Library



CANADA IN THE WORLD OF ELECTRONICS

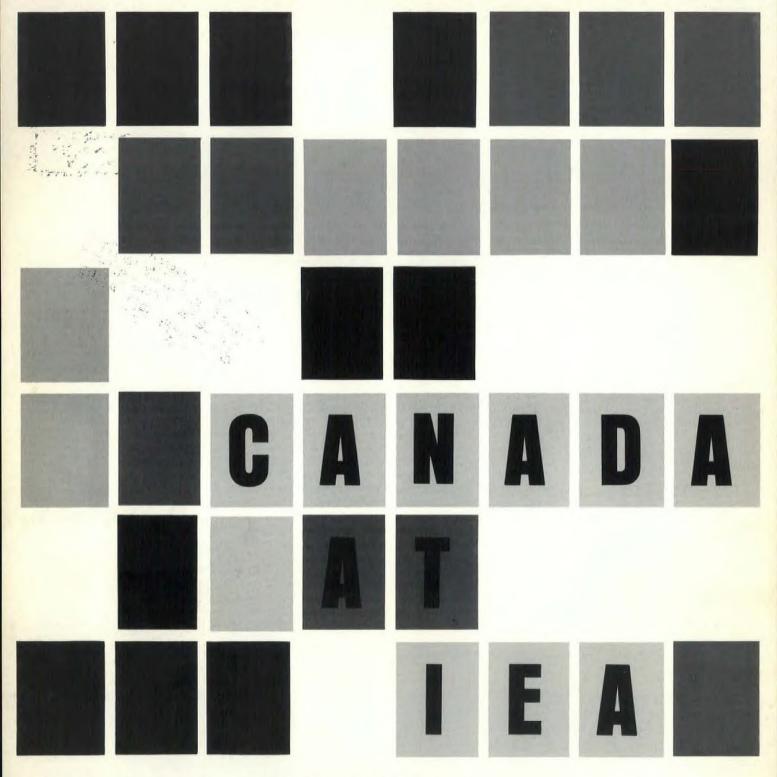




This booklet, published by the Canadian Department of Industry, Trade and Commerce, is your ready reference to more than 200 Canadian electronics companies experienced in serving world markets with quality products and services. We know that you will find it of continuing value.

Listings of electronic equipment and systems, components, consumer products and consultant companies include addresses, products and services. A product index shows you exactly where to look for your particular requirements. The booklet also outlines briefly the story of electronics in Canada — its success and growth.

Keep your copy in a handy place and it will serve you well.



INTERNATIONAL INSTRUMENTS ELECTRONICS AND AUTOMATION EXHIBITION

STAND NO: E 326 OLYMPIA, LONDON MAY 11 TO 16, 1970

Canada's contributions to the world of electronics are of growing importance with Canadian products and the Canadian name being recognized around the world. The Canadian industry, backed by a government well aware of the importance of electronics, is continually making significant advances in all facets from miniature integrated circuits to huge radio telescopes and ambitious space exploration programs. Because of Canada's particular problems of vast distances and widely varied climate, the country has long been a leader in communications. Canadians have developed the world's longest microwave communications network — 17,000 miles of it. By 1972, Canada will have launched its own domestic satellite communications system, complete with Canadiandesigned and built satellites and ground relay stations to reach even the most remote parts of the country. Canadian scientists are no strangers to space exploration. lonospheric studies have been carried out by a series of highly successful Canadian satellites - Alouettes I and II and ISIS-I. Canada's electronics industry has feet firmly planted on the ground too, with industrial and commercial applications. Electronic and electro-mechanical engineering achievements have brought efficiency and automation to industrial plants and business offices. Canadian computer peripheral equipment is in fast-growing demand, while Canadian display systems are finding their way to airports, stock exchanges and other locations throughout the world. Canadians are justly proud of their country's electronics achievements and it is thus with pride and pleasure that I welcome you to the Canadian Exhibit at the International Instruments, Electronics and Automation Exhibition, Olympia, London, May 11 to 16, 1970. Here you will find a number of the companies which have helped build the Canadian electronics reputation displaying their products and services. Company representatives and officials of the Canadian Department of Industry, Trade and Commerce will be on hand to be of any assistance, to answer questions - and to do business.



C. J. Van Tighem Minister (Commercial)

One Grosvenor Square London, W1X OAB

for Canada

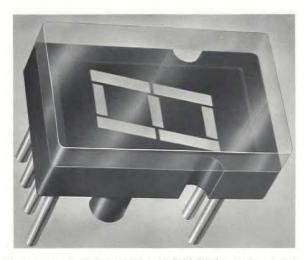
Office of the High Commissioner

Tel: 629 9492 (Area Code 01)

BOWMAR CANADA LIMITED

1257 Algoma Road Ottawa 15, Ontario, Canada

Tel: (613) 746-3100



Solid state numeric display panel (model R7M Elite) uses the principle of injection luminescence in semiconductor diodes.

solid state display products, rotary electro-mechanical components

Well established for its production of rotary electromechanical components, Bowmar Canada Limited now introduces a series of solid state display products. These include a vertical bargraph suitable for many purposes — notably aircraft engine instrumentation and a seven-segment numeric display for a range of commercial readout applications.

Bowmar has carried out considerable research and development into the field of solid state display, studying the use of semiconductor light-emitting diodes as display devices. Crystals, up to one inch (25.4 mm) square, are grown and doped with impurities to form a conventional semiconductor junction. Driven by 10 milliamperes at approximately two volts d.c., a 0.020-inch (.5 mm) square crystal will give off 100 footlamberts of light in a phenomenon known as injection luminescence.

Represented by:
Bowmar Instrument Limited
1 Ormond Avenue
Hampton, Middlesex, England
Tel: (01) 979-2349
Telex: BILHAMPTON 917114

The finished solid state, light-emitting diode can be fashioned into any display format and Bowmar applications include: alphanumeric readouts, film annotation, paper annotation, large-scale displays, bargraph displays, circuit status indicators, failure warning lamps, integral lighting sources, and punch card or tape readers.

Such solid state display products have many advantages over their electro-mechanical counterparts including: compatibility with digital circuitry; solid state reliability; automatic scale factor variability; small size and light weight; fast response time; and nearly monochromatic light output.

Also on view are samples of Bowmar's rotary electro-mechanical components such as synchros, resolvers, servo motors, gearheads, motor-gearheads and stepper motors.

CANADIAN RESEARCH INSTITUTE DIVISION OF CRITERION INSTRUMENTS LIMITED

85 Curlew Drive Don Mills, Ontario, Canada

Tel: (416) 445-6363 Cable: CANEXIA



CG-166 digital colour-gloss reflection meter for laboratory or production use is adaptable to continuous process inspection and control.

meters and analyzers

In its 30 years of operations, the Canadian Research Institute's program of research, development and testing in chemical, electrical and mechanical fields has gained for it the reputation of "Canada's most versatile laboratory." Products and services range from the manufacture of testing and analyzing meters and electro-medical equipment to relative and absolute evaluation of consumer goods.

A highlight of the company's display is the CG-166 digital colour-gloss reflection meter which measures colour, gloss, brightness, opacity, optical density, transmittance and hiding power. To do this it measures the quantity and quality of reflected light through use of photo-electric cell and computer. Carefully designed circuitry and display enable relatively untrained personnel to evaluate colour and reflected light components to a high degree. Built for industrial use, CG-166 has a durable case of heavy gauge enamelled steel, louvered for ventilation.

Represented by: Field Tech Ltd. London Airport Hounslow, Middlesex, England Tel: (01) 759-2811 Model OH-2F power transformer ratiometer is an accurate, rugged and portable instrument for measuring ratios and phase angle in distribution transformers. Periodic maintenance checks with OH-2F will cut power failure and down time by indicating incipient trouble before failure occurs. OH-2F is fitted with a Ferguson modification permitting ultra-rapid testing of multi-winding transformers without shifting test leads.

Also on display are the ruggedly portable IRT-5000 insulation resistance tester with a "Deadman" safety switch which removes high voltage and discharges any capacitance load build-up; capacitance bridges for laboratory, production line and field service; miniature power supplies suitable for use in laboratory, research, production or field testing of electronic printed circuit boards and integrated circuits.

CANADIAN WESTINGHOUSE COMPANY LIMITED ELECTRONICS DIVISION

P.O. Box 510 Hamilton, Ontario, Canada

Tel: (416) 528-8811 Telex: 021-655 Cable: CANWEST HAMILTONONTARIO



The Wand monitor, shown in a stockbroker's office, is also ideal for airport arrival and departure displays.

video display system, electroluminescent devices, integrated circuits, macroscopic breadboard

For more than 70 years Canadian Westinghouse Company Limited has successfully marketed products on a world-wide scale. Today, through its Electronics Division, it manufactures a broad range of electronic devices to high standards of quality.

The company's Wand display system accepts electronic data from teletype, computer, data link, keyboard and other digital input sources, converting it to alphanumeric form for remote display on standard television monitors. With up to 1,050 characters and a readout speed to 300 characters per second the Wand system has many applications including ticker readout in stock exchanges or individual brokers' offices; flight and weather information displays in air terminals; and process control readout for industry.

Canadian Westinghouse has been engaged in research and development in the field of electroluminescence for several years and now has facilities for producing a variety of glass encapsulated light sources. Standard lamps are green, but custom devices can be fabricated in a variety of colours and shapes. Arranged in a dot matrix pattern, these devices offer unique possibilities for creative effects such as animated image displays. The company also produces electroluminescent readout panels for displaying alphanumeric characters and a range of symbols.

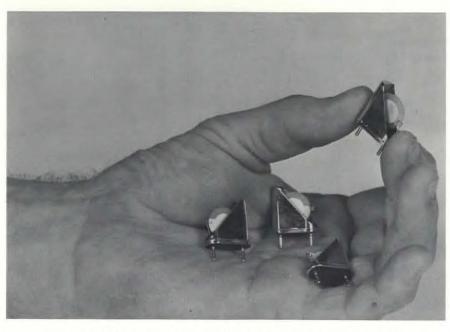
Canadian Westinghouse is also active in the development and manufacture of linear integrated circuits and markets a wide range of these devices to domestic and world markets. Product types offered by the company include silicon master chips, voltage regulators, operational amplifiers, low level audio amplifiers and wide band amplifiers.

Allied with the company's integrated circuit line is the WB-178 Macroscopic Breadboard for use in the design and development of integrated circuits. The WB-178 permits designers to rapidly interconnect monolithic components to form circuits whose performance in integrated form can be quickly evaluated. In addition to its application as a prototype circuit development tool, the WB-178 can be used in teaching and illustrating integrated circuit design principles.

CROVEN LIMITED

500 Beech Street Whitby, Ontario, Canada

Tel: (416) 668-3325 Cable: CROVCRYSTAL



Cut-away models show Croven quartz crystals as they are set into casing to perform their electronic frequency control functions.

quartz crystals and crystal ovens

A specialist Canadian company known around the world in the electronics industry, Croven Limited builds a complete frequency range of quartz crystals for frequency control to close tolerances and high performance standards. Those standards, plus the company's significant contributions to the economy, have recently won an "A" for Achievement Award from the Province of Ontario in Canada.

Both natural and cultured quartz are used in the Croven manufacturing facility. Large users of the end products are international communications and aerospace industries. The crystals perform frequency control functions in such equipment as two-way mobile

Represented by: Walmore Electronics Limited 11-15 Betterton Street London, W.C. 2, England

Comptoir Commercial D'Importation 42 Rue Etienne Marcel Paris 2, France radios, microwave equipment, sonobuoy detection, telephone carrier systems, paging units in hospitals, as well as in aircraft navigational systems.

Croven crystal products have also played important roles in Canada's space projects. They were used extensively in Canada's successful ISIS-I ionospheric sounding satellite launched in January, 1969.

This Canadian company has a reputation as a manufacturer of a precision crystal that is guaranteed to meet all specifications. In addition to the regular units, Croven now makes crystals in a complete line of cold weld holders to ensure better stability and performance.

Lipschitz & Company Ges. m.b.H. Biberstrasse 22 A-1011 Vienna, Austria

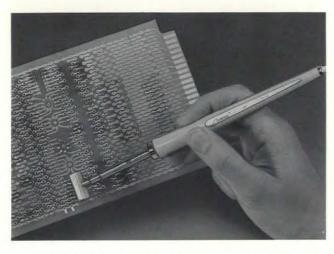
A/S AGATRONIC Buddingevej 312-316 København, Soborg Denmark Wenzel Elektronik Lamontstrasse 32 8 Munich 27, West Germany

Gigi Gallo Gorgatti Via Borromei 5 20123 Milan, Italy

ELDON INDUSTRIES OF CANADA LIMITED UNGAR DIVISION

1315 Lawrence Avenue East Don Mills, Ontario, Canada

Tel: (416) 447-8536 Telex: 02-2353 Cable: ELDONIND, TORONTO



Ungar Model 6939 Princess De-soldering Kit removes up to 16 pin in-line integrated circuits in one operation.

soldering and de-soldering tools

Equipment created by Eldon Industries of Canada Limited can be put to almost endless uses — but in today's rapidly expanding world of electronics one of the most important is the soldering and de-soldering of integrated circuits (IC's) and printed circuits.

Of the specialized tools developed in this field by the company's Ungar Division, one of the latest is the Ungar Model 6939 Princess De-soldering Kit. The kit contains a three-wire grounded Princess handle, a 15-watt heat capsule and three special de-solder tips.

Model 6942 tip in the kit removes up to 16 pin in-line integrated circuits in one operation; it is iron-clad, nickel-plated and pre-tinned with a tip temperature of 550°F (287.5°C). Model 6945 tip lifts off "TO" packages and transistors with one pass; is iron-

Represented by: Northlight Razor Blade Co. 26 Wellington Quay Dublin, Erie

Lugton & Co. Ltd. 209-212 Tottenham Court Road London, W.1, England clad, nickel-plated and pre-tinned with a tip temperature of 680°F (360°C). Model 6947 tip melts and straightens bent tabs and leads, preventing waste, is nickel-plated and has a tip temperature of 680°F (360°C). Additional tips for further IC or printed circuit applications are available.

Ungar Division of Eldon Industries is one of the leading manufacturers of soldering irons and production line aids for electronic assembly and manufacturing. Its market consists primarily of those companies requiring sophisticated hand production tools for electronic design and engineering encompassing extreme miniaturization and supersensitive micro-electronic integrated circuits.

Megex 105 Quai Branly Paris 15, France Mulder-Hardenberg Michelangelostraat 10 Amsterdam-C The Netherlands

ESNA LIMITED

P.O. Box 250 Agincourt, Ontario, Canada

Tel: (416) 291-6251 Telex: 02-21671 Cable: ESNATOR - TORONTO



New Esna Agastat fully pneumatic timing relay has nine time-delay ranges from 0.2 seconds to 60 minutes with both on-delay and off-delay models available.

timing instruments

Serving industry for more than 50 years, Canada's Esna Limited introduces the Agastat series of timing relays — rugged and dependable.

In the 2400 Series Agastat time/delay/relay, advanced design combines a time-tested principle with modern materials to provide reliability and versatility. And these electro-pneumatic instruments offer a considerable bonus in economy.

The first timer to have the ease of adjustment and resetting of a time-calibrated dial head, the 2400 Series has 12 ranges from 0.1 second to 60 minutes. The head uses no needle valve but recirculates air under controlled pressure through a variable orifice to provide linearly adjustable timing. A precision wound potted coil module supplies the initial motive force with minimum current drain while a new snap-action switch assembly provides greater contact pressure up to transfer time for positive, no-flutter action.

Esna is introducing the Agastat all-pneumatic time/delay/relay — the only all-pneumatic unit available

in the world — operating directly on the plant air supply. An important feature is the adjustable timing and the high repeat accuracy using a patented calibrated timing head. It is completely sealed, recycling internal air under controlled pressure through a variable orifice.

The timing function and accuracy are not affected by fluctuations in the plant air supply pressure. This instrument is supplied in nine time-delay ranges from 0.2 seconds up to 60 minutes.

The Agastat adjustable fluidic time/delay/relay—featuring adjustment ease and long time ranges—is also being introduced. New too is Esna's design of the solid state time/delay/relay which will not allow false tripping. Electrical ruggedness and smooth operation are built in.

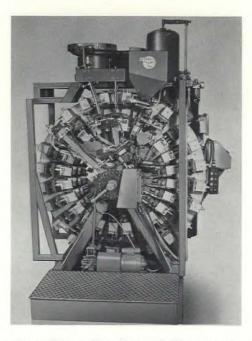
Esna's electrical programmer will also be displayed. This allows sequencing in one device up to 20 delay functions. In application it does the work of a simple process computer.

Represented by: Esna Products Limited Chantry Road Kempton, Bedford, England Tel: Kempton 3507 Cable: ESNABRIT, BEDFORD

FORTIN-LATCHFORD LTD.

867 Progress Avenue Scarborough, Ontario, Canada

Tel: (416) 291-2171



Model 18-0-1 rotary transfer moulding machine allows a significant reduction in cure cycle. In most applications at least a four-to-one advantage in labour and two-to-one advantage in equipment cost is realized over conventional equipment.

rotary transfer moulding machine

A specialist Canadian company with a unique product, Fortin-Latchford Ltd. is introducing its rotary transfer moulding machine for automatic Thermo-Set encapsulation or insertion of electronic components. One of the outstanding features of this machine is its cost-saving — representing a four-to-one ratio saving in manpower and two-to-one in equipment cost compared with conventional methods.

Model 18-0-1 is multi-station (up to 24) and each station is equipped with its own injection-ejector and functions as an independent press, encapsulating one to eight parts. Since material flow is over a shorter distance than in multi-cavity moulds, less pressure and lower temperatures can be used. This in turn means that the yield of delicate electronic parts is increased.

The small moulding area entails less clamp pressure, reducing mould maintenance to a minimum.

Short flow distances virtually eliminate misses and cracks and the special mould design prevents sticking. A vacuum system is supplied which evacuates the moulds to eliminate pinholes and increase density.

Stations rotate at an adjustable speed (to establish cure time) and all functions of part load, material load, close, clamp, inject, air blast clean, are carried out automatically. Stations and multiple parts feeders can be added later to give maximum flexibility.

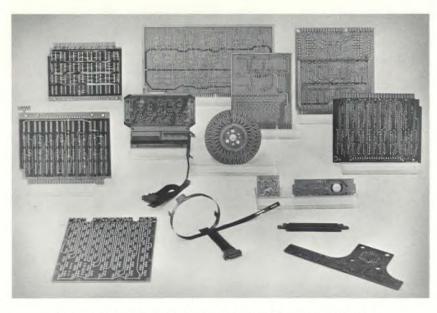
The equipment is delivered ready to operate with a known production rate. Fortin-Latchford installs machinery and trains personnel in its use.

The company is seeking representation in Europe.

GRAPHICO PRECISION WORKS LTD.

1100 Bellamy Road North Scarborough, Ontario, Canada

Tel: (416) 293-8266



Precision products from Graphico meet rigid quality control specifications.

printed circuit boards

In the close to 10 years since it was established, Graphico Precision Works Ltd. has built a solid reputation as a leading supplier of a wide range of custom products and services for the aircraft, electronics and electrical industries.

On display are printed circuit boards—single and double-sided, plated and non-plated through holes, with and without nickel/gold connector tabs; multi-layer printed circuit boards; and flush-circuitry for rotary switch applications.

Graphico products also include terminal boards; photo-etched panels, dials and pointers; edge-lit panels; metal and plastic components; precision fabricated sheet-metal parts; laminated heater strips; silvered mica capacitor plates; electroformed parts; chemically-milled parts.

Represented by: Walmore Electronics Limited 11-15 Betterton Street London, W.C. 2, England Tel: 836-0201 Telex: 09-28752 Services available encompass silk-screen processing; photo-etching; epoxy resin casting and encapsulation; engraving; profiling; chemical milling; plating; metal finishing; product engineering. The company machine shop creates all the tooling needed for its products and the plating department is equipped for lead/tin, copper, nickel, silver, gold, rhodium, tintelate, anodizing and chemical conversion coating.

To ensure that Graphico customers receive only the best, quality checks are made at every phase of manufacturing or processing and each item produced is subject to a rigorous final inspection. The quality control department is familiar with military specifications and fully equipped with all the necessary inspection and measuring devices.

GEORGE KELK LIMITED

48 Lesmill Road Don Mills, Ontario, Canada

Tel: (416) 445-5850 Telex: 02-29434 Cable: KELLEX TORONTO



When installed, Kelk washer-type load cells have no rotational movement and are not exposed to damage from external sources.

washer-type load cells, digital incremental encoder, static inverter

Established in 1953, George Kelk Limited is an electronic and electro-mechanical engineering company specializing in the design and production of equipment for steel mill automation.

On display are three Kelk washer-type load cells with capacities ranging from 500,000 pounds (226,795 kg) to 5,000,000 pounds (2,267,950 kg), and load cell readout amplifiers. The cells are strain gauge compression-type transducers for the measurement of force or weight. Load-sensing elements are forged steel rings with resistance-strain gauges bonded to them. The cells are easily installed without requiring modifications to screws, chock or to mill housings. Used with Kelk load cell readout amplifiers and indicating meters, the cells provide a complete load-metering system that can be installed by a mill's own technicians.

Represented by: Rees (Mechanical Equipment) Ltd. 6 Park Grove Cardiff, CF1 3BN, Wales

Canada Products Stadtbuero 1 Bauernmarkt 24 A 1010 Wien, Austria for metallurgical laboratory quality control; analogue to digital shaft encoders for digital indication of roll gap and cut-to-length systems; electronic weighing scales and temper mill extensometers.

Ing. Franco Luchsinger Via F. Nullo 29/A 24100 Bergamo, Italy

Equipement Electronique 184 Chaussée de Vleurgat Brussels 5, Belgium

Ingeniorsfirman Lundwall & Co. AB Frokloversgatan 5 S 421 31 V. Frolunda Goteborg, Sweden

Heinrich A. Lampmann VDI 4018 Langenfeld Postfach 2042 Albrecht-Duerer-Strasse 3 Germany

Also on display are two new Kelk products: a digital incremental encoder and a static inverter. The

encoder produces two outputs of 128 pulses per rev-

olution and employs magnetic sensing with no moving

parts other than the rotating magnetic coded disc. The static inverter is for direct current cranes and related

mill applications where dependable, stable output is required despite large disturbances of the input power.

non-contacting gauges for measuring length, width and

thickness of hot slabs and ingots; digital metallographs

Kelk also manufactures a wide range of equipment for industrial and rolling mill applications including

Company seeks representation in France and Spain

MICROSYSTEMS INTERNATIONAL LIMITED

P.O. Box 3529, Station "C" Ottawa 3, Ontario, Canada

Tel: (613) 828-9191



Custom designed hybrid circuit is a micro-electronic tone generator, network and tone ringer for telephones.

advanced technology micro-electronics

Rapidly becoming a leader in the semiconductor industry, Mycrosystems International Limited is the only company in Canada to design and manufacture semiconductors — advanced technology micro-electronics — from raw material to finished product and market them on a world-wide basis.

Microsystems International offers a total custom design service including computer-aided mask design and systems-oriented application engineering service. Custom hybrid circuits include a micro-electronic tone generator, network and tone ringer, which allows industrial designers freedom of shape in new telephone designs as well as in the updating of existing telephones.

Silicon integrated circuits are offered on a custom basis and include such items as MOS decoder ma-

trices, field effect controlled switch and gyrators. Breadboard chips are available for designers who wish to select their own circuit configurations. Some circuits are available in beam-leaded chip form for custom hybrid circuit designers.

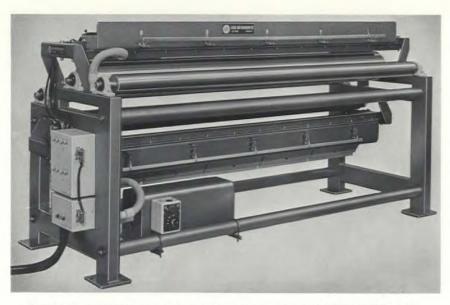
At Microsystems International new devices are constantly being developed to meet the specialized requirements of M.I.L. customers around the world. They are tested at every stage of production to ensure that only those achieving M.I.L. quality specifications reach completion. On completion, all devices undergo stringent mechanical, electrical and environmental tests and final quality and reliability checks ensure that only products of the highest standard of excellence reach the customer.

Represented by: Microsystems International Limited Alliance House 12 Caxton Street London, S.W. 1, England Microsystems International Limited 7,000 Stuttgart S Hohenheimerstrasse 9 Stuttgart, West Germany Microsystems International Limited 5 Place du Champ de Mars Brussels 5, Belgium

NASH AND HARRISON LTD.

P.O. Box 6040, Station "J" Ottawa, Ontario, Canada

> Tel: (613) 836-3520 Cable: AUTOMATION



Transistorized, with all components carefully aged and matched, the ELDEMA 109 optical inspection system has reliability and long-term stability.

web or sheet material inspection systems

A pioneer in the field of automated electronic inspection of web or sheet material, Nash and Harrison Ltd. today markets its systems throughout the world. While the company's efforts have been mainly concentrated on the paper industry, the principles involved can be applied to the manufacture of any materials produced in roll, sheet or strip form.

ELDEMA 109 is an automated inspection method which detects dirt, discolouration, lumps, wrinkles, holes, coating skips and other defects in web or sheet material moving at speeds up to 6,000 fpm (1,828.8 meters/minute). Inspection efficiency of close to 100 per cent can be achieved with marked improvement in quality and reduction of cost.

HOLOCATOR 115 can detect holes .02 inch (.5 mm) in diameter in material that is opaque to ultraviolet light at speeds up to 6,000 fpm (1,828.8 meters/minute). Fully transistorized for reliability, this

Represented by: Vacuumatic Limited 129 Kingsway London, W.C. 2, England

Achard Picard et Remy 36 Rue D'Enghien Paris 10, France

Agenturenhandel W. Seegers Verspronckweg 295 Haarlem, The Netherlands Dott. L. Gambino Via Saluzzo 83 Torino, Italy

Ing. Wolfgang Hammerschlag & Co. OHG. Renngasse 10 1010 Vienna, Austria

Hjelm Bang A/S Islevdalvej 65 2610 Rodovre, Denmark unit needs little calibration and maintenance, may be used in many locations and in conjunction with several output devices to meet various requirements.

PIN-HOLE DETECTOR 116 will detect holes as small as .001 inch (.02 mm) in diameter over a speed range that covers all the paper processing operations. Model 124 is an economical version with less uniform sensitivity across the web width. SPLICEALARM 119 will monitor up to 16 webs of material and detect the presence of a hidden splice or a tear-out over a speed range that again covers all paper processing operations.

The REJECT CONTROL COMPUTER 121 fully automates an inspection system, providing an automatic reject facility for defective sheets. Used between an automatic cutting/sorting machine and inspection device, it assures that papers will be inspected, cut and sorted automatically without human intervention.

Oscar Skotvedt Maskin A/S Stalverksvn 2, Box 6080 Etterstad, Oslo, Norway

AB Wesskon Virebergsvagen 1, Box 1177 Solna 1, Sweden AB Ekstroms Maskinaffar Box 10310, Alexandersgatan 7 Helsinki 10, Finland

Internacional Tecnica S. A. Torre de Madrid, Planta 8 No. 3 Madrid (13), Spain

PRECISION ELECTRONIC COMPONENTS LIMITED

19 Hafis Road Toronto 15, Ontario, Canada

Tel: (416) 249-7103



Variable resistors and hot-moulded potentiometers are competitively priced, high in quality.

variable resistors, trimmer potentiometers

Precision Electronic Components Limited specializes in . the production of high quality variable resistors and hot-moulded potentiometers. Backed by an enviable reputation in the Canadian domestic market, the company has moved successfully into the export field and is well able to expand sales.

Multi-turn trimmer potentiometers, Models RJ11 and RJ24, are among the company's latest developments and, with variable resistors of recent design, highlight its display.

Precision Electronic's integrated hot-moulding technique and the company's own metal ceramic resis-

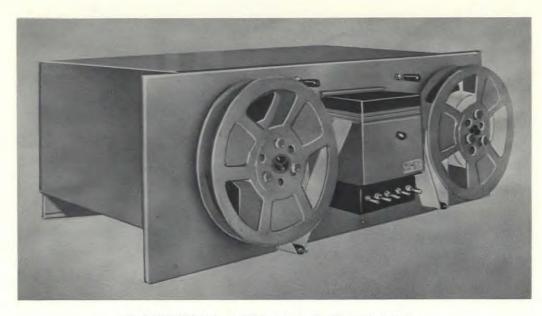
tive film are used in the production of trimmer pots. The variable resistors are all designed for broad spectrum reliability — combinations of physical and electrical stresses are applied during evaluation in addition to rotational and load life tests.

PEC products meet appropriate military specifications and the company's laboratory, quality control systems and reliability testing program have been approved by the Canadian Military Electronics Standards Agency.

SYNER-DATA CANADA LIMITED

130 Rivalda Road Weston, Ontario, Canada

Tel: (416) 742-7804



Model TRS-300 photo-electric tape reader/handler meets today's data acquisition demands for reliability and performance.

computer peripheral equipment

Low cost, ease of operation and high reliability are characteristics of the model TRS-300 punched tape reader/handler combination designed and developed by Syner-Data Canada Limited. This Canadian company has as its primary objective the design, manufacture and marketing of computer peripheral equipment for the fast growing data processing, numerical control and communications fields. With the introduction of the model TRS-300, the company has made a significant breakthrough in the input peripheral industry.

The model TRS-300 is a medium speed photoelectric reader/handler with a free run speed of 300 characters per second. Besides featuring a 600 character/second rewind speed, it reads a wide variety of tapes varying in transmittance from 0 to 60 per cent without adjustment. Also from Syner-Data are the BETA printer/terminal and the AVCOM audio-visual systems.

BETA is an incremental printer terminal and prints at speeds of up to 30 characters per second asynchronously. It is column width variable from 26 to 132 and features a full 64 character ASC11 set. BETA is available in three configurations — receive only, send-receive and automatic send-receive. It prints out clean, crisp copy and handles six-part carbon-interleaved forms up to 15 inches (381 mm) in over-all width.

AVCOM audio-visual units are suitable for education, advertising and sales promotion. AVCOM-1 is simple to operate, compact, flexible and self-contained. AVCOM-2 is a multiple projector system using up to eight projectors and featuring control electronics that provide automatic slide changes and picture dissolves integrated with background music and/or commentary.

der

TRADE & COMMERCE

JUN 15 1972

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RECORD OF ACHIEVEMENT

Canadian research and development have yielded a broad spectrum of specialized electronic products. Developed initially for Canada's own commercial and military requirements, these products, manufactured in modern factories, are being put to use on a rapidly increasing scale throughout the world.

Canadian installation services, training programs, repair and overhaul, tailored to fit a country's particular requirements, are available for all Canadian electronic systems and equipment.

Assisted in research and development by a government enlightened about the importance of electronics and by a concerned industry, Canadian electronics more than hold their own in all competitive situations.

As a result, Canada today contributes far more than might be expected to the world's electronics. Its technologies and components are flowing out into other industries at an ever-increasing rate. Some of the more important uses are in machine tool and process controls; complex weapons systems; space exploration; data processing; computers; communications; ground transportation and traffic control; air traffic control; medical research; and nuclear power systems.

The electronics industry contributes substantially to the Canadian economy. Total sales now exceed \$1,200,000,000 annually. Significant as this growth has been, with a more than 100 per cent increase in the past decade, by 1980 a three-fold increase to an annual rate of \$3,000,000,000 can be expected. In Canada at least 65,000 persons are employed in the industry to make a huge variety of products ranging from the smallest of miniature integrated circuits to the largest of radio telescopes.

The major participants in the industry are members of the Electronics Industries Association of Canada. This national trade association not only provides continuity within the industry but acts as a central information source for prospective export customers.



Canada's vast microwave system extends from coast-to-coast through the country's farmland and far into the north.

COMMUNICATIONS

GROUND

Communications represents one of the foremost Canadian electronic capabilities. Skills in this field grew from the need to provide a network for broadcast, message and television transmission across the 4,000mile expanse of Canada from Newfoundland on the Atlantic to British Columbia on the Pacific with spur links to serve the growing needs of Canada's northlands — a 17,000mile broadband system spanning six time zones. Similar high performance microwave relay systems of Canadian design and manufacture have been installed in at least 18 countries in North, South and Central America, Europe, the Middle East and Africa for a total of more than 40,000 route

miles. A Canadian tactical radio relay system has been adopted by NATO countries to serve military defence communications requirements.

Canadian-made marine, airborne and mobile communications equipment has become an integral part of commercial and military operations around the world. Marine radio equipment of Canadian design and manufacture is in wide use aboard ships sailing on practically every ocean and major waterway of the world. Canadian-built mobile radio has become a day-to-day necessity with police, fire departments, transportation and other essential services. Commercial and military air-

craft, flying across Canada and many other countries, depend on Canadian airborne radio equipment for accurate communication and navigation.

With at least 250 television outlets, Canada is a major manufacturer of broadcasting equipment — AM, FM, TV and associated antenna systems, studio equipment and studioto-transmitter radio link equipment. Turnkey broadcasting installations in other countries have involved a network of TV and AM transmitters complete with studio equipment, buildings and associated microwave relay systems.

85-foot radome-enclosed antenna. The second, completed in 1969, has a 97-foot exposed and heated reflector. At Bouchette, Quebec, 70 miles north of Ottawa, the Canadian capital, a further earth station has been built to test such equipment under Arctic conditions for

domestic communications.

oneered global satellite communications.

Today Canada is one of the first nations in the world to start work on its own domestic satellite communications system, planned for operation in the early 1970s. The system will have at least 60 ground receiving and relaying stations and two synchronous satellites to provide improved message and television distribution for the country. The satellites will have a capacity of six television channels for broadcast cov-

Satellites are the communications sys-

tems of the future and Canada has been

in the forefront of research and devel-

opment in this field for many years. It

was in 1961 that Canadian industrial

experience in satellite electronics began with the design and manufacture of

the transponder system for the NASA

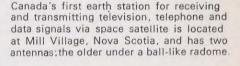
relay satellite which, with Telstar, pi-

erage across Canada.

Canada is already a foremost supplier of earth stations for the global satellite system with equipment installed in at least 12 large satellite terminals. The Canadian-designed and built satellite terminal facility at Mill Village, Nova Scotia, on Canada's east coast, has two stations to serve the heavy commercial traffic via Atlantic-placed satellites. The first station was completed in 1965 and consists of an

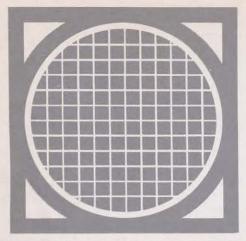
Canada was the third country, following the United States and Russia, to have a satellite in orbit. That was Alouette I, launched successfully 625 statute miles above earth in 1962. Alouette I and its successor, Alouette II, launched in 1965, are topside sounder satellites designed for ionospheric and other upper atmospheric investigations. They pioneered such developments as spacecraft radio antennas 150 feet and more in length. More than six years after its launching Alouette I had set records for continuous performance and in sending back more information than any other comparable satellite.

Part of a continuing International Satellite for Ionospheric Studies (ISIS) program, ISIS-I (originally called ISIS-A) was sent into an elliptical orbit in 1969. Larger than its two predecessors, it was designed to carry out at least 10 separate ionospheric exploration tasks. It was to be followed by an even more sophisticated version — ISIS-B.



SPACE





INDUSTRIAL, DEFENCE AND COMMERCIAL ELECTRONICS

A long-standing leader in the marine navigation aids field, Canada has greatly increased its capabilities to cover ground and air navigation. To achieve this, facilities have been built to provide the critically controlled environment for the development and production of precise, highly sophisticated equipment.

Canadian-built airborne electronic and electro-mechanical equipment has been specified for commercial and military aircraft and airfields in Canada, the United States, Europe and many other lands. This includes Doppler navigation systems, selfcontained inertial guidance systems, position and homing indicators and beacons, altitude indicators, temperature control systems, automatic weapon sighting and fire control systems, low cost weapon-release computer systems, aircraft function recording systems and UHF communications transceivers. In conjunction with the airborne equipment, a full range of automatic and semiautomatic mobile and fixed ground test equipment is available for use by ground maintenance personnel.

A remote radio-controlled pilotless aircraft for photo reconnaissance is a major Canadian development and production program, geared primarily to the international market. Acceptance of this system points the way for its wide use in other countries.

At sea, Canadian-designed radar equipment, automatic direction finders and other navigation aids have been installed for many years in Canadian and foreign vessels. Because it is bounded by the Atlantic and Pacific Oceans, Canada has been vitally concerned with defence against submarines. Canada's naval ships and maritime reconnaissance aircraft, using primarily Canadian-designed equipment, are recognized as forerunners in the anti-submarine warfare (ASW) field.

Flight simulators for aircraft pilot training have been associated with Canada since the early days of the Link Trainer during World War II. Today Canadian simulators have found world-wide acceptance and reproduce practically any flight conditions imaginable. A purely Canadian concept is the airborne simulator for vertical and short take-off and landing (V-STOL) aircraft.

Concern for safety afloat and in the air has brought about the Canadian production of such devices as crash-position indicators which automatically send out powerful radio signals triggered by the impact of a crashing aircraft. At sea a similar device is activated by contact with water and has been designed primarily for use with life rafts.

Proof of Canada's ability to design and manufacture radar equipment is the wide range of commercial and military radar that is in use in many countries throughout the world. Canadian industry offers an exceptional level of capability for the supply of navigation, search and weather radar for land, sea and air applications. In addition, there is a wide range of antennas, antenna towers, radomes and accessories capable of operating in widely varying environments.

In nucleonics, Canada has been a pacesetter with its peacetime use development work at the Atomic Energy of Canada's establishment in Chalk River. Canada's first fullscale nuclear power station went into operation in 1966. The source of energy is the CANDU heavy water reactor which was developed in Canada and which does not require enriched uranium fuel. Nuclear instrumentation and apparatus such as reactor controls, gamma radiation meters and particle detectors for many applications are produced in Canada for domestic and export use.



Canadian National Research Council's giant radio telescope at Lake Traverse, Algonquin Provincial Park, Ontario, has a 150-foot diameter parabolic reflector.



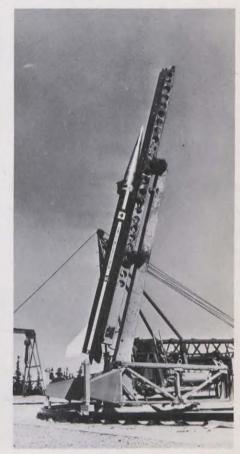
The newest shape in telephones, designed and made in Canada, undergoes rigid quality testing.



Black Brant rocket, designed and built in Canada, is shown just prior to launching. It has been used primarily for upper atmospheric research.







MEDICAL ELECTRONICS

On the human or medical side of electronics, research is constantly being carried out by Canadian scientists and technicians.

A blind scientist working with Canada's National Research Council is responsible for the development of a number of devices to aid persons similarly afflicted. Energized artificial eyes help blind persons to "see" obstacles, pour liquids and detect light in their surroundings. They bounce ultrasonic energy off objects, pick up the echoes and transform them into beeping radio signals. By differentiating the radio signals a blind person can discriminate between any number of obstacles.

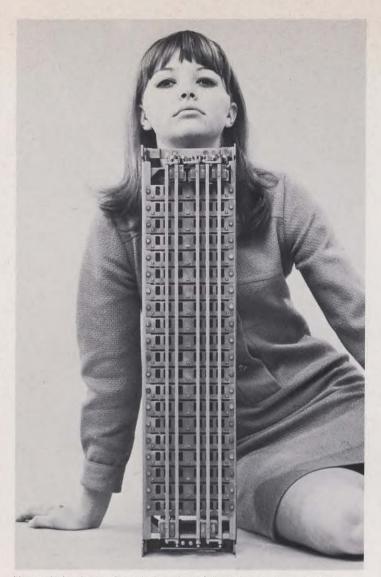
Canadian scientists have also been able to make brain scanning easier, facilitate sleep-sound studies and human skill studies through the development and improvement of electronic equipment and techniques. In hospitals today electronic devices are playing growing roles in giving better patient care and making nursing tasks easier and more efficient.

A major Canadian contribution is the development and supply of artificial limbs for paraplegics and Thalidomide children, permitting lifelike movement from nerve impulses. This development will enable many afflicted Canadians and others throughout the world to live near-normal lives.

Procedure and resuscitation table maintains an infant's body temperature and permits easy access to the child during a blood transfusion.

Developed by the National Research Council of Canada, this alignment device permits new and more accurate techniques for diagnosing certain brain disorders through the use of ultrasonics.





Young lady shows the relative size of the new common control switch crossbar system developed by Canadian scientists.

Canadian technology has been responsible for many developments in the telephone over the years and among the latest is a new common control switch crossbar system. This answered the need for a modern, miniature switching system which incorporated services features normally available in larger exchanges.

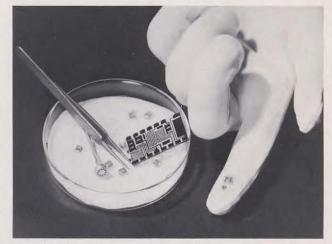
Canadian scientists have also created the first totally Canadian-designed telephone set based on the dial-in-handset concept. With no change in basic design, this set can be modified for push-button dialing or any other modern telephone function such as data transmission.

THE TELEPHONE





"Clean room" techniques used in Canada's electronics industry.



Canadian electronics experts are finding new methods of miniaturization to make complete thin film integrated circuits smaller and smaller as the speck on the end of the finger here shows.

Electronic components are the bases of successful electronics equipment of all types — products as diverse as television, radio, radar, computers, microwave and avionics. The Canadian components industry is constantly striving to lower costs, improve quality and develop new and better products to meet the design engineer's needs.

Canadian components are making a valuable contribution to the United States Apollo spacecraft and can now be found on the moon. In addition, they perform major functions aboard Canada's own orbiting research satellites.

At the heart of electronics equipment are the active elements — vacuum tubes or solid state devices. Both are turned out in high volume in Canada on automated production and test lines, as are all other components associated with them.

Canadian resistor manufacturing, using the latest techniques and materials, covers a full range of carbon composition, precision film wire wound resistors and potentiometers. Capacitor capabilities include paper, ceramic, electrolytic, tantalum, mica and air types. Interconnection material is readily available — printed circuits, hookup wire, solder and connectors as well as discrete components such as inductors, transformers, flybacks, yokes, delay lines and switches.

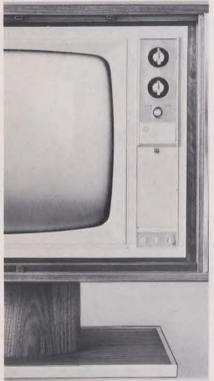
Tremendous possibilities are being opened up in miniature design through development of the integrated circuit. Rapid progress and continuing research are leading to smaller and smaller miniaturized circuits for more compact, sophisticated electronics equipment.

Industrial and military electronic equipment uses a wide variety of specialized components including such electro-mechanical devices as meters and motors, servos and switches, waveguides and antennas, crystals and filters, batteries and relays, seals and sockets, klystrons and magnetrons. Canada makes them all.

High reliability of such components for military projects calls for their qualification to military specifications. The Canadian industry works to the high quality MIL Standards which are known around the world and are finding increasing use in industrial electronics as well. A more recent trend is toward designing for IEC specifications to further intercontinental trade.

Even higher reliability is required for manned space exploration electronics. Canadian manufacturing techniques and traceability of all materials ensures top quality to meet rigid specifications. At times the testing and documentation necessary can equal the manufacturing costs.

CONSUMER PRODUCTS



Modern styling for modern use — television sets developed in Canada.



Canadian-designed car radio has made impact on export markets.



Futuristic design and warm tone are hallmarks of Canadian stereo sets.

With one of the highest standards of living in the world, the Canadian consumer has encouraged the growth and development of an outstanding consumer electronics industry. Since 1945 this industry has established its position as one of the important secondary industries in Canada and, over the years, has shown high innovative and design capability. Today it can offer a complete range of consumer electronic products for the world markets.

Canadian-designed and engineered color and monochrome television receivers, stereos, automobile radios, home entertainment centers, and other consumer products, are finding ready acceptance both in Canada and abroad. One of the outstanding features of these Canadian products has been the integration of cabinets — crafted from

native hardwoods and veneers — with space-age electronic interiors, using the latest developments in transistorized and integrated circuit design.

Canadian manufacturers have also recognized that many countries in the world are developing their own consumer electronics industries. The Canadian industry has the necessary experience, engineering capability and interest in the needs of other countries to provide advice and assistance to foreign manufacturers. The industry can also supply kits of component parts for local assembly where required.

All Canadian products have been designed and engineered to rigid specifications in modern, efficient plants employing the latest production and quality control techniques.



LOOKING TO THE FUTURE

CANADIAN COMPANIES SUPPLYING

ELECTRONICS EQUIPMENT
COMPONENTS, CONSUMER PRODUCTS
AND CONSULTANT SERVICES

ELECTRONICS EQUIPMENT AND SYSTEMS SECTION

ADVANCED TRANSDUCER SYSTEMS LTD.

P.O. Box 307, Station "U" 333 Bering Avenue Toronto 18, Ontario, Canada Tel: (416) 233-5535 Cable: ATSTOR TORONTO

PRODUCTS:

EDP peripheral service equipment; computer magnetic tape cleaners; verifiers; rewinders; erasers; metallurgical testing equipment; vacuum chambers and furnaces; tensile, creep testing machines; pneumatic transducers; CALARM annunciators; liquid level switches and flow meters.

AINSLIE ANTENNA CO. LTD.

Industrial Boulevard St. Jerome, Quebec, Canada Tel: (514) 324-1660 TWX: 610-421-3270

PRODUCTS:

microwave communications antenna systems; microwave and UHF antennas; rectangular and circular waveguide transmission line components; flexible waveguide coaxial transmission line systems; waveguide and coaxial components; pressurization equipment; radar antennas; rotary joints; antenna engineering services.

AIRCRAFT APPLIANCES & EQUIPMENT LIMITED

585 Dixon Road Rexdale, Ontario, Canada Tel: (416) 249-8411 TWX: 610-492-2113 Telex: 02-2722

PRODUCTS:

tachometer generators; voltage regulators; liquid level sensors; auxiliary power units; solid state sign flashers.

ANACONDA ELECTRONICS LIMITED

1915 Stainsbury Avenue Vancouver 12, British Columbia Canada

Tel: (604) 876-6213

PRODUCTS:

CATV equipment including head end gear, amplifiers, splitters and couplers, customer service devices,

terminators and connectors, traps and filters; consulting service on CATV systems.

ANDREW ANTENNA COMPANY LIMITED

606 Beech Street Whitby, Ontario, Canada Tel: (416) 668-3348 Telex: 02-29562

Cable: ANDCORP WHITBY

PRODUCTS:

microwave antennas for all commercial and military bands both standard and high performance; satellite communication antennas, ground, for both synchronous and non-synchronous satellites; coaxial Heliax transmission line, air dielectric and foam dielectric: Heliax elliptical waveguide for frequencies from 1.7 GHz to 13.2 GHz; rigid coaxial transmission lines and waveguides; air pressurizing equipment and accessories; mechanical type transportable masts; fixed station antennas for VHF and UHF; scatter propagation antennas; military antennas and transmission lines both tactical and strategic.

APPLICON COMPUTER SYSTEMS LIMITED

1755 Woodward Drive Ottawa 5, Ontario, Canada Tel: (613) 728-3733 TWX: 610-562-1671

PRODUCTS:

low-cost output devices for mixed graphic and alphanumeric output; communications subsystems and terminals; custom systems with special purpose hardware and software.

ASHMAN INDUSTRIES (1966) LTD.

43 Glen Road Hamilton, Ontario, Canada Tel: (416) 528-8953

PRODUCTS:

custom built electronic and electric testing equipment for schools; motor generator sets; psychological testing equipment for universities; power supplies for schools, laboratories and industries. Design, engineering, manufacturing facilities.

ASSEMBLY ELECTRONICS

P.O. Box 461 807 Kent Street Niagara Falls, Ontario, Canada Tel: (416) 345-2124

PRODUCTS:

signalling, warning devices; incandescent and strobe; proximity sensors; manufacturing, designing and repair service.

AUTOMATIC ELECTRIC (CANADA) LIMITED

100 Strowger Boulevard Brockville, Ontario, Canada Tel: (613) 342-6621 TWX: 610-525-1061 Telex: 026-3532

Cable: GENTELINT BROCKVILLE

PRODUCTS:

electronic and electro-mechanical telephone switching equipment for central offices; manual toll, information, test and repair positions; private automatic branch exchange (PABX); private automatic exchange (PAX); key telephone equipment; secretarial answering units; telephones of all types; enterphone systems (apartments); educational and industrial video systems; engineering and installation services plus special applications for communications.

AVIATION ELECTRIC LIMITED

200 Laurentien Boulevard Montreal 379, Quebec, Canada Tel: (514) 744-2811 Telex: 01-267659

Cable: AVIATION MONTREAL

PRODUCTS:

aircraft and research rocket instrumentation; gyros; servo amplifiers; jet fuel controls; electro-mechanical assemblies; systems test equipment; fluidic components and control systems.

BACH-SIMPSON LIMITED

1255 Brydges Street London 31, Ontario, Cai

London 31, Ontario, Canada Tel: (519) 451-9490

Telex: 024-843 Cable: WILBAC

PRODUCTS:

panel meters; control instruments; shunts and current transformers; portable electrical and electronic test equipment; electro-mechanical counters.

BAILEY METER COMPANY LIMITED

205 Brunswick Boulevard Pointe Claire 730, Quebec, Canada

Tel: (514) 697-6770 Telex: 01-20705 Cable: BAILYCANDA

PRODUCTS:

pneumatic and electronic systems, computers and instruments for power and process control consisting of: electronic computers; analog and digital data processing; building management systems; mechanical, electric or pneumatic gauges, meters, indicators, pyrometers, regulators, recorders, alarms and control valves.

BARRINGER RESEARCH LIMITED

304 Carlingview Drive Rexdale, Ontario, Canada Tel: (416) 677-2491 Cable: BARESEARCH TORONTO

PRODUCTS:

geophysical equipment — magnetometer, helicopter EM systems; air pollution detection — remote sensing spectrometers, SO² stack monitors, ambient air pollution monitors. Services — geophysical data reduction; geochemical analyses (atomic absorption spectrometer).

BAYLY ENGINEERING LIMITED

120 Hunt Street Ajax, Ontario, Canada Tel: (416) 925-2126 Telex: 02-2831

PRODUCTS:

selective signalling systems; railway despatchers' communication equipment; program amplifiers; program channels; telephone equipment; remote control systems; RF power meters.

BEACONING, OPTICAL & PRECISION MATERIALS CO. LTD.

455 Craig Street West Montreal 126, Quebec, Canada Tel: (514) 866-8395 TWX: 610-532-6561 Cable: BOPHAR

PRODUCTS:

UHF communications equipment for mobile or ground use; military air-

borne searchlight systems; ancillary radar equipment; remote control systems.

BEDARD GIRARD LTD. (ELECTRONICS DIVISION)

117 Lagauchetière Street West Montreal, Quebec, Canada Tel: (514) 861-5631

Telex: 05-25142 Cable: GIRBED MONTREAL

PRODUCTS:

annunciators and alarm systems; supervisory and tele-transmission systems; static power rectifiers; electronic governors for hydraulic turbines; static power converters and supplies; railway signalling systems and equipment; subway controls and special equipment such as automatic tunnel cleaning vehicles, gates; special equipment for automated operations.

BENCO TELEVISION ASSOCIATES A DIVISION OF REDIFON (CANADA) LIMITED

27 Taber Road Rexdale, Ontario, Canada Tel: (416) 743-4361 Telex: 02-21211 Cable: BENCOTV

PRODUCTS:

community and master antenna TV distribution equipment (amplifiers, converters, splitters, taps); low power TV transmitters.

BOWMAR CANADA LIMITED

1257 Algoma Road Ottawa 15, Ontario, Canada Tel: (613) 746-3100 TWX: 610-562-1916

PRODUCTS:

solid state light emitting device research, development and production for applications such as alphanumeric displays, film and paper annotation, failure warning and integral lighting lamps and card and tape readers; design and production of precision rotating components such as synchros, resolvers, speed reducers, gearheads, servo motors, stepper motors and motor generators.

BROWN BOVERI (CANADA) LIMITED

4000 Trans-Canada Highway Pointe Claire, Quebec, Canada Tel: (514) 697-6210

Telex: 01-2742

Cable: BROWNBOVER MONTREAL

PRODUCTS:

power line carrier; time multiplex analog telemetering; protection signalling channels.

CAE INDUSTRIES LTD.

P.O. Box 6166 Montreal 101, Quebec, Canada Tel: (514) 341-6780 TWX: 610-422-3063

Telex: 01-20708 Cable: CAEIND

PRODUCTS:

flight, tactical and weapons simulators; solid state telecommunications equipment; industrial monitoring and control systems; portable and mobile data terminals; electronic volume measuring devices; portable grain temperature probes and moisture measuring devices; airborne magnetic detection systems; visual display and tracking systems; weather satellite photo receivers; field maintenance, repair and overhaul, test and calibration services and facilities.

CANADIAN ADMIRAL CORPORATION LTD.

501 Lakeshore Road Port Credit, Ontario, Canada Tel: (416) 278-5561 Telex: 029-6138

PRODUCTS:

military electronic equipments and assemblies; nuclear instrumentation; gamma radiation survey meters; dosimeter charges; ionization chamber detectors; radiac calibrators; power supplies.

CANADIAN BRIDGE DIVISION OF HAWKER INDUSTRIES LTD.

1219 Walker Road Windsor, Ontario, Canada Tel: (519) 256-2661 Cable: CANBRIDGE

PRODUCTS:

radio, TV, microwave masts and towers; electronic structures; transmission towers and substation structures.

CANADIAN GENERAL ELECTRIC COMPANY LIMITED

830 Lansdowne Avenue Toronto 4, Ontario, Canada Tel: (416) 534-6511

Telex: 02-2057 Cable: GELECTRON

PRODUCTS:

radio and television broadcast equipment; microwave communications equipment; mobile radio communications equipment; video integrator and video mapping equipment; radar and sonar systems; radar detection equipment; air traffic control communications equipment; computers; installation, repair and overhaul services.

CANADIAN MARCONI COMPANY

2442 Trenton Avenue Montreal 301, Quebec, Canada

Tel: (514) 343-3411 TWX: 610-421-3564 Telex: 01-2260

Cable: ARCON MONTREAL

PRODUCTS:

full range of fixed, mobile and portable radio communications equipment in HF, SSB, VHF-FM and UHF-FM; marine radar and communications; tactical radio relay; communications system engineering; airborne Doppler sensors and computers and indicators for navigational and tactical use on both fixed and rotary wing aircraft; specialized power supplies; specialized servo amplifiers; BITE failure indicators.

CANADIAN RESEARCH INSTITUTE DIVISION OF CRITERION INSTRUMENTS LIMITED

85 Curlew Drive Don Mills, Ontario, Canada Tel: (416) 445-6363

PRODUCTS:

power supplies and inverters; test equipment, instruments and scientific apparatus; pollution test equipment (air, water); automatic production test sets for electronic and electrical devices, motors, etc.; medical electronic instruments; computer interfacing; panel meters; contactless contact meters; precision portable meters; school and educational instrumentation; insulation resistance and breakdown testers; high voltage test sets; electrostatic high voltage generators; geo-

physical instruments; pH meters; colorimeters; Wheatstone and Kelvin bridges; decade boxes; megohmmeters; wire testing equipment; conductivity bridges; power distribution test sets and fault locators; hospital floor conductivity test sets. Services — instrumentation R and D; test and calibration services and facilities; printed circuit design.

CANADIAN WESTINGHOUSE INTERNATIONAL COMPANY

840 York Mills Road Don Mills 404, Ontario, Canada

Tel: (416) 444-1103 TWX: 610-371-0246 Telex: 02-1655

Cable: CANWESTEX TORONTO

PRODUCTS:

steered stabilized platforms for television; film and electronic surveillance devices; special and linear monolithic integrated circuits; electroluminescence devices; digital to video information display systems; magnetic sensors; satellite ground station subsystems; electronic assembly subcontract manufacturing; radar test equipment, airborne and ground; line tracing systems for automatic contour control of gas and plasma cutting machines, nibbling and routing machines; repair and overhaul instrument services.

CASCADE ELECTRONICS LTD.

Electronic Avenue Port Moody, British Columbia Canada

Tel: (604) 939-1191 TWX: 610-962-6011

PRODUCTS:

community antenna TV distribution equipment — wideband Class "A" transistorized amplifiers and associated power supplies; wideband directional couplers, taps and splitters.

CENTAUR MANUFACTURING COMPANY

45 Industrial Road Richmond Hill, Ontario, Canada Tel: (416) 884-6474 or 889-6494

PRODUCTS:

C-D electronic ignition for cars, trucks, fork-lifts, etc.; miles-pergallon computer for cars, trucks, etc.; GT energy chamber; fuel pressure regulator.

CENTRAL DYNAMICS LTD.

147 Hymus Boulevard Pointe Claire, Quebec, Canada Tel: (514) 697-0811

TWX: 610-422-3906

PRODUCTS:

video terminal equipment systems for broadcasting, ETV, CCTV installations; video, pulse, audio switching for studio and master control with associated amplifiers and peripheral equipment; automatic programmers; supervisory control and telemetry systems; industrial monitoring and data logging; electronic information display systems.

COLLBEN MANUFACTURING COMPANY DIVISION OF REFORM PRODUCTS LIMITED

5 Thorpe Street Dundas, Ontario, Canada Tel: (416) 628-6913

PRODUCTS:

TV, FM, amateur and commercial antennas; TV towers, self-supporting and guyed; tilt towers, outriggers, masts and installation hardware; TV trailer antenna kit.

COLLINS RADIO COMPANY OF CANADA LIMITED

150 Bartley Drive Toronto 16, Ontario, Canada Tel: (416) 757-1101 TWX: 610-492-1375 Telex: 02-21130

Cable: COLINRAD TORONTO

PRODUCTS:

airborne radio communications and navigation equipment; airborne, land mobile and fixed base SSB communications equipment; portable manpack and hand-held UHF transceivers; microwave and multiplex equipment; high power short wave broadcast transmitters.

COMPUTING DEVICES OF CANADA LIMITED

P.O. Box 508 Ottawa 4, Ontario. Canada Tel:(613) 829-1800 TWX: 610-563-1632

Telex: 013-439
Cable: COMDEVCAN OTTAWA

PRODUCTS:

air and marine navigation, oceanics, ASW, photo optical, telecommuni-

cations, digital computer, industrial and scientific systems design, development and management; aerospace research; survey and exploration, field engineering installation and maintenance services.

CONSOLIDATED ELECTRONIC EQUIPMENT CO. LTD.

40 Racine Road Rexdale, Ontario, Canada Tel: (416) 241-1113 Cable: CEECOLTD TORONTO

PRODUCTS:

audio visual electronic programmers and low power automatic dimmers; ground fault protectors.

CONUCLEAR LIMITED

551 Ferry Road Winnipeg 21, Manitoba, Canada Tel: (204) 783-4770 Cable: CONUCLEAR

PRODUCTS:

electronic equipment for radiation measurement, geophysical exploration; nuclear instrument modules for research and systems for nuclear medical applications.

CONWAY ELECTRONIC ENTERPRISES LTD.

88-90 Arrow Road Weston, Ontario, Canada Tel: (416) 742-6631 Cable: CONLECTRON

PRODUCTS:

precision electronic and electrical instrumentation for research, industrial and educational organizations and institutions; nucleonic instruments; industrial automation and control equipment; communications receiver and specialized transmitter equipment; electro-medical equipment for diagnostic and therapeutic applications including ultrasonics.

C-TECH LIMITED

P.O. Box 69 Lancaster, Ontario. Canada Tel: (613) 347-2445

PRODUCTS:

echo sounder and sonar transducers; electronic solid state switches; digitizers; echo sounder and sonar systems engineering.

CTS OF CANADA LIMITED

P.O. Box 280 80 Thomas Street Streetsville, Ontario, Canada Tel: (416) 826-1141 Cable: INDELEC

PRODUCTS:

power supplies; static inverters including system and start-up assistance; rectifiers; oscillators.

DANIELS ELECTRONIC LIMITED

225 St. Lawrence Street Victoria, British Columbia, Canada Tel: (604) 382-8268

PRODUCTS:

Model DE 440 C radio telephone, standard broadcast band, six crystal controlled channels, deluxe 10 channels, 12, 24, 32-volt, DOC rated 50 watts output; Model DR 60 marine radio telephone, 10 channels, 12, 24, 32, 110-volt DC and 117, 220-volt AC, DOC rated 74 watts output; Model DE 330 radio telephone, five channels and broadcast band, 12-volt DC, DOC rated 44 watts output; custom designing and manufacturing of electronic equipment.

DELTA ELECTRONICS LIMITED

70 Ronson Drive Rexdale, Ontario, Canada Tel: (416) 241-3556 TWX: 610-492-2707

PRODUCTS:

electronic equipment for the distribution of television signals; products for improved home television reception, master antenna installations in hotels, motels, apartments and educational institutions; amplifiers, passive devices and test equipment for community antenna (CATV) systems.

DIGITAL SYSTEMS ASSOCIATES LIMITED

1505 Laperriere Avenue Ottawa 3, Ontario, Canada Tel: (613) 725-2123

PRODUCTS:

electronics equipment systems engineering: data acquisition systems, plotting systems, graphics division, small computer systems; computer products: data acquisition systems, small computer systems, plotting systems, graphic division, time sharing facilities, software and consulting services, educational computer systems, computer designed and oriented systems.

DYNAMIC INDUSTRIES INC.

P.O. Box 1664 45 Dorchester Street South Quebec City 2, Quebec, Canada Tel: (418) 524-5221

PRODUCTS:

transmission line towers and allied products.

EDWARDS OF CANADA

625 6th Street East Owen Sound, Ontario, Canada Tel: (519) 376-2430 Telex: 02-8739 Cable: EDCAN

PRODUCTS:

heavy duty bells, horns and buzzers; visual nurse call systems; fire alarm systems; lamp and drop type annunciators; electrical instructional equipment.

EKOLITE LIMITED

525 East Hastings Street Vancouver 4, British Columbia Canada Tel: (604) 254-4424

Cable: CANEKO

PRODUCTS:

marine echo sounders including sonar.

ELECTRONIC ASSOCIATES OF CANADA LTD.

4616 Yonge Street Willowdale, Ontario, Canada Tel: (416) 223-4220

PRODUCTS:

Betameter — radiation type basis weight measuring system; Aquatel — AC impedance measurement of per cent moisture in paper; Calitel — magnetic reluctance measurement of caliper of paper and plastic, etc.; Calitrol — control of paper caliper by means of air showers; Poratel — on-line porosity measurement of paper; Formatel — on-line formation measurement of paper; QNSM —

off-line formation measurement of paper; Profilograph — off-line basis weight and caliper measurement: Inspectasort — optical fine paper inspection for cutters; Inspectalarm optical fine paper inspection for paper machines; Gigatel - high level moisture measurement: Rho-Meter roll hardness tester; Opacitel on-line opacity measurement; Britel - on-line pulp brightness meter.

ELECTROVERT MANUFACTURING CO. LTD.

3285 Cavendish Boulevard Montreal 261, Quebec, Canada Tel: (514) 488-2521

Telex: 05-267561

PRODUCTS:

automated pretinning and soldering systems (also fluxing and cleaning operations) for electronic, electrical and automotive industries.

E.M.I. ELECTRONICS CANADA LTD.

P.O. Box 1005 Dartmouth, Nova Scotia, Canada Tel: (902) 466-7491 Telex: 014-4224

Cable: EMICOS

PRODUCTS:

radio communications equipment: HF antennas: ionospheric sounder equipment; oceanographic buoys and devices; sonobuoys; ASW systems; ships' intercommunications equipment; defence electronic products.

ESE LIMITED

1780 Albion Road Rexdale, Ontario, Canada Tel: (416) 749-2271

PRODUCTS:

telephone line conditioning equipment; special purpose digital systems; high speed modems; high speed 1024-point contact scanner; CRT alphanumeric displays.

FANON ELECTRONICS OF CANADA LIMITED

25 Bathurst Street Toronto 2B, Ontario, Canada Tel: (416) 363-5011 Telex: 02-21264

PRODUCTS:

intercoms; public address amplifiers; telephone amplifiers; loudspeakers (paging and talkback); walkietalkies; megaphones; telephone intercoms.

FARINON ELECTRIC OF CANADA LTD.

657 Orly Avenue Dorval 760, Quebec, Canada Tel: (514) 636-0974 Telex: 01-20962

PRODUCTS:

high quality multichannel point-topoint communications equipment including all solid state SS and TR radio and partial solid state PT radio systems for operation in nominal frequency bands of 80 MHz, 150 MHz, 200 MHz, 300 MHz, 400 MHz, 450 MHz, 900 MHz, 2 GHz, 4 GHz, 5 GHz, 6 GHz, and 7 GHz, with voice channel capacities varying from 6 channels to 960 channels; voice channelling multiplex equipment type LD for self-contained systems with maximum flexibility to 48 channels and Type FC for fully compatible CCITT multiplex from 24 to 600 channels; accessories include transmission filters, order wire equipment, protection combining and switching equipment, HF and VF bridges and amplifiers, etc.; engineering and installation services; specialists in low density, complete systems.

FERRANTI-PACKARD ELECTRIC LIMITED

121 Industry Street Toronto 15, Ontario, Canada Tel: (416) 762-3661 TWX: 610-491-1434

PRODUCTS:

power and distribution transformers: furnace transformers; watthour meters; instrument transformers; street lighting relays; step voltage regulators; shunt reactors; electronic products and systems for commercial. industrial and military applications including information displays and systems; instrumentation readout devices; high speed photo-electric punched tape readers; business machines; high speed data communication systems; computer controlled switching centers; general and special purpose digital computers and

systems; industrial control systems. subsystems and components; lead computing gunsights and airborne computers; miniaturization of systems for shipboard and airborne applications; special digital equipment and systems; job shop manufacturing electronic subassembly contracting.

FISCHER & PORTER (CANADA) LIMITED

134 Northfield Drive Downsview, Ontario, Canada Tel: (416) 633-9810

Telex: 02-2709 Cable: FISHCAPORT

PRODUCTS:

solid state supervisory control systems and logger-scanner systems of either hard wired or computer directed type; industrial and process control systems; traffic control and parking systems; hydrologic and meteorological recording systems.

FORTIN-LATCHFORD LTD.

867 Progress Avenue Scarborough, Ontario, Canada Tel: (416) 291-2171

PRODUCTS:

rotary transfer molding machine for automatic thermo-setting encapsulation or insertion; quartz crystal processing equipment.

GARRETT MANUFACTURING LIMITED

255 Attwell Drive Rexdale, Ontario, Canada Tel: (416) 677-1410 TWX: 610-492-4352 Telex: 02-21673

PRODUCTS:

aircraft temperature control systems for cabin's crew compartments; aircraft electric windshields and electronic bays; static inverters 250 VA aircraft; dual frequency radio emergency beacons and downed aircraft locators; pneumatic signal generators; mesometeorological automatic data collection systems; marine replenishment systems; aircraft test equipment; custom micro-electronic circuit designing and manufacturing.

GENERAL PRECISION INDUSTRIES LTD.

455 Craig Street West Montreal 126, Quebec, Canada

Tel: (514) 866-8395 TWX: 610-532-6561 Cable: BOPHAR

PRODUCTS:

MF, HF and UHF direction finding equipment for military and civil use in mobile or fixed installations.

GUILDLINE INSTRUMENTS LIMITED

Churchill Crescent Smiths Falls, Ontario, Canada Tel: (613) 283-3000

TWX: 610-561-1681

PRODUCTS:

electrical and temperature measuring instruments of the highest accuracy and precision; voltage and resistance standards; oceanographic instrumentation for pressure, depth and salinity.

HAMMOND MANUFACTURING COMPANY LIMITED

394 Edinburgh Road North Guelph, Ontario, Canada Tel: (519) 822-2960 Telex: 0295-6523

PRODUCTS:

magnetic amplifiers; sheet metal cabinets, consoles, cubicles, racks and chassis.

INSTRONICS LIMITED

P.O. Box 100 Stittsville, Ontario, Canada Tel: (613) 836-4411 Telex: 013-415

PRODUCTS:

telephone line test sets; data line interface test sets; stepping motor line finders; digital to ASCII or Baudot converters; parity checkers; custom data acquisition systems; water level instrumentation; instrumentation amplifiers; solid state coolers; power supplies; LF FSK exciters; graphic digitizers; machine monitoring electronics.

INTERNATIONAL SYSTCOMS LIMITED

4900 Fisher Street Montreal 9, Quebec, Canada Tel: (514) 631-2083 TWX: 610-422-3065

PRODUCTS:

VHF and UHF radio telephone equipment including mobile, portable, fixed station and rural radio.

ITT CANADA LIMITED COMMUNICATIONS DIVISION

175 Dawson Road Guelph, Ontario, Canada Tel: (519) 821-2000 Telex: 02-956547

PRODUCTS:

ground and airborne radio navigation equipment; telephone and telegraph equipment; telephone carrier equipment; microwave radio terminals; ground radar equipment (precision approach radar); telex and broadband switching; data telephones; field maintenance, repair and overhaul, test and calibration services and facilities.

GEORGE KELK LIMITED

48 Lesmill Road Don Mills, Ontario, Canada Tel: (416) 445-5850 Telex: 02-29434 Cable: KELLEX TORONTO

PRODUCTS:

washer type load cells; thickness gauge (hot slab); length-width gauge for hot products; digital metallograph; shaft encoders; pulse tachogenerator; digital frequency divider; temper mill extensometer; Stedivolt-AC line voltage regulators.

KAMECO ELECTRONICS LIMITED

1080 Port Royal West Montreal 355, Quebec, Canada Tel: (514) 331-6100 Telex: 01-20680

PRODUCTS:

Telemat — sequential logic selector for data circuits and teletype circuits (data code generator, code translator); live line detector (safety device for hydro crews); alarm reporting systems for unattended

telephone exchanges; illuminated push buttons; design, supply and maintenance of communication and control systems.

KEIL INDUSTRIES LIMITED

P.O. Box 664 125 Whitney Place Kitchener, Ontario, Canada Tel: (519) 578-7380

PRODUCTS:

intercom and sound systems; musical and PA amplifiers; reverberation units; language laboratory; educational record players; sheet metal cabinetry; metal chassis.

LEIGH INSTRUMENTS LIMITED

P.O. Box 820 Carleton Place, Ontario, Canada Tel: (613) 257-3883 Telex: 013-448

PRODUCTS:

airfoil delivery systems; crash position indicator; maintenance and accident flight data recorder systems; aircraft instruments including altimeter (e.g. AAU-19, AAU-27) and servo altimeters: UHF-VHF safety and marker beacons; commercial products including penetrating radar altimeter, ambient air fluoride analyser, numerical control systems for machine tools and liquid steel oxygen probe; ground support and test equipment associated with products: field maintenance, repair and overhaul, test and calibration services and facilities, product design and development services, technical writing, cataloging and illustrating services.

LENKURT ELECTRIC CO. OF CANADA, LTD.

1017 Vancouver Block 736 Granville Street Vancouver 2, British Columbia Canada

Tel: (604) 688-7261 Telex: 04-5833

PRODUCTS:

radio relay systems — 71A, 450 MHz band, 4/8/24/48 voice channels; 71B, 150 MHz band, 4/8/24 voice channels; 71F, all solid state, 2 GHz band, 120/300 voice channels; 76 class, 6/8/10/13 GHz bands, 960 voice channels. Open

wire carrier - 35c, 2-156 kHz frequency range, 16 voice channel capacity. Radio carrier — 34A, 24channel system, 4-112 kHz frequency range; 46A, 1200 channel system, 12-2540 kHz frequency range. Cable carrier — 35 BN, 24 channel system, 40-264 kHz frequency range; 46C, coaxial cable line equipment for use with 46A multiplex, 600 channel system, 60-2540 kHz frequency range. Supervision, remote indication and telecontrol — 51D, 17 or 18 channel capacity at 170 Hz bandwidth. 3740-6630 Hz or 340-3400 Hz frequency range, each self-synchronizing one-way tone channel providing up to 28 functions. Order wire and signalling system — 53C, solid state, 6 signalling tones, tone calling cct, and 1.8 kHz order wire circuit transmitted over 3 kHz voice channel or 12 tones, 2.7 kHz order wire cct over 8 kHz channel. Data systems — 25A telegraph and data carrier system; 26C duobinary data set, speeds 150, 300, 600, 1200 or 2400 bits per second over standard 3 kHz voice channel.

LITTON SYSTEMS (CANADA) LIMITED

25 Cityview Drive Rexdale, Ontario, Canada Tel: (416) 249-1231 TWX: 610-492-2110 Telex: 02-2714 Cable: LITTCAN

PRODUCTS:

airborne inertial navigation systems; special purpose airborne computer systems; tactical data systems; special purpose commercial electronic control systems; aerospace ground equipment; automatic mobile, portable and factory test equipment.

MARSLAND ENGINEERING LIMITED

350 Weber Street North Waterloo, Ontario, Canada Tel: (519) 744-3321 Telex: 029-5440

PRODUCTS:

airport control equipment consisting of runway visual range computers, transmissometers, automatic weather stations; analog — digital plotting computers; airborne recorders for ASW work; airborne

intercom systems (solid state); training aids (simulators); special power supplies; public address equipment and systems; telephone equipment — paging and conference systems; precision geared and electronic assemblies to customer specifications; teletypewriters.

McCURDY RADIO INDUSTRIES LIMITED

108 Carnforth Road Toronto 16, Ontario, Canada Tel: (416) 751-6262 Telex: 02-21660 Cable: MACMETAL

PRODUCTS:

complete broadcast audio line including solid state consoles, production centers, components, packages and accessories; solid state intercom system; pre-wired jackfields; audio distribution systems, audio switchers, consoles, amplifiers and speaker units for educational systems.

McPHAR GEOPHYSICS LIMITED

139 Bond Avenue Don Mills, Ontario, Canada Tel: (416) 444-4451 Cable: MCPHAR TORONTO

PRODUCTS:

geophysical instruments for mineral exploration — variable frequency induced polarization equipment; flux gate magnetometers; radiation spectrometers (ground and airborne); electromagnetic instrumentation (ground and airborne); resistivity equipment; Afmag (ground and airborne); electromagnetic and induced polarization scale modelling systems; self potential units; electromagnetic drill hole systems.

MEASUREMENT ENGINEERING LIMITED

P.O. Box 850 Arnprior, Ontario, Canada Tel: (613) 623-4217 Cable: MELARNPR ARNPRIOR

PRODUCTS:

dynamic ground detectors and low leakage isolated power supplies and accessories for hospital electrical systems.

METRIX MANUFACTURING COMPANY LIMITED

85 Colville Road Toronto 385, Ontario, Canada Tel: (416) 249-9153 Telex: 06-219664

PRODUCTS:

timing devices both electro-mechanical and electronic for both industrial and military applications; electromechanical and mechanical assemblies; solid state controls; relays; electrolytic conductivity instruments and cells; industrial and military control systems and hardware.

MULTI-ELMAC OF CANADA LIMITED

Sydney Avenue, Devon Park Windsor, Ontario, Canada Tel: (519) 966-0162

PRODUCTS:

remote radio controls; radio controls for all security systems.

NATIONAL ELECTROLAB ASSOCIATES LTD.

1130 East 7th Avenue Vancouver 12, British Columbia Canada

Tel: (604) 879-9161 TWX: 610-929-1058 Telex: 04-50322

PRODUCTS:

AM broadcast RF amplifiers; high quality off-air receivers for AM broadcast industry; oceanographic telemetry systems; broken wire detectors for aluminum rope stranding machines; engineering and installation services; design and manufacture of custom instruments and equipment; repair, overhaul and calibration of electrical and electronic instruments, test equipment, meters, etc., for science, government and industry; electrical metrology lab for precise calibration.

R. H. NICHOLS CO. LTD.

4544 Dufferin Street Downsview, Ontario, Canada Tel: (416) 633-8190 TWX: 610-492-1348 Telex: 02-29296

Cable: NICOLTROL TORONTO

PRODUCTS:

electronic and electrical equipment and systems for remote (supervisory) control, data transmission, logging and telemetry; annunciator equipment and systems; automatic battery chargers; gas turbine control systems; pipeline booster station control systems, modular system maps and displays; voltage and current transducers.

NORTHERN ELECTRIC COMPANY LIMITED

P.O. Box 6123 1600 Dorchester Boulevard West Montreal, Quebec, Canada Tel: (514) 931-5711 TWX: 610-421-3750 Cable: NORELCAN

PRODUCTS:

crossbar and electronic telephone exchange systems; carrier and radio microwave radio relay systems (long and short haul); domestic satellite communications systems: private automatic and branch exchanges: power plants; test equipment; key telephone systems; business interphone systems; telephone sets; data sets; telephone booths: amplifiers; loading coils; connecting blocks; filters; protectors: all types of wires and cables for connections and power purposes.

NORTHERN RADIO MANUFACTURING CO. LIMITED

1950 Bank Street Ottawa 10. Ontario, Canada Tel: (613) 733-4440 Telex: 013-274

PRODUCTS:

solid state multi-channel data and frequency shift telegraph systems; solid state repeaters — HUB repeaters, regenerative repeaters 5 level code, regenerative repeaters 8 level code: electronic relays; telemetering systems; line amplifiers; custom designed circuits; sequential selectors.

PHILIPS ELECTRONIC **EQUIPMENT** A DIVISION OF PHILIPS **ELECTRONICS INDUSTRIES** LIMITED

116 Vanderhoof Avenue Toronto 17, Ontario, Canada Tel: (416) 425-5161 Telex: 02-2513

Cable: PHILIND TORONTO

PRODUCTS:

instrument landing systems; communications control equipment and systems; emergency communications systems; data handling peripheral equipment and systems; aeronautical beacon equipment and navaids.

POLYTRONICS CO.

582 Bathurst Street Toronto 4, Ontario, Canada Tel: (416) 921-8767

PRODUCTS:

quality measurement and control instruments including precision wire wound resistors; decade boxes; voltage dividers; Wheatstone bridges: temperature controllers of high accuracy and stability; attenuators with essentially flat frequency responses from DC to 3 MHz.

POWERTRONIC EQUIPMENT LIMITED

125 Nantucket Boulevard Scarborough, Ontario, Canada Tel: (416) 757-5151 Telex: 02-29523

PRODUCTS:

DC power supplies, regulated and unregulated; communication type filtered battery chargers; battery chargers for industrial trucks and electric locomotives; electroplating rectifiers; line voltage regulators; chargers for engine starting batteries.

PROTOL LTD.

P.O. Box 184 Islington, Ontario, Canada Tel: (416) 239-2977

PRODUCTS:

special process control and instrumentation; timing and counting devices; photo-electric controls: power supplies; solenoids; pressure switches.

PYLON ELECTRONIC DEVELOPMENT COMPANY, LTD.

2300 Victoria Avenue Lachine, Quebec, Canada Tel: (514) 637-1186

PRODUCTS:

static power supplies; DC-DC converters; inverters; ringing and signalling supplies; fuse alarm and

meter panels; battery eliminators; fixed coaxial attenuators and terminations: aluminum transit cases: digital clocks; programmers; data entry keyboards; special controls based on the digital technique.

QUINDAR PRODUCTS LIMITED

30 LePage Court Downsview, Ontario, Canada Tel: (416) 789-7213

Telex: 02-21316

PRODUCTS:

electronic equipment for remote control, supervision and telemetry: multiplexing systems; data modems; communication amplifiers, related equipment and accessories.

RACAL (CANADA) LTD. 1806 Woodward Drive Ottawa, Ontario, Canada Tel: (613) 725-2041

PRODUCTS:

HF radio communications systems and ancillary equipment; communications systems; engineering and maintenance services; digital frequency measuring equipment.

RADIO ENGINEERING PRODUCTS LIMITED **ELECTRONICS DIVISION**

P.O. Box 460, Snowdon Station Montreal 29, Quebec, Canada Tel: (514) 731-3251

TWX: 610-421-3726 Telex: 01-2104

Cable: RADENPRO MONTREAL

PRODUCTS:

tactical military communications systems comprising telegraphtelephone multiplexers of from four plus four to 60 plus 40 channels, VHF radio sets, field telephones, antennas and masts, cable assemblies and connectors, power supplies, voltage regulators, telegraph converters and other accessory equipment.

RCA LIMITED

1001 Lenoir Street Montreal 30, Quebec, Canada Tel: (514) 933-7551 Telex: 01-2522

PRODUCTS:

microwave, solid state radio relay systems; inospheric sounding satellite systems; wideband solid state transponders for communication satellites; communication subsystems; multiplex equipment; HF SSB transmitters and receivers; audio, video and RF amplifiers; digital display systems; tropospheric scatter receivers; AM, FM and TV transmitters, antenna systems and studio facilities; nuclear particle detectors. infrared detectors and preamplifiers.

RAYTHEON CANADA LIMITED

400 Phillip Street North Waterloo, Ontario, Canada Tel: (519) 745-6831

TWX: 610-365-3469 Telex: 029-5431 Cable: RAYCAN

PRODUCTS:

primary, secondary and weather radar systems; radar bright display equipment; counter mortar radars; symbol generating equipment; VHF omni-range, instrument landing systems and other ground/air traffic control navigation aids; analog and digital display and data processing equipment; anti-submarine warfare equipment; radio relay equipment; specialized test and measuring equipment; simulators and trainers; microwave communications equipment; printed circuit modules.

RESEARCH ELECTRONICS RESELÇO LIMITED

16302 - 80th Avenue Edmonton, Alberta, Canada Tel: (403) 489-6207

PRODUCTS:

stepless solid state control; light dimming; light amplifier; AC type motors; stepless transformer control; stepless battery charger control; automatic voltage and current regulator; stepless variable heat control; burglar alarm; counter monitor; automatic fire alarm and smoke control; chemical process control; humidity control; thickness control for paper or nylon mills; air and gas speed control; pressure control; light measuring and integrating control; automatic light controls in rooms; automatic traffic control; safety and security control; automatic patient control for hospitals; light sensor element; power booster; optical electronic colormeter; optical electronic densitometer; industrial type potentiometer; electro-mechanical and electronic voltage regulator; solid state analyzer; thyratron tube replacement by solid state; combustion engine remote control; electronic guidance system for tunnel digging; selenium rectifier replacement by silicon rectifier; rotating field exciter replacement by solid state; field analyzer potentiometer; electronic metal cutters; 3-phase to single-phase motor operation converters.

RICHMOND HILL LABORATORIES LIMITED

1240 Ellesmere Road Scarborough, Ontario, Canada Tel: (416) 291-7921 TWX: 610-492-4396

Telex: 02-29803

Cable: RICHILL TORONTO

PRODUCTS:

PAL color synchronizing pulse generators; PAL color sub-carrier generators; monochrome and color generator and lock units; Uni-Pulse equipment; pulse and video distribution amplifiers; video test signal generators: VIT signal systems; color video program switchers; video/ audio signal routing matrixes; special effects generators; digital cueing generator: video equalizing amplifiers; video clamping amplifiers; video processing amplifiers; master clock system driver.

SCINTREX LIMITED

222 Snidercroft Road Concord, Ontario, Canada Tel: (416) 889-8990

Telex: 06-219674 Cable: SCINTREX TORONTO

PRODUCTS:

flux gate and proton precision magnetometers for surface, drill hole observatory and airborne use; susceptibility meters for field and lab measurements: CG series quartz gravity meters for prospecting and geodetic surveys; electromagnetic prospecting systems including tiltangle systems, moving source and fixed source compensation systems; drill hole electromagnetic compensator systems; helicopter-borne electromagnetic systems; pulse type induced polarization systems; integral and differential gamma ray spectrometers for ground and airborne applications; AC and DC resistivity equipment; instruments for non-destructive analysis of

geologic and industrial materials analog digital conversion and digital recording systems; field portable digital test equipment; headphones for industrial, educational and recreational applications; services geophysical consultations; surface. drill hole and airborne surveys; natural resources inventory studies.

SIMTEC INDUSTRIES LTD.

3400 Metropolitan Boulevard East Montreal 38, Quebec, Canada Tel: (514) 728-4527 Cable: SIMATOM MONTREAL

PRODUCTS:

nuclear detectors and associated electronic instrumentation; total nuclear instrumentation systems capability; health physics equipment; aerial gamma monitors; reactor power monitoring systems, nuclear blood flow monitoring systems; SCR proportioning temperature controllers; electronic punch press safety window; control panels and custom made electronic and electro-mechanical devices; electronic counters for batch control and similar industrial uses; cable twisting run-out controls; brake fluid testers; artificial kidney controller.

SINCLAIR RADIO LABORATORIES LIMITED

122 Rayette Road Maple, Ontario, Canada Tel: (416) 889-8800

PRODUCTS:

antennas and filters for radio communications; auto-tuned filters. multi-couplers and antenna matching couplers: special antennas and filter systems for the military and for airports.

SPAR AEROSPACE PRODUCTS LIMITED

825 Caledonia Road Toronto 395, Ontario, Canada Tel: (416) 783-6171

Telex: 02-2054 Cable: SPARCAL TOR

PRODUCTS:

mobile X-ray equipment; stereo projector; portable fire detector (Hotspotter); extendible antennas and booms for spacecraft and ground applications; static power conditioning equipment; electro-optical systems and devices.

SPARTON OF CANADA, LIMITED

P.O. Box 2125 100 Elm Street London, Ontario, Canada Tel: (519) 455-6320

Cable: SPARTON

PRODUCTS:

sonobuoy transmitters and associated equipment.

SPILSBURY & TINDALL SALES LTD.

120 East Cordova Street Vancouver 4, British Columbia Canada

Tel: (604) 684-4131

Cable: SPILTIN VANCOUVER

PRODUCTS:

HF-AM and SSB, fixed, mobile, marine and aircraft radiotelephone equipment; LF non-directional radio beacons; specialized antennas and antenna tuning units for service on land, sea and air.

STARK ELECTRONIC INSTRUMENTS LIMITED

180 Station Street Ajax, Ontario, Canada Tel: (416) 942-2121 Telex: 02-2133

Cable: STARKEX TORONTO

PRODUCTS:

general purpose electronic test equipment and power supplies including vacuum tube voltmeters, tube testers, oscilloscopes, audio generators, resistance decade boxes, capacitance decade boxes; Stark Teaching Systems — a breadboarding method of teaching electricity and electronics.

TELE-RADIO SYSTEMS LIMITED

1015 Finch Avenue West Downsview, Ontario, Canada Tel: (416) 635-5221 TWX: 610-492-2384

PRODUCTS:

supervisory control systems; telemetering systems; fault alarm systems (microwave, etc.); data logging systems; telephone signalling equip-

ment; telephone traffic registers; custom communication apparatus; telephone test equipment.

TMC (CANADA) LIMITED

R.R. 5 Ottawa, Ontario, Canada Tel: (613) 822-0244 Telex: 013-446 Cable: TEPEI OTTAWA

PRODUCTS:

complete communications systems and engineering services; VLF through HF transmitters and receivers: data and telegraph modems and terminals; time division multiplex; telegraph polling, speed and code converters; switching, patching, monitoring and error protection equipment; data interface, timing, recovery, speech privacy, Lincompex; all auxiliary devices for complete communications systems; specialists in antenna multi-couplers and SSB equipment; antenna distribution systems; no-break power supplies; communications vans and packages; solid state products.

TOPPING ELECTRONICS LTD.

1320 Ellesmere Road Scarborough, Ontario, Canada Tel: (416) 291-7707

PRODUCTS:

communications accessories, telemetry and supervisory; low frequency radio teletype receivers; frequency shift exciters; low frequency solid state low power beacons; telemetry interfaces; solid state digital teletype; analog to teletype; pipeline meter stations; narrow band crystal filters for VHF mobile aeronautical receivers.

TOWER COMMUNICATIONS CO. (CANADA) LIMITED

28 Overlea Boulevard Thorncliffe Park Toronto 17, Ontario, Canada Tel: (416) 412-4626

PRODUCTS:

custom designed structural steel towers (guyed and self-supporting)

for commercial use on TV, FM, AM, HF, LF, and VHF systems (heights in excess of 1,000 feet also available). Services: engineering, supply and installation of towers and associated foundations, antennas, etc.

T-SCAN LIMITED

155 Adelaide Street West Toronto 1, Ontario, Canada Tel: (416) 363-5271

PRODUCTS:

T-Scan data communications terminal set.

VALERIOTE ELECTRONICS (GUELPH) LTD.

P.O. Box 603 Guelph, Ontario, Canada Tel: (519) 824-3220

PRODUCTS:

modules; splitter panels; power supplies; amplifiers; communications equipment; antennas.

VICKERS UMAC DIVISION OF SPERRY RAND

2500 Trans-Canada Highway Pointe Claire 730 Montreal, Quebec, Canada Tel: (514) 695-7870 Telex: 05-268583

PRODUCTS:

two and three axis, point-to-point numerical control system with two axis linear and circular interpolation.

WESTERN ELECTRONIC SYSTEMS COMPANY LTD.

4331 Manhattan Road Southeast Calgary, Alberta, Canada Tel: (403) 287-2000

Telex: 038-2352

PRODUCTS:

communications equipment; supervisory control and data gathering equipment; electronic flow meters; product analyzers; seismic instruments; custom electronic equipment; vehicle-mounted power units.

COMPONENTS SECTION

ABEX INDUSTRIES OF CANADA LTD. AEROSPACE DIVISION

P.O. Box 550 Hawkesbury, Ontario, Canada Tel: (613) 632-2751 TWX: 610-423-1990

PRODUCTS:

IF and RF coils; pulse transformers; delay lines; toroidal audio transformers; filters; molded inductors; molded cable assemblies.

AEROVOX CANADA LIMITED

1551 Barton Street East Hamilton, Ontario, Canada Tel: (416) 545-5893 TWX: 610-371-0214 Telex: 021-735

PRODUCTS:

fixed capacitors — ceramic, oil, electrolytic; thin film resistor microcircuits.

ALMAX CERAMIC INDUSTRIES LIMITED

31 Kent Street East Lindsay, Ontario, Canada Tel: (705) 324-5100

PRODUCTS:

piezoelectric ceramic elements; coprecipitation of electronic ceramic raw powders such as lead zirconate, lead titanate; compositions made up to meet special requirements.

AMPHENOL CANADA LTD.

44 Metropolitan Road Scarborough, Ontario, Canada Tel: (416) 291-4401 TWX: 610-492-4379

PRODUCTS:

filtered power connectors; printed circuit connectors; power connectors; RF cable; CATV cables and connectors; RF connectors; miniaturization of connectors; bracket panel connectors; DK whip antenna (mobile communications); precision potentiometers, trimmers, variable resistors; tool room equipped to rework connectors and for prototype work.

ARROW-HART OF CANADA LIMITED

81 Industry Street Toronto 337, Ontario, Canada Tel: (416) 762-1101 Telex: 06-217824

PRODUCTS:

illuminated push button stations and pilot lights; low power relays and contactors; specialty switches including tumbler and rotary types.

AUDIO TRANSFORMER COMPANY LIMITED

P.O. Box 220 202 Regina Street North Waterloo, Ontario, Canada Tel: (519) 743-4351

PRODUCTS:

laminated iron core transformers.

AUTOMATIC COIL MANUFACTURING LTD.

50 Wingold Avenue Toronto 19, Ontario, Canada Tel: (416) 781-6174 Telex: 02-2319 Cable: ANCHOR

PRODUCTS:

snap-around volt-ohm-ammeters; miniature strip chart recorders, voltage testers; TV deflection components — yokes and horizontal output transformers.

AUTOMATIC ELECTRIC (CANADA) LIMITED

100 Strowger Boulevard Brockville, Ontario, Canada Tel: (613) 342-6621 TWX: 610-525-1061 Telex: 026-3532

Cable: GENTELINT BROCKVILLE

PRODUCTS:

telephone dials; telephone arresters and protectors; loading coils; flexicore transformer; industrial relays and switches; telephone relays; printed wiring cards and assemblies; pole line hardware and cable splicing materials.

AUTOMATIC WINDING CORP. LTD.

1179 Finch Avenue West Downsview, Ontario, Canada Tel: (416) 630-2012

PRODUCTS:

RF and IF transformers; radio oscillators; chokes; peaking coils; solenoid windings; relays; various custom electronic components.

AVIONICS LIMITED

P.O. Box 200 Niagara-on-the-Lake, Ontario Canada

Tel: (416) 468-3632

PRODUCTS:

printed circuit boards; terminal boards; silk screening and precious metal plating; thermo-electric cooling elements; designs and assembles circuit boards to customer specifications.

BAYLY ENGINEERING LIMITED

120 Hunt Street Ajax, Ontario, Canada Tel: (416) 925-2126 Telex: 02-2831

PRODUCTS:

electric filters and equalizers; telephone jacks.

BOSTON INSULATED WIRE AND CABLE COMPANY, LIMITED

118 Shaw Street Hamilton, Ontario, Canada Tel: (416) 529-7151 Telex: 021-684 Cable: BOSWIRELTD

PRODUCTS:

television camera cables, connectors, and terminated assemblies; custom multiconductor combination cables for space communication ground station, geodetic survey, commercial and military radar applications; radiation resistant cables; underwater cables and molded assemblies for ASW and oceanographic applications.

BOURNS (CANADA) LTD.

36 Cranfield Road Toronto 16, Ontario, Canada Tel: (416) 751-3880 Telex: 02-29276

PRODUCTS:

carbon, wire wound and cermet adjustment and precision potentiometers, linear motion potentiometers; comprehensive servicing and test facilities in CAMESA qualified lab.

BURNDY CANADA LTD.

1530 Birchmount Road Scarborough, Ontario, Canada Tel: (416) 757-8761 Telex: 02-2343

PRODUCTS:

single and multi-contact electronic

connectors including compression terminals, miniature round, rack and panel and printed circuit connectors for standard and coaxial conductors; matched installation tooling, both hand and automatic.

CANADIAN ASTATIC LTD.

1820 Ellesmere Road Scarborough, Ontario, Canada Tel: (416) 291-6284

PRODUCTS:

microphones; phono cartridges; phono needles and tone arms.

CANADIAN GENERAL ELECTRIC COMPANY LIMITED

189 Dufferin Street Toronto, Ontario, Canada Tel: (416) 537-4481 Telex: 02-21360 Cable: CANEDISON

PRODUCTS:

electronic tubes (receiving, industrial, military and special purpose); picture tubes (monochrome and color); semi-conductor devices (transistors, diodes, rectifiers); electronic assemblies; capacitors.

CANADIAN MARCONI COMPANY

2442 Trenton Avenue Montreal 301, Quebec, Canada Tel: (514) 343-3411 TWX: 610-421-3564

Telex: 01-2260

PRODUCTS:

multilayer printed circuit boards; hybrid microcircuits; four terminal networks; AF and RF filters, chokes and transformers; power transformers; precision investment castings.

CANADIAN RESEARCH INSTITUTE

85 Curlew Drive Don Mills, Ontario, Canada Tel: (416) 445-6363

PRODUCTS:

precision wire wound resistors; panel meters; contactless contact meters; modular power supplies; printed circuit assemblies (plug-in, modular and encapsulated); current transformers; shunts, rheostats (carbon pile).

CANADIAN STACKPOLE LIMITED

550 Evans Avenue Toronto 14, Ontario, Canada Tel: (416) 255-2373 TWX: 610-492-2565

PRODUCTS:

fixed composition resistors; carbon products; powder metal parts.

CANADIAN WESTINGHOUSE INTERNATIONAL COMPANY

840 York Mills Road Don Mills 404, Ontario, Canada Tel: (416) 444-1103 TWX: 610-371-0246 Telex: 02-1655

Cable: CANWESTEX TORONTO

PRODUCTS:

receiving, cathode ray and power tubes.

CANADA WIRE AND CABLE COMPANY LIMITED EXPORT DEPARTMENT

147 Laird Drive Toronto 17, Ontario, Canada Tel: (416) 421-0440 Telex: 02-2260 Cable: CANWIRCO

PRODUCTS:

magnet wires, film insulated, fiber covered; communications and electronics wires and cables; Alucel cables, high frequency cables; hookup wires; Teflon wires; coil lead wires; electrical wires and cables.

CAPACITORS OF CANADA (1968) LIMITED

40 Upton Road Scarborough, Ontario, Canada Tel: (416) 755-2216

PRODUCTS:

miniature flat Mylar dielectric capacitors; paper ceramic case tubular capacitors; Mylar dipped capacitors; Mylar paper dipped capacitors; printed circuit Mylar capacitors.

CENTRALAB CANADA LIMITED

106 McMaster Avenue Ajax, Ontario, Canada Tel: (416) 925-4124 TWX: 610-384-2812

PRODUCTS:

ceramic disc capacitors; rotary

switches; variable resistors; packaged electronic circuits.

C. P. CLARE CANADA A DIVISION OF GENERAL INSTRUMENT OF CANADA LTD.

61 Industry Road Toronto 15, Ontario, Canada Tel: (416) 762-8154 Telex: 02-29478

PRODUCTS:

cable harness.

COLUMBIA RESEARCH LIMITED

120 East Cordova Street Vancouver 4, British Columbia Canada Tel: (604) 684-0621 Cable: KRISTLS

PRODUCTS:

quartz crystals in frequency range 1 MHz to 150 MHz.

COMMUNICATION APPARATUS CO. (CANADA) LTD.

P.O. Box 694 359B Burritt Street Stratford, Ontario, Canada Tel: (519) 271-9200 TWX: 610-355-8713

PRODUCTS:

loading coil assemblies; build-outcapacitor units; telephone station connecting blocks, telephone jacks, 8A buzzers, portable telephone plugs, outdoor wire terminals.

THE CONSTANTA COMPANY OF CANADA LIMITED

280 Regina Avenue Montreal 203, Quebec, Canada Tel: (514) 766-8569 Cable: KONSTANTA

PRODUCTS:

precision film resistors including deposited carbon, metal, high voltage, high frequency and microwave; ultra low ohm ribbon resistors; resistor networks; temperature sensors.

CRAMCO SOLDER ALLOYS

80 Sinnott Road Scarborough, Ontario, Canada Tel: (416) 757-2876

PRODUCTS:

perfect, tiny spheres of solder; high purity solders; fluxes.

CROVEN LIMITED

500 Beech Street Whitby, Ontario, Canada Tel: (416) 668-3325 TWX: 610-384-2750

PRODUCTS:

quartz crystals and crystal ovens.

CTS OF CANADA LIMITED

P.O. Box 280 80 Thomas Street Streetsville, Ontario, Canada Tel: (416) 826-1141 Cable: INDELEC

PRODUCTS:

variable resistors; selector switches; trimming potentiometers; crystals; filters; photo-electric controls; rectifiers; inverters; microminiature components and circuit packages.

DALE ELECTRONICS CANADA LTD.

18 Howden Road Scarborough, Ontario, Canada Tel: (416) 759-5631 TWX: 610-492-1381 Cable: DALOHM

PRODUCTS:

resistors — precision wire wounds, industrial wire wounds (fixed and adjustable with silicone or vitreous enamel coatings); trimmer and precision potentiometers; connectors; wire wound packaged networks.

J. H. DARCY LTD.

Merrickville, Ontario, Canada Tel: (613) 269-4956

PRODUCTS:

relays; solenoids; electronic timing devices; terminal boards; switches-snap; communication and control sub-assemblies.

DECOR METAL PRODUCTS LIMITED

1 Bay Street East Midland, Ontario, Canada Tel: (705) 526-5451

PRODUCTS:

extruders of aluminum trim and heat sinks; designers and manufacturers of anodized or painted decorative extruded and sheet aluminum trim.

DESITRON COMPANY LIMITED

198 Hymus Road Scarborough, Ontario, Canada Tel: (416) 759-1151

PRODUCTS:

microwave components for marine and communications purposes; isolators; circulators; switches; flanges; standard plumbing.

EASTERN WIRE AND CONDUITS DIVISION OF THE AUTOCROWN CORPORATION LTD.

266 Rexdale Boulevard Rexdale, Ontario, Canada Tel: (416) 248-6291 Telex: 02-21618 Cable: INDUSTRAD

PRODUCTS:

flexible electric conduits.

ELCO CONNECTORS (CANADA) LTD.

32 Mobile Drive Toronto 16, Ontario, Canada Tel: (416) 752-1800

PRODUCTS:

electronic connectors, card edge types.

ELECTRONIC CRAFTSMEN

73 Schaefer Street Waterloo, Ontario, Canada Tel: (519) 743-1473

PRODUCTS:

electrical and electronic coils and transformers; these components are encapsulated by liquid epoxy casting or transfer molding with epoxy powder.

EL-MET PARTS LTD.

47 Head Street Dundas, Ontario, Canada Tel: (416) 628-6366 Telex: 021-8207

PRODUCTS:

cold rolled, silicon and nickel steel laminations for electromagnetic devices such as motor laminations, fluorescence and mercury ballast laminations and EMI laminations; distributed gap wound cores; C-cores; toroids; shielding materials, allied products and specialty magnetic annealing and hydrogen annealing.

ERIE TECHNOLOGICAL PRODUCTS OF CANADA LTD.

5 Fraser Avenue Trenton, Ontario, Canada Tel: (613) 392-9251 Telex: 02-2029

PRODUCTS:

ceramic capacitors — disc, tubular feedthrough, variable; button mica capacitors; EMI suppression filters — low pass.

ESNA LIMITED

P.O. Box 250 10 Esna Park Drive Agincourt, Ontario, Canada Tel: (416) 291-6251 Telex: 02-21671

PRODUCTS:

relays — electro-pneumatic and solid state time delay, general purpose, power, reed; stepping switches with time delay; counters; fluidic time delay; fluid power time delay.

FABRICON MANUFACTURING LIMITED

107 Ragg Street Trenton, Ontario, Canada Tel: (613) 392-1291

PRODUCTS:

communication and electronic cables; high frequency cables; hookup wires; special wires — thermoplastic, crosslink, polyethylene and crosslink vinyl electrical wires and cables.

FERRITRONICS LIMITED

222 Newkirk Road Richmond Hill, Ontario, Canada Tel: (416) 889-7313

PRODUCTS:

high quality frequency selective devices including LC network filters, precision adjustable inductors, pulse transformers, ferrite cored transformers, delay lines.

GARRETT MANUFACTURING LIMITED

255 Attwell Drive Rexdale, Ontario, Canada Tel: (416) 677-1410 TWX: 610-492-4352

PRODUCTS:

standard and custom designed hybrid microcircuits (thick and thin film); precision resistor ladder networks; discrete and decade resistor dice; resistor wafers; resistor arrays for hybrid circuits.

GELECO ELECTRONICS LIMITED

Unit 43, 2 Thorncliffe Park Drive Toronto 17, Ontario, Canada Tel: (416) 421-5631

PRODUCTS:

RF edgewound coils; RF tube coils; RF contactors; tower lighting chokes; lightning chokes; MMB heavy duty switches; plug-in meter inserts; phase sampling loops; complete antenna tuning and phasing equipment; broadcast antenna and studio design.

GENERAL INSTRUMENT OF CANADA LTD.

151 Weber Street South Waterloo, Ontario, Canada Tel: (519) 744-8101 TWX: 610-365-3415

PRODUCTS:

IF and RF transformers; FM tuners; deflection components; stereophonic AM-FM chassis; radiosondes; solenoid, bobbin, universal and shielded coils of all types; electro-mechanical sub-assembly work on a sub or prime contract basis; solid state speed controls.

GENERAL MAGNETIC PRODUCTS OF HAWKESBURY LIMITED

P.O. Box 188 140 John Street Hawkesbury, Ontario, Canada Tel: (613) 632-2755 TWX: 610-423-1994

PRODUCTS:

Custom manufactured AF, IF and RF coils; toroids; solenoids; VHF coils; open shielded, molded and encapsulated coils; transformers; chokes.

GENERAL PRECISION INDUSTRIES LTD.

455 Craig Street West Montreal 126, Quebec, Canada Tel: (514) 866-8395 TWX: 610-532-6561 Cable: BOPHAR

PRODUCTS:

decade switches; frequency synthesizers.

GRAPHICO PRECISION WORKS LTD.

1100 Bellamy Road North Scarborough, Ontario, Canada Tel: (416) 293-8266 TWX: 610-492-4371

PRODUCTS:

printed circuit boards; terminal boards; photo-etched panels, dials and pointers; metal and plastic components; precision fabricated sheet metal parts; laminated heater strips; electro-formed parts; chemically milled parts; P.C. boards to military specifications; flexible P.C. boards; multi-layer P.C. boards. Services: silk screen processing; photo-etching; epoxy resin casting and encapsulating; engraving; profiling; chemical milling; plating; metal finishing; product engineering.

HAMMOND MANUFACTURING COMPANY LIMITED

394 Edinburgh Road North Guelph, Ontario, Canada Tel: (519) 822-2960 Telex: 0295-6523

PRODUCTS:

transformers; chokes; saturable reactors; magnetic amplifiers; toroidal devices; sheet metal cabinets, consoles, cubicles, racks, chassis—in all ranges and sizes for the electronics and electrical industries.

ITT CANNON ELECTRIC CANADA A DIVISION OF ITT CANADA LTD.

160 Bartley Drive Toronto 16, Ontario, Canada Tel: (416) 751-5440 Telex: 02-2250

PRODUCTS:

multi-contact connectors for commercial, industrial, military and aircraft use.

ITT GREMAR CONNECTORS CANADA A DIVISION OF ITT CANADA LTD.

23 Racine Road Rexdale, Ontario, Canada Tel: (416) 247-5351

PRODUCTS:

electrical connectors for CATV applications; radio frequency connectors.

LAKE ENGINEERING CO. LTD.

123 Manville Road Scarborough, Ontario, Canada Tel: (416) 751-5980 Telex: 02-2684

PRODUCTS:

precision printed circuits; terminal boards; precision electro-plating; electro-forming.

LIGHTNING CIRCUITS DIVISION OF LIGHTNING FASTENER CO. LTD.

P.O. Box 940 Victoria Street Niagara-on-the-Lake, Ontario Canada Tel: (416) 468-7663 Telex: 02-1522

PRODUCTS:

printed circuitry — rigid, flexible, multilayer.

LINDSAY SPECIALTY PRODUCTS LTD.

50 Mary Street West Lindsay, Ontario, Canada Tel: (705) 324-2196

PRODUCTS:

VHF and UHF domestic and CATV antennas; CATV line splitters and couplers; CATV directional multitaps; complete line of CATV passive devices including matching transformers; printed circuit connectors.

MAGNA ELECTRONICS CORPORATION LIMITED

1480 Birchmount Road Scarborough, Ontario, Canada Tel: (416) 757-2881

PRODUCTS:

precision gears; precision machined mechanical components; aluminum

dipped brazed components; heat exchangers; welded components; beryllium precision machined components; precision sheet metal chassis and components fabricated from aluminum, magnesium or steel; deep drawn components; anodizing and chemical film for aluminum and magnesium; spray painting to military specifications.

MAGNETIC METALS OF CANADA LIMITED

P.O. Box 1114 10 Spalding Drive Brantford, Ontario, Canada Tel: (519) 753-8675 TWX: 610-379-0107

PRODUCTS:

silicon and nickel transformer laminations; motor laminations; distributed gap cores; custom heat-treating.

MALLORY BATTERY CO. OF CANADA LTD.

2333 North Sheridan Way Sheridan Park, Ontario, Canada Tel: (416) 274-2361

PRODUCTS:

batteries — Duracell mercury rechargeable — Duracell alkaline.

MICRO-COM ELECTRONICS LIMITED

P.O. Box 3661, Station "B" Winnipeg 4, Manitoba, Canada Tel: (204) 339-4716

PRODUCTS:

trade name "X-Line" hobby and educational equipment — electronic single function modules; AM receiver function modules; hi-fi stereo function modules; music modules; FM professional guitar transmitters, microphone adapters; instructional kits for training on function modules.

MICROSYSTEMS INTERNATIONAL LIMITED

800 Dorchester Boulevard West Montreal 101, Quebec, Canada Tel: (514) 875-2814

PRODUCTS:

integrated circuits; microcircuits; transistors; diodes; thin film circuits; hybrid circuits.

NATIONAL SEMICONDUCTORS LIMITED

2150 Ward Street Montreal 9, Quebec, Canada Tel: (514) 744-5507 Cable: NATSEMICO

PRODUCTS:

cadmium sulphide photoconductive cells; cadmium selenide photoconductive cells; silicon photodiodes; photocell lamp assemblies; special photo-electric transducers.

NEOSID (CANADA) LIMITED

10 Vansco Road Toronto 18, Ontario, Canada Tel: (416) 251-2831 Cable: NEOSID

PRODUCTS:

electronic powdered iron and ferrite core components; microwave materials.

NOVATRONICS OF CANADA LIMITED

P.O. Box 610 677 Erie Street Stratford, Ontario, Canada Tel: (519) 271-3880 TWX: 610-355-8717

PRODUCTS:

small high performance stepper motors and controllers for indication and control functions; in-line servo assemblies; gimbal components such as gyro stators; digital indicators for airborne applications; high response industrial stepper motors and drives for automatic positioning; servo motors and synchros; precision electro-mechanical components.

OSBORNE ELECTRIC COMPANY LIMITED

95 Wesley Street Toronto 18, Ontario, Canada Tel: (416) 259-7886 Cable: OSELECT

PRODUCTS:

epoxy molded neutralizing transformers; multi-circuit neutralizing transformers; communications coupling protectors; isolating and drainage transformers.

O. & W. ELECTRONICS LTD.

1335 Lawrence Avenue East Don Mills, Ontario, Canada Tel: (416) 447-6471

Telex: 02-2081 Cable: OKITOR

PRODUCTS:

printed circuitry to meet military specifications; printed circuit boards, rigid and flexible (assemblies); micromodules; resistor networks; resistive and capacitive chips; edge-lighted panels and dials to military specifications and pointers; special coil forms; escutcheons.

PHILLIPS CABLES LIMITED

550 King Street West Brockville, Ontario, Canada Tel: (613) 345-5666 Telex: 026-3512 Cable: PHILELEC

PRODUCTS:

Stalpeth: Alpeth; coaxial cable, CATV cable, magnet wire and all other types of wire and cable for the electrical and communication industries.

PHILIPS ELECTRON DEVICES DIVISION OF PHILIPS ELECTRONICS INDUSTRIES LTD.

116 Vanderhoof Avenue Toronto 17, Ontario, Canada Tel: (416) 425-5161 Telex: 02-2513

PRODUCTS:

quartz crystals; printed circuit boards.

POLYGON INDUSTRIES LIMITED

50 Northline Road Toronto 16, Ontario, Canada Tel: (416) 755-3301 Telex: 02-29535

PRODUCTS:

standard dry type transformers; rectifier transformers; furnace transformers; custom engineered transformers; saturable reactors.

PRECISION ELECTRONIC COMPONENTS LTD.

19 Hafis Road Toronto 15, Ontario, Canada Tel: (416) 249-7103 TWX: 610-492-1341

PRODUCTS:

variable resistors and trimmer potentiometers, non-wire wound.

PRECISION SMALL PARTS **LIMITED**

434 Steeles Avenue West Willowdale, Ontario, Canada Tel: (416) 889-5407

PRODUCTS:

precision machine parts for navigation, aerospace, communications. optical, instrumentation and computer industries.

QUALITY COMMUNICATION PRODUCTS LTD.

14528 - 118 Avenue Edmonton, Alberta, Canada Tel: (403) 454-8606

PRODUCTS:

cases containing telephone cable loading coils or build-out units; telephone repeaters; toroidal coils; wound Mylar capacitors; R-C-L filters, small communications coils or transformers; miscellaneous communications hardware.

QUALITY HERMETICS LIMITED

45 Hollinger Road Toronto 16, Ontario, Canada Tel: (416) 757-2869

PRODUCTS:

glass-to-metal hermetic seals; standoffs; multi-terminal headers; crystal, transistor and diode bases and end seals.

RAPID GRIP AND BATTEN, LIMITED

181 Richmond Street West Toronto 133, Ontario, Canada Tel: (416) 368-4771

PRODUCTS:

chemically milled custom components: photo-etched panels: lead frames: masks: apertures: heaters: fluidic laminations and other precision metal components for electronic instrumentation; optical and electromechanical devices.

RAYTHEON CANADA LIMITED

400 Phillip Street North Waterloo, Ontario, Canada Tel: (519) 745-6831 TWX: 610-365-3469

Telex: 029-5431 Cable: RAYCAN

PRODUCTS:

printed circuit modules: microwave components.

RCA LIMITED

21001 North Service Road Trans-Canada Highway Ste. Anne de Bellevue 810, Quebec

Tel: (514) 453-9000 Telex: 01-2522

PRODUCTS:

miniature electron and color picture tubes; silicon and germanium semiconductors: television vokes: flvback transformers and tuners; laminated transformers: loudspeakers.

RDC INDUSTRIES LIMITED

8460 Darnley Road Montreal 307, Quebec, Canada Tel: (514) 731-7121

PRODUCTS:

printed circuit boards, edge-lighted panels, dials and instruments to military specifications; electronic assemblies.

RENFREW ELECTRIC COMPANY LIMITED

349 Carlaw Avenue Toronto, Ontario, Canada Tel: (416) 461-3511 Telex: 02-2450

PRODUCTS:

resistors — carbon composition, metal film, precision wire wound. power wire wound (fixed and adjustable), molded wire wound, variable carbon and wire wound controls; rheostats, time delay and industrial relays; wiring devices including wall plates; flexible and rigid waveguides.

SMALLWOOD S. G. LIMITED

391-397 King Street East Kitchener, Ontario, Canada Tel: (519) 745-9583

PRODUCTS:

coils. RF and IF: solenoids: toroidal: flyback transformers: bobbin windings and components for radiotelevision and electronic industries.

C. R. SNELGROVE CO. LTD.

141 Bond Avenue Don Mills, Ontario, Canada Tel: (416) 447-8531

TWX: 610-492-1354 Telex: 02-21598 Cable: SNELCRSTL

PRODUCTS:

quartz crystal filters; packaged oscillators; temperature controlled ovens.

SPACE CIRCUITS LTD.

156 Roger Street Waterloo, Ontario, Canada Tel: (519) 742-5896

PRODUCTS:

printed circuits: terminal panels: precision screens; chemically milled parts.

SPILSBURY & TINDALL SALES LTD.

120 East Cordova Street Vancouver 4. British Columbia Canada Tel: (604) 684-4131

Cable: SPILTIN VANCOUVER

PRODUCTS:

quartz crystals in frequency ranges from 1.5 MHz to 100 MHz with associated holders.

SPRAGUE ELECTRIC OF CANADA LIMITED

10 Bertal Road Toronto 337, Ontario, Canada Tel: (416) 766-6123 Telex: 02-29930 Cable: TELEFARAD

PRODUCTS:

electrolytic capacitors including aluminum foil, dry sintered solid tantalum, miniature aluminum.

SUPERIOR ELECTRONICS INDUSTRIES LIMITED

2255 Dandurand Street Montreal 331, Quebec, Canada Tel: (514) 271-4761 Telex: 05-25160

Cable: SUPERELEC

PRODUCTS:

black and white picture tubes; color picture tubes; electron gun mounts for both black and white and color TV tubes: outdoor antennas: indoor antennas: electronic garage door openers: UHF converters; antenna rotors.

SYNTRON (CANADA) LIMITED

P.O. Box 10 928 Queenston Road Stoney Creek, Ontario, Canada Tel: (416) 662-8313

PRODUCTS:

vibratory feeders; vibrating screens; vibrators; selenium and silicon rectifier stacks; power conversion units.

VALERIOTE ELECTRONICS (GUELPH) LTD.

P.O. Box 603 Guelph, Ontario, Canada Tel: (519) 824-3220

PRODUCTS:

coils; transformers; modules; matching transformers; filters; antennas; cable assemblies; aluminum and steel masts; tool and die; pattern shop; FRP filament winding; FRP hand and press molding; rubber molding; plastics.

VARIAN ASSOCIATES OF CANADA LTD.

45 River Drive Georgetown, Ontario, Canada Tel: (416) 877-6901 TWX: 610-492-2641

Telex: 069-7502

PRODUCTS:

microwave tubes — klystrons, travelling wave tubes, magnetrons.

WARD LEONARD OF CANADA LIMITED

1070 Birchmount Road Scarborough, Ontario, Canada Tel: (416) 757-4131 TWX: 610-492-1386

Cable: VITRES

PRODUCTS:

wire wound resistors; rheostats; relays; motor controls; dimmers; lighting control systems; emergency lighting.

WELWYN CANADA LIMITED

P.O. Box 2484 1255 Brydges Street London, Ontario, Canada Tel: (519) 451-9490

Telex: 024-843 Cable: WILBAC

PRODUCTS:

precision and semi-precision resistors — tin oxide, metal film, carbon film, ultra-high, ultra-low and standard values.

WILL-HART LTD.

1100 Bellamy Road North Scarborough, Ontario, Canada Tel: (416) 293-8266

PRODUCTS:

edge-lighted panels to military specifications; escutcheons.

CONSUMER PRODUCTS SECTION

CANADIAN ADMIRAL CORPORATION LTD.

501 Lakeshore Road Port Credit, Ontario, Canada Tel: (416) 278-5561

Telex: 029-6138

PRODUCTS:

monochrome and color television receivers; radio receivers; phonos; portable and console stereos.

CANADIAN GENERAL ELECTRIC COMPANY LIMITED (HOME ENTERTAINMENT CENTER)

830 Lansdowne Avenue Toronto 4, Ontario, Canada Tel: (416) 534-6511 Telex: 02-2057 Cable: GELECTRON

PRODUCTS:

color and black and white television receivers; stereo consoles.

CANADIAN WESTINGHOUSE INTERNATIONAL COMPANY

840 York Mills Road Don Mills 404, Ontario, Canada Tel: (416) 444-1103

TWX: 610-371-0246 Telex: 02-1655

Cable: CANWESTEX TORONTO

PRODUCTS:

radio and television receivers (including color); high-fidelity equipment; radio phonographs; stereo component systems.

CLAIRTONE SOUND **CORPORATION LIMITED**

100 Ronson Drive Rexdale, Ontario, Canada Tel: (416) 249-1281 Telex: 02-2745 Cable: CLAIRTONE

PRODUCTS:

color television (console and theater models); stereophonic AM/FM consoles and compact models.

CORVETTE INDUSTRIES LTD.

100 Floral Parkway Toronto 15, Ontario, Canada Tel: (416) 241-6629 Telex: 06-217086

PRODUCTS:

stereo speaker systems; private label brand stereo combinations.

ELECTROHOME LIMITED

809 Wellington Street North Kitchener, Öntario, Canada Tel: (519) 744-7111 Telex: 029-5449

Cable: DEIL

PRODUCTS:

stereo hi-fidelity (cabinet, boutique and component units); television receivers (including color); electronic organs; environmental (fourchannel) sound systems; tape recorders; speaker systems; video monitors; ETV receiver/monitors; educational phonos; intercoms.

FLEETWOOD CORPORATION

5785 Paré Street Montreal 9, Quebec, Canada Tel: (514) 731-3811

Telex: 01-26169 Cable: FLEETCORP

PRODUCTS:

television receivers (including color); radio, stereo high-fidelity combinations; record players.

MONTREAL PHONO COMPANY LIMITED

4000 St. Patrick Street Montreal 206, Quebec, Canada

Tel: (514) 769-8557

PRODUCTS:

record players; phonographs.

PHILCO-FORD OF CANADA LTD.

900 Don Mills Road Don Mills, Ontario, Canada Tel: (416) 444-2541 Telex: 02-2237

PRODUCTS:

television; stereos and combinations; phonographs; automobile radios.

PHILIPS ELECTRONIC INDUSTRIES LIMITED CONSUMER PRODUCTS DIVISION

116 Vanderhoof Avenue Toronto 17, Ontario, Canada Tel: (416) 425-5161

Telex: 02-2513

Cable: PHILIND TORONTO

PRODUCTS:

radio and television receivers (including color); stereo radio-phonograph combinations; radios; car radios: tape recorders.

THE RADIUS COMPANY

424 John Street Dunnville, Ontario, Canada Tel: (416) 774-6510

PRODUCTS:

stereo speaker systems.

RCA LIMITED

21001 North Service Road Trans-Canada Highway Ste. Anne de Bellevue 810 Quebec, Canada Tel: (514) 453-9000 Telex: 01-2522

PRODUCTS:

radio and television receivers (including color); stereo combinations; chassis kits for export.

SEA BREEZE PRODUCTS OF CANADA LIMITED

40 Belvia Toronto 14, Ontario, Canada Tel: (416) 255-1191 Telex: 02-2772

PRODUCTS:

record players; cassettes; modular units.

SHELBERN ELECTRONICS LIMITED

642 de Courcelle Street Montreal 207, Quebec, Canada Tel: (514) 932-3974, 932-0347 Cable: SHELTRONIC

PRODUCTS:

radio stereo-phono consoles.

SYMPHONIC ELECTRONIC CORPORATION

2225 Leclaire Street Montreal 404, Quebec, Canada Tel: (514) 254-4501 Telex: 05-268647

PRODUCTS:

portable record players; AM-FM stereo consoles; guitar amplifiers.

CONSULTANTS SECTION

ACRES INTERTEL LIMITED

298 Elgin Street Ottawa 4, Ontario, Canada Tel: (613) 236-0864 TWX: 610-562-1929

Telex: 013-209

SERVICES:

specialists in airport systems, telecommunications, navigational aids, computers systems and applications, information services. Domestic and international consulting specialists in all systems and phases pertaining to the generation, structure, organization, processing, transmission and distribution of information. Satellite, microwave relay, scatter, point-topoint for telephone, broadcast, TV, ETV, CATV. Education technology; navigation systems; computer applications; market research; theoretical analyses, field surveys; feasibility and reliability studies; systems planning and design, system and equipment specifications, maintenance techniques; installation, test, acceptance and maintenance of systems inclusive of personnel training.

ADGA LIMITED

P.O. Box 227, Terminal "A" Ottawa 2, Ontario, Canada Tel: (613) 235-8677

SERVICES:

telecommunications and information systems specialists; terrestial and satellite communications systems studies; preparation of plans and specifications for communications systems; advisory service on selection of equipment; reliability and maintainability studies and inspection services; installation, test and acceptance of radio and video systems for various applications.

APPLICON COMPUTER SYSTEMS LIMITED

1755 Woodward Drive Ottawa 5, Ontario, Canada Tel: (613) 728-3733 TWX: 610-562-1671

SERVICES:

software consulting and contract programming services for problem analysis, specification and selection of computer systems for scientific and commercial purposes and for commercial computer system programming; hardware consulting services for design and selection of computer systems, industrial data processing and control to meet customer specifications.

BELL CANADA

1050 Beaver Hall Hill Montreal 1, Quebec, Canada Tel: (514) 870-1511 TWX: 610-421-3649

Cable: BELLPHONE MONTREAL

SERVICES:

consulting services for operating telephone companies including comprehensive coverage in all phases of communication planning, design and operation; company organization and administration; engineering planning and design; communication equipment and plant maintenance; traffic forecasting and operating; rates and tariffs; marketing; accounting; personnel administration; public relations; training of all types.

CANADIAN NATIONAL RAILWAYS INTERNATIONAL CONSULTING DIVISION

P.O. Box 8100 Montreal 101, Quebec, Canada Tel: (514) 877-4816

SERVICES:

consulting specialists in railway communications systems.

CANCOM CORPORATION LIMITED

515 St. Catherine Street West Montreal 2, Quebec, Canada Tel: (514) 849-5779

SERVICES:

terrestial and satellite telecommunications and managerial services throughout the world including: feasibility, market, equipment, pricing studies and field surveys; operational, procedural and management studies; preparation of fundamental plans and systems and equipment specifications and drawings for the establishment, change and augmentation of commercial, industrial and military telecommunication networks; conducting and monitoring tests at vendor facilities to ensure compliance to specifications; preparing test plans and procedures and conducting actual field tests to

ensure compliance to specifications; installing equipment and constructing facilities to establish systems and networks; preparing necessary documents to provide for adequate maintenance and operation of telecommunication systems and networks; maintaining and operating telecommunication systems and networks.

COMPUTECH CONSULTING CANADA LTD.

1404 - 1177 West Hastings Street Vancouver 1, British Columbia Canada

Tel: (604) 688-1371

SERVICES:

consultant services in data processing: guidance, equipment selection, monitoring, facilities management, systems design, programming, education courses.

DIGITAL METHODS LIMITED

1316 Carling Avenue Ottawa 3, Ontario, Canada Tel: (613) 725-3113

SERVICES:

consulting engineering services in the field of computer systems and applications; methods analysis and management engineering; and aviation — including air traffic control and simulation studies.

DIGITAL SYSTEMS ASSOCIATES LIMITED

1505 Laperriere Avenue Ottawa 3, Ontario, Canada Tel: (613) 725-2123

SERVICES:

time sharing facilities, software and consultant services.

DILWORTH, SECORD, MEAGHER AND ASSOCIATES LIMITED

4195 Dundas Street West Toronto 18, Ontario, Canada Tel: (416) 239-3011 Cable: DSMASSOC

SERVICES:

logic systems design; control system design, digital and analog; control system analysis; custom instrumentation design and development.

ELECTRONIC LABORATORIES OF CANADA LTD.

250 North Grosvenor Avenue Burnaby 2, British Columbia, Canada Tel: (604) 298-9619

SERVICES:

geophysical exploration (especially airborne) for minerals and oil organized through the development of a two-component, high speed magnetometer, helicopter borne, with data on magnetic tape which is processed by computer. A choice of follow-up for ground work is available. Consultants in physical, chemical, air pollution and transportation control systems as well as on antennas.

GAMMA ENGINEERING LIMITED

10135 - 103 Street Edmonton, Alberta, Canada Tel: (403) 429-4341

SERVICES:

management engineering. Telecommunications engineering: planning of communication networks; engineering design of telephone and telegraph systems, etc.; preparation of specifications; calling for bids; installation of telecommunication equipment; project supervision; preparation of operating and maintenance standards; training of telecommunication and maintenance personnel; operation, maintenance and management of networks.

HOYLES, NIBLOCK ASSOCIATES LIMITED HOYLES, NIBLOCK INTERNATIONAL LTD.

3110 Boundary Road Vancouver 12, British Columbia Canada

Tel: (604) 437-1141 TWX: 610-929-1058 Telex: 04-50322

Cable: TELECOM VANCOUVER

SERVICES:

avionics — telecommunication and navigational facilities for local, regional, national and international airlines and airports; troposcatter communications systems for application requiring direct interconnection of widely separated communities. Space communications — synchronous space vehicle technology and systems for national or regional

ground receiving and transmitting stations; wire and cable telephone systems for local, regional, national or international services; coaxial cable systems for the distribution of TV programs (CATV). Data transmission — automatic and semiautomatic data transmission and presentation systems including supervisory control and telemetry facilities and computer data centers. Television broadcast—VHF and UHF TV broadcast stations, studios and network for local, regional, national or international services. Sound broadcasting - medium wave AM and FM broadcast stations, studios or networks for local, regional, national or international services. High frequency — HF and VHF communications systems for land and maritime application including maritime services in coastal waters or on the high seas. Microwave multi-channel light and heavy route microwave for voice communication, television program and data circuit transmissions.

KATES, PEAT, MARWICK & CO. Prudential Building

4 King Street West Toronto 1, Ontario, Canada Tel: (416) 362-2371

SERVICES:

business data processing, management information systems, urban traffic control, marine traffic control, air traffic control, medical electronics, process control. Computers and peripheral equipment, digital and analog communications, telemetry, supervisory control, television, process transducers and instrumentation. Feasibility studies, systems evaluations, equipment evaluations and tests, system design development and specifications, computer programming, system implementation.

KENDALL ASSOCIATES LIMITED

77 Metcalfe Street Ottawa 4, Ontario, Canada Tel: (613) 236-0875 Telex: 013-3560 Cable: KENMARK

SERVICES:

marketing consultants specializing in surveys and studies for clients interested in North American defence or technical markets.

MONTREAL ENGINEERING COMPANY LIMITED

P.O. Box 777, Place Bonaventure Montreal 114, Quebec, Canada Tel: (514) 395-3636

Telex: 01-20227 Cable: MONENCO

SERVICES:

consulting engineering services in communications and supervisory control systems for power generating plants, electric power transmission networks (including high voltage DC), pipelines, pumping stations and industrial plants.

NATIONAL ELECTROLAB ASSOCIATES LTD.

1130 East 7th Avenue Vancouver 12, British Columbia Canada

Tel: (604) 879-9161 TWX: 610-929-1058 Telex: 04-50322

SERVICES:

consulting electronics laboratory; testing of communications equipment for type-approval by the Canadian Department of Communications; testing and evaluation for purchasing and insurance purposes; custom instrumentation design and development.

N. J. PAPPAS & ASSOCIATES

5253 Decarie Boulevard Montreal 248, Quebec, Canada Tel: (514) 488-9581 Cable: PAPPACO

SERVICES:

RF search; DOC applications; systems engineering; broadcast planning; computer applications; telecommunications.

SYSTEMS DIMENSIONS LIMITED

770 Brookfield Road Ottawa 8, Ontario, Canada Tel: (613) 731-6910 TWX: 610-562-8934

SERVICES:

computer services, providing a full range of services to data processing customers; System 360/85 is the single largest and most powerful computer installed in Canada; software packages under SYSTEMCODE, e.g. ACCOUNTPAK.

CROSS INDEX BY PRODUCTS

This index provides a handy reference to the at least 200 companies listed in the booklet. For easy use it is broken down into general categories in two sections — Electronics Equipment and Systems Section, and Components Section — rather than by specific products.

ELECTRONICS EQUIPMENT AND SYSTEMS SECTION (Pages 14 to 23)

AEROSPACE EQUIPMENT, RESEARCH

Barringer Research Limited
CAE Industries Ltd.
Computing Devices of Canada
Limited
Leigh Instruments Limited
Litton Systems (Canada) Limited
RCA Limited
Scintrex Limited
Simtec Industries Ltd.
Spar Aerospace Products Limited

AIRCRAFT ELECTRONICS

Aviation Electric Limited
Canadian General Electric
Company Limited
Canadian Marconi Company
Collins Radio Company of Canada
Limited
Garrett Manufacturing Limited
ITT Canada Limited
Leigh Instruments Limited
Litton Systems (Canada) Limited

ALTIMETERS

Leigh Instruments Limited

AMPLIFIER EQUIPMENT

Bayly Engineering Limited
Canadian Marconi Company
Cascade Electronics Ltd.
Farinon Electric of Canada Ltd.
Hammond Manufacturing Company
Limited
National Electrolab Associates Ltd.
Polygon Industries Limited
Quindar Products Limited
Valeriote Electronics (Guelph) Ltd.

ANNUNCIATORS SYSTEMS

Advanced Transducer Systems Ltd. Bedard Girard Ltd. Edwards of Canada KAMECO Electronics Limited R. H. Nichols Co. Ltd.

ANTENNAS AND TOWERS

Ainslie Antenna Co. Ltd.
Andrew Antenna Company Limited
Canadian Bridge
Cascade Electronics Ltd.
Collben Manufacturing Company
Delta Electronics Limited
Dynamic Industries Inc.
E.M.I. Electronics Canada Ltd.
Leigh Instruments Limited
RCA Limited
Sinclair Radio Laboratories Limited
Spilsbury & Tindall Sales Ltd.
TMC (Canada) Limited

Tower Communications Co. (Canada) Limited
Valeriote Electronics (Guelph) Ltd.

BROADCAST EQUIPMENT

Canadian General Electric
Company Limited
Central Dynamics Ltd.
McCurdy Radio Industries Limited
National Electrolab Associates Ltd.
Richmond Hill Laboratories Limited

COMPUTERS AND ACCESSORIES

Applicon Computer Systems Limited Canadian Research Institute **Centaur Manufacturing Company Digital Systems Associates Limited** Ferranti-Packard Electric Limited Fischer & Porter (Canada) Limited KAMECO Electronics Limited Litton Systems (Canada) Limited Marsland Engineering Limited Philips Electronic Equipment **Pylon Electronic Development** Company, Ltd. **Raytheon Canada Limited** TMC (Canada) Limited Tele-Radio Systems Limited Vickers UMAC Division of Sperry Rand

COMMUNICATIONS EQUIPMENT

Bavly Engineering Limited Beaconing, Optical & Precision Materials Co. Ltd. CAE Industries Ltd. **Canadian General Electric Company Limited** Canadian Marconi Company Collins Radio Company of Canada Limited **Daniels Electronic Limited** E.M.I. Electronics Canada Ltd. Farinon Electric of Canada Ltd. General Precision Industries Ltd. Instronics Limited International Systcoms Limited Lenkurt Electric Co. of Canada, Ltd. National Electrolab Associates Ltd. Philips Electronic Equipment **Quindar Products Limited** Racal (Canada) Ltd. Radio Engineering Products Limited RCA Limited Raytheon Canada Limited Spilsbury & Tindall Sales Ltd. TMC (Canada) Limited Topping Electronics Ltd. Valeriote Electronics (Guelph) Ltd. Western Electronic Systems

Company Ltd.

CONTROLS

Bailey Meter Company Limited
Bedard Girard Ltd.
Canadian Research Institute
Electronic Associates of Canada
Ltd.
Protol Ltd.
Research Electronics RESELCO
Limited
Simtec Industries Ltd.
Western Electronic Systems
Company Ltd.

CONVERTERS

Pylon Electronic Development Company, Ltd.

COUNTING DEVICES

Bach-Simpson Limited
Canadian Research Institute
Protol Ltd.
Research Electronics RESELCO
Limited
Simtec Industries Ltd.

CRASH POSITION INDICATORS
Garrett Manufacturing Limited
Leigh Instruments Limited

DATA PROCESSING

Applicon Computer Systems Limited **Bailey Meter Company Limited** CAE Industries Ltd. Central Dynamics Ltd. **Digital Systems Associates Limited ESE Limited** Ferranti-Packard Electric Limited Fischer & Porter (Canada) Limited **Garrett Manufacturing Limited Instronics Limited** Leigh Instruments Limited R. H. Nichols Co. Ltd. Quindar Products Limited Raytheon Canada Limited Tele-Radio Systems Limited TMC (Canada) Limited

DIRECTION FINDING EQUIPMENT

General Precision Industries Ltd.

DISPLAY SYSTEMS

Applicon Computer Systems
Limited
Bowmar Canada Limited
CAE Industries Ltd.
Canadian Marconi Company
Canadian Westinghouse
International Company
Central Dynamics Ltd.
Consolidated Electronic Equipment
Co. Ltd.
Edwards of Canada

ESE Limited
Ferranti-Packard Electric Limited
Leigh Instruments Limited
R. H. Nichols Co. Ltd.
Novatronics of Canada Limited
Raytheon Canada Limited
RCA Limited

FILTERS

Anaconda Electronics Limited
Northern Electric Company
Limited
Sinclair Radio Laboratories Limited
TMC (Canada) Limited

FLIGHT SIMULATORS CAE Industries Ltd.

GEOPHYSICAL EQUIPMENT

Barringer Research Limited Canadian Research Institute Conuclear Limited McPhar Geophysics Limited Scintrex Limited Simtec Industries Ltd. Western Electronic Systems Company Ltd.

IGNITION, ELECTRONIC
Centaur Manufacturing Company

INTERCOMMUNICATION EQUIPMENT

E.M.I. Electronics Canada Ltd.
Fanon Electronics of Canada
Limited
Keil Industries Limited
McCurdy Radio Industries Limited
Marsland Engineering Limited

INVERTERS

Canadian Research Institute CTS of Canada Limited Garrett Manufacturing Limited Pylon Electronic Development Company, Ltd.

MACHINE TOOL CONTROLS

Canadian Westinghouse International Company Leigh Instruments Limited Vickers UMAC Division of Sperry Rand

MEDICAL ELECTRONICS

Canadian Research Institute Conway Electronic Enterprises Ltd. Simtec Industries Ltd. Spar Aerospace Products Limited

METAL PARTS

Hammond Manufacturing Company Limited Keil Industries Limited

METERS

Bach-Simpson Limited
Bailey Meter Company Limited
Bayly Engineering Limited
Canadian Admiral Corporation Ltd.
Canadian Research Institute
Farinon Electric of Canada Ltd.
Ferranti-Packard Electric Limited
Polytronics Co.

MICROWAVE EQUIPMENT

Ainslie Antenna Co. Ltd.
Andrew Antenna Company Limited
Collins Radio Company of Canada
Limited
Farinon Electric of Canada Ltd.
ITT Canada Limited
Leigh Instruments Limited
Lenkurt Electric Co. of Canada, Ltd.
Northern Electric Company Limited
RCA Limited
Raytheon Canada Limited

MULTIPLEX EQUIPMENT

Brown Boveri (Canada) Limited
Collins Radio Company of Canada
Limited
Farinon Electric of Canada Ltd.
Lenkurt Electric Co. of Canada, Ltd.
Northern Electric Company Limited
Radio Engineering Products
Limited
RCA Limited
TMC (Canada) Limited

NAVIGATION AIDS

Canadian Marconi Company
Computing Devices of Canada
Limited
C-Tech Limited
Ekolite Limited
General Precision Industries Ltd.
ITT Canada Limited
Leigh Instruments Limited
Litton Systems (Canada) Limited
National Electrolab Associates Ltd.
Philips Electronic Equipment
Raytheon Canada Limited
Spilsbury & Tindall Sales Ltd.

NUCLEAR EQUIPMENT

Advanced Transducer Systems Ltd. Canadian Admiral Corporation Ltd. Conway Electronic Enterprises Ltd.

OSCILLATORS
CTS of Canada Limited

POWER SUPPLIES

Aircraft Appliances & Equipment Limited Ashman Industries (1966) Ltd. Canadian Admiral Corporation Ltd. Canadian Marconi Company Canadian Research Institute Instronics Limited Marsland Engineering Limited Measurement Engineering Limited Powertronic Equipment Limited Protol Ltd. Pylon Electronic Development Company, Ltd. Radio Engineering Products Limited Spar Aerospace Products Limited Stark Electronic Instruments Limited TMC (Canada) Limited Valeriote Electronics (Guelph) Ltd.

RADAR SYSTEMS

Canadian General Electric Company Limited Canadian Westinghouse International Company ITT Canada Limited Philips Electronic Equipment Raytheon Canada Limited

RADIATION MEASUREMENT

Canadian Admiral Corporation Ltd.
Conuclear Limited
Electronic Associates of Canada
Ltd.
Simtec Industries Ltd.

RECORDERS

Leigh Instruments Limited

RECTIFIERS

Bedard Girard Ltd.
Canadian Research Institute
CTS of Canada Limited
Powertronic Equipment Limited

REPAIR AND OVERHAUL SERVICES

Canadian General Electric Company Limited Canadian Research Institute ITT Canada Limited Leigh Instruments Limited National Electrolab Associates Ltd.

ROTATING COMPONENTS

Bowmar Canada Limited

SAFETY DEVICES

Assembly Electronics

SATELLITE COMMUNICATIONS SYSTEMS

Northern Electric Company Limited RCA Limited

SOLDERING EQUIPMENT

Electrovert Manufacturing Co. Ltd.

SOLID STATE DEVICES

Collins Radio Company of Canada Limited Garrett Manufacturing Limited

SONAR SYSTEMS

Canadian General Electric Company Limited Canadian Westinghouse International Company Ekolite Limited E.M.I. Electronics Canada Ltd. Sparton of Canada, Limited

SUPERVISORY CONTROL

Bedard Girard Ltd.
Brown Boveri (Canada) Limited
Central Dynamics Ltd.
Fischer & Porter (Canada) Limited
Multi-Elmac of Canada Limited
R. H. Nichols Co. Ltd.
Quindar Products Limited
Tele-Radio Systems Limited
Topping Electronics Ltd.
Western Electronics Systems
Company Limited

TACHOMETERS

Aircraft Appliances & Equipment Limited

TELEGRAPH EQUIPMENT

CAE Industries Ltd.
ITT Canada Limited
Lenkurt Electric Co. of Canada, Ltd.
Northern Radio Manufacturing Co.
Limited
Radio Engineering Products
Limited
TMC (Canada) Limited
Topping Electronics Ltd.

TELEPHONE EQUIPMENT

Automatic Electric (Canada)
Limited
Bayly Engineering Limited
Daniels Electronic Limited
ESE Limited
Fanon Electronics of Canada
Limited
International Systcoms Limited
ITT Canada Limited
Northern Electric Company Limited
Radio Engineering Products
Limited
Tele-Radio Systems Limited
TMC (Canada) Limited

TELEVISION EQUIPMENT

Anaconda Electronics Limited
Benco Television Associates
Canadian General Electric
Company Limited
Canadian Westinghouse
International Company
Cascade Electronics Ltd.
Central Dynamics Ltd.
Delta Electronics Limited
Marsland Engineering Limited
Richmond Hill Laboratories Limited

TEST AND CALIBRATION SERVICES

CAE Industries Ltd.
Canadian Research Institute
Farinon Electric of Canada Ltd.
Guildline Instruments Limited
ITT Canada Limited
Leigh Instruments Limited
National Electrolab Associates Ltd.

TEST EQUIPMENT

Advanced Transducer Systems Ltd. Ashman Industries (1966) Ltd.

Aviation Electric Limited
Canadian Research Institute
Garrett Manufacturing Limited
Guildline Instruments Limited
Instronics Limited
Leigh Instruments Limited
Litton Systems (Canada) Limited
Polytronics Co.
Raytheon Canada Limited
Stark Electronic Instruments
Limited
Tele-Radio Systems Limited

TIMING DEVICES

Metrix Manufacturing Company Limited Protol Ltd.

TRANSDUCERS

Advanced Transducer Systems Ltd.
Aircraft Appliances & Equipment
Limited
Assembly Electronics
C-Tech Limited
Canadian Westinghouse
International Company
George Kelk Limited
Leigh Instruments Limited
Metrix Manufacturing Company
Limited
R. H. Nichols Co. Ltd.
Research Electronics RESELCO
Limited

TRANSMITTERS (BROADCAST)

Benco Television Associates
Canadian General Electric
Company Limited
Collins Radio Company of Canada
Limited
RCA Limited
TMC (Canada) Limited

VOLTAGE REGULATORS

Aircraft Appliances & Equipment Limited Canadian Research Institute George Kelk Limited Research Electronics RESELCO Limited

WIRE AND CABLES

Northern Electric Company Limited

COMPONENTS SECTION (Pages 24 to 30)

ANTENNAS

Amphenol Canada Ltd.
Geleco Electronics Limited
Lindsay Specialty Products Ltd.
Superior Electronics Industries
Limited
Valeriote Electronics (Guelph) Ltd.

BATTERIES

Mallory Battery Co. of Canada Ltd.

CAPACITORS

Aerovox Canada Limited
Canadian General Electric
Company Limited
Capacitors of Canada (1968)
Limited
Centralab Canada Limited
Communication Apparatus Co.
(Canada) Ltd.
Erie Technological Products of
Canada Ltd.
Quality Communication Products
Ltd.
Sprague Electric of Canada Limited

CERAMICS

Almax Ceramic Industries Limited Neosid (Canada) Limited

CONNECTORS

Amphenol Canada Ltd.
Boston Insulated Wire and Cable Company, Limited
Burndy Canada Ltd.
Dale Electronics Canada Ltd.
Elco Connectors (Canada) Ltd.
ITT Cannon Electric Canada
ITT Gremar Connectors Canada

CONDUITS

Eastern Wire and Conduits

COILS, IF, RF

Abex Industries of Canada Ltd.
Automatic Winding Corp. Ltd.
Communication Apparatus Co.
(Canada) Ltd.
Electronic Craftsmen
Geleco Electronics Limited
General Instrument of Canada Ltd.
General Magnetic Products of
Hawkesbury Limited
Smallwood S. G. Limited

COUNTERS

Esna Limited

CRYSTALS

Columbia Research Limited

Croven Limited
CTS of Canada Limited
C. R. Snelgrove Co. Ltd.
Spilsbury & Tindall Sales Ltd.

ELECTRONIC AND TV TUBES

Canadian General Electric
Company Limited
Canadian Westinghouse
International Company
RCA Limited
Superior Electronics Industries
Limited
Varian Associates of Canada Ltd.

FILTERS

Bayly Engineering Limited
Canadian Marconi Company
CTS of Canada Limited
Erie Technological Products
of Canada Limited
Ferritronics Limited
Geleco Electronics Limited
Quality Communication Products
Ltd.
Valeriote Electronics (Guelph) Ltd.

HEAT EXCHANGERS

Avionics Limited
Magna Electronics Corporation
Limited
Rapid Grip and Batten, Limited

LAMINATIONS

EI-Met Parts Ltd. Magnetic Metals of Canada Limited Rapid Grip and Batten, Limited

LOUDSPEAKERS

Marsland Engineering Limited RCA Limited

METAL PARTS, CABINETS

Canadian Marconi Company
Canadian Stackpole Limited
Decor Metal Products Limited
Graphico Precision Works Ltd.
Hammond Manufacturing Company
Limited
Magna Electronics Corporation
Limited
Precision Small Parts Limited
Rapid Grip and Batten, Limited
Valeriote Electronics (Guelph) Ltd.

MICROCIRCUITS

Aerovox Canada Limited Canadian Marconi Company CTS of Canada Limited Garrett Manufacturing Limited

MICROWAVE COMPONENTS

Desitron Company Limited
Neosid (Canada) Limited
Raytheon Canada Limited
Renfrew Electric Company Limited
Varian Associates of Canada Ltd.

METER COMPONENTS

Automatic Coil Manufacturing Ltd. Canadian Research Institute Geleco Electronics Limited O. & W. Electronics Ltd.

PLATING

Avionics Limited Graphico Precision Works Ltd. Lake Engineering Co. Ltd.

POTENTIOMETERS

Amphenol Canada Ltd.
Bourns (Canada) Ltd.
CTS of Canada Limited
Dale Electronics Canada Ltd.
Precision Electronic Components
Ltd.

PRINTED CIRCUITS

Automatic Electric (Canada)
Limited
Avionics Limited
Canadian Marconi Company
Canadian Research Institute
Graphico Precision Works Ltd.
Lake Engineering Co. Ltd.
Lightning Circuits
Micro-Com Electronics Limited
O. & W. Electronics Ltd.
RDC Industries Limited
Space Circuits Ltd.

RECORDERS

Automatic Coil Manufacturing Ltd.

RECTIFIERS

Syntron (Canada) Limited

RELAYS

Arrow-Hart of Canada Limited
Automatic Electric (Canada)
Limited
Automatic Winding Corp. Ltd.
J. H. Darcy Ltd.
Esna Limited
Renfrew Electric Company Limited

RESISTORS

Amphenol Canada Ltd.
Canadian Research Institute
Canadian Stackpole Limited
Centralab Canada Limited
The Constanta Company of Canada
Limited
CTS of Canada Limited
Dale Electronics Canada Ltd.
Precision Electronic Components
Ltd.
Renfrew Electric Company Limited
Ward Leonard of Canada Limited
Welwyn Canada Limited

SEALS

Quality Hermetics Limited

SEMI-CONDUCTOR DEVICES

Canadian General Electric Company Limited General Instrument of Canada Ltd. National Semiconductors Limited O. & W. Electronics Ltd. Quality Hermetics Limited RCA Limited

SOLDER AND FLUXES

Cramco Solder Alloys

SOLID STATE DEVICES

Aerovox Canada Limited
Canadian Marconi Company
Garrett Manufacturing Limited
O. & W. Electronics Ltd.
Microsystems International Limited

SWITCHES

Arrow-Hart of Canada Limited Centralab Canada Limited CTS of Canada Limited Desitron Company Limited Esna Limited Geleco Electronics Limited General Precision Industries Ltd.

SYNTHESIZERS

General Precision Industries Ltd.

TELEPHONE COMPONENTS

Arrow-Hart of Canada Limited
Automatic Electric (Canada)
Limited
Bayly Engineering Limited
Communication Apparatus Co.
(Canada) Ltd.
Northern Electric Company Limited
Quality Communication Products
Ltd.

TELEVISION COMPONENTS Lindsay Specialty Products Ltd.

TERMINAL BOARDS

Avionics Limited
Communication Apparatus Co.
(Canada) Ltd.
J. H. Darcy Ltd.
Graphico Precision Works Ltd.
Lake Engineering Co. Ltd.

TIMING DEVICES

J. H. Darcy Ltd. Ward Leonard of Canada Limited

TRANSFORMERS

Abex Industries of Canada Ltd. Audio Transformer Company Limited Automatic Coil Manufacturing Ltd. Automatic Electric (Canada) Limited Automatic Winding Corp. Ltd. Canadian Marconi Company Canadian Research Institute Electronic Craftsmen Ferritronics Limited General Instrument of Canada Ltd. General Magnetic Products of Hawkesbury Limited **Hammond Manufacturing Company** Limited Lindsay Specialty Products Ltd. Osborne Electric Company Limited Polygon Industries Limited **Quality Communication Products** Ltd. **RCA Limited** Smallwood S. G. Limited Valeriote Electronics (Guelph) Ltd.

TUNERS

Abex Industries of Canada Ltd. General Instrument of Canada Ltd. RCA Limited

WIRE AND CABLE

Abex Industries of Canada Ltd.
Amphenol Canada Ltd.
Boston Insulated Wire and Cable
Company, Limited
Canada Wire and Cable Company
Limited
Fabricon Manufacturing Limited
Phillips Cables Limited

CANADIAN TRADE OFFICES

Further information concerning the electronics industry in Canada may be obtained from the following

ARGENTINA

Commercial Counsellor Canadian Embassy Casilla de Correo 3898 Suipacha 1111 **Buenos Aires** Tel: 32-9081

Telex: 121383 (DOMCAN BA)

Cable: CANADIAN

AUSTRALIA

Commercial Counsellor for Canada P.O. Box 3952, G.P.O. A.M.P. Building, 21st Floor Circular Quay Sydney Tel: 27-7565 Telex: 089-20600 (CDN GOVT AA 20600) Cable: CANADIAN

Commercial Counsellor for Canada Princes Gate East Tower, 17 Floor 151 Flinders Street Melbourne 3000 Tel: 61-3473 Telex: 089-30501 (CDN GOVT AA 30501) Cable: CANADIAN

Commercial Counsellor Office of the High Commissioner for Canada Commonwealth Avenue Yarralumia 2600 Canberra ACT Tel: 7-2541 Telex: 089 62017 (DOMCAN AA 62017)

Cable: DOMCAN

AUSTRIA

Commercial Counsellor Canadian Embassy P.O. Box 190, 1013 Vienna Obere Donaustrasse 29/51 Vienna 2 Tel: 33 43 63 Telex: 75320 (DOMCAN A) Cable: CANADIAN

BELGIUM

Commercial Counsellor Canadian Embassy rue de la Science, 35 B-1040-Brussels Tel: 13.38.50

Telex: 221613 (DOMCAN BRU) Cable: CANADIAN

BRAZIL

Commercial Secretary Canadian Embassy Caixa Postal 2164-ZC-00 Edificio Metropol Avenida Presidente Wilson 165 Rio de Janeiro Tel: 242-4140 Telex: 031430 (DOMINION RIO)

Cable: CANADIAN

Consul and Trade Commissioner Canadian Consulate Caixa Postal 6034 Edificio Scarpa Avenida Paulista, 1765, 9 andar São Paulo Tel: 287-2122 Telex: 021269 (CANADIAN SPO) Cable: CANADIAN

BRITAIN

Minister (Commercial) Office of the High Commissioner for Canada One Grosvenor Square Tel: 629-9492 (Area Code 01)
Telex: 22526 264428 (DOMINION LDN)
Cable: SLEIGHING LONDON

Canadian Government Trade Commissioner Cornhill House 144 West George Street Glasgow C.2 Tel: 332-6751 (Area Code 041) Telex: 778650 (CANTRACOM GLW) Cable: CANTRACOM

CEYLON

Commercial Division Office of the High Commissioner for Canada P.O. Box 1006 Colombo Tel: 95843 Telex: 106 (DOMCAN COLOMBO)

Cable: CANADIAN

CHILE

Commercial Counsellor Canadian Embassy Casilla 771 Edificio Ahumada, 10th Floor Santiago Tel: 64189 Telex 3520068 (3520068 DOMCAN) Cable: CANADIÀN

COLOMBIA

Commercial Secretary Canadian Embassy Apartado Aereo 22031 Calle 58 No. 10-42 Bogota Tel: 355211, 355477

Telex: 044568 (DOMCAN BOG)

Cable: CANADIAN

CUBA

Commercial Division Canadian Embassy Gaveta 6125 Calle 30 No. 518 esquina 7ª Avenida Miramar Havana Tel: 2-6421 Cable: CANADIAN

CZECHOSLOVAKIA

Commercial Secretary Canadian Embassy Chancery, Mickiewiczova 6 Prague 6 Tel: 32-71-24, 26, 31, 32 Telex: 11061 (DOMCAN PHA)

DENMARK

Commercial Counsellor Canadian Embassy Prinsesse Maries Állé 2 Copenhagen V
Tel: 31 33 06
Telex: 5036 (DOMCAN KH)
Cable: CANADIAN

EUROPEAN COMMUNITIES

Mission of Canada to the European Communities
Canadian Embassy
rue de la Science, 35
B-1040-Brussels, Belgium Tel: 13.38.50 Telex: 221613 (DOMCAN BRU) Cable: CANADIAN

FRANCE

Minister-Counsellor (Commercial) Canadian Embassy 35 Avenue Montaigne Paris 8e Tel: 225-99-55

Telex: 28806 (DOMCAN A PARIS) Cable: CANADIAN PARIS 086

GERMANY

Commercial Counsellor Canadian Embassy Friedrich-Wilhelmstrasse 18 53 Bonn Tel: 231061 Telex: 886421 (DOMCA D) Cable: CANADIAN

Consul General Canadian Consulate General Koenigsallee 82 4 Dusseldorf 1 Tel: 320525 Telex: 8587144 (DMCN D)

Cable: CANADIAN

Consul General Canadian Consulate General Esplanade 41-47 2000 Hamburg 36 Tel: 351805 Telex: 215555 (DMCNH D)

Cable: CANADIAN

GHANA

Commercial Secretary Office of the High Commissioner for Canada P.O. Box 1639 E 115/3 Independence Avenue Accra

Tel: 28555

Telex: 2024 (DOMCAN ACC) Cable: CANADIAN

GREECE

Commercial Secretary Canadian Embassy 31 Vassilissis Sophias Avenue Athens 138 Tel: 714-041

Telex: 5584 (215584 DOM GR) Cable: CANADIAN ATHENS 5584

GUATEMALA

Commercial Counsellor Canadian Embassy Apartado 3A (airmail), 4A (seamail) Edificio Etisa, Plazuela Espana 7a Avenida 8-02, Zone 9 Guatemala City, C.A. Tel: 61560, 67227, 61005 Telex: 206 (DOMCAN GU 206), Cable: CANADIAN

HONG KONG

Senior Canadian Government Trade Commissioner P.O. Box 126 P & O Building, 11th Floor 21-23, Des Voeux Road, Central Hong Kong Tel: 224087 Telex: HKG 391 (DOMCAN HX 391) Cable: CANADIAN

INDIA

Commercial Counsellor for Canada P.O. Box 11 13 Golf Links Road New Delhi 1 Tel: 61-8254 Telex: 346 (DOMCAN DLI) Cable: CANADIAN

INDONESIA

Acting Commercial Secretary Canadian Embassy Djalan Budi Kemuliaan No. 6 Djakarta Tel: O. G. 47841 Telex: 011-4345 (DOMCAN DKP)

IRAN

Commercial Secretary Canadian Embassy P.O. Box 1610 Bezrouke Building, Corner of Takht Jamshid Avenue and Forsat Street Tehran

Tel: 613560, 4-9291 Telex: 2037 (DOMCAN TEHRAN) Cable: CANTRACOM

IRELAND

Commercial Counsellor for Canada 66 Upper O'Connell Street Dublin Tel: 41577

Telex: 5488 (DMCN EI) Cable: CANADIAN

ISRAEL

Commercial Secretary Canadian Embassy P.O. Box 20140 84 Hahashmoniam Street Tel Aviv

Tel: 37161/2 Telex: 740 (DOMCAN TV) Cable: CANADIAN

ITALY

Minister-Counsellor (Commercial) Canadian Embassy Via G. B. De Rossi 27 00161 Rome Tel: 864-327 Telex: 61056 (DOMCAN ROME)

Cable: CANADIAN

Consul General and Trade Commissioner Canadian Consulate General Canadian Consulate General C.P. 3977 Via Vittor Pisani 19 20124 Milan Tel: 652-485/652-600 Telex: 31368 (CANTRACOM MILAN) Cable: CANTRACOM

JAMAICA

Commercial Secretary Office of the High Commissioner for Canada P.O. Box 1500 Tobago Road Corner Trafalgar Road and Knutsford Boulevard Kingston 10 Tel: 65726

Telex: KGN 30 (BEAVER KINGSTON)
Cable: CANADIAN

JAPAN

Minister (Commercial) Embassy of Canada Akasaka Post Office Tokyo 107
Tel: 408-2101/8
Telex: TK 2218 (DOMCAN TK 2218)
Cable: CANADIAN

KENYA

Commercial Counsellor Office of the High Commissioner for Canada P.O. Box 3778 Industrial Promotion Services Building Kimathi Street Nairobi Tel: 27426 Telex: 22198 (DOMCAN NRB) Cable: DOMCAN NAIROBI

LEBANON

Commercial Counsellor Canadian Embassy Boîte Postale 2300 Alpha Building Rue Clemenceau Beirut Tel: 250955
Telex: 652 (DOMCAN BERYT)
Cable: CANADIAN

MALAYSIA

Commercial Counsellor Office of the High Commissioner for Canada P.O. Box 990 A.I.A. Building, Ampang Road Kuala Lumpur Tel: 89722/4 Telex: KL/TX 279 (DOMCAN KL)

Cable: DOMCAN

MEXICO

Commercial Counsellor Canadian Embassy Apartado Postal 5-364 Melchor Ocampo 463, 7th Floor Mexico 5, D.F.
Tel: 33-14-00
Telex: 017-71-191 (DOMCAN MEX)

Cable: CANADIAN

NETHERLANDS

Commercial Counsellor Canadian Embassy Sophialaan 7 The Hague Tel: 61-41-11

Telex: 31270 (DOMCAN HAGUE)

Cable: CANADIAN

NEW ZEALAND

Commercial Counsellor Office of the High Commissioner for Canada P.O. Box 12-049 Wellington North ICI Building, 3rd Floor Molesworth Street Wellington Tel: 70-644 Telex: 065-3505 (DOMCAN NZ 3505) Cable: DOMCAN WELLINGTON

NIGERIA

Commercial Secretary Office of the High Commissioner for Canada P.O. Box 851 Niger House Odunlami Street Lagos Tel: 25262 Telex: 21275 (DOMCAN LAGOS) Cable: CANADIAN

NORWAY

Commercial Secretary Canadian Embassy Oscarsgate 20 Osio 3 Tel: 46.69.55

Telex: Osio 11880 (11880 DOMCAN) Cable: CANADIAN

PAKISTAN

Commercial Secretary Office of the High Commissioner for Canada Hotel Shahrazed Islamabad Tel: 21101-04 Telex: 875 (DOMCAN IBA) Cable: CANADIAN

PERU

Commercial Secretary Canadian Embassy Casilla 1212 Edificio El Pacifico Corner Avenida Arequipa and Plaza Washington Lima

Tel: 287420 Telex: WLA 5323 (DOMCAN PX 5323) Cable: CANADIAN

PHILIPPINES

Consul General and Trade Commissioner Canadian Consulate General P.O. Box 1825 1414 Roxas Boulevard

Tel: 50-20-76, 77, 78 Telex: 3252 (DOMCAN PN 3252) Cable: CANADIAN

PORTUGAL

Commercial Counsellor Canadian Embassy Rua Rosa Araujo, 2-7° Seventh Floor Teles: 377 (DOMCAN P)
Cable: CANADIAN

PUERTO RICO

Consul and Trade Commissioner Canadian Consulate 1606 Pam Am Building Hato Rey, PR 00917 Tel: (809) 764-2011 Telex: 3450297 (CANADA 3450297)

SINGAPORE

Commercial Counsellor Office of the High Commissioner for Canada P.O. Box 845 International Building, 11th Floor 360 Orchard Road Singapore 1

Tel: 36-1322 Telex: 277 (DOMCAN SPORE) Cable: CANADIAN

SOUTH AFRICA

Canadian Government Trade Commissioner P.O. Box 715 Mobil House, 17th Floor Corner Rissik and De Villiers Streets Johannesburg

Tel: 834-6521 Telex: 7189 (43-7189 JH) Cable: CANADIAN

Canadian Government Trade Commissioner P.O. Box 683 African Life Centre, 13th Floor St. George's Street Cape Town

Tel: 2-5134/5 Telex: 7060 (5-7060 CT) Cable: CANADIAN

SPAIN

Commercial Counsellor Canadian Embassy Apartado 117 Edificio Espana Avenida de Jose Antonio 88 Madrid

Tel: 247-54-00 Telex: 27347 (DOMCA E) Cable: CANADIAN

SWEDEN

Commercial Counsellor Canadian Embassy P.O. Box 14042 Kungsgatan 24 S-104 40 Stockholm Tel: 23-79-20

Telex: 10687 (10687 DOMCAN S) Cable: CANADIAN

SWITZERLAND

Commercial Counsellor Canadian Embassy Kirchenfeldstrasse 88 3000 Berne Tel: 44-63-81

Telex: 32489 (DMCNB CH) Cable: CANADIAN

THAILAND

Commercial Secretary and Consul Canadian Embassy P.O. Box 2090 Thai Farmers Bank Building, 7th Floor 142 Silom Road Bangkok Tel: 32956

Telex: 2277 (DOMCAN BKK)

TRINIDAD AND TOBAGO

Commercial Counsellor Office of the High Commissioner for Canada
P.O. Box 1246
Colonial Building
72 South Quay
Port-of-Spain, Trinidad
Tel: 34787

Telex: 226 (DOMCAN POS 226) Cable: CANADIAN

TURKEY

Commercial Secretary Canadian Embassy Vali Dr. Resit Cadessi 52 Ankara

Tel: 12-24-48

Telex: 69 (DOMCAN ANKARA)

UNION OF SOVIET SOCIALIST REPUBLICS

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