ble radar is currently installed as a secondary radar on the Trident submarines.

HF/SSB Radio – fully synthesized transmitters, receivers, and transceivers cover the frequency range 1.6 – 30 MHz in configurations including vehicle-mounted mobile stations and desk-top and rack-mounted fixed stations. Output powers are available from 100 Watts to 1000 Watts PEP. Optional facilities include remote controls, RTTY, low-speed data, and scramblers.

RACE (Adaptive HF/SSB) – this new product uses the HF/SSB transmitters/receivers listed above and complements them with a controller which has a real-time channel evaluation system as well as an Automatic Telephone Interconnect. There are two basic products – a single master system which can sustain one simultaneous telephone conversation, but serve up to 16 remote units – and a multiple master system which can sustain up to four simultaneous telephone conversations and serve up to 64 remote units. Telex and RTTY can be provided as optional features.

Communications Systems – the Commercial Communications Division designs and manufactures complete communication systems in the HF/UHF/VHF bands, including base stations, repeaters, mobiles, consoles, remote controls, supervisory equipment, etc. Full turnkey systems can be designed, manufactured, installed and commissioned.

Defense Communications Division: The Defense Communications Division specializes in military tactical communications:

Tactical Radio Relay – the AN/GRC-103 Radio Set operates in the 220 to 1850 MHz frequency range in four frequency bands. The radio set will accommodate frequency division multiplex (FDM) or time division multiplex (TDM) equipment. The TDM equipment may be pulse code modulation (PCM) or delta modulation (DM) multiplexers. Associated with the radio set is a test facility, the AN/GRM-95, used as a depot maintenance facility. The test facility is now available to test all four frequency bands of the radio. The AN/GRC-103 in conjunction with multiplexer equipment is configured into standard US Army systems, e.g., AN/TRC-113, AN/TRC-145.

Multiplexers – the TD-5064 is a 16-channel delta modulation multiplexer which replaces PCM equipment in TDM systems. By stacking 4 sets of the TD-5064, 63 traffic channels can be provided. The MTD-212M is a unit which combines the outputs of two 12-channel PCM multiplexers to provide a single 24-channel stream for ease of transmission and separates the two 12-channel streams at the receive end.

Tactical Switchboards – the SB-4170/TT is a microprocessor-controlled, 12-line semi-automatic, cordless field telephone switchboard. Two SB-4170s may be stacked to provide a 24-channel capability. A built-in Net Radio Interface (NRI) allows the SB-4170/TT to connect directly to a base radio without the need for a separate radio-wire integrator. This provides direct communication between the switchboard's landline subscribers and any compatible radios in the net.

Radio Wire Integrator – the C11416/G Radio Set Control provides a capability to enable single channel net radios to be connected to the switched telephone network.

Conditioned Diphase Adapter – this unit enables radio, multiplexer, crypto and secure orderwire units to be configured as a digital communications system.

Line Terminating unit – this unit allows the multiplexer to be separated from its radio by a distance of up to 2 km.

Special Services Division: The Special Services Division performs a variety of services including the installation, operation, maintenance of equipment and antennas at large radar and communications sites; repair and overhaul of all types of military electronic systems; repair, overhaul and calibration of electronic test instruments; and repair and calibration of secondary and primary standards, both mechanical and electronic. The Special Services Division has a long history of satisfactory transactions with USAF units.

Average Work Force: Engineers – 254
Technologists – 573
Others – 2054
Total – 2881

Gross Sales: 1979/80 – $107.0M
1980/81 – $123.0M
1981/82 – $144.0M
1982/83 – $198.0M

Plant Size: Montreal – 500,000 sq ft
Kanata – 50,000 sq ft

Equipment: CMC has a wide variety of specialized production and test equipment including an Anechoic Antenna Test Range, Automated Test Equipment, EMI/EMC testing to 1 GHz, and environmental testing facilities to all major MIL standards. In addition, complete facilities are available for component manufacture of specialized items, and assembly of electronic components and systems to customer design or specifications.

Experience: Canadian Marconi Company has provided systems, equipment, components and services to every branch of the US DOD and the US Coast Guard over the past 22 years, meeting all military specifications satisfactorily. The products of CMC, military and commercial, are exported regularly to 94 countries world-wide. The company has been granted every Mil Spec available.

Keywords: 1 = Aircraft; 3 = Avionics; 5 = Communications; 7 = Electronics; 10 = Image Processing & Optics; 12 = Machining; 13 = Missiles; 15 = Radar; 19 = Testing/Test Equipment; Doppler Navigation Systems = 3; Omega Navigation Systems = 3; Navstar/GPS = 3; Engine Instruments = 1, 3; Intelligent Instruments = 1, 3; Photogrammetry = 10; Data Communications = 5, 7; Tactical Radio Relay = 5; Multiplexer = 5; Tactical Switchboards = 5; Radio Wire Integrator = 5; ECCM Radio = 5; Digital Order Wire = 5; Power Supplies = 1, 7, 13; Radio Ancillaries = 5; Adapters = 5; Line Terminating Unit = 5; Surveillance = 15; PC Boards = 7; Circuit Packaging = 7; Microcircuits = 7; Thin Film Hybrid = 7; Thick Film Hybrid = 7; Magnetic Devices = 7; Transformers = 7; Displays = 1, 3; Illuminated Panels = 1, 3; Injection Molding = 12; Welding = 12; Precision Machining = 12; Radios = 5; Repair & Overhaul = 3, 7, 19; Calibration = 19; Components = 3, 5, 7; Photoplating = 7; Navigation = 3; Radar = 15.

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