CONTACT: Dr David I Kennedy, President - (613) 591-0336

HISTORY: Optotek Ltd is a high technology company with no other divisions in Canada or the US. Optotek was incorporated in Oct 77 as a spin-off from Bowmar Canada Ltd, a Canadian subsidiary of Bowmar Instrument Corp.

CAPABILITY: Active – (1) Development and manufacture of LED materials and devices based on Group III-V and II-VI compounds, (2) design and manufacture of custom LED arrays for military and industrial applications, (3) design and manufacture of display-related electronic subsystems and test equipment, (4) design and manufacture of Gallium Arsenide monolithic microwave integrated circuits and (5) design and manufacture of infrared photodetector arrays (Cadmium Mercury Telluride).

Development – Current LED displays, both monochromatic and multicolor, range in resolution from 25 to 1000 lines-per-inch. Diversification activities will encompass gallium arsenide MMIC's and highspeed integrated circuit technology, as well as infrared photodetector technology based on cadmium mercury telluride.

AVERAGE WORK FORCE: PhDs ~ 2 Engineers ~ 10

GROSS SALES: No Data

PLANT SIZE: 37,000 Sq Ft

EQUIPMENT: Optotek has a full complement of semiconductor processing and test equipment.

EXPERIENCE: Optotek has experience with the USAF, USN and NASA. They are interested in continuing their business with the DOD and NASA. Past contracts have been in the LED materials, devices, and displays areas. Principal programs with the USAF have been the Multimode Matrix LED Display, the Video Flat-Panel LED Display, and the development of Multicolor LED Displays. The USN programs include manufacturing technology for advanced solid-state data annotation displays and a production program involving the RF-4 and P3 reconnaissance systems.

KEYWORDS: Cockpit Displays; Data Annotation Displays; Displays; Electronic Test Equipment; Flat Panel Displays; IR Dectors; Infrared Instrumentation; Integrated High Density LED Displays; LED Arrays; LED Materials; MMICs; Multicolor LED Displays; Printheads (LED); Semiconductors; Solid State Devices; Solid State Recording Heads.

REVISED: January 88

PAI-PUBLIC AFFAIRS INTERNATIONAL

ADDRESS: 55 Metcalfe St, Suite #1300 Ottawa, Ontario, Canada K1P 6L5

CONTACT: Lt Gen Donald C Mackenzie, CF (Ret), Senior Consultant (613) 238-4371

HISTORY: PAI was founded in 1973. The company is part of the Public Affairs Resource Group (PARG) and has three affiliates: Government Research Corp (GRC) in Washington, DC; Decima Research in Toronto, Ontario; and Public Affairs Communications Management (PACM) in Toronto, Ontario.

CAPABILITY: PAI is Canada's largest public policy and government relations consulting company with headquarters in Ottawa and affiliated offices across Canada in Toronto, Winnipeg, Calgary, Victoria, and Halifax. PAI's range of services includes: monitoring, analyzing and interpreting the entire range of government policies that affect companies operating in Canada and the US; strategic advice and issue management; establishing effective and ongoing government relations strategies for clients; and occasionally, direct representation.

PAI is also Canada's leading procurement consulting firm. In this regard PAI's staff provides clients with an unsurpassed expertise

while offering a full range of services to assist clients interested in accessing the multi-billion dollar government procurement market.

AVERAGE WORK FORCE: Professional Staff - 25 Research & Support - 10

GROSS SALES: 1986 - \$5.0M 1987 - \$6.0M

EQUIPMENT: PAI's equipment includes: complete in-house computer system including publishing capability, a large conference room, and office space available for clients.

EXPERIENCE: PAI's client list includes major corporations from virtually every industry sector – defense, financial, high tech, energy, transportation, agriculture, and manufacturing.

KEYWORDS: Consulting; Government Relations; Procurement Advice; Sales Representation.

REVISED: January 88

PARAMAX ELECTRONICS Inc.

ADDRESS: 6111 Royalmount Avenue Montreal, Quebec, Canada H4P 1K6

CONTACT: Mr Jack Henry, Director, Marketing - (514) 340-8310

HISTORY: Paramax Electronics Inc is a wholly-owned subsidiary of Unisys Corporation in Canada. The company was created following the granting by the Canadian Government of a \$2.6 billion contract to the St John Shipbuilding/Paramax team for the construction of six Canadian Patrol Frigates. Paramax's contract for design, integration, testing and installation of the combat systems and other electronics on the first six frigates is valued at \$1.25 billion. The company has also recently been awarded an additional contract for electronic systems work on a second group of six frigates. This contract, running to 1997, represents a further \$1.25 billion to Paramax. Paramax is also presently involved in contract proposals for systems integration work on up to 50 new shipboard helicopters for the Canadian Forces and for as many as 12 nuclear submarines.

CAPABILITY: Paramax is the business of electronic systems management. It is a disciplined systematic process which begins with the analysis of a complex requirement, examines alternatives, selects candidate approaches, synthesizes the best answer, and then implements the proper solution.

Paramax engineers have developed independent expertise in systems integration and management and are now pursuing new large-scale program management business involving work on other naval vessels or systems integration work for commercial ships, oil and gas platforms, and other civilian projects in Canada and abroad.

Training Canadian Navy crews is also one of Paramax's immediate responsibilities. The realistic physical environment created in the 16,000 sq ft Radio Frequency (RF) shielded room within the Combat System Test and Support Facility allows naval personnel to test and familiarize themselves in the use of the system over an extended period of time in life-size detailed mock-ups of the frigate's bridge, operations room and other ship's space.

The significant advantage of the land-based test concept is that the entire combat system, including the computer software, can be tested to its operational limits through simulation of realistic and repeatable combat scenarios prior to installation aboard ship. Similar testing is not feasible at sea, except in wartime, because of costs.

AVERAGE WORK FORCE: 700 specialists in electrical, electronic and mechanical engineering and computer sciences.

GROSS SALES: No Data

PLANT SIZE: 160,000 Sq Ft