

KEYWORDS: Engine Test; Fuel Control; Systems Engineering; R&O (Engine Test Facilities); Ground Support Equipment; Field Service; Spare Parts; Facilities Design; Facilities Construction.

REVISED: January 88

M.E.L. DEFENCE SYSTEMS Ltd

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CONTACT: Mr Brian Metcalfe, Deputy Director, Corporate Business Development (613) 836-6860

HISTORY: M.E.L. Defense Systems Ltd is a wholly-owned subsidiary of Philips Canada Ltd, established in 1982 as a Canadian electronic warfare systems company.

CAPABILITY: M.E.L. Defense Systems specializes in the design, development, manufacture and integration of naval electronic warfare (EW) systems for Canadian and export markets. The company also provides contracted engineering consulting and program management services. In-house and contracted studies have been performed for the Department of National Defence on advanced land and air EW systems as well as naval EW systems. Capabilities include research and development, software design and development, and program generation and simulation activities. The M.E.L. Defence Systems' plant and CAD/CAM laboratory facilities are security cleared to SECRET level, as are all personnel associated with our military EW products. Manufacturing is to AQAP-1. As a member of the Philips Defence Control Systems Main Industry Group, M.E.L. Defence Systems has full access to the substantial research, engineering, production and marketing resources of the Philips Group of companies worldwide.

AVERAGE WORK FORCE: PhD - 6
Engineers - 50
Others - 84

GROSS SALES: 1986 - \$33.0M
1987 - \$34.0M

PLANT SIZE: 45,000 Sq Ft

EQUIPMENT: Secure electronics assembly, integration and testing facility, 600 sq ft of TEMPEST shielded environment for support of EW research and development, software development and program generation and simulation activities, and CAD/CAM microwave and digital laboratories supported by a central in-house DEC computer system tied to various VAX and micros.

EXPERIENCE: M.E.L. Defence Systems' principal customer is Canadian Department of National Defence.

KEYWORDS: ECM; Electronic Support Measures; Electronic Warfare; Program Management; Software Development; Systems Integration; TEMPEST.

REVISED: April 88

MENASCO AEROSPACE Ltd

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CONTACT: Mr Eric Eriksmoen, VP, Marketing - (416) 827-7777

HISTORY: Menasco is a wholly owned subsidiary of Colt Inc (US) and was organized in 1971.

CAPABILITY: Menasco designs, develops, test, and manufactures fixed-wing aircraft and helicopter landing gear systems. Also included in this capability are electro-hydraulic and hydro-mechanical systems related to primary and secondary flight controls; fly-by-wire electro-

hydraulic flight controls; ground steering, including steer-by-wire; aircraft hydraulic systems; variable wing and wing sweep actuation and machining of aircraft and helicopter components. They meet contractor and quality control standards as specified by FAA, DOT, MIL-Q-9858A, and AQAP-1. Physical and environmental testing is accomplished with, among other facilities, two drop test towers which can also measure landing gear shimmy and steering characteristics. Brochures available upon request.

AVERAGE WORK FORCE: Engineers - 45
Manufacturing - 262
Others - 193

GROSS SALES: 1986 - \$80M
1987 - \$84M

PLANT SIZE: 220,000 Sq Ft

EQUIPMENT: Complete physical and environmental testing laboratory for landing gear, flight controls and actuating devices, including facilities for vibration, structural, stress survey, fatigue testing, and full complement of NC equipment and a computerized production control system.

EXPERIENCE: Menasco Canada has produced equipment for the following manufacturers and aircraft - Boeing (727, 737, 757, CH-47, CH-46, V-22); Bell (YAH-63, XV-15); Canadair (CL-41, CL-84); deHavilland (DHC-4, DHC-5, DHC-7); Fairchild Republic (A-10); Fokker (F-28, Fokker 100); General Dynamics (F-111); Lockheed (C-141, C-5A,B); McDonnell Douglas (DC-10, KC-10, MD-80); Short Bros (SD3-30); and Sikorsky (CH-53). Program and facilities have been approved by major military prime contractors and government agencies in the US and Canada.

KEYWORDS: Airframe Components; Control Systems; Flight Control Actuation Systems; Ground Steering Systems; Hydraulics; Landing Gear Components; Landing Gears; Wing Actuation Systems.

REVISED: January 88

METRO MACHINING CORPORATION

ADDRESS: 7926 - 15e Avenue
Ville St-Michel, Quebec, Canada
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CONTACT: Mr Bernard Coursimault, President - (514) 374-0791

HISTORY: Metro Machining Corporation is a high technology CNC machining center founded in October 1973. The company is Canadian-owned.

CAPABILITY: Metro Machining Corporation is primarily involved in producing aluminum and titanium air frame components from small to medium size, using 3 to 5 axis equipment. The company also produces landing gear components, heat treated up to 300 PSI.

AVERAGE WORK FORCE: Management - 6
Others - 45

GROSS SALES: 1986 - \$1.5M
1987 - \$2.3M

PLANT SIZE: 17,000 Sq Ft

EQUIPMENT: Various CNC equipment, single and multi spindle up to 5 axis including programming system NCL No. 501 APT.

EXPERIENCE: Present customers include - McDonnell Douglas Canada Ltd, Heroux Inc., Canadair Ltd, and Bell Helicopter.

KEYWORDS: Machining; Airframe Components; Components (Airframe); Components (Landing Gear); Components (Aluminum); Components (Titanium).

REVISED: February 88