

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 25 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: Adapters; Avionics; Calibration; Circuit Packaging; Cockpit Displays; Communications; Components (Avionics); DME; Data Communications; Digital Order Wire; Displays; Doppler Navigation Systems; ECCM Radio; Engine Instruments; Hybrid Circuits; ILS; Illuminated Panels; Image Processing; Injection Molding; Instrument Repair; Intelligent Instruments; Landing Aids; Lighted Panels; Line Terminating Unit; MLS; Machining; Magnetic Devices; Microcircuits; Multiplexer; Navigation; Navigation Aids; Navstar GPS; Omega Navigation Systems; PC Board Design & Fabrication; Photogrammetry; Photoplatting; Power Supplies; Precision Machining; R&O (Avionics); Radar; Radio Ancillaries; Radio Communications; Radio Wire Integrator; Surveillance; Tactical Radio Relay; Tactical Switchboards; Testing/Test Equipment; Thick Film Hybrid Microcircuits; Thin Film Hybrid Microcircuits; Transformers; VOR; Welding.

REVISED: February 88

CANUTEL INDUSTRIES Ltd

ADDRESS: Box 610
College Heights, Alberta, Canada
T0C 0Z0

CONTACT: Mr Hugo Wegmuller, President - (403) 782-4838

HISTORY: Canutel Industries Ltd is a Canadian-owned company specializing in the contract assembly of sophisticated electronic equipment and printed circuit boards on a build-to-print basis. It was established in 1981 on the campus of Canadian Union College, College Heights, Alberta. The company has an US associate, Canutel Berrien Inc., located in Berrien Springs, MI. The company is represented in Western US by Canadian Commercial Advisers of Marina del Rey, CA (Contact - Mr Ed Hepner at (213) 822-2701).

CAPABILITY: Canutel Industries Ltd provides professional electronic contract manufacturing facilities on a build-to-print basis, specializing in high quality, yet competitive, assembly of complete electronic equipment, printed circuit boards of the conventional, multilayer and surface mount type, cable and wire harnesses and mechanical assemblies related to the electronic field. The manufacturing process, when required, conforms to Military Specifications MIL-1-45208A and NATO AQAP1 and AQAP4, and it is subject to a strict anti-static protection program.

AVERAGE WORK FORCE: Engineers - 3
Others - 60+

GROSS SALES: 1986 - \$750,000
1987 - \$750,000

PLANT SIZE: 13,500 Sq Ft

EQUIPMENT: Canutel Industries' equipment includes: wave soldering machines, freon vapor degreasers and automatic lead forming/cutting machines. Also included are routine electronic test instruments and stereo microscope heat chamber for environmental testing, and computerized production management and cost control system. The company is planning to introduce automatic production facilities for surface mount assembly operation.

EXPERIENCE: Canutel Industries' experience includes the fabrication of all types of professional and industrial electronic equipment and printed circuit boards for the Canadian Government and for private industry in the areas of telecommunications, computers, oil industry, aviation, process control, rail transport, etc. Also the company holds certificates of approval from the US and Canadian prime contractors to manufacture to military quality, high reliability soldering technology by China Lake Naval Weapon Center in California.

KEYWORDS: Build-To-Print; PC Board Design & Fabrication; Circuit Boards.

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CARR-SAWYER Inc

ADDRESS: 1885 Wilson Avenue
Weston, Ontario, Canada
M9M 1A2

CONTACT: Mr Alan C Carr, President - (416) 741-4733

HISTORY: Carr-Sawyer Inc (CSI) is a Canadian-owned high technology aerospace consulting company founded in 1984. The company is wholly owned by its Directors - Alan C Carr, Richard N A Sawyer, and Haig Saadetian.

CAPABILITY: CSI's principal field of specialization is aerospace. Other fields of interest are ground transportation, nuclear, robotics, CAD/CAM/CAE and heavy industrial.

Capabilities offered by CSI are: Detailed aircraft design, (aerodynamics and stress analysis); design and approval of airframe modifications; design, analysis and manufacture of custom test rigs and equipment; consulting services for 'finite element structural analysis'; and consulting services for CAD/CAM/CAE.

CSI also markets specialty PC-based software for structural analysis, CAD/CAM, fracture analysis, piping analysis, and heat transfer/thermal analysis.

CSI's typical projects include:

- Aerospace - Design of wing-mounted fuel tank for SKYVAN Aircraft (EMR); aerodynamic design and stress analysis for LW-SKAD wing-mounted stores; detail stress analysis of various components on DASH-7 and DASH-8 aircraft (deHavilland Aircraft of Canada); accident analysis including expert witness advice in court; design and manufacture (procurement) of test rigs for AN/SAR-8 Program including commissioning and project management (shipborne surveillance system for SPAR Aerospace); design, analysis and manufacture of vibration fixtures for ADATS components (Grantech); research & development of frangible towers for airport use; and design of containers & test equipment for ANIK-E Satellite.

- Transportation - Detail stress analysis of ORION I bus including field tests measurements - Ontario Bus Industries; and detail stress analysis of ORION II Bus - Ontario Bus Industries).

- Nuclear/Piping - Consulting services to review reports (Ontario Hydro), and detail analysis of piping system for a waste-re-cycling system (B & R Engineering).

- Robotics - Feasibility study and preliminary designs of a 5-axle router for cutting doors in airframe structures (deHavilland Aircraft of Canada).

- Heavy Industrial - Detail stress analysis of mine hoist and winch drums (John T Hepburn Co), and detail stress analysis of various press platens (John T Hepburn Co).

AVERAGE WORK FORCE: Professional Engineers - 6
Designers - 2
Others - 2

GROSS SALES: 1986 - \$500,000
1987 - \$800,000

PLANT SIZE: 2,000 Sq Ft (Office Space)

EQUIPMENT: Various Microcomputers including IBM's, Sperry 286, Televideo 386, CAD Workstation, and Plotter (E Size)

EXPERIENCE: CSI's present customers include various department of the Canadian Government, but most of their business is with the private sector. Customers include: SPAR Aerospace Ltd, The deHavilland Aircraft Company of Canada (Boeing of Canada), Fleet Industries, CAE Electronics Inc, John T Hepburn Ltd, Innotech Aviation Ltd, and Ontario Bus Industries.