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History of Statitrol Corporation

Duane Pearsall
STATITROL CORPORATION was founded by Duane D. Pearsall with the help of a technician, to apply an old principle of high voltage ionization to control electro-static charges.

The product, assembled in the housing of a portable electric heater, generated an intense field of ions and distributed them with a fan for the purpose of controlling statics, particularly in film processing laboratories.

In an attempt to develop a greater ionization output, an instrument was developed to measure the concentration of ions and their rates of decay. As this instrument was being used, it was noted that the technician could seriously distort the readings by blowing cigarette smoke into the high voltage ionizer.

The excitement of this discovery was soon tempered when we discovered that a company in Switzerland had been using this principle in smoke detection since 1946. However, since our device used only 24 volts, instead of the 240 volts used by the Swiss manufacturer, a major fire alarm company encouraged Pearsall to continue development of a commercial smoke detector.

After 2 years, with weak sales of neutralizers, together with development of new and improved models, and further compounded by the high cost of development of a totally new principle of smoke detection, STATITROL CORPORATION was in financial trouble. The staff was reduced from approximately 10 to 3 people. The hopes of the company for survival hinged on securing a listing (or approval) by Underwriters Laboratories in order to successfully market the product in the fire alarm industry. Because of help and advice from members of the National Fire Protection Association (NFPA), and particularly because of assistance given by test engineers for Underwriters Laboratories, STATITROL CORPORATION was able to receive the first listing of a low-voltage, ionization smoke detector.
With this certification, and to avoid bankruptcy, STATITROL was able to secure financing through the sale of 52% of its stock to a midwestern manufacturer of pneumatic temperature controls.

Because the principle of detection was new, and product reliability was relatively uncertain, sales were not exciting. The company found it mandatory to invest heavily in further engineering development to make a more versatile detector. With subsequent borrowing from the major corporate investor, a new, more versatile model was listed with Underwriters Laboratories by 1966.

With this new product, STATITROL was able to interest a major fire alarm manufacturer to sign a three-year purchase contract for exclusive rights. At the same time, Pearsall was able to negotiate a $250,000 loan from a small business investment company (SBIC), purchasing back its 52% major stockholding, and granting warrants to the venture capital (SBIC) in the amount of 49% of its stock.

Competition in commercial smoke detectors, now referred to as "early warning" detectors, began to develop. Even STATITROL's exclusive customer was secretly developing its own detector, forcing further rapid development of still newer models to be available for other customers at the termination of its exclusive agreement.

The major breakthrough came in 1971 when an inventor/consultant to Statitrol developed a prototype battery-powered, low-cost detector, specifically for home use.

The first obstacle was that there were no standards in the fire alarm industry that would allow such a device, and therefore, Underwriters Laboratories had not developed test standards. The product was first introduced in 1971, without a listing or approval. With the help of a fire protection consultant, Pearsall approached the NFPA Committee on "Household Fire Alarm Systems". By 1972, the standards were changed, the product was first approved by Factory Mutual Research Corporation, and subsequently, by Underwriters Laboratories. In addition, STATITROL almost single-handedly convinced the Building Code authorities to recognize the need for early-warning home smoke detection. By 1974, 50% of the Building Codes in the U.S. required at least one such "early warning" smoke detector.
By 1975, major companies were introducing their own home smoke detectors and building public awareness with national television exposure.

During this period, STATITROL CORPORATION grew from sales of $850,000 in 1972 to over $10.0 million in fiscal year 1975. Employment also increased to over 500.

Industry sales in 1976 approached $200.0 million, and there were over 30 brand-named home smoke detectors on the market.

STATITROL now found itself faced with another crisis - how to compete with major corporations whose names were household words and who were manufacturing their products off-shore with low-cost labor and other tax advantages. To match production efficiencies would cost an estimated $3.5 million in automated capital equipment. National T.V. advertising to attempt to build a minimum image was estimated in excess of $1.0 million.

The normal alternative for a company who pioneered the field would be to go to the public market. Unfortunately, because of a weak stock market and particularly because of overly restrictive SEC regulations, and further because of the unintended effects of ERISA rules, STATITROL did not have this opportunity. The alternative for survival was sale to a major company. The merger of STATITROL with a large and well-managed corporation was accomplished in March, 1977.

In retrospect, one might conclude that STATITROL CORPORATION is a success story that had a happy ending. A deeper look, however, reflects a different and perhaps more ominous conclusion. That is, the development of STATITROL typifies innovative and growth-oriented companies which, for lack of alternative methods of financing their growth, are forced through the unintended effects of legislation - to become part of big business. In other words, the unintended effects of legislation force industry concentration.