ROBERTSON PHOTOGRAMMETRIC

ADDRESS: Edmonton Research & Development Park Research Center One 9411-20 Avenue Edmonton, Alberta, Canada T6N 1E5

CONTACT: Mr Gary Robertson, President - (403) 461-2974

HISTORY: Robertson Photogrammetrics Inc was incorporated in 1980.

CAPABILITY: RPI is the only company in Canada involved exclusively in the field of close-range photogrammetry. The company offers capabilities in research & development, consulting service, software, training programs, and manufacturing of close-range photogrammetric instrumentation.

Examples of some of the aerospace services provided by RPI are:

- · Analysis of flight testing provided for RPV
- Structural testing
- Measurements of prototype models
- · Quality control of assembly fixtures
- Sales of specialized close-range photogrammetric software for aerospace use
- Training programs for aerospace companies
- · Measurement of radar antenna and reflectors
- Consulting in specialized applications for aerospace use

RPI, working jointly with The Perkin-Elmer Corp, Applied Optics Operation, Garden Grove, CA, have developed an automated close-range photogrammetric instrument. The instrument is called PASS 2000 (Photogrammetric Automatic Scanning System).

The PASS 2000 system has been designed to provide a multi-role instrument for aerospace usage in high precision manufacturing and quality control. The system has the capability of measuring and analyzing any form of imagery.

Entire assembly tools can be photographed and target locations are automatically measured, to accuracies of less than .001 inches. This eliminates the use of manual measurements with a master tool gage. Photogrammetry has shown time savings of up to 400 hours per assembly tool.

The PASS 2000 has the capability to enhance and measure x-rays and ultrasound images. The PASS 2000 offers options which includes an automatic film transport unit that will automatically measure up to 8 rolls of cine theodolite data.

AVERAGE WORK FORCE: Engineers & Photogrammetrist – 3 Perkin-Elmer/A00 Facility – 8 Others – 3

GROSS SALES: No Data

PLANT SIZE: 4,000 Sq Ft (Research Facility in Edmonton) 4,200 Sq Ft (Perkin-Elmer/A00, Garden Grove, CA)

EQUIPMENT: The company operates Digital VAX computers, DEC PDP/11, 4 photogrammetric cameras, PASS 2000 System Image Processing Work Station, flatbed plotter, graphics terminals, and a PDS Microdensitometer.

EXPERIENCE: Currently 100% of aerospace sales have been to the US. The company is interested in working directly with the USAF in particular on joint R&D programs. RPI has undertaken projects for USAF prime contractors such as Northrop, General Dynamics, Martin Marietta and ITT.

KEYWORDS: Analysis (Test Data); Inspection Systems; Measurement Systems; Photogrammetry; Software Training; Structural Testing.

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ROCKWELL INTERNATIONAL OF CANADA Ltd (Collins Canada Division)

ADDRESS: 150 Bartley Drive Toronto, Ontario, Canada M4A 1C7

CONTACT: Mr R Zanette, Marketing Manager - (416) 757-1101

HISTORY: Collins Radio of Canada Ltd was formed in 1953 as a wholly owned subsidiary of Collins Radio Company of Cedar Rapids, Iowa. With the acquisition of Collins Radio by Rockwell International in 1973, it became a Division of Rockwell International of Canada.

CAPABILITY: The Collins Canada Division is engaged in the manufacture of radio communications products, systems designs and support activities. Principal products are HF Receivers and Transmitters, General Purpose VLF/LF/MF/HF Receiver, Miniature HF Single Channel Synthesized Receiver, HF Manpack Transceiver, 156 watt HF power amplifier/antenna coupler, preselector for an Extended Range Communications System, and Standard and Custom Transportable HF Communication Shelters. Products and systems are sold worldwide.

AVERAGE WORK FORCE: Engineers – 38 Technicians – 65 Others – 282

GROSS SALES: 1986 - \$51.0M 1987 - \$56.0M

PLANT SIZE: 122,000 Sq Ft

EQUIPMENT: Rockwell's facility is equipped for all types of electrical and mechanical assembly employing advanced techniques such as computerized wave soldering, auto insertion for ICs and axial lead components. Product quality is assured by intensive in-process and completed item inspection. Test equipment is maintained and calibrated on regular cycles. Calibration is traceable to the Canadian National and US National Bureau of Standards. Requirements of the Canadian Government DND 1015 and by reciprocal agreement, US MIL-Q-9858A for quality standards are met. A detachment of the Canadian Forces Technical Services Agency is resident at the facility.

EXPERIENCE: Since its inception as a manufacturing facility in 1955, Collins Canada has been providing UHF/HF equipment and systems to the Canadian Forces, the US military and a wide range of other countries. Current products are being supplied to all US Military Services, Canadian Forces and other countries. Products include equipment such as the HF-80 HF Transceivers, the HF-2050 HF Receiver, the S-1 HF Receiver, the AN/PRC-515 HF Packset, Collins 549-1 150-watt HF power amplifier/antenna coupler enhances the AN/PRC-515 capabilities, the F-1535 agile preselector is a rapid tuning bandpass filter designed for use with the AN/ARC-190(V), and communication centrals such as the AN/TSC-60(V)7 a 1-kW system, the AN/TSC-60(V)8 a dual 2.5-kW system and the AN/TSC-60(V)9 a dual 1-kW system.

KEYWORDS: Avionics; Communication Shelters; Communications; HF Airborne Communication Systems; HF Packset; HF Receivers; HF Transmitters; Support Activities; Systems Design.

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ROLLS-ROYCE (CANADA) Ltd

ADDRESS: 9500 Cote de Liesse Road P. O. Box 1000 Montreal AMF, Quebec, Canada H4Y 1B7

CONTACT: Mr D Bayly, Account Manager, US Military Programs - (514) 631-3541