

Gross Sales: 1979 – \$0.58M
1980 – \$0.50M
1981 – \$0.40M
1982 – \$0.50M
1983 – \$0.50M (Projected)

Plant Size: 7,000 sq ft

Equipment: Baron's equipment consists of Exorcisor II – Computer Development System 96K RAM, 1M Disc Capacity Development Module for 6800-6802 & 6801 Processors, PROM Programmer, and EPROM Programmer with Exorterm 150 console & Model 703 printer. They also have the usual assortments of oscilloscopes, VTVMs, spectrum analysers, temperature environment chambers, transmission test sets, etc., necessary for the design and development of advanced circuitry.

Experience: Baron is a recognized and accredited supplier of tone signalling equipment and systems (DTMF, in band, singleton, two tone simultaneous or sequential) to – Motorola, GE, Pacific Northwest Bell Telephone Co, Michigan Bell Telephone Co, General Telephone & Equipment, Getty Oil Company, ALASCOM, AT & T, US Army Corp of Engineers, and the RCMP. They are also in the final stages of development of a signalling system (designed for CRC Ottawa) which will provide selective calling on HF/SSB.

Keywords: 5 = Communications; 6 = Computers;
7 = Electronics; Microprocessors = 6, 7; Tone Signalling = 5, 7; Telephone Systems = 5; Microwave Systems = 5; Status Systems = 5; Alarm Systems = 5, 7; Telephone Interconnect Terminals = 5; Mobile Control Heads = 5; Based Tone Signalling = 5, 7.

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BARRINGER RESEARCH Ltd

Code: BRL

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History: Barringer Research was founded in 1961 to develop geophysical/geochemical techniques and instrument systems relating to mineral exploration. Barringer Resources Inc (formerly Barringer Research Inc) was incorporated under the laws of the State of Delaware on 7 Sep 67 for the purpose of acquiring all of the issued and outstanding voting stock of Barringer Research Ltd, an Ontario (Canada) corporation.

Capability: Barringer has undertaken research projects primarily in the earth sciences in the disciplines of geology, geochemistry, electro-optics electromagnetics, magnetism and atmospheric physics. As a result of such projects, they have developed instrument systems and techniques in the fields of airborne and ground mineral exploration and environmental and process monitoring. They have recently devoted a substantial portion of their efforts toward adapting for oil and gas exploration instrument systems and technology that they initially developed for mineral exploration. They continue developing new oil and gas exploration instrument systems and technology.

Barringer's research and development activities have led to the following systems:

The INPUT® (INDuced Pulse Transient) – This system was the original development of Barringer and is the only commercial airborne electromagnetic prospecting system to use a pulsed field principle. The system has been successful in its application in the search for mineral deposits. The success of the system was recently recognized by the Society of Exploration Geophysicists

which awarded Dr Anthony R Barringer the Kauffman Gold Medal of the Society for his contributions to the science and practice of geophysics via the INPUT system. According to the Society's statistical returns, 70% of all the world's commercial airborne electromagnetic surveys are carried out with the INPUT system.

COTRAN® (CORrelation of TRANsients) – This system uses a new approach to signal processing that can only be achieved by digital techniques. The airborne computer analysis of the data is believed to give the system substantial advantages in terms of sensitivity and interpretability. Only one COTRAN system exists at the present time, and is currently undergoing evaluation in surveys that are part testing and part operational.

TIVAC – This system is aimed at detection of hydrocarbon leakage over oil deposits by geophysical remote sensing methods.

Metal detection systems have also been developed by Barringer as a spin-off from its airborne geophysical equipment. A modification of the original design was used for traffic counting and tramp metal detection on conveyor belts. Subsequently, this patent has been used as a metal detector in walk-through systems installed in airports. It has also been used on conveyor belts to protect ore crushers from damage caused by ingesting pieces of metal that accidentally get mixed in with the ore. A new prototype system has functioned well and has demonstrated a significant advantage in that it can be programmed to ignore pieces of metal, such as the clips of conveyor belt seams, which give a signal that will usually trigger a false alarm. It is anticipated that there will be further development of the COTRAN principle, possibly using new microcomputer technology, allowing production costs to be reduced so that the system can be supplied to a number of new applications. This system may also be used for military range clearance.

A new product known as a Ratioing Radiometer is an optical device for measuring the reflectance ratios of pairs of wavelengths in the visible and infrared region. The instrument has application in identifying clay minerals for mapping purposes when exploring for mineralization and in the follow-up of targets of interest selected from satellite imagery and aerial photography, particularly with regard to the forthcoming US Landsat-D satellite and the French SPOT (Système Probatoire pour Observation Terrestre) satellite. Both of these satellites use infrared channels that generate new kinds of information that can be checked on the surface with the Radiometer. The first production run is in progress.

RESPEC II – A microprocessor-controlled field reflectance spectrometer was added to Barringer's product line in 1983. This product provides graphs and tables of commonly sought spectral quantities – reflectance vs wavelength, averages of spectra, difference of spectra, mean reflectance over variable wavelength ranges, and standard deviations in time and wavelength-averaged spectra.

Barringer has for many years been involved in the manufacturing of certain exploration instrumentation and monitoring equipment. An increase in their product line is planned. Towards this end, 13,000 sq ft of space have been added to their Toronto facility.

Another product of the company is its range of on-stream heavy water monitors for monitoring the heavy water content of flow streams in nuclear reactors. Barringer is a supplier for the CANDU, Canadian heavy water reactor, which has seen expanded use in Canada and other countries.

COSPEC® (CORrelation SPECtrometers) – These are the only commercial available remote sensing devices for