

HISTORY: GEC Plessey Telecommunications, an established Canadian company for over 55 years, is a wholly owned subsidiary of the GEC Plessey Telecommunications of England. There are offices in Winnipeg, Toronto, New York, Los Angeles and Washington, DC.

CAPABILITY: GEC Plessey Telecommunications is involved in the engineering, manufacturing, distribution and installation of various telecommunication switching systems. They have supplied major local and toll switching systems for North American metropolitan areas, as well as smaller dial offices, PABX systems, and peripheral equipment. They have also supplied numerous American Air Force bases with video compression equipment used in Aircraft and missile surveillance.

AVERAGE WORK FORCE: Engineers - 17
Others - 66

GROSS SALES: 1986 - \$ 7.4M
1987 - \$10.6M
(Parent company has \$1.5B in Sales for 1987)

PLANT SIZE: 40,000 Sq Ft (Winnipeg Plant)

EQUIPMENT: The company has the following equipment available for use on projects:

- Laboratory Equipment: SWPT 6800 Computer Software System, Soroc Software Programming (Development) System, various mini and micro computer systems, CAD system, etc.
- Machinery Equipment: Ragen 750 Automatic Self Programmable PC Board Assembly System, Econopak 229 Automatic PC Board Soldering System, etc.
- Test Facilities: Environmental Chamber, adjustable from 0 to 70°C (32.0 - 158°F) for burn-in testing of various integrated circuits (PC boards).

EXPERIENCE: GEC Plessey Telecommunications is involved in the production of Automatic Number Identification (ANI) systems and 911 Emergency Reporting Systems for world-wide markets. The company is involved in the manufacture of single and double line telephone sets, video teleconferencing equipment, and smart IC cards.

KEYWORDS: Automatic Number Identification System; Communications; Emergency Reporting Systems; PABX Systems; Peripheral Equipment; Switching; Telecommunications; Telephone Communications.

REVISED: January 88

GEHRING RESEARCH CORPORATION

ADDRESS: 1200 Bay Street, Suite 502
Toronto, Ontario, Canada
M5R 2A5

CONTACT: Mr P H Barry MacLennan, PEng, President -
(416) 966-3139

HISTORY: Gehring Research Corporation is a Canadian-owned company pursuing applications for its proprietary three-dimensional audio technology. It was incorporated in April 1986. Mr Louis S "Bo" Gehring and Mr Barry MacLennan are the company's principals.

CAPABILITY: During its first year of operation, Gehring Research Corporation was involved in the general field of advanced cockpit displays and now concentrates its efforts on three-dimensional audio and its application to the aerospace/defence market. A machine which processes ordinary audio signals to make three-dimensional (binaural) sound is called an auditory localizer. Recent advances in digital signal processing technology and in Gehring Research's understanding of binaural audio and its utility now make it possible to produce artificial binaural sound indistinguishable from that heard naturally. In a fighter aircraft, today's pilot relies almost exclusively on his visual sense for information about his combat situation. An auditory localizer,

on the other hand, gives the pilot immediate awareness of the threats and opportunities in the combat environment by locating them in space as sound sources.

Gehring Research Corporation is committed to the development and marketing of a family of advanced fully-electronic auditory localization product to satisfy customer requirements for three-dimensional auditory localizer products.

AVERAGE WORK FORCE: Engineers - 1
Others - 2

GROSS SALES: 1986 - \$290K
1987 - \$350K (Est'd)

PLANT SIZE: 1,240 Sq Ft

EQUIPMENT: Gehring Research Corporation employs Sony PCM Digital Audio, Apple MacIntosh computers and a laserwriter.

EXPERIENCE: Gehring Research Corporation's customers include - Armstrong Aerospace Medical Research Laboratory, Visual Displays Branch, AAMRL/HEA, Wright-Patterson AFB, OH; Pilot's Associate Program, USAF, Wright-Patterson AFB, OH; and Litton Systems Canada Ltd, Display Systems Engineering Group, Rexdale, Ontario, Canada.

KEYWORDS: Auditory Localizer; Binaural Audio Generator; Spatial Audition Displays; Cockpit Displays (Audio).

REVISED: February 88

GENELCOM Ltd

ADDRESS: 90 Clayson Road
Weston, Ontario, Canada
M9M 2G7

CONTACT: Mr Brian Stal, Market Development Engineer -
(416) 741-1060

HISTORY: Genelcom Ltd, a subsidiary of GE Canada, was established in 1972. Key personnel at Genelcom have continuity of experience in repair and overhaul starting in 1953 when Canadian General Electric established a repair and overhaul facility to provide contractor support for ground radar systems and communication equipment. Over the years, the amount of field service work has reduced and the in-plant repair and overhaul business has grown, establishing Genelcom as a recognized expert in depot level maintenance.

CAPABILITY: Genelcom's capabilities in several areas are described below:

- Engineering - Genelcom has an engineering staff experienced in providing engineering support for repair and overhaul activities including design and development of system modifications, reliability engineering, failure analysis, and technical investigations.
- Repair and Overhaul - Genelcom performs repair and overhaul to electronic, communication, avionics, nav aids, radar, surveillance and interrogation equipment to NATO AQAP-1 quality standards.
- Manufacturing - Custom manufacturing and prototypes are provided to compliment the R&O operation. Modifications and enhancements to improve equipment operation includes manufacturing and replacement of circuit boards and components.
- Calibration Facility - Genelcom's calibration facility is equipped to perform repair and calibration to the required degree of accuracy on virtually all standard electronic test equipment and on an extensive range of specialized devices. Standards for time, frequency, voltage, etc., are traceable to the National Research Council and National Bureau of Standards. The calibration department staff is available for consul-