

AVERAGE WORK FORCE: Engineers - 1
Finance - 1
Others - 2

GROSS SALES: 1986 - \$250K
1987 - 500K

Note: These figures represent consulting figures only.

PLANT SIZE: N/A

EQUIPMENT: Complete computer capabilities relative to consulting requirements.

EXPERIENCE: Present and past client list as follows:

- Government of Canada
- Dept of Regional & Industrial Expansion
- Connector Standardization Program
- BOSS Trade Shows
- NEI Ferranti Packard Electronics Ltd
- DGW Compar Connectors (Canada)
- RD Associates (Canada)
- Carma Industries (Canada)
- Numet Engineering (Canada)
- Inducon Design/Build Consultants and M/H Systems (Canada)
- IBM (Canada)
- Lakeview Publications (Canada)
- Andrew Antenna (Canada)
- Arrow Electronics Canada Ltd
- High Technology Shows (Canada)
- Matrix Science Corporation (USA)
- Struthers Dunn (USA)
- Oak Switches (USA)

A number of clients shown above are currently doing business with the Canadian Armed Forces, the USAF and the USN. We are actively positioning several clients in the military market and wish to do business with the USAF. Please note that our clients above have R&D capabilities and manufacturing capabilities and that information on their capabilities is available through our office.

KEYWORDS: Marketing; Business Planning; Quality Assurance Programs; Surveys; Analysis; Sourcing; Training; Audio Visuals; Presentations; Government Relations; Marketing Research; Consulting.

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CAD/CAM GRAPHICS Ltd

ADDRESS: 700 Industrial Avenue
Ottawa, Ontario, Canada
K1G 0Y9

CONTACT: Mr A H Jarvis, General Manager - (613) 526-0620

HISTORY: CAD/CAM Graphics Ltd is a small Canadian-owned high-technology company incorporated in Jan 1984. There are branches in Toronto (Markham & Mississauga) and Montreal, and the company is incorporated in the US as CAD/CAM Graphic Systems Inc.

CAPABILITY: CAD/CAM Graphics is an engineering design group specializing in computer aided graphics design and artwork generation for printed circuit boards and/or hybrid microcircuits. They also offer consulting services to assist clients in the development of design standards/criteria to suit their special needs. Their product services include: (1) Design from schematic to color-coded layout, (2) Digitizing of color-coded layouts for single, double or multilayered boards (prepared by either the customer or CAD/CAM), (3) Photoplotting of the following artwork masters - component and solderside, drill graphics, solder resist mask, silk screen and assembly, (4) Numerical control drill tapes to suit either Excellon or Digital Systems format, (5) Documentation packages and, (6) Prototype and production quantities of printed circuit boards.

AVERAGE WORK FORCE: Total - 20

GROSS SALES: 1986 - \$1.4M
1987 - \$1.8M

EQUIPMENT: The equipment presently in use at CAD/CAM is a CALMA GDS I Interactive Graphics System that consists of: (1) Data General Eclipse CPU, (2) Four 48x60 inch digitizing tables with dual 19x11 inch CRTs, (3) Color design/edit station with tablet and CRT, (4) CALCOMP 970 pen plotter (on-line), (5) GERBER 4432 Photoplotter (off-line), (6) Kodak film processing laboratory, and (7) Racal/Redac Color Maxi Auto Tracking equipment.

PLANT SIZE: 5,000 Sq Ft

EXPERIENCE: CAD/CAM has contract experience with various departments of the Canadian Government, including the Departments of National Defense and Transportation. Canadian industrial experience includes such companies as Northern Telecom, Bell Northern Research, Litton Systems, and AES Data Ltd. US industrial experience includes ITT Aerospace and IBM.

KEYWORDS: Circuit Layout; Microcircuits (Thick & Thin Film); PC Board Design & Fabrication; Software Services; Thick Film Hybrid Microcircuits; Thin Film Hybrid Microcircuits.

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CAE INDUSTRIES Ltd

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P. O. Box 1800
Saint Laurent, Quebec, Canada
H4L 4X4

CONTACT: Dr Murdoch McKinnon, Director, R&D - (514) 341-6780

HISTORY: The company was incorporated in 1947 as Canadian Aviation Electronics Ltd to engage principally in the repair and overhaul of electronics and electro-mechanical equipment and devices. The name was changed to CAE Industries Ltd in 1963 to more accurately reflect its expanding interests in many diverse fields of industry. Diversification and acquisition began in 1961 with the formation of CAE Electronics GmbH in West Germany. Other subsidiaries include CAE Electronics Ltd, Northwest Industries Ltd, CAE Fiberglass Products Division, CAE Aircraft Ltd, Canadian Bronze Company Ltd, Welmet Industries Ltd, CAE Machinery Ltd, CAE Webster Ltd, CAE Accurcast Ltd, CAE-Montupet Diecast Ltd, CAE Lubricators Division, Cleveland-CAE Metal Abrasive Ltd, USP Industries Inc, and CAE Magnesium Products Division. All are Canadian-based except the one subsidiary located in West Germany. This profile will concentrate on CAE Electronics Ltd.

CAPABILITY: CAE Electronics Ltd designs and manufactures sophisticated commercial and military aircraft flight simulators and airborne magnetic anomaly detection equipment. They have also become a major producer of computer-based data acquisition and control systems in the areas of electrical power generation and transmission, marine propulsion, air traffic control, and space.

In the simulator area, they are a leading designer and producer of flight simulators. They have produced the first FAA approved phase III commercial aircraft simulator for United Airlines. Their simulators include state-of-the-art technology such as hydrostatic six-degree-of-freedom motion, general purpose computers, and CRT-based instructor's facilities. They reproduce aircraft performance in all flight regimes and, in particular, the critical landing phase. Digital flight simulators have been developed for the A-300, A310, A320, B727, B737, B747, DC-8, DC-9, MD-80, DC-10, MD11, L1011, F-28, F-50, F-100, CL-600, and the new generation B757 and B767. A wide range of simulators has also been supplied to different countries for various types of military aircraft, including tactical jet fighters, jet trainers, antisubmarine patrol aircraft, transports and helicopters.

They selectively pursue the US military flight simulator market. CAE also designs and produces simulators for helicopters such as the Agusta AB-205 and AB-212, Bell UH-1D, Boeing-Vertol CH-47, Sikorsky CH-53, and Westland Sea King MK41. In addition to flight simulators, CAE Electronics produces training simulators for nuclear power plants. They are used to train operators to develop experience