund forecasts a Canadian growth rate of 3.5 per cent in 1997 and 3.4 per cent in 1998. The IMF also expects that in 1998 Canada will have an improved rate of job creation and a slightly lower (8.8 per cent) unemployment rate, low inflation and the smallest budget deficit of any G-7 country (0.1 per cent of GDP). The Fund attributes Canada's economic vigour to low interest rates, Canada's improving fiscal situation, and rising consumer confidence.

The World **Economic Forum** (WEF)

he WEF's 1997 competitiveness report shows that in one year, Canada has moved from eighth place to fourth, positioning it just behind the U.S. and well ahead of Germany, Japan, France and the U.K. Two smaller economies, Singapore and Hong Kong, remained in first and second place.

Covering 53 countries, the WEF Report ranks countries on the basis of a wide range of statistical measures, supplemented by information from 3,000 corporate executives throughout the world.

The report defines a country's competitiveness as its ability to sustain a high rate of economic growth in terms of real or inflation-adjusted per capita income.

Particularly interesting to investors is the report's forward range: it focuses not just on the short term, but on a country's ability to sustain a highgrowth rate over the next five years.

In ranking countries, the Forum considers 155 criteria under eight main headings including:

- openness to trade and investment:
- the role of government in the economy;
- the quality of banks and financial markets;
- technological strengths, including investment in research and development;
- infrastructure: and
- the soundness of legal, social and political institutions.

According to the survey, Canada's competitive advantages include healthy and reliable banking and legal systems, a favourable exchange rate, political stability, excellent business schools, low-cost long-distance telephone rates, a high rate of computer use and an efficient air transportation system.

FURUKAWA ELECTRIC

Company's Quebec subsidiary invests

\$14.4 million

hillips-Fitel Inc. (PFI), the Canadian offshoot of Japan's giant Furukawa Electric Company, is spending \$14.4 million on a joint venture that will double the productive capacity of its optical ground wire (OPGW) plant at Rimouski, Quebec. PFI's partner in the project is the Société générale de financement du Québec (SGF), a publiclyfunded economic development agency.

Commenting on the joint venture, Mr. T. Nishiyama, Director of Furukawa's Bare Wire Division, said: "Our company could not have hoped for a better investment partner than a Quebec company. SGF will be committed to promoting the interests of this venture and helping us to secure a lasting leadership position in this world market."

Mr. Doug Kong, President of Phillips-Fitel Inc., whose head office is in Willowdale, Ontario, says that one advantage of the Rimouski location is "a highly skilled and stable workforce whose performance is reflected in our certification as an ISO 9001 facility."

"Highway transportation links are excellent to all destinations in North America. And we have convenient access through the Port of Montreal to our offshore markets in India, Brazil and Chile."

Another competitive plus is a strong working relationship with a major Phillips-Fitel customer, Hydro-Québec, with whom the company cooperates in research and development and other areas.

Two-phase timetable

PFI plans to expand in two phases. The first, already under

to double plant capacity

way, will increase plant capacity by 70 per cent and will add 10 new jobs to a 50-person workforce. Budgeted at \$8.4 million, this phase is scheduled for completion by March 1998.

Backed by a \$6-million investment, the second phase will carry PFI to its mediumterm goal of doubling its productive muscle. The timetable calls for the expansion to keep pace with world demand for OPGW, which PFI expects to grow **Doug Kong,** President, Phillips-Fitel Inc.



"Highway transportation links are excellent to all destinations in North America. And we have convenient access through the Port of Montreal to our offshore markets in India, Brazil and Chile."

dramatically as customers for broadband communication capabilities multiply.

PFI posted annual sales in 1996 of \$25 million and exported over half of its production, compared with five per cent when it opened for business in 1993. The company's offshore markets include the United States, China, India, Australia, Brazil and Chile.

Furukawa Electric Company Ltd. had annual sales of \$8 billion in 1996. A world leader in optical systems technology, the Tokyobased company's output also includes electrical wire and cable, fibre optic components and systems, and aluminum and copper products. ◆



Growing with Canada

The vehicle-manufacturing industry invested \$1.8 billion in Canada in the first half of 1997, pushing the country up in the rankings from eighth- to fifthplace producer.

The surge is documented in a report by the Automotive Parts Manufacturing Association of Canada. The largest share of investment came from Chrysler Canada, which is spending \$850 million to upgrade its assembly plant at Brampton, Ontario. Toyota Motor Manufacturing Canada Ltd. (TMMC) is another major contributor. TMMC is conducting a \$430 million gear-up at its Cambridge, Ontario, facility to produce a new sports coupe and other models.

Cisco Systems Inc. of San Jose, California, has purchased Skystone Systems Corporation of Ottawa for \$89.1 million. Skystone makes semiconductor chips that act as high-speed transport mechanisms for telecommunications networks carrying voice and data signals. Cisco spokesperson Adam Stein said the company bought Skystone because of their pioneering development in this area. "It's an emerging new market," he said, "and these folks have great technology." Mr. Antoine Paquin, President and founder of three-year-old Skystone, said joining Cisco would immediately increase Skystone's market penetration. "We are joining the world leader in networking," he said.

3M Canada Inc. is spending \$5 million to install new equipment and expand production space at its plant in Perth, Ontario.

The plant manufactures nonwoven abrasive cleaning pads, marking tape and diaper tape for the North American market and exports about 90 per cent of its production to the U.S. parent company.

3M Canada operates another plant at Perth, producing pressuresensitive tapes for the U.S. and world markets.

Site Manager Jim Brock says: "3M awards product mandates on the basis of a combination of competitive strengths, which add up to an ability to deliver quality goods on time."

"Our plant is expanding because it meets those criteria. One advantage is a skilled and highly motivated workforce. Another is closeness to markets. Perth is 70 km by road from the U.S. border where we connect with the U.S. interstate highway system. For European markets, we have excellent access by road and rail to deep-sea ports in Montreal and Halifax."

SHL Systemhouse of Ottawa, Inc, a subsidiary of U.S.-based MCI Communications Corp., has announced it will locate two new facilities in Calgary, Alberta: a software development centre, and what it calls a Global Enterprise Help Desk to field technical questions from SHL clients around the world. SHL says it expects to double its staff in Alberta from 850 to 1,600 in a year. The move will not affect company workforce levels in Ottawa. •

For more information

Find out more about investing in Canada by contacting the nearest Canadian embassy or consulate, or the:

International Marketing Group Department of Foreign Affairs and International Trade Lester B. Pearson Building 125 Sussex Drive, C-2 Ottawa, Ontario Canada K1A 0G2

E-mail: investcan@dfait-maeci.gc.ca Telephone: (613) 995-4128 Facsimile: (613) 995-9604 (613) 944-6500 FaxLink: www.dfait-maeci.gc.ca/investcan Website:

Canada Investment News

is published under the direction of Richard M. Bégin International Marketing Group (BCFD) **Communications Strategies and Planning Division** Department of Foreign Affairs and International Trade

Canada