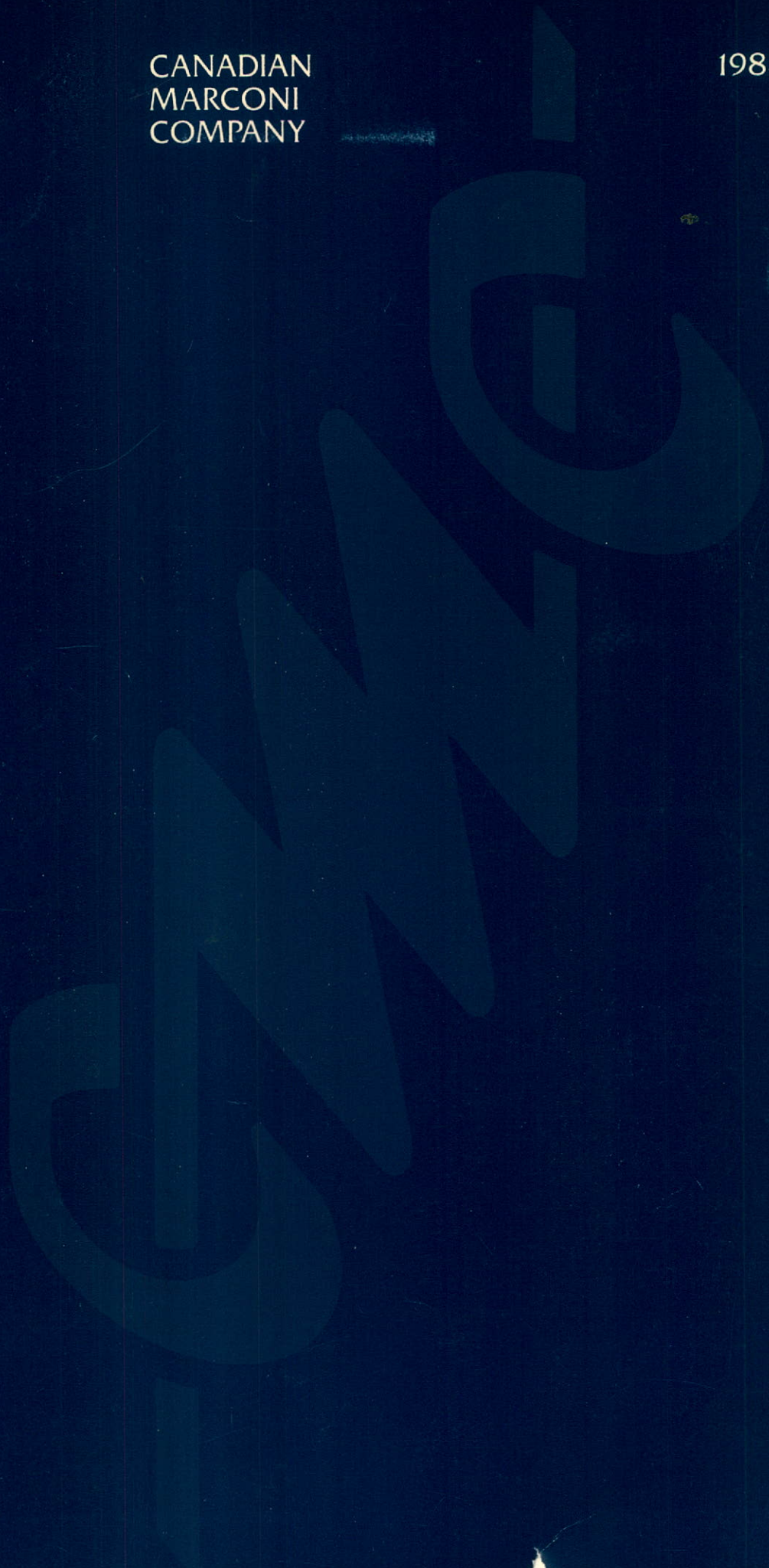


CANADIAN
MARCONI
COMPANY

1984-1985





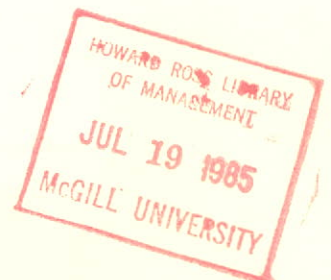
CANADIAN MARCONI COMPANY

In the highly sophisticated, fast moving world of high technology electronics, Canadian Marconi Company is recognized internationally as an innovator and a leader. The Company's communications and avionics equipment, radar systems and specialized components are used on land, at sea and in the air and have found sustained markets in 84% of the world's nations.

The operations of CMC are divided into two major groups: the Communications Group, which includes the Commercial Communications, Defence Communications and Special Services Divisions; and the Electronics Group which comprises the Avionics, Components and Radar Divisions, and the DataComm Products Department. Two wholly-owned U.S. based subsidiaries, CMC Electronics, Inc. and Sun World Circuits, Inc., further enhance the Company's activities in product development, sales and systems support.

Executive offices and major manufacturing facilities are located in Montreal, Quebec, as are five of the Company's six Divisions. The Radar Division and selected engineering and development programs operate from CMC's facility in Kanata, Ontario.

Canadian Marconi Company is a publicly held Canadian corporation. The General Electric Company, p.l.c. of England holds 51.6% of outstanding shares.



The Annual General Meeting of Shareholders
will be held at
Canadian Marconi Company,
90 Trenton Avenue (corner Aberdare and Trenton),
on Thursday, August 8, 1985
at 11 o'clock.

Pour obtenir une copie française
de notre rapport annuel,
prière d'adresser votre demande
au Secrétaire de la Société.

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Financial highlights

Year ended March 31

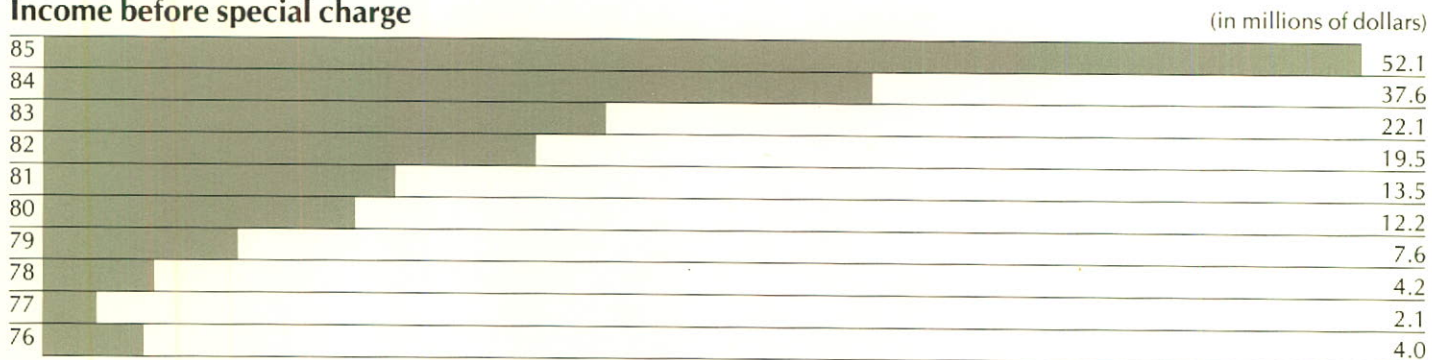
	1985	1984
(in thousands of dollars, except as otherwise stated)		
Sales and other revenues	\$313,925	\$256,131
Income before special charge	52,088	37,568
Net income	52,088	37,568
Dividends	6,419	5,527
Shareholders' equity	176,972	131,303
Working capital	155,766	114,784
Number of shares (in thousands)*	23,773	23,773
Per share data (in dollars)		
Income before special charge	2.19	1.58
Net income	2.19	1.58
Dividends	0.27	0.233
Shareholders' equity	7.44	5.52

* Number of shares and per share data have been restated to reflect adjustment for the four-for-one stock split which became effective on September 2, 1983.

Sales and other revenues



Income before special charge



	1983	1982	1981	1980	1979	1978	1977	1976
	\$198,627	\$155,268	\$129,417	\$112,830	\$84,223	\$57,252	\$58,325	\$58,288
	22,093	19,463	13,547	12,170	7,603	4,184	2,068	4,005
	18,790	19,463	13,547	12,170	7,603	4,184	2,068	4,005
	5,052	4,160	2,971	2,526	1,575	1,263	1,189	1,189
	99,262	85,524	70,221	59,645	50,001	43,973	41,052	40,173
	83,391	74,153	62,832	55,212	47,823	42,977	40,815	40,134
	23,773	23,773	23,773	23,773	23,773	23,773	23,773	23,773
	0.93	0.82	0.57	0.51	0.32	0.18	0.09	0.17
	0.79	0.82	0.57	0.51	0.32	0.18	0.09	0.17
	0.213	0.175	0.125	0.106	0.066	0.0531	0.05	0.05
	4.18	3.60	2.95	2.51	2.10	1.85	1.73	1.69

Dividends

(in millions of dollars)

85	6.4
84	5.5
83	5.1
82	4.2
81	3.0
80	2.5
79	1.6
78	1.3
77	1.2
76	1.2

Shareholder's equity

(in millions of dollars)

85	177.0
84	131.3
83	99.3
82	85.5
81	70.2
80	59.6
79	50.0
78	44.0
77	41.1
76	40.2

Report to shareholders

Review of the fiscal year

Revenues reached a record level of nearly \$314 million. Approximately one-half of the sales represented export deliveries of defence communications equipment, resulting mainly from a series of large orders obtained from the U.S. Army and overseas customers during the previous fiscal year.

Net income rose to \$52,088,000, or \$2.19 per share. Profitability was assisted by the strength of the U.S. dollar against Canadian currency, as most of the Company's sales are made in U.S. funds, and by an increase of nearly \$6.5 million in income earned from temporary investments. After-tax earnings also continued to benefit from the Canadian Government's program of tax credits related to research and development expenditures, all of which were devoted by the Company to increased R&D outlays.

Sun World Circuits, Inc. of Florida, acquired in 1982, continued to improve its performance, and maintained its profitability throughout the year.

Previous reports referred to a contract to supply telex exchange equipment to ten sites in the United Kingdom for British Telecom, the largest order of its kind ever placed. This program had been delayed due to difficulties with the completion of the software development. During the fiscal year, the software work was essentially completed. All of the systems have now been delivered, and most are already in revenue service. The project will be fully completed in the new fiscal year.

During the year in review, the Company accomplished several important objectives in its plans to acquire and develop new product technology to broaden its activities and prepare for long-term expansion. These included the exercise of an option to obtain a licence from Hazeltine Corporation of the United States for the production and sale of microwave landing system (MLS) ground stations, which will enable us to address a large future market in Canada and certain overseas countries. In March, we concluded an agreement with Philips Electronics Ltd of Toronto to acquire all of that company's operations related to ground-based navigation systems, and these have been transferred to our facility at Kanata, Ontario. A number of key milestones were also reached in the development of our own new products. This past year saw the first working demonstrations of airborne MLS receivers, Global Positioning System (GPS) Navstar receivers and an advanced new tactical multi-channel radio.

Outlook

The Company's order backlog declined sharply to approximately \$190 million at fiscal year end, compared to \$300 million in March 1984. As we have indicated in previous reports, the Company is heavily dependent on the progress and timing of major projects of government agencies, especially those related to defence requirements. During the past year, we have been actively addressing a number of large programs, but it may be some time before these can be expected to result in production contracts. Consequently, shipments and earnings will show a reduction in the new fiscal year.

We are confident that, with new product lines and activities, the Company will be in a strong position to resume the trend of long-term growth that it established over the past decade.

Dividends

The Directors declared a half-yearly dividend of 15 cents per share, payable June 17, 1985, to shareholders of record as at May 24, 1985. This compares with the last dividend of 14 cents per share paid on December 10, 1984.

Directors and officers

At the Annual General Meeting of Shareholders held on August 9, 1984, a number of changes were made to the Board of Directors. Mr. Howard J. Lang, Sir Robert Telford and Mr. Rhys J. Williams retired from the Board. Messrs. Philip P. Ralph, W.I.M. Turner, Jr., and Arthur S. Walsh were elected to fill the vacancies.

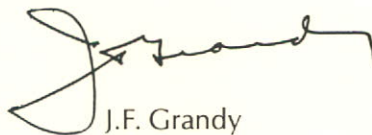
Mr. Lang had been a director since 1964, and had rendered distinguished service both as a director and as the first Chairman of the Audit Committee. Sir Robert Telford, a director since 1968, has since been elected President for life of The Marconi Company Ltd., an honour awarded only to the founder of that company and of Canadian Marconi Company, Guglielmo Marconi.

William Baillie and Jack A. Howlett, who had both served as senior officers for many years, retired during the fiscal year. Between them, they represented a total of nearly 73 years of outstanding service with the Company.

In January 1985, Frank B. Driscoll was appointed General Manager – Radar Division; in February 1985, Daniel Rosenthal was appointed Vice President – Components Division, and in May 1985, Peter Gasser was appointed Vice President – Commercial Communications Division.



P.E. Wheatley
President



J.F. Grandy
Chairman

May 16, 1985

Communications Group

The products of this Group encompass a broad range of radio equipment and communications systems for both military and commercial use. The Defence Communications Division has developed command, control and communications systems for Armed Forces around the free world. CMC's tactical communications package includes radios, multiplexers, field switchboards and associated equipment. CMC also provides these systems in mobile, all-terrain, all-weather shelters.

The Commercial Communications Division produces short- and long-range radio equipment for civil and commercial needs in 140 countries. CMC-designed HF-SSB radios, based on microprocessor technology, are helping to improve voice and data communications in remote communities around the world. CMC's RACE radio systems are self-contained, transportable stations which can operate as remote extensions to public telephone and telex networks. Many of the world's police forces, including the R.C.M.P., use CMC's Link 8000 – a 'private' communications system, for relaying information between central dispatch posts and remote field units.

The Special Services Division provides both CMC and its customers with specialized technical personnel and logistics support in three major areas: servicing of precision instruments; repair and overhaul of electronics systems; and field operations concerned with long-term installation and maintenance contracts for communications systems. The Division is contracted by the Canadian Department of National Defence to carry out all calibration and repair of its test equipment in Canada and West Germany and to maintain DND's antenna systems in both countries.

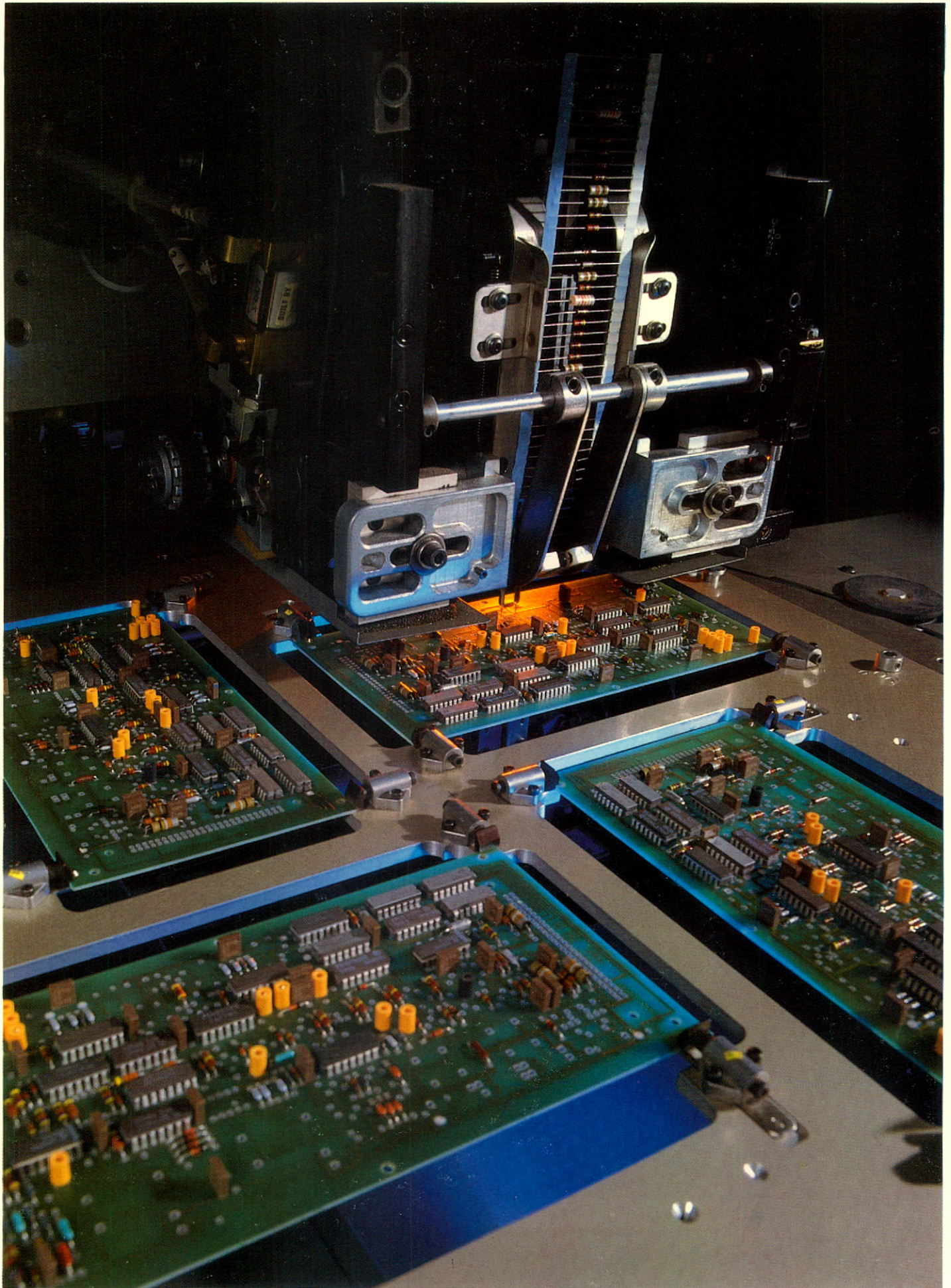
The technical capabilities of this Division include expertise in all classes of electronic equipment including airborne navigation, communication and electronic counter-measure systems, land-based data terminals, transmitters and receivers, parametric amplifiers, seismic detection and radar systems.

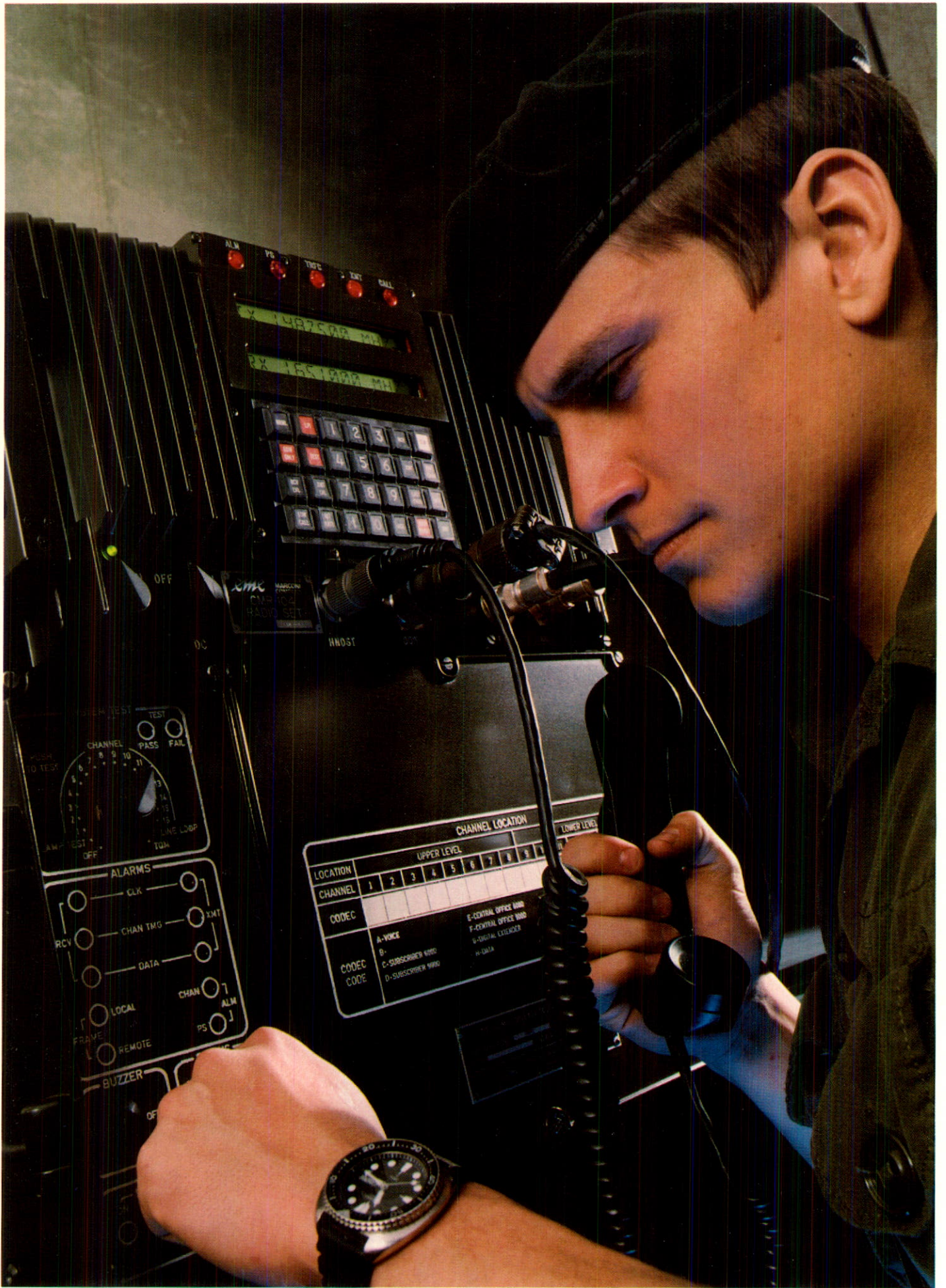
The Company's ability to maintain the highest standards of quality, while meeting world-wide production demands for such products as the AN/GRC-103 Radio Set, often depends upon the most sophisticated methods of automation.

The Axial-Lead Insertion Machine shown here operates in conjunction with an Expandable Component Sequencer. In combination, these two systems provide great speed and accuracy to the process of mounting individual components on printed circuit boards.

The Sequencer accepts up to 60 types of axial-lead components. A single reel of the required component mix is fed automatically to the Insertion Machine, which then inserts the components into the printed circuit boards.

The photo shows the automated Insertion Machine operating in the Defence Communications Division's assembly area. Each of the machine's two heads has the capacity to insert 10,000 components per hour.





CHANNEL LOCATION		UPPER LEVEL										LOWER LEVEL									
LOCATION	CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CODEC																					
CODEC CODE																					

A-VOICE
B-
C-SUBSCRIBER 9900
D-SUBSCRIBER 9900

E-CENTRAL OFFICE 9900
F-CENTRAL OFFICE 9900
H-DIGITAL EXTENDER
H-DATA

Scheduled for on-line production in February 1986, the Defence Communications Division's digital, multi-channel CMR-104 tactical radio is being demonstrated to potential customers and shown at strategic trade exhibitions. Unlike the Company's broadband AN/GRC-103 radio, the CMR-104 operates in a narrow band of 1350 to 1850 megahertz.

Designed for military use, the new radio is of modular construction and utilizes the latest technology. It is smaller due to the use of hybrid circuitry and more intelligent because of microprocessor-based design.

The CMR-104 includes extensive BITE features and built-in capabilities for considerable upgrading of the system. The CMR-104 is based on brand new technology which will extend into other marketable products for the future.

Defence Communications

Orders from 17 countries resulted in a record year for sales by this Division, which supplies state-of-the-art tactical communications systems to the Military.

The AN/GRC-103 Radio Set, now an international standard in its class, has enjoyed increasing demand around the globe. With over 14,000 units sold to date, the AN/GRC-103 is the most widely used multi-channel tactical radio system in the world. In fact, sales of the radio set fill 70 per cent of the world market for this class of radio. Over the last 15 years, the AN/GRC-103 has been the workhorse in tactical communications for the U.S. Army. Today, Canadian Marconi supplies the system in various configurations to 28 countries.

A continuous program of value engineering and product improvement has maintained the state-of-the-art position of the AN/GRC-103. Notwithstanding over 200 engineering changes approved to date by the U.S. Army, the AN/GRC-103 Radio Set maintains the vital parameters of form, fit, function and dual interchangeability.

When used with CMC's TD-5064 Multiplexer, the AN/GRC-103 Radio Set cannot be outperformed. One of the most modern multiplexers available on the market, the TD-5064 meets North American as well as European standards. Today, this product is supplied to the U.S. Army as well as to several countries around the world.

A further example of the Division's tactical communications equipment is the SB-4170 Tactical Switchboard. Basically a 12-line semi-automatic unit, the SB-4170 can be stacked to provide 24 lines of switching.

Production scheduling has become a very precise science in the Defence Communications Division. With the recent installation of MRP-II (Manufacturing Resource Planning), production planners enjoy instant access to available capacity of man hours and machine hours, and available materials either on hand or procurable. The resulting control over delivery schedules, production costs, inventory levels and product quality will be beneficial to CMC and its customers.

The heart of the MRP-II is a Hewlett-Packard 3000 computer which stores all information necessary for resource management. When the system is fully operational in late 1985, there will be more than 100 individual terminals within the Division, most of them operated by assembly line personnel.

The year has also been significant in terms of new product development. Incorporating advanced high technology design, the CMR-104 Radio Set was introduced in January 1985. This digital, tactical UHF system provides 1600 operating channels and is designed for easy operation, using simple keyboard controls. Two alphanumeric displays allow an unambiguous readout of information, providing reminders in plain text where necessary. Built-in test equipment (BITE) allows display of faults. The flexible and entirely modular CMR-104 is expected to set the standard for other radio manufacturers over the next decade.

Also introduced was the Forward Error Correcting Codec (FECC), designed for use with CMC communications equipment such as the AN/GRC-103 Radio Set and the TD-5064 Multiplexer to provide protection against electronic counter-measures in the battlefield.

The first four AN/TRC-180 (V) Radio Terminal Sets were delivered to the U.S. Army's 9th Infantry Division (Rapid Deployment Force). This new communications shelter houses three AN/GRC-103 Radio Sets and three TD-5064 Multiplexers in addition to security equipment. The system provides 45 voice or data channels and twice the communications capacity of the shelters it is designed to replace. To interface existing security equipment with CMC hardware, the shelter incorporates the newly designed CV-3837 Converter. The AN/TRC-180(V) is also designed to solve space and weight constraints associated with the deployment of transportable shelters.





The Special Services Division's Electrical Standards Lab is dedicated to the support of both electrical and mechanical test apparatus. The photograph shows a senior metrologist using sophisticated, automated equipment in conjunction with a computer to calibrate a signal generator.

The Standards Lab is DND approved and maintains the finest Standards facility in Canada's private sector. In fact, major companies send their laboratory calibration equipment to be calibrated at the CMC facility. Customers include the Department of National Defence (DND), de Havilland Aircraft of Canada, Rolls Royce, Telesat, RCA and Canadian Marconi Company itself.

The fact that this CMC Division consistently has obtained major DND contracts for repair and calibration of test equipment over the last 15 years, confirms the excellence of Special Services' mandate. In addition to work performed at CMC's main facility and branch offices, the Division mans existing DND calibration centres across Canada and in Lahr, West Germany.

Special Services

Technical maintenance, repair and overhaul, and long-term customer support are the chief concerns of the Special Services Division, which enjoys multiple ongoing contracts with the Department of National Defence and whose services are frequently sought by customers in the United States, Europe, South America, the Middle East, Far East and Africa.

With CMC-designed cameras, this Division observes all physical engine testing of the Canadian Forces CF-18 fighter aircraft in West Germany. It also has the responsibility for servicing all electronics involved in the test program. Also in West Germany, this Division provides total electronic support and maintenance for DND's early warning defence systems and microwave communications antennas. The operation and maintenance of the United States Air Force's ionospheric observatory in Labrador and the support of satellite navigation receivers in Antarctica for the Chilean Research Institute are among many long-term contracts held by Special Services.

During the year, several important new contracts were obtained from Canada's Department of National Defence. Two of these cover repair and calibration in support of the CF-18 aircraft, one for automatic test equipment and the other for general aircraft instruments. The latter contract required the building of a special facility with stringent control of dust, temperature, humidity and air velocity flow. Two further contracts concern repair and overhaul of airborne radar and navigation aids equipment. In Cold Lake, Alberta, Bagotville, Quebec and Baden, West Germany, CMC has been contracted to complete installation and testing of three engine data acquisition and processing systems for the CF-18 aircraft. In conjunction with CMC's Defence Communications Division, the Special Services Division will evaluate and bid on the overhaul and upgrading of communications equipment for 45 Canadian Forces mobile command post trailers.

Commercial Communications

In addition to CMC's widely known short-range and long-range radio equipment, this Division also distributes specialized electronic equipment produced by a number of suppliers of products for marine and land applications. Major sales in this area included contracts from Fishery Products Company in the U.S., Marystown Shipyards, Davie Shipyards, CN Marine, the Department of National Defence and Transport Canada.

CMC's line of HF-SSB radios continues to find markets around the world. The multitude of uses for these systems includes long distance rail-line communications and communications between ports and ships at sea. This year, major contracts for HF-SSB equipment were received from Algeria, Ghana and Niger.

In the area of VHF/UHF communications, the Division has received its first major contract from Algeria to supply Rural Radio Telephones. This product provides a line-of-sight system specifically designed for remote applications where cost and topography make telephone lines impractical.

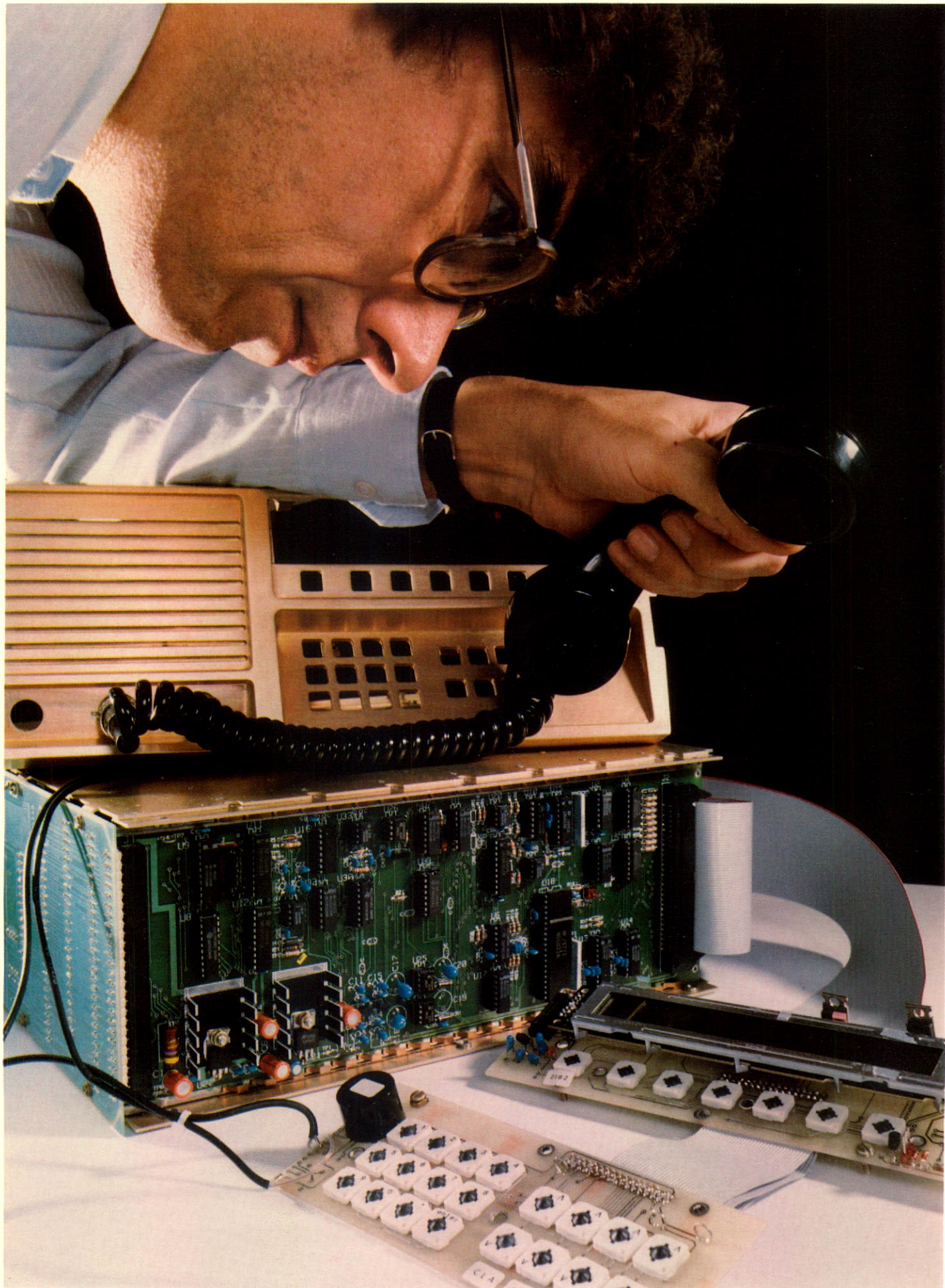
A recently introduced product with strong potential is the CMC RACE system. This HF radio-telephone system provides subscribers in remote areas with direct-dial access to their country's telephone network. With RACE, voice and data communications via high frequency radio are now quite simple. The automatic channel evaluation technology takes the guesswork out of selecting the clearest frequency on which to place a call. A flexible, microprocessor-controlled system, RACE offers a cost-effective solution for remote, small capacity telephone and data transmission. The RACE system has been delivered to a North African country and orders have been received from PTT France and AWA New Zealand for islands in the Pacific. CMC's marketing efforts during the past year included product demonstrations in strategic areas of the world, permitting identification of many potential network projects.

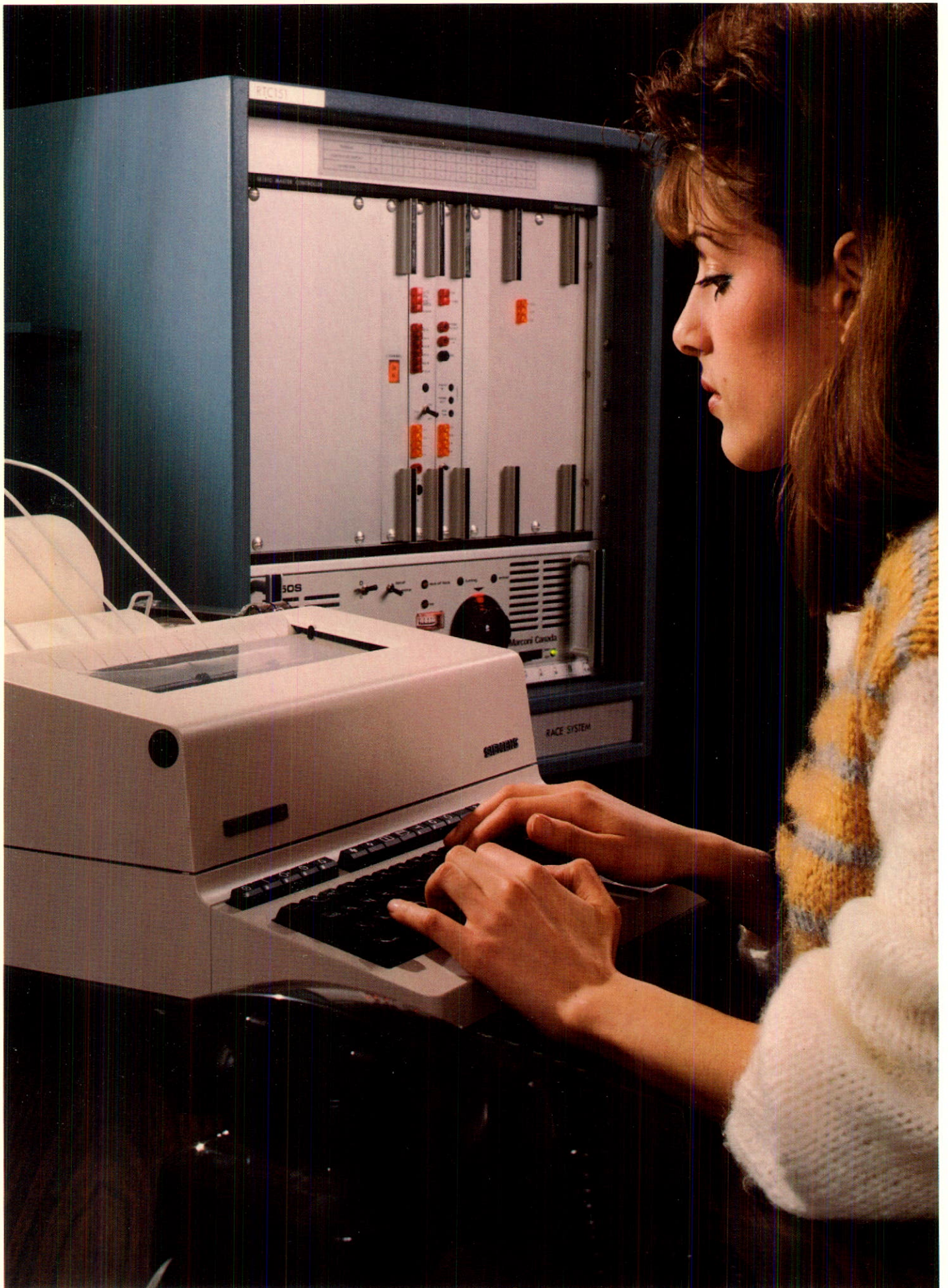
Commercial Communications' new HF-SSB synthesized transceiver, the CH-235 radio, will be the forerunner in a family of sophisticated HF radio equipment offering improved performance and versatility.

The new radio will be easier to use and to program. New liquid crystal display technology will provide step-by-step instructions to the operator, eliminating the need to use a manual for lengthy instructions. Soft key programming will control multiple functions, resulting in fewer keys and an uncluttered front panel.

Pre-production units are expected in October of 1985, for display and demonstration purposes.

The totally modular concept of the CH-235 enables repairs in less than fifteen minutes, making it of particular interest to paramilitary customers and police forces. The new radio is designed to offer considerable expansion of capabilities.





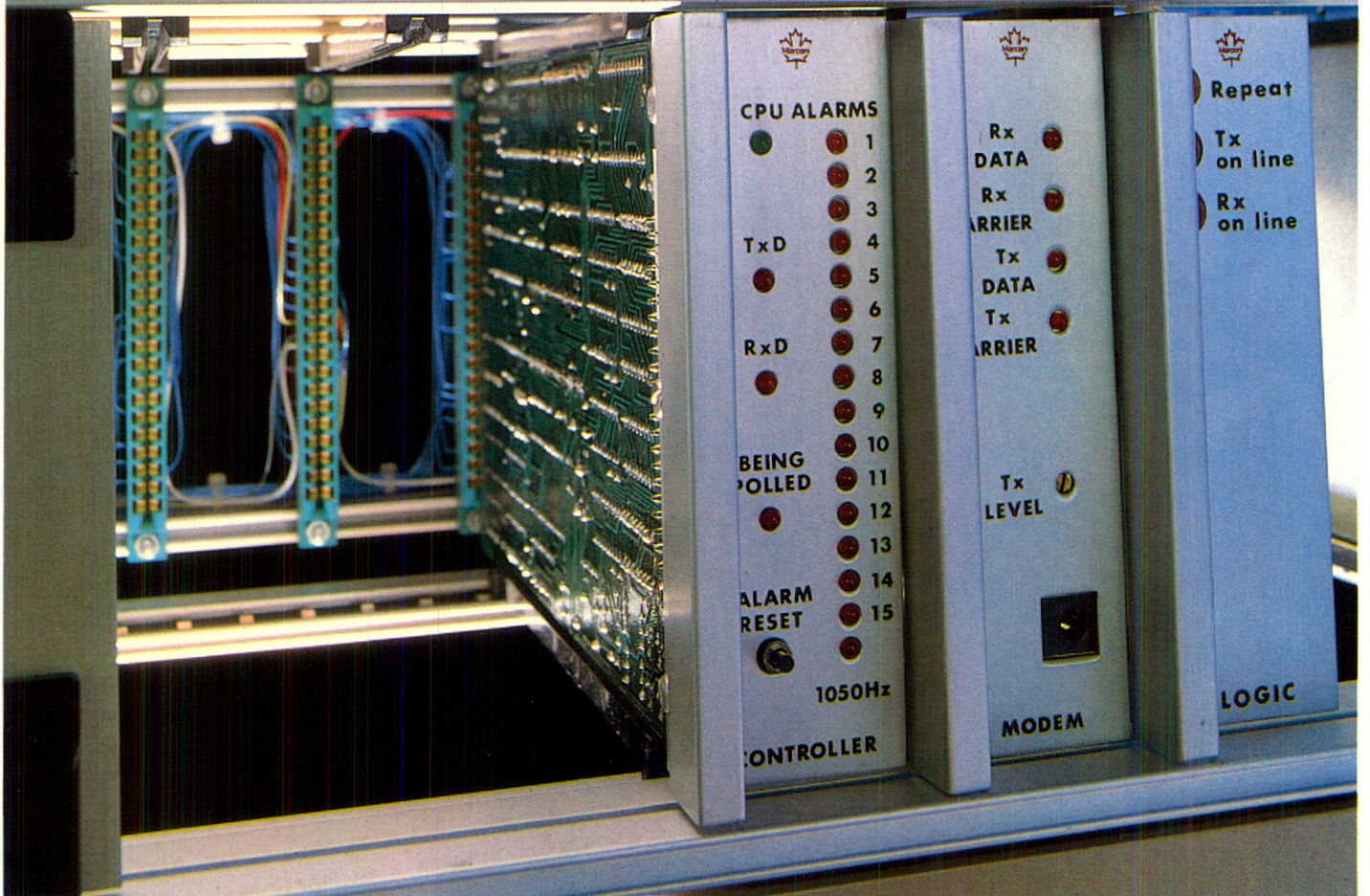
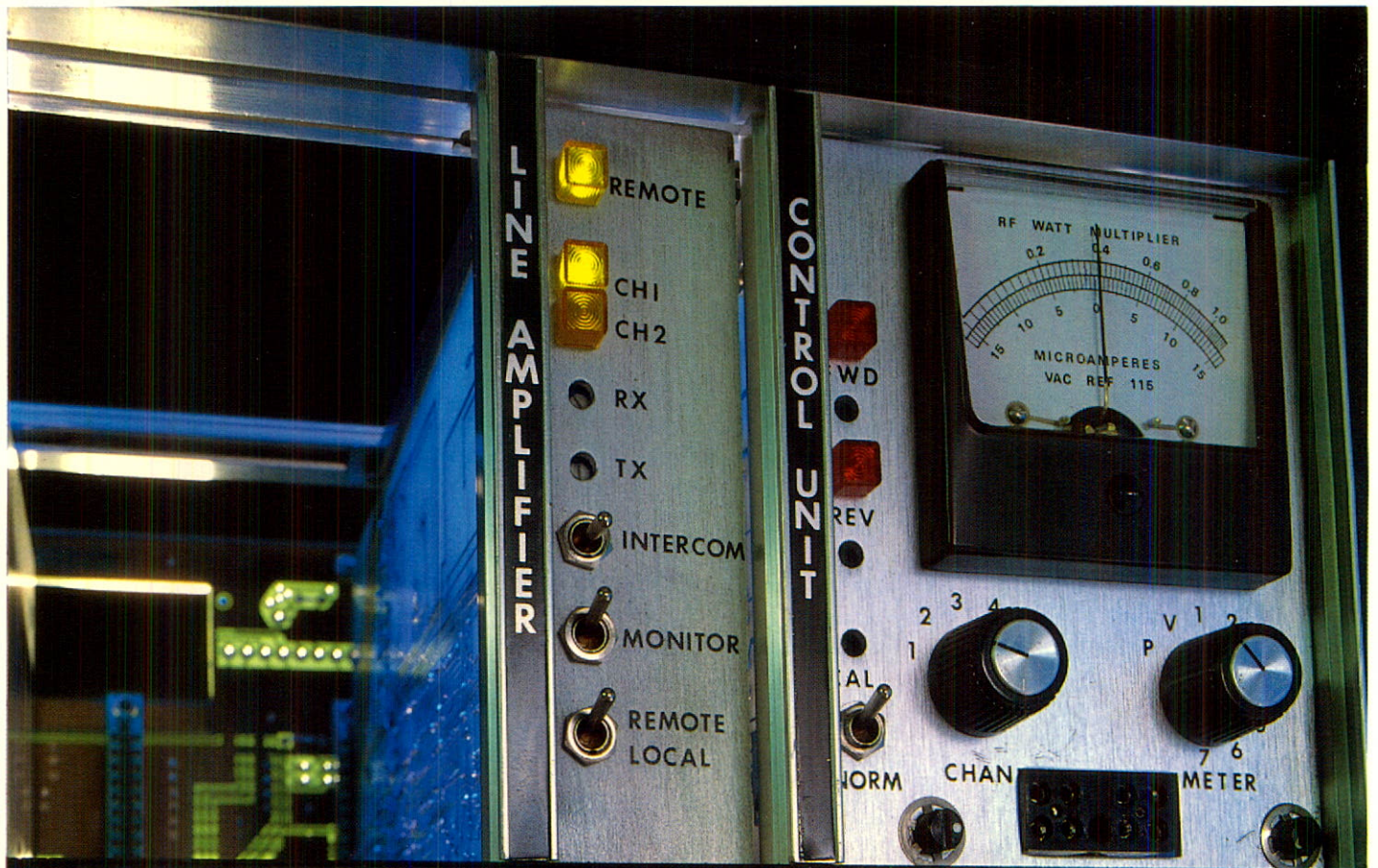
For the inhabitants of remote, hard to access areas, CMC's RACE system provides a fully automatic communications link to the world's telephone and telex networks.

RACE is a microprocessor controlled Radio-Telephone system with automatic channel evaluation and automatic inter-connection capability. Several countries in Africa, the Pacific islands and Canada with its remote northern area are primary users of this technology. The RACE system can operate as a telephone exchange. When a call is placed, the system automatically selects the clearest and best available frequency on which the call can be made. The caller simply dials the required number since RACE's inter-connect feature eliminates the need for operator assistance.

Further development work by the Commercial Communications Division has now added data transmission to RACE's capabilities.

Originally developed for commercial markets, CMC's LN-66 family of radars enjoys extensive use by the U.S. Armed Forces. They are aboard most U.S. Navy vessels including the Trident class submarines and are employed extensively for surface search and navigation by U.S. Navy helicopters such as the LAMPS MK-1. Follow-on contracts and a major repair and overhaul contract have been received this year for the LN-66HP radar.

Product development efforts during the year were concentrated in two key areas. The design of a new line of HF-SSB radios incorporating the latest technology will maintain CMC's leadership in this field. This advanced product extension will be introduced to world markets in early 1986. The development of data transmission capability for the RACE system will allow access to teletype/telex networks in addition to the telephone network. RACE will offer this expanded capability in 1985. Current efforts to develop a multichannel system will further expand the market for RACE equipment in early 1986.



The search for improved reliability, efficiency and performance of communications products and systems is an ongoing concern in the Commercial Communications Division. Recently introduced, and now being demonstrated to potential customers is the Company's new VHF/UHF Radio Repeater Station. This is a modular type radio built to rigid standards and using the latest technology.

The RS-84/85 will provide flexibility as an integral part of communications systems, particularly those operating under harsh environmental conditions. Police forces and the pipeline industry are among the many potential users of the new radio.

The anticipation of tomorrow's needs, continuous investment in research and development, innovative thinking and improved production technology have kept CMC in the vanguard of high technology electronics.

The Avionics Division is a world leader in electronic systems for aerospace. More than 5000 of its Doppler navigation systems have been supplied around the world for use in rotary and fixed wing aircraft. The Division's customers include the defence agencies of some 20 countries. CMC's navigation, monitoring and display systems are used by airlines in 45 countries, aboard 100 aircraft types. The Company's colour-coded, vertical-scale engine instruments provide a new standard for clear and precise information readouts and reduced pilot workload.

The Microwave Landing System (MLS) is the state-of-the-art landing guidance system for all types of military and commercial aircraft. The potential market is vast with large-scale installations of MLS ground stations beginning in late 1985 or early 1986 at airports in the U.S. In addition to initiating production in Canada of Hazeltine MLS ground stations, CMC has designed and produced an MLS airborne receiver which has already undergone extensive flight-testing.

Many highly specialized components in CMC's avionics, communications and radar systems are supplied by the Components Division. These products include hybrid microcircuits, multi-layer printed circuit boards, illuminated panels, power supplies and precision machined parts. A customer list including the world's leading aerospace companies testifies to the quality of these products.

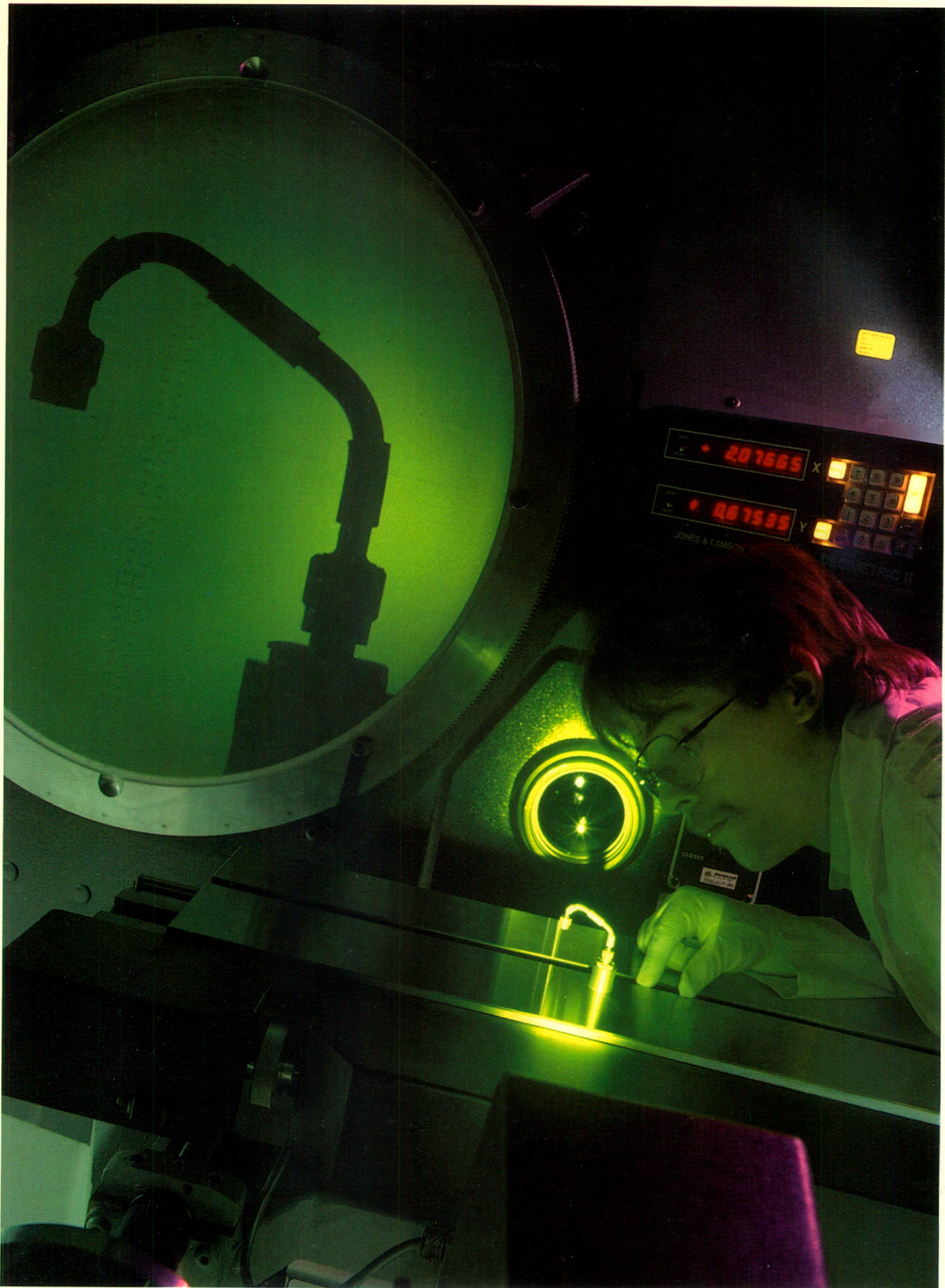
When Canada's Radarsat radar satellite is launched into polar orbit in 1990, it will carry a High Power Amplifier designed and produced by CMC's Radar Division. CMC's AN/SPS-503 Surveillance Radar Systems have been chosen for Canada's Destroyer Life Extension (DELEX) Program now in progress. The Radar Division is addressing itself to the global requirements for surveillance radars which will detect small, low-level air targets under severe environmental and electronic jamming conditions.

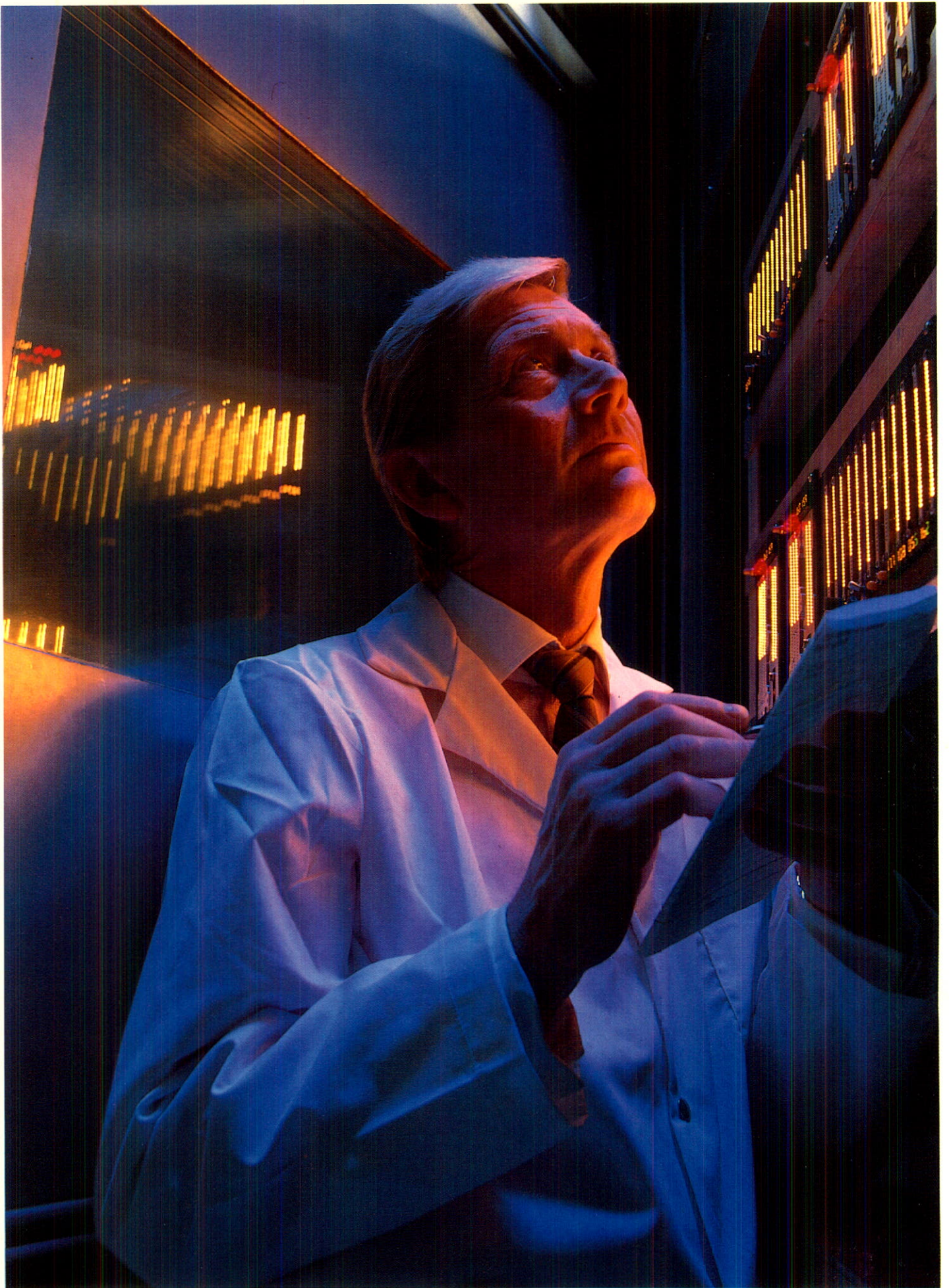
The largest single engineering project undertaken by CMC to date is also the largest contract ever awarded in the field of telex switching. The DataComm Products Department is nearing completion of this contract from British Telecom to upgrade the British inland telex network.

CMC's dedication to optimum quality in the products it produces must be shared by those companies who supply CMC with fabricated parts.

To ensure that suppliers conform to the quality requirements of the Company and its customers, CMC continually evaluates performance in its Incoming Inspection department which is staffed by trained professionals and equipped with sophisticated test equipment.

The photograph shows a mechanical part being inspected in the Avionics Division's Optical Comparator. After the part is placed in the focal plane of the Comparator, light is directed onto its face. The illuminated surface is reflected onto the optical system and appears as an enlarged image on the 30" viewing screen which contains angular and radius reference lines, allowing accurate measurement of all features. The Comparator includes an electronic digital display with accuracies to .00005" or 0.001 mm. The screen image can be magnified 50 times.





CMC's ability to produce affordable products that are not only innovative but also extremely reliable is vital to the Company's success in the highly competitive international marketplace.

Typical of this quest for reliability is the Avionics Division's program of quality controls for its vertical-scale engine instruments. All new U.S. Military helicopter programs specify these instruments. For the Blackhawk helicopter, CMC participated in a quality improvement program called "Target Zero" aimed at eliminating non-conformances at Sikorsky during system integration. One element of this program was the enhancement of the stress screening procedure which consists of conducting random vibration and temperature cycling on all units before shipment. The photograph shows a complete system about to undergo repetitive temperature cycling to detect weaknesses in components or fabrication before delivery to the customer.

Avionics

The largest area of activity for the Avionics Division this year was the highly successful CMA-730 line of opto-electronic vertical-scale engine instruments. Deliveries of these systems for U.S. Forces and Coast Guard helicopters now total 945. These instruments are used by the U.S. Army on the Blackhawk, Apache and AHIP programs, by the U.S. Navy on the Seahawk helicopter, and by the U.S. Air Force on the Nighthawk program. New CMA-730 programs included a prototype for the U.S. Air Force's Grumman E-2C Electronic Warfare aircraft.

Development work on liquid crystal display techniques has brought about new interest and customer demand for this technology, and prospects are excellent in a number of areas. During the year, CMC received a Canadian Forces R&D contract for Night Vision Goggle compatible cockpit lighting for the CH-136 observation helicopter.

Demand continued for CMC's Omega/VLF navigation systems, with orders from major aircraft manufacturers, airlines and military customers. The new generation 'Alpha' Omega/VLF system has been further improved, and this year saw the first deliveries to PEOPLExpress Airlines.

CMC was awarded a contract by Fokker Aircraft for an Engine Rating Select Panel (ERSP) for the F-50 aircraft. The ERSP is a new product that controls the power ratings for the Pratt & Whitney turboprop engine on the F-50.

Setting new standards in the accuracy of guidance and position determination, the Global Positioning System (GPS) is the navigation system of the future. CMC's GPS receiver, which will utilize transmissions from the U.S. Air Force's constellation of Navstar satellites, is nearing completion.

The Company's Doppler navigation systems continue to be used in many programs. Prototypes of AN/APN-235 Doppler Velocity Sensors were delivered for the USAF Nighthawk helicopter and deliveries of CMA-880 Navigation Systems to Lockheed Aircraft Services for the USAF Combat Talon program were completed. Production of the AN/APN-227 Doppler Velocity Sensor continues for U.S. Navy P-3C and other aircraft. The fourth production run of AN/APN-221 Navigation Systems has begun for USAF HH-53H Night and Adverse Weather Rescue helicopters and others. Canadair's CL-289 Reconnaissance Drone will be fitted with CMC's CMA-727D Doppler Velocity Sensor.

New Doppler technology at the development stage includes a navigation system for the Canadian Navy Sea King helicopter retrofit program and a new generation Doppler Sensor to meet the requirements of the U.S. Army and others for such programs as the LHX experimental light helicopter.

The Microwave Landing System (MLS) now being introduced as a world-wide replacement for Instrument Landing Systems (ILS) offers enormous potential both for airborne receivers and for ground stations. CMC's CMA-2000 airborne MLS receiver has undergone extensive flight testing, and exceeds both commercial and U.S. military requirements for this equipment. In conjunction with its airborne MLS receiver, CMC has recently exercised an option to manufacture Hazeltine MLS ground stations in Canada. CMC also has exclusive distribution rights for Hazeltine-manufactured systems to Federal Government customers in Canada and a selected number of countries.

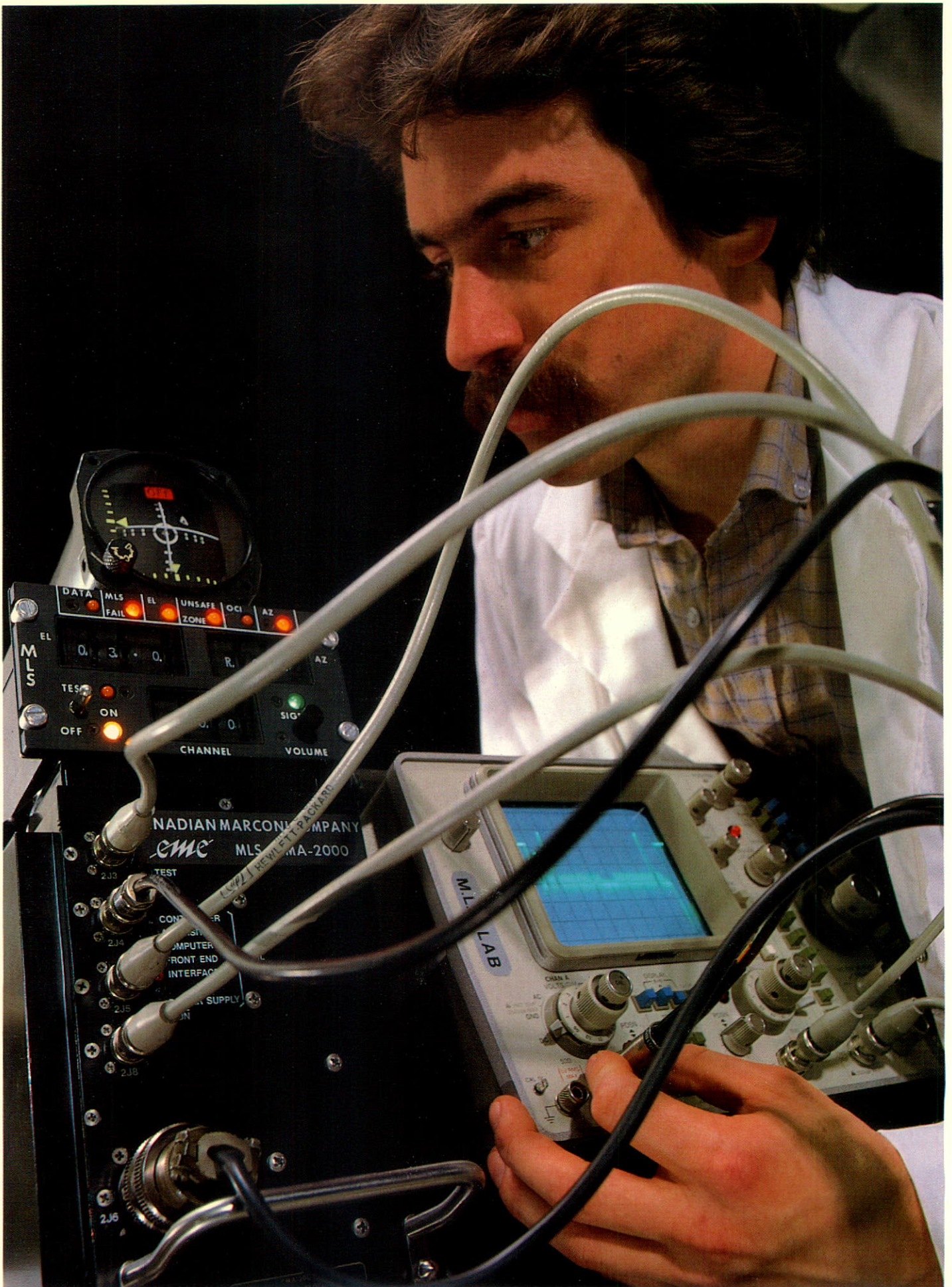
To further broaden its penetration of the ground navigation station business, CMC has purchased the Philips Electronics Ltd range of ILS, VOR (VHF omni-directional range equipment) and DME (distance measuring equipment) products and will manufacture these products in its Kanata facility.

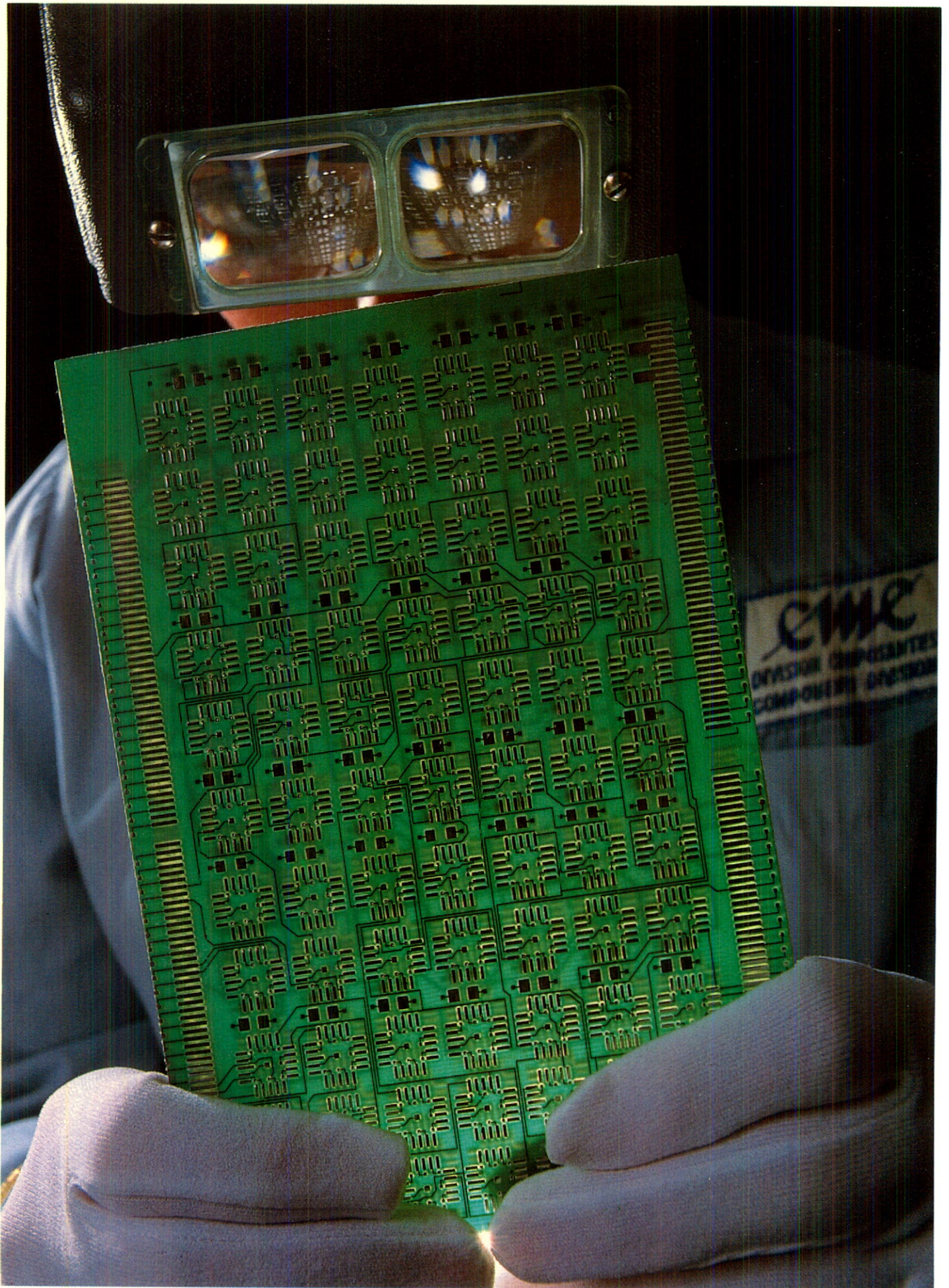
MLS is the landing system of the future and it will shortly begin to replace ILS systems at commercial airports in North America and around the world. The photograph shows a CMC Microwave Landing System airborne receiver being tested by an Avionics Division technician.

The CMA-2000, CMC's MLS airborne receiver, is currently being evaluated in an extensive flight-test schedule jointly established by Transport Canada and CMC. In addition, the Company will manufacture Hazeltine MLS ground stations in Canada for domestic and several other markets.

CMC has a total capability for the production, marketing and support of the only fully operational MLS meeting the standards and requirements of the international community.

The Company's MLS airborne receiver has been under development for five years and incorporates exclusive features such as curved and segmented approach capabilities.





A Leadless Chip Carrier (L.C.C.) printed circuit board at one of many inspection stages.

The demand for components that are smaller and lighter and yet have greater functional capacities can only be met by companies dedicated to continuous research and development.

CMC's L.C.C. technology represents the current state-of-the-art in micro-electronics packaging. Its four-sided configuration enables board area to be reduced by 50% and more, and the resulting shorter lead lengths improve circuit performance.

Striving to further increase package densities, the Components Division has successfully produced L.C.C. boards with polyamide and polyamide-quartz materials. The Chip Carrier's size, weight and cost economies, combined with greater densities for more power and function, allow increased freedom in the design of electronic products of the future.

Components

Complex electronics systems, like other forms of architecture, are only as good as the building blocks that form them. And it is this philosophy that the Components Division applies to the design and development of its sophisticated electronic components and sub-systems.

Today, CMC's specialized components are the building blocks which form the foundation of many of its own avionics, communications and radar systems, equipment which is relied on by customers in 138 countries. Canadian Marconi is a major supplier of components to other leading electronics and aerospace manufacturers.

Major international corporations, including the top ten North American aerospace companies, specify CMC components for their defence communications systems, avionics, airborne early-warning and guidance systems, and other strategic naval and ground equipment. In fact, these industry leaders rely on CMC's customized printed circuit boards, hybrid microcircuits, illuminated Night Vision Goggle (NVG) compatible displays, power supplies and machined parts to form the core of their high reliability equipment.

Current product development activities reflect the Components Division's sensitivity to evolving market needs. Major development programs are under way in support of NVG display components, multi-layer Leadless Chip Carrier printed circuit boards, specialized microwave components and power conversion systems.

All of the Company's Divisions and programs are supported by an ultra-modern CAD/CAM (computer-aided design/manufacturing) design centre. This advanced facility is also used as a sophisticated data link for the exchange of design and manufacturing information between CMC users and the Company's external customer base.

The Division's comprehensive electronic production capability encompasses a wide range of assembly technologies and special processes. State-of-the-art machinery includes computer-controlled laser trimmers, automated robotic wire bonders and x-ray equipment. Additional facilities include plastic injection moulding, numerically controlled drills and routers and sheet metal services with a complete welding and finishing capability.

The Components Division is particularly proud of its record in designing and manufacturing products which are successfully performing on major U.S. and international programs.

The rapid progress in miniaturization of electronic products and components is dramatically demonstrated in the tiny, densely packed hybrid microcircuits produced by the Components Division. The assembly of these hybrids often requires several hundred wire bondings on a field of about a square inch – a process requiring considerable dexterity and time.

The photo shows the latest addition to the Components Division production line equipment. This robotic wire bonder is designed specifically for hybrid wire bonding and represents the absolute state-of-the-art. A diminutive hybrid microcircuit with 500 wires and 50 chips that would require approximately 60 minutes to complete manually, is completed by the robot in less than five minutes.



DANGER
HIGH TEMPERATURE 300° C
BURN HAZARD
ALLOW TO COOL PRIOR TO SERVICE



The AN/SPS-503 is a prime example of CMC's innovative radar technology. Originally developed for the Canadian Navy's Destroyer Life Extension (DELEX) Program, this medium-range shipboard surveillance system incorporates enhanced features of flexible design. In the photo, a fully assembled receiver transmitter bay is undergoing a voltage check.

Canadian Marconi's modular radars are designed to satisfy the operational requirements of warships ranging from fast patrol craft to frigates and destroyers. They provide reliable air and surface target identification and surveillance under severe environmental and electronic jamming conditions.

Current R&D activities at Canadian Marconi's new Radar facility in Kanata, Ontario, include a range of products and features associated with the AN/SPS-503.

Radar

CMC's Radar Division, based in Kanata, Ontario, continues to exploit the world-wide potential for its AN/SPS-503 Surveillance Radar Systems. Radar deliveries for Canada's Destroyer Life Extension (DELEX) Program started earlier this year with an installation aboard the HMCS Nipigon at Halifax. HMCS Terra Nova received the second radar at Esquimalt, B.C. and deliveries will continue throughout the coming year. A large associated contract has been awarded by Canada's Department of Supply and Services for spare parts.

Marketing efforts in countries world-wide are promising, and the coming year will see international orders and the start of local manufacture in another country.

Scheduled for launch via the space shuttle in the early 1990's, Canada's Radarsat satellite, designed and developed by Spar Aerospace Limited, will take readings from space of Canada's mineral, forest and agricultural resources, as well as the ice packs in northern waters. During the year, CMC completed an engineering study for the High Power Amplifier which will be installed on the satellite. In the second part of a multi-phase contract, the Radar Division has commenced work to produce an engineering model.

Development projects under way include an advanced planar array antenna and a C-Band radar system operating in the 5.4 to 5.9 GHz frequency range. Both these projects will expand the Division's product line.

DataComm Products

British Telecom's decision to upgrade Britain's inland telex network resulted in the largest single telex switching equipment contract ever awarded and the largest systems design and manufacturing contract to date for CMC. The DataComm Products Department developed the CMA-755 Telex and Low Speed Data Exchanges for this \$50 million contract that called for the installation of 58,368 telex line terminations across the United Kingdom. Approximately two-thirds of the exchange ports are now in revenue service and the remaining exchanges will be put on line in the coming year.

CMC recently received an additional contract from British Telecom for a further 4000 telex lines to expand the Keybridge exchange in London, making this exchange the largest in the world.

The DataComm Products Department is now actively pursuing market opportunities for the CMA-755 exchange in Canada, South America, the Far East and other countries.

Development work is proceeding on enhancements to the CMA-755 including improvements to the front-end processor which is the exchange's interface to the telex/data networks, and on a modified CMA-755 product, based upon recently approved CCITT recommendations, to provide interworking between existing telex networks and the new Teletex service.

CMC is working with the Data Communications and Telecommunications Research Institute of the Ministry of Posts and Telecommunications of the People's Republic of China to develop a small market version of the CMA-755 Telex Exchange.

Canadian Marconi Company's CMA-755 Multiprocessor Telex Exchange was chosen for the updating of Britain's telex network in 1979. The five-year project calling for installation of exchanges in ten cities in the U.K., represents the Company's most complex systems design and production contract ever.

The DataComm Products Department designed and manufactured hardware and software, produced documentation to cover every aspect of the program and trained British Telecom personnel in the operation, management and maintenance of the system.

Over 24,000 printed circuit boards were manufactured, assembled and tested for the project. Software for the British telex system required the development of 100,000 lines of code.



Subsidiary companies

CMC Electronics, Inc. (CMCE), in addition to augmenting CMC's marketing efforts in the U.S., also provides maintenance support and training for avionics equipment, and architectural design and development services for tactical communications systems at its base in Eatontown, New Jersey.

CMCE's research and development projects include design work in RF systems, antennas, baseband processing and the development of a family of interactive terminals incorporating customized software.

Following evaluation of its User Readout Simulator (UROS) proposal, CMCE was awarded a contract by the U.S. Army Communications-Electronics Command. Deliveries to the U.S. Army and Marine Corps will start in 1985. The UROS design is an interactive terminal which serves in training armed forces personnel in the use of the Position Locating Reporting System. A fully militarized, hand-held device with a wide range of military applications is currently under development.

Sun World Circuits, Inc. (SWC), manufactures high quality, double-sided printed circuit boards at its modern, 30,000 sq. ft. facility in Altamonte Springs, Florida. Considerable expansion of product capabilities was effected this year through purchases of new equipment. Qualification of Sun World Circuits to military specifications has considerably broadened its U.S. market base.

Despite a highly competitive market, SWC has shown substantial improvement in profitability and sales over the previous year.

Plans for the immediate future include further enlargement of SWC's potential with the addition of new equipment and technology to allow it to enter the mass lamination market of four- and six-layer printed circuit boards.




Consolidated financial statements

March 31, 1985

Consolidated balance sheet
as at March 31

Assets	1985	1984
Current assets	(in thousands)	
Cash and temporary investments, at cost, including accrued interest (approximates market)	\$126,425	\$ 78,839
Accounts receivable	40,605	40,759
Income taxes refundable	18,451	—
Inventories (Note 3)	47,124	51,663
Prepaid expenses	492	517
	233,097	171,778
Fixed assets, at cost, less accumulated depreciation (Note 4)	28,598	24,544
	\$261,695	\$196,322
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable and accrued liabilities	\$ 72,142	\$ 52,736
Income taxes payable	5,189	4,258
	77,331	56,994
Deferred income taxes	2,634	2,454
Long-term debt (Note 5)	4,758	5,571
Shareholders' equity		
Stated capital – 23,772,768 common shares (Note 6)	10,216	10,216
Retained earnings	166,756	121,087
	176,972	131,303
	\$261,695	\$196,322

Approved by the Board:



J.F. Grandy, Director



P.E. Wheatley, Director



Consolidated statement of income

Year ended March 31

	1985	1984
	(in thousands)	
Revenue		
Electronic products	\$299,937	\$248,658
Income from temporary investments	13,988	7,473
	313,925	256,131
Operating costs and expenses		
Manufacturing, selling and administration	209,158	178,898
Research and development, net of government participation – \$3,010,000 (1984 – \$3,549,000)	23,706	15,300
Depreciation	8,713	7,054
Interest on long-term debt	410	462
	241,987	201,714
Income before income taxes	71,938	54,417
Provision for income taxes (Note 7)	19,850	16,849
Net income	\$ 52,088	\$ 37,568
Earnings per common share (in dollars)	\$2.19	\$1.58

Consolidated statement of retained earnings

Year ended March 31

	1985	1984
	(in thousands)	
Retained earnings, beginning of year	\$121,087	\$ 89,046
Net income	52,088	37,568
	173,175	126,614
Dividends – 27.00 cents per common share (1984 – 23.25 cents per common share)	6,419	5,527
Retained earnings, end of year	\$166,756	\$121,087

Consolidated statement of changes in financial position

Year ended March 31

	1985	1984
Working capital was provided from:		
Operations –		
Net income	\$ 52,088	\$ 37,568
Depreciation	8,713	7,054
Deferred income taxes	180	(260)
	<u>60,981</u>	<u>44,362</u>
Proceeds from sale of fixed assets	184	274
	<u>61,165</u>	<u>44,636</u>
Working capital was applied to:		
Additions to fixed assets, net of government assistance – \$1,959,000 (1984-\$1,369,000)	12,951	6,910
Reduction of long-term debt	813	806
Dividends	6,419	5,527
	<u>20,183</u>	<u>13,243</u>
Increase in working capital	40,982	31,393
Working capital, beginning of year	114,784	83,391
Working capital, end of year	<u>\$155,766</u>	<u>\$114,784</u>



Notes to consolidated financial statements

March 31, 1985

Note 1. Operations

The Company is engaged in substantially one class of business: the development, manufacture, and sale of electronic products. Export sales in the fiscal year amounted to \$248,783,000 (1984 – \$201,220,000).

Note 2. Summary of significant accounting policies

a) Principles of consolidation

The consolidated financial statements include the financial statements of Canadian Marconi Company and those of its subsidiary companies, all of which are wholly-owned. All significant intercompany accounts and transactions have been eliminated.

b) Inventories

Raw materials and bought-out components, work in process, and finished products are valued at the lower of cost and estimated net realizable value. Deductions are made for progress payments received and any losses incurred or expected to be incurred on contracts not completed at the balance sheet date.

c) Fixed assets and depreciation

Fixed assets retired or disposed of are eliminated from the asset and accumulated depreciation accounts. Gains and losses from disposals are included in income.

Depreciation is provided on the straight-line method at rates based on the estimated useful lives of depreciable assets.

d) Income Taxes

The Company follows the practice of providing for income taxes based on income included in the financial statements regardless of when such income is subject to payment of taxes under the tax laws. Investment tax credits are used to reduce the provision for income taxes in the year in which the related expenditures are made.

e) Recognition of revenue

Sales are normally recognized when products are delivered to customers, however, revenue from major long-term contracts is recorded on the percentage of completion method based on the ratio of the incurred costs to date to the projected total cost of completing the contracts. There were no contracts accounted for as major long-term contracts in 1985 and 1984.

Note 3. Inventories

March 31	1985	1984
	(in thousands)	
Raw materials and bought-out components	\$12,860	\$11,225
Work in process	44,073	55,565
Finished products	9,256	7,852
	66,189	74,642
Progress payments	(19,065)	(22,979)
	\$47,124	\$51,663

Note 4. Fixed assets

March 31	1985		1984
	Cost	Accumulated depreciation	Net
	(in thousands)		
Land	\$ 2,206	\$ —	\$ 2,206
Buildings	15,393	6,500	8,893
Plant, machinery and equipment	39,210	22,283	16,927
Equipment on rental	3,030	2,458	572
	\$59,839	\$31,241	\$28,598
			\$24,544

The estimated useful lives of depreciable assets are as follows:

Buildings	25 to 50 years
Plant, machinery and equipment	up to 10 years
Equipment on rental	up to 4 years

Capital expenditures authorized and committed at March 31, 1985 were \$3,467,000.

Note 5. Long-term debt

March 31	1985	1984
	(in thousands)	
5¾% unsecured sinking fund debentures, Series A, due May 1, 1988	\$1,831	\$1,858
7% unsecured sinking fund debentures, Series B, due June 1, 1989	1,109	1,135
7¼% Seminole County Industrial Development Authority Revenue Bonds, due October 28, 1988 (U.S. \$2,020,000)	2,761	3,395
	5,701	6,388
Less: Due within one year included in accounts payable and accrued liabilities	943	817
	\$4,758	\$5,571

The Series A and B debentures include sinking fund provisions which require payments aggregating \$475,000 annually in the fiscal years 1986 to 1988, \$1,975,000 in the year 1989 and \$1,050,000 in the year 1990. Debentures have been purchased and surrendered for cancellation in advance of the current requirements of the sinking fund provisions.

The Seminole County Industrial Development Authority Revenue Bonds are secured by title to the manufacturing facility of the Company's subsidiary located in Altamonte Springs, Florida.

Aggregate annual maturities of long-term debt for the fiscal years ending March 31 are as follows;

1987 - \$1,011,000
1988 - \$ 807,000
1989 - \$1,890,000
1990 - \$1,050,000

Note 6. Common shares

In May 1984, the directors approved a share option plan for officers and selected senior managers of the Company. At March 31, 1985 common shares totalling 750,000 had been authorized and reserved for the plan. Options have been granted to participants in the plan for an aggregate of 123,500 common shares at a price of \$26.875 per share. These options are exercisable after August 9, 1987 and they expire on August 10, 1991.

Note 7. Income taxes

A reconciliation of the Company's consolidated effective income tax rate for the year ended March 31, 1985 is as follows;

	Amount	Percent of pre-tax income
	(in thousands)	
Federal statutory income taxes	\$33,091	46.0
Provincial abatement	(7,013)	(9.8)
Provincial income tax	4,680	6.5
Manufacturing and processing tax incentives	(3,762)	(5.2)
Investment tax credits	(5,876)	(8.2)
Inventory allowance	(660)	(0.9)
Other items	(610)	(0.8)
	\$19,850	27.6

Note 8. Related party transactions

The General Electric Company, p.l.c. (GEC) of London, England, indirectly owns 51.6% of the outstanding shares of the Company. During the fiscal year the Company's sales to GEC and its subsidiaries amounted to \$27,023,000 (1984 - \$11,835,000). The Company purchased goods and services from GEC and its subsidiaries amounting to \$3,117,000 (1984 - \$4,749,000). At March 31, 1985, the Company had accounts receivable and accounts payable with these associated companies amounting to \$5,396,000 (1984 - \$4,268,000) and \$1,076,000 (1984 - \$246,000), respectively. Terms for these transactions were essentially the same as those with unrelated parties.

Note 9. Pension plan

At March 31, 1985, all vested past service benefits in the Company's pension plan were fully funded.

Auditors' report

May 16, 1985

To the Shareholders of
Canadian Marconi Company:

We have examined the consolidated balance sheet of Canadian Marconi Company as at March 31, 1985 and the consolidated statements of income, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the Company as at March 31, 1985 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.



Price Waterhouse
Chartered Accountants
Montreal, Quebec

Directors and officers

Directors

Roger O. Beauchemin*	President Arrowby Consultants Inc. Montreal, Canada
Sidney Dobb, F.C.A.*	Corporate Director Chelmsford, Essex, England
Thomas S. Dobson**	Chairman Easton United Securities Limited Calgary, Canada
James F. Grandy	President Reisman & Grandy Limited Ottawa, Canada
Jack E. Pateman, C.B.E., F.Eng.	Managing Director GEC Avionics Limited Rochester, Kent, England
Philip P. Ralph, F.C.A.	Director of Corporate Finance The General Electric Company, p.l.c. London, England
The Hon. Ian D. Sinclair, O.C., Q.C.	Senator Ottawa, Canada
William I. Mackenzie Turner, Jr.	Chairman and Chief Executive Officer Consolidated-Bathurst Inc. Montreal, Canada
Arthur S. Walsh, C.B.E., M.A., E.Eng., F.IEE	Managing Director The Marconi Company Ltd. Chelmsford, Essex, England
Philip E. Wheatley	President Canadian Marconi Company Montreal, Canada
	* Member Audit Committee ** Chairman Audit Committee

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CMC Electronics, Inc.	20 Meridian Road Eatontown, N.J. 07724 Tel. (201) 389-2522
James E. Soos, Ph.D. President	
Sun World Circuits, Inc.	950 Sunshine Lane Altamonte Springs, Fla. 32701 Tel. (305) 869-6500
Curtis Bossi President	

Officers

Jack W. Dodds, Ph.D.	Vice President Special Services Division Montreal, Canada
Claude Filiatrault	Vice President, General Counsel and Secretary Montreal, Canada
James F. Grandy	Chairman of the Board Ottawa, Canada
James J. Kelly	Vice President, Finance Montreal, Canada
Lionel Léveillé	Vice President Avionics Division Montreal, Canada
J. Gustave McInnes	Comptroller Montreal, Canada
Laurent Noël	Vice President Defence Communications Division Montreal, Canada
Daniel Rosenthal	Vice President Components Division Montreal, Canada
Claude St.Arnaud	Executive Vice President Communications Group Montreal, Canada
Jean-Guy St-Germain	Vice President Human Resources/ Administration Montreal, Canada
John H. Simons	Executive Vice President Electronics Group Montreal, Canada
Gerry Stuurop	Treasurer Kanata, Canada
Philip E. Wheatley	President Montreal, Canada

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The Montreal Exchange (CMW)
American Stock Exchange (CMW)

Transfer agent & Registrar

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Auditors

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