

Average Work Force: Scientists & Engineers – 105
Others – 30

Gross Sales: 1982/83 – \$ 8.0M
1983/84 – \$14.0M

Plant Size: 52,000 sq ft (Including clean rooms, production area, development laboratories, antenna range, military secure area with TEMPEST shielded room)

Experience: CAL has developed an excellent reputation for performing challenging programs, in a professional, reliable manner. The company's record with respect to schedule and budgets is excellent. Their contracts have typically been divided between the Canadian Government (60%), NASA (20%) and others (20%). Canadian Government departments include Communications; National Defense; Environment; Energy, Mines and Resources; and National Research Council. Private customers include Telesat Canada, Atomic Energy of Canada, Marconi Space and Defense Systems (UK), MEL (Phillips, UK) European Space Agency, Intelsat, Bell Canada, and others. Cal has no direct contracts with the USAF, but are directly involved via the SARSAT Program. One of the four SARSAT ground stations provided to NASA is located at Scott AFB, IL. CAL can perform to military specifications.

Keywords: 5 = Communications; 6 = Computers; 7 = Electronic; 10 = Image Processing & Optics; 15 = Radar; 17 = Software Services; 18 = Space Systems; 19 = Testing/Test Equipment; Antennas = 7, 15; C3 Systems = 5; Computer Parts = 6; Navigation = 7; Solid State Devices = 7; Environmental Testing = 19; Simulators = 15; Phased Array = 15; Synthetic Aperture = 15; Design to Requirement = 17; Structural Analysis = 17; Structural Design = 17; Communications = 18; Data Reduction = 18; Radar = 15, 18; Ground Stations = 18; Satellite Electronics = 18; System Studies = 18; Remote Sensing = 18; Search & Rescue = 18; Design = 6; Microprocessors = 6, 7; Test Rigs = 19; Electromechanical Design = 19; Electronic Warfare = 7; Signal Processing = 7, 15; Spacecraft Units = 18; Spacecraft Subsystems = 18; Antennas = 18; RF Subsystems = 18; Electro-Optical Equipment = 10, 18; Battery Management Systems = 18; Power Converters = 18; Rad-Hardened Microprocessors = 6, 7, 18; Radar = 15; Planar Array = 15; Side-Looking Airborne Radar = 15; Tactical Signal Simulator = 7.

Revised: Dec 83

CANADIAN GENERAL ELECTRIC COMPANY Ltd

Code: CGE

Address: Aerospace Operations
Industrial Benefits Program-Defense Programs
396 Attwell Drive
Rexdale, Ontario, Canada M9W 5C3

Contact: Mr. Brian Noble, Spec Industrial Benefits Program
– (416) 675-7500 X210

History: Canadian General Electric Company was incorporated in 1892 and is ninety-two percent owned by General Electric Company.

Capability: The Cobourg (Ontario) Plant – one of the largest Canadian custom molders, specialize in thermoplastic injection molding, and thermoset injection & compression molding. They manufacture all types of composite molding for military purposes (e.g., rocket nozzles) and work to MIL SPEC 105.

The St Andrews (Quebec) Plant – specializes in fiberglass wound tubes for underground duct and high pressure pipes. They accept custom orders for military projects, such as,

launch tubes (pod and hand-held) and rocket motor casings, etc., for the US Army.

Average Work Force: 15,869 – Total

Gross Sales: 1982 – \$1.6B

Plant Size: Cobourg Plant – 125,782 sq ft
St Andrews Plant – 50,000 sq ft

Experience: Canadian General Electric works with the Canadian Government, US military and many US and Canadian prime contractors (e.g., General Motors, Xerox, etc.).

Keywords: 1 = Aircraft; 2 = Armament; 12 = Machining; 20 = Miscellaneous; Composite Components = 1, 2, 20; Injection Molding = 2, 12; Launch Tubes = 2; Rocket Nozzles = 2; Rocket Motor Casings = 2.

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CANADIAN MARCONI COMPANY

Code: CMC

Address: 2442 Trenton Ave
Montreal, Quebec, Canada H3P 1Y9

Electronics Group
Avionics Division
Components Division
Radar Division
Data Communications Department
Communications Group
Commercial Communications Division
Special Services Division
Defense Communications Division

Contact: Mr. Jack Howlett, Vice President Admin –
(514) 341-7630, X204

History: Canadian Marconi was incorporated in Montreal in 1903 as the Marconi Wireless Telegraph Company of Canada, primarily for the purpose of operating a transatlantic communications link and a ship-to-shore communications service. The company maintained its interest in communications until the end of the 1950s. In the 1960s, products diversified to include marine radar and airborne navigation systems.

Canadian Marconi has two wholly owned subsidiaries in the US (CMC Electronics, Inc, Eatontown, NJ; and Sun World Circuits Inc, Altamonte Springs, FL). The General Electric Company P.L.C. of London, England owns 51.6% of Canadian Marconi's common stock. The remaining 48.4% is owned by shareholders in the US and Canada.

Capability: Canadian Marconi has expertise in two major fields – Electronics and Communications. The total company capability of potential interest to the USAF can best be shown by describing each of six divisions, all of which are located at the Montreal site, except for the Radar Division which is located at the Kanata, Ontario site.

Avionics Division: The Avionics Division is engaged in the development, engineering, production of aircraft navigation systems, monitoring and display systems, and integrated logistics support.

Doppler Navigation Systems – determine aircraft velocity in forward, side, and vertical axes by transmitting microwave energy to the scattered radiation picked up by a receiver. By feeding this velocity information combined with heading information, to a navigation computer, the aircraft position is calculated and displayed. Doppler Velocity computers and interactive CRT displays,