BIEL 'S INFORMATION TECHNOLOGY SYSTEMS

A COMPANY HISTORY

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PREFACE

The history of microfilm and the micrographics industry is a unique story of chance, opportunity and circumstance. Having its roots in the parent field of photography, microfilm was realized by accident as the result of an experiment. This led to further attention to the concept of microphotography which eventually developed into its own science. With subsequent refinement in methods and equipment, and the emergence of applications for its use, the microfilm industry continued to mature, assuming its place as a natural element of the industrial revolution. A brief look at the history of photography and microphotography will help to illustrate some of the key developments as they occurred and how they led to the unfolding of the micrographics industry.

As these topics have been researched and the events uncovered which led to establishment of Biel's Information Technology Systems, various individuals have contributed invaluable assistance in conveying an accurate history of this company. I would like to thank Ray Kempner and Bud Nieman for their continuous assistance in providing dates, names and other important information relating to the company's key periods of growth and development. I would also like to thank Mrs. Kate Biel for her generous contribution of time and information relating to the early years of the company. In addition, I would like to thank Dennis Kempner and Joel Murphy for making available that information which was useful from the company's scrapbooks and archives.

It was in 1839, at the same time that the photographic metal plate known as the daguerreotype was being developed by the French scientist Louis Jacques Mande Daquerre, that William Talbot Fox was in England working on the negative - positive process using light sensitive paper. Although decidedly less popular at the time than the metal plate medium of his French counterpart, Talbot's idea of making a negative, then repeating the process resulting in a would eventually prove to be of far significance. That same year, another Englishman, John Benjamin Danzer, made the first microphotograph of a document while experimenting with lenses. He was unaware of the significance of this development, however, and it was not until twenty years later that Rene Dagron, a Frenchman, applied for and was awarded the first microphotography patent.² It was not long after this that useful applications for microfilm began to surface. When the German army surrounded Paris in 1870 during the Franco-Prussian War, carrier pigeons were used to take microfilmed messages beyond enemy lines. The messages were read by placing the film between glass plates and projecting them onto the wall of a darkened room. Eventually, such messages would be enlarged and printed onto sensitized sheets of paper, thus giving birth to the concept of V-

¹Naomi Rosenblum, A World History of Photography (New York: Abbeville Press Publishers, 1984), 15.

 $^{^2}$ Frank Henkel and Don Wells, "How Microfilm Began", The Office (May 1971): 57 - 58.

mail. As the methods of photography were developed and refined, it became increasingly feasible to make use of the opportunities that microfilm presented. One of the most pivotal developments contributing to the widespread use of microfilm came from an American chemist and amateur photographer. The innovation involved "stripping film", which meant that a gelatine emulsion was applied to a paper base and stripped after exposure. This not only enhanced the convenience of handling the film but also contributed to the improvement of image quality. This new process was patented in 1884 by its inventor, George Eastman, who would go on to successfully produce and distribute his product through the Eastman Kodak Company. As a result of his success, Mr. Eastman assured the future of microphotography, his stripped film providing the vehicle by which its application would be made practical.

Over the course of the next fifty years, as the science of photography advanced, so also did the field of microphotography. By the 1930's microfilm was an industry in its own right and was beginning to earn the attention of government and industry alike. Banks had enlisted the aid of microfilm by 1931 to photograph checks that had been processed. Other businesses followed suit, filming sales receipts and other important records to save space. By 1940, microfilm had taken hold to the extent that courts began

³Ralph De Sola, <u>Microfilming</u> (New York: Esential Books, 1944), 25.

⁴Ibid., 27.

to accept microfilmed records as admissible evidence. 5

It was against this backdrop, in 1938, that Ernest Biel arrived in the United States, with his wife Kate, to begin his own microfilm operation. Mr. and Mrs. Biel, both German Jews, were all but forced to leave their country which had recently come under the severely antisemitic rule of Hitler. Like so many other Europeans at the time, the Biels saw the promise of freedom and prosperity across the Atlantic in North America. It is no matter for debate, therefore, why they chose to come to the United States. But what is left for speculation is why the Biels chose Buffalo as the location for their new home and business. One of many arguments could be interjected to explain this, including the city's location in the prosperous northeast, its access to neighboring economies via Lake Erie and the Erie Canal or the potential business to be had from its growing number of retail and manufacturing enterprises. If any of these reasons were considered by Mr. Biel at the time, there was one overriding factor for his choice of Buffalo, that being money.

When the Biels left Germany in 1938, there was no time for anyone of Jewish background to worry about such matters as finances for their future in America or elsewhere. It was all they could do to escape Hitler's reach when they did and they were fortunate to get on one of the last boats out of the country. The amount of cash that they were permitted to take with them was limited to the sum of ten dollars, making New York or any other east coast city

 $^{^{5}}$ Henkel and Wells, 58.

cost prohibitive from the start. This was probably the main reason why they chose Buffalo as their new home. The city offered all of the benefits of being in the economically healthy northeast, without the restrictive expenses of the east coast.

Despite the cash restrictions that immigrants were forced to deal with, there were alternative measures, albeit difficult ones, that could be taken to get around this problem. This was possible because no limits, other than freight costs, were placed on the amount of material belongings that were allowed to leave the country. To this end, all of the equipment that would be initially required was purchased in Germany before the Biels' departure. This included cameras, film processors and dryers, enlargers and other such machinery. They also brought all of their personal belongings, many of which would have to be sold for cash upon their arrival in the United States.

There were many other, more subtle problems that made matters difficult for the Biels. Among these was the problem of voltage requirements for all of their equipment. European power standards were, and still are, based on 220 volts, while the United States has always operated on a 110 volt system. Thus, all of the equipment purchased in Germany for use in the United States had to be modified for operation on half of the power supply.

The magnitude of such a task as that with which the Biels were faced as formidable for most people even under the best of circumstances. But the Biels were not most people. Ernest Biel had always been known by those around him as a man of intense

fortitude. Once resolved to undertake any matter, regardless of how great or small the task, he would pursue it with an unrelenting determination that astonished his peers. Such perseverence, coupled with the promise of freedom that awaited the Biels across the Atlantic, provided all the motivation necessary for their successful journey to America.

And so it was, in 1938, that Ernest and Kate Biel were finally able to board a ship full of Jewish immigrants and leave their country forever. The voyage, to the recollection of Mrs. Biel, was an unpleasant one at best. Coupled with the miserable conditions on the ship which was overcrowded and able to provide only the bare necessities, was the apprehension and uncertainty of a people who had just been completely uprooted, ostracized and robbed of their very livelihood.⁶

The ship arrived in New York City in the spring of 1939 whereupon the Biels unloaded their belongings and arranged for their storage until they could find someplace to live. In order to raise badly needed cash, the Biels immediately began selling off personal property such as jewelry, binoculars, hand held cameras and other such valuables. They then boarded a bus headed west as they had no desire to live in the cost prohibitive environment of New York City which was still suffering from the effects of the Great Depression. Their bus trip took the Biels as far as Buffalo at which point they ran out of money, and had to get off. Thus it was Buffalo where they decided to make their new home

⁶Mrs. Kate Biel, interviewed by author, 17 July 1991.

and begin their life in America.

Biel's Photocopy Service, as the business was first called, began operating May 18, 1939 in the upper flat of a two story house at 699 Elmwood Avenue. Upon reaching Buffalo they were able to rent this space with the small amount of money they had remaining, supplemented by loans from relatives who were already in the country. In addition to this, they had all of their belongings, both household and business, that they had shipped from storage in New York City. Most important was their German made KONTOPHOT; a 35mm microfilm camera that would be used for all photographs in the first several years.

The equipment was set up in their flat, making the best of what little space they had. Before the equipment would be operable, Biel had to reduce the electrical requirements on all the equipment brought from Europe from 220 volts to 110. Another task with which Biel was faced was the setup of a film processing area. This would eventually be incorporated into the bathroom including the use of the bathtub for washing prints. After documents were filmed, the film was developed in a series of tanks, then dryed and stored. From this film, enlargements could then be made as desired. The development of these prints employed the use of a series of trays in which the prints were developed, fixed and washed. It was in this manner that documents were stored and reproduced from microfilm, a method from which Biel's Photocopy would derive much of its early business.

Among the Biel's first customers were the Buffalo Museum, the

Erie Co. Historical Society, newspapers and various retail stores. Through the use of microfilm, as described above, documents could be photographed and then enlarged or reduced in size when printed back to paper copies. In addition to the advantage of being able to reduce or enlarge the size of a print, it also offered the ability to make unlimited copies of the same document. One of the first services that Biel successfully provided was the filming of retail items for advertising purposes. Objects could be filmed capturing the finest details, and reproduced at relatively low cost to advertisers. Another service offered was to photograph newspaper ads and reproduce them for advertisers, or their competitors, who wished to keep copies of them.

Such techniques had not previously been available from a vendor who was dedicated solely to the production of microfilm. It was the fortune of timing that brought Mr. Biel into business just when the microfilm industry was so ripe for the market. Coupled with a great deal of effort and an acute business sense, these circumstances helped Biel's Photocopy Service to get off to a very good start.

Business climates and the economy will often thrive in times of war, and Biel's Photocopy Service was no exception to this rule during World War II. The need to have military and other government documents microfilmed and the new demand for V-mail contributed to the rapid expansion of the industry. Thus the United States Government sought to contract the services of the Biel's

⁷Mr. Lloyd Nieman, interviewed by author, 28 November 1990.

during the Second World War. "Under supervision of the Second Service Command, all employees, were checked and strangers were barred from the laboratories as secret documents, formulas, designs and plans were recorded on tiny rolls of film". It was only after the war that Biel had learned that some of the documents he had been microfilming were for work on the atomic bomb.

In addition to the government's need to have military and other documents microfilmed during World War II, there was the task of sending vast quantities of mail to servicemen abroad. V-mail was used for this purpose, a method by which letters were microfilmed so the less cumbersome film could be sent overseas. Upon arrival, the microfilm was then enlarged to prints of approximately 4X6 and distributed to addresses. The same method was repeated for return letters, the process greatly reducing the problem of shipping such huge quantities of mail.⁹

As a result of such war time microfilm applications, Biel's Photocopy, and the microfilm industry in general, emerged from the Second World War as a proven method for records management. The rotary microfilmer, introduced by the Recordak division of George Eastman's Kodak Co., provided a fast, efficient method for the filming of standard office records. Also introduced by Recordak was the Model C and Model D planetary cameras which were designed for the filming of larger documents such as newspapers, maps, and

⁹Mr. Lloyd Neiman, interviewed by author, 7 May 1991.

 $^{^8\}underline{\text{The Buffalo News}}$, "Pharmacists May Adopt War Baby," 11 August 1946 p. 12.

engineering drawings.

In addition to the rapid improvements that were being made in the photographic realm was the emergence of alternative methods for retrieving and viewing filmed documents. Machines were appearing that permitted the viewing of microfilm without the trouble and expense of producing a print, thus making the use of microfilm for regularly accessed documents expedient and sensible. Furthermore, different formats for microfilm, also known as microforms, were being perfected which gave the user still more options. In all of these areas of development, Biel's Photocopy played a significant role.

As business increased and diversified, the Biels found it necessary to purchase more equipment and implement new procedures to keep pace with the growth. By the end of World War II Biel's had outgrown the Elmwood Avenue flat and found it necessary to move into a larger space. In the fall of 1945, the operation was moved to the Hoelscher Building at 210 Franklin Street. Four large offices were occupied on the sixth floor which allowed space for the growing inventory of cameras and other equipment as well as necessary office space. In addition to the need for more space and equipment, it was also necessary at this time to acquire help. To meet this need, two employees were hired early in 1946 to assist with the workload. Their duties included photographing documents, processing film, making prints and other functions.

Operations continued to grow throughout the year and by late summer it was necessary to hire a career employee who could learn

the business and work into sales. Thus, in July of 1946, Lloyd 'Bud' Nieman was hired for this purpose. 10 As an employee for the next 18 years, and finally as co-owner of the company, Nieman would have a major impact on the company's success, its sales and marketing efforts and the overall direction that Biel's Microfilm would take over the course of the next forty years.

Prior to his arrival at Biel's, Nieman's experience had been primarily in farming and the military. As a youth he had worked on his father's farm in then rural Orchard Park, N. Y. and later, after graduating from high school in 1938, worked as a desk clerk at an agricultural cooperative which dealt in farming and related supplies. In 1941 Nieman joined the U.S. Army and, with the entry of the United States into the Second World War, was assigned to the European Theatre. There he saw considerable combat experience in five separate battles with the 26th Regiment Service Company of the 1st Infantry Division. He completed his term of service in 1945 and left the Army with the rank of Staff Seargent to return to civilian life. After a brief term of employment at the Weed and Company Hardware Store in Buffalo where he acquired some sales training, Mr. Nieman began what would turn into a prosperous career at Biel's Photocopy Service.

Among Nieman's first duties was the task of learning the technical aspects of producing microfilm. This included the photographing of documents, film processing, film enlargement and other functions. In the years immediately following Mr. Nieman's arrival, Biel acquired several items from Eastman Kodak's most

recent line of Recordak Microfilmers. These included an MRD camera which took still photographs and had the capability of using either 16mm or 35mm microfilm. This made it very useful for filming office records that were unable to be fed through a rotary camera. Also included was a Model C camera which, like the MRD, was able to handle 16mm and 35mm film. The Model C had the added advantage of being outfitted with a book cradle, providing the ability to film bound books page by page on an oscillating copyboard. The third item of major significance which the company acquired at this time was a Recordak Triplex camera. Known as a rotary microfilmer, this was one of the first machines capable of filming office records and smaller documents while in motion.¹⁰

Banks, government offices and other operations had started using these cameras at this time and the company's acquisition of these units put Biel's in a competitive position. These machines would enhance the company's efforts in terms of both volume and quality and make possible the further expansion of their customer base. It was to this end that Biel and Nieman would apply their efforts throughout the following decade, preparing for their role as main players in the rapidly growing field of micrographics.

Their ability to penetrate this new market would be aided by one very important element, that being the procurement of dealership rights from equipment manufacturers. This decision would prove to be extremely lucrative as a complementary business

Biel's Microfilm Corp. - Scrap Book Compiled by Ray Kempner, Dennis Kempner and Joel Murphy.

in that it enabled the sale of not only microfilm services, but also the equipment that was necessary to use the film. Typical items of resale were initially such units as readers for viewing microfilm, film processors, enlargers and printers from which hard copies could be reproduced and cameras in cases where companies and government offices chose to do their own filming. In addition, the resale of cameras and other equipment led to the establishment of supplies accounts for film, paper and other consumables which were necessary for daily microfilming operations.

With the rapid growth in business that the company was experiencing at this time, it became necessary to locate a larger facility. The company had added several employees by this time to operate cameras, process film and meet other production needs, and annual sales had reached approximately seventy-five thousand dollars. 11

In addition to the need for more lab space for microfilming operations, there was the need for a warehouse or holding facility where equipment could be received from manufacturers and stored until it was sold. Thus in July, 1950 Biel's relocated to the Ellicott Square Building in downtown Buffalo. The two top floors were occupied by Biel's where the company set up their offices and the lab space that would be required for microfilming operations, and the service elevator was used for transferring equipment for resale and other large machines that were brought into the building.

 $^{^{11}\}mathrm{Mr}.$ Joel Murphy, interviewed by author, 15 April 1994.

One of Biel's first equipment sales was the installation of a complete microfilm lab for Erie County, New York. The sale included cameras, processors, readers and all other items necessary to operate a microfilm system. This provided the county with the means to film, process, file and retrieve all of their records on a daily basis. The installation also established the supplies account for film, paper and other items which would be necessary. 12

The acquisition of dealership rights would continue to play a significant role in Biel's business activities, eventually consisting of approximately half of annual gross sales. An important factor in the company's ability to establish itself as a viable retailer of supplies and equipment was its participation in a national organization known as Microdealers. This body consisted of microfilm service bureaus and equipment dealers from all regions of the country whose purpose was to gain more favorable terms from equipment manufacturers. In addition, they were able to draw on one another for information, sales leads and other resources to which they would not have had access as individual dealers.

Also of importance in the decade of the 1950's was the company's development of new methods and procedures yet unknown to the industry. Among these was the development by Nieman of a microform known as microtak. This product was made by placing one or more documents on the copy board of a planetary camera and

¹²Mr. Lloyd Nieman, interviewed by author, 7 May 1991.

photographing them on 100 foot rolls of film. This microfilm was then duplicated onto 35mm photographic paper creating a positive image from the negative film. These print rolls were then laminated with a pressure sensitive adhesive while still in roll format. After this lamination was completed, the rolls were then cut into lengths of five frames and applied to a 5 x 8 card, two strips per card, then stored, as the final microform. The end result was an easy-to-use product, approximately the size of an index card, which could be labeled with the appropriate information and filed accordingly. This patented invention of Biel's would prove to be very profitable for vendor and customer alike.

This method was used to film registration cards for the New York State Department of Motor Vehicles. For this application, ten registration cards were filmed in each frame. With five frames per row and two rows on each microtak card, each one provided storage space for one hundred vehicle registrations, greatly reducing the need for storage space and virtually eliminating misfile problems. This turned out to be an extremely large contract which solved many problems for the Department of Motor Vehicles. Biel's would continue to provide this service to New York State for twenty-two years. 13

With the design and installation of such micrographics systems, supplies and equipment would play an increasingly important role. One of the first significant dealerships that

¹³ The Buffalo News, "Microfilm Process Aids Auto Bureau," 14 April 1956 p. 8.

Biel's would acquire was that of a "Q" dealership from Kodak. This not only provided them with the opportunity to retail cameras and supplies but other equipment as well. One of these machines was a Verifax copier. From 1952 to 1957 Biel's Photocopy and Microfilm Service's primary source of revenue would change drastically. Where previous to 1952 100% of their business had been generated from microfilm and photocopy services, by 1957 approximately 60% of the company's sales would be for equipment and supplies while photographic service revenues were, reduced to 40%. This was due in large part to Eastman Kodak's Verifax copier as well as other resale items.

Another dealership of significance during this period was that of 3M's micrographic products. Biel's would acquire the rights to retail 3M's complete line of equipment and supplies including the Filmsort 1000D and 2000D camera processors. These machines were designed to expose and develop film which was preset into the window of a 3" x 7"computer indexed card called an aperture card. This procedure had the advantage of eliminating several steps from the conventional process but was often unreliable and plagued with mechanical difficulty. Biel's also sold the 3M Filmac Reader/Printer among other items but their relationship with 3M would not last.

Biel had come a long way from his first day of operations as a result of many factors. One of these was his refusal to limit his alternatives in any aspect of his business operations. Unfortunately, however this seems to have been exactly what 3M

was asking him to do by demanding that he give up dealership rights for all other manufacturers and become an exclusive dealer of 3M products. The decision to do so at that time would have been most unwise. The micrographics industry was in a period of intense growth in which innovative technologies and new lines of equipment were emerging at an extremely rapid pace. Undoubtedly, Biel and Nieman recognized these circumstances and chose to forego their relationship with 3M in order to preserve their brokerage rights with all other manufacturers. Biel's Microfilm maintains the same dealership approach to this day carrying virtually every line of equipment including Minolta, Canon, Bell & Howell, Alos and many others.

As the industry grew, and new lines of equipment were being introduced, the company found itself in the agreeable position of being able to chose new items for resale as desired. Notable among these new units was one of the Filmsort 1000D, one of the first camera-processors. This machine had the ability to film documents, process and then mount the film into its final microform in one step. Another new item was the Polydex M35 Reader/Printer. This machine was used for reading and reproducing microfilm making dry silver prints in sizes of 8.5 x 11 or 18 x 24. Many other units were brokered by Biel's during this period, all dealerships acquired with the clear understanding that the company would not be limited to any one manufacturer's products.

As the industry and the company continued to grow, the Biels decided to turn their business over to the hands of a group of

employees and retire. In October, 1964, they sold the company to four employees, among them was Nieman. The National Micro-News, the official journal of the National Microfilm Association, recognized Biel upon his retirement as a pioneer in his field. "Ernest Biel, a pioneer in the field of microreproduction, a long time member of the National Microfilm Association, founder and proprieter of Biel's Photocopy and Microfilm Service in Buffalo, New York has announced his retirement." 14 Despite the seemingly insurmountable odds that Biel had to overcome to establish his business, he was extremely successful in virtually all aspects of his operations. He found a market, then new markets, for an all but unknown product. He successfully developed new methods and techniques (as did those around him) for creating his products, he used every resource at his disposal first to survive, then to prosper, and he always maintained a level of energy and optimism constantly motivating those who worked with him.

His wife Kate, now living in Kenmore, NY, was equally tenacious and resourceful. A photographic expert in her own right, she possessed all of the qualities that her husband would rely on through the existence of their business. In addition to her knowledge of photographic science, her diligence and loyalty was an invaluable asset to her husband and their company. It was she who had managed shop operations while Biel went out in search of customers. In addition, she handled all clerical duties and

The National Micro-News, "Ernest Biel Retires" (October, 1964): No. 72.

maintained an account of their finances. Overall, if Biel could have hand picked a business partner, regardless of their marriage, he could not have found a more helpful, unfailing person.

With the retirement of the Biels, the new group of owners would now look ahead to a long term strategy for the company. The new owners consisted of Ray Kempner, President and Business Manager; Lloyd S. Nieman, Vice President; Jack Loden, Sales Manager and Fred Madigan, Assistant Sales Manager and Secretary. Kempner was a businessman who had held the position of Vice President of Tool Mfg. Co. in Buffalo prior to coming to Biel's. He purchased the majority of the company's stock from Biel upon his retirement and became the major shareholder. Madigan and Loden had worked in sales for an engineering supply company in Buffalo called Wilder Photocopy before coming to Biel's in 1953. At Biel's, they worked in the sales department for approximately ten years before forming their partnership with Kempner and Nieman in 1964.

The new owners of Biel's would continue to offer the same basic microfilm and reproduction services that the company had been providing for the past twenty-five years. In addition to these services, there was the constantly growing market for equipment and supplies. The company was also well positioned to continue its involvement in this area and would continue to keep pace with the constant improvements that were being made with virtually all types of micrographic equipment.

In order to keep pace with the industry, Kempner and Nieman

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realized that a substantial amount of capital would be required. With the industry in a state of rapid growth as it was at the time, it was not unlikely that new lines of equipment would be introduced at any time. In order to maintain a competitive edge, cash would have to be readily available to purchase new items for resale and/or internal use if it was determined that they were worthy investments.

Another concern that was presenting itself to Kempner and Nieman was the unavoidable fact that the company would soon have to relocate to a more appropriate facility. The increasing volume of equipment and source documents that were being handled was rendering the use of an elevator inefficient and time-consuming. A single level building was needed in which all operations could be conducted on a ground floor. This would allow the use of a warehouse and loading dock for shipping and receiving and a service department which was now necessary for the installation and maintenance of equipment. The overall goal was to create an efficient, single level production facility in which the various departments and work stations would be located closer to one another with the necessary office space for handling administration and management tasks from an effective vantage point.

To this end, nearly two years were spent searching for an appropriate building. Since all possible sites would have required considerable alteration at major costs, it was decided that the most feasible approach was to construct a building that was designed exclusively for Biel's operation. After a lengthy search,

appropriate property in West Seneca was located approximately one quarter mile from a main highway and one mile from a New York State Thruway interchange.

It was during this time that the company was approached by Atlantic Microfilm corp. of Spring Valley, NY regarding the possible acquisition of Biel's. Atlantic, at the time, was one of the largest microfilm service companies in the country with branches in Cleveland, Winston-Salem, Chesterton, Indiana, San Leandro, Ca. and Houston, Tx. Kempner and Nieman, not too interested in being associated with Atlantic, continued finalizing plans for the new building. In mid-1969, however, the president of Atlantic informed Biel's that they were being acquired by Arcata National Corp. and that Arcata was also interested in acquiring Biel's.

Arcata National, located in Menlo Park, Ca., was a leading player in the information transfer industry. Its role was in the collection, organization, storage, retrieval, reproduction and distribution of information in the most economically useful forms. Arcata's various subsidiaries and divisions throughout the United States included J.W. Clement Company of Buffalo, the nation's second largest printer; Butler Data Systems, providing technical support data for the aircraft industry; Arcata Redwood Company, processor of redwood products and Arcata Investment Company, providing capital and management assistance to minority group entrepreneurs. By acquiring Atlantic Microfilm, Arcata emerged as a major factor in the micrographics industry by expanding its

information transfer capabilities. Becoming a part of Arcata was a most interesting possibility for Biel's.

After lengthy discussions and negotiations, Biel's agreed to terms that provided the framework for their acquisition by Arcata. The agreement provided that Biel's would initially operate as an autonomous subsidiary of Atlantic since it was felt that the retention of the Biel's name was most important to the company's continued growth. Biel's accordingly became "Biel's Division of Arcata National Corp." at the conclusion of the sale in September, 1969. 16

Arcata National had bought Biel's with the notion that the micrographics industry was substantially more lucrative than was actually the case. While it was true that the industry was in a state of growth and prosperity, however, it was not the type of business where extensive profits could be realized in a short period of time as had been the case, for example, in the electronics industry. Therefore, Arcata, perhaps disappointed with the micrographic industry's ability to produce high profits in a relatively short period of time (or possibly preoccupied with its other holdings), decided to withdraw from the industry and sold Biel's back to Kempner and Nieman in 1971.

Once again independent, Kempner and Nieman decided to realign their corporate structure. To achieve this goal, Dennis L. Kempner, son of Ray Kempner was named Vice President of Marketing and Joel W. Murphy was named Vice President of Operations. The

¹⁶ Ray Kempner, interviewed by author, 29 Oct. 1992.

activities of the new executives were to be coordinated by Nieman who would remain Senior Vice President.

Dennis Kempner was a graduate of Ripon College in Ripon Wisconsin and received an MBA from Washington University in St. Louis Mo. in 1973. After the completion of his graduate studies he joined Biel's in a sales capacity where he remained until being named to his new position one year later. His new responsibilities included the development of marketing strategies, the selection of areas of specialization and the integration of new systems into the company's sales efforts.

Murphy had worked for Biel's since 1963, shortly before the retirement of Ernest & Kate Biel. He was hired as a production assistant until 1968 when he was named Production Manager. His responsibilities were now to include the coordination of production planning and scheduling and the development and implementation of new systems for both internal and customer use.¹⁷

Over the course of the next several years Kempner and Murphy worked to take full advantage of the expanding micrographics market and the new systems that were frequently being developed. Kodak, 3M, Minolta, Canon and others were involved in fierce competition with one another, each introducing their own versions of newly developed and upgraded equipment.

One of these items, a central element to the industry, was a planetary microfilmer. While planetary filmers had been intro-

 $^{^{17}\}underline{\text{The}}$ Buffalo News; "Biel's Microfilm Corp Realigns Executive Setup," 15 july 1974 p.12

duced earlier, they were of limited capabilities compared to the new versions now appearing. Unlike rotary microfilmers which exposed documents while in motion, the planetary camera utilized the much higher quality concept of still photography. In this manner, documents were placed on a copy board and exposed while laying flat and motionless. One of the main advantages to this type of filming was simply a far superior quality image. The resolution that is captured from a still microphotograph is approximately fifty percent higher than that possible from a rotary camera. With the introduction of these new cameras, Biel's recognized the advantages to be obtained over its competitors with their use and wasted no time implementing them into filming operations.

On the negative side, however, was the unavoidable fact that these new cameras were significantly slower than their rotary counterparts as there is much less of a requirement for handling documents than with planetary filmers. Nonetheless, to the credit of the company as a whole, the slower but higher quality planetary cameras were chosen as the mainstay for source document filming while a few rotary filmers were kept for filming records which did not lend themselves to still photography.

Despite this speed difference, planetary cameras had many other advantages over their rotary counterparts. Among these was their ability to mark and number each photograph for recording and indexing purposes, a concept that would have a huge impact on the efficiency and feasibility of using microfilm as a method of

records management. Up to this point documents were filmed in a certain predetermined order and the first and last document on a given roll of film was indicated on the film's label. Since a roll of microfilm could hold as many as 3000 documents, the search time for an image on a roll could be extensive. With the introduction of image marking and numbering capabilities, however, each document could be given an address on its respective roll of microfilm, greatly enhancing the speed of retrieval.

In addition, these advancements opened up an entirely new set of marketing opportunities. When combined with certain new microfilm reader/printers which could count image marks, a document could be rapidly retrieved using the machine to search the film, even further enhancing the effectiveness of a microfilm system. This made it possible to film documents, even if in random order, and quickly retrieve them with no possibility of misfiled or lost records. Recognizing the implications that such a system would have for present and potential users of micrographic systems, Biel's quickly decided to market these systems which are widely and effectively used today.

Biel's continued to grow and keep pace with the fast occurring developments of the industry and by the early part of the 1980's Joel Murphy and Dennis Kempner expressed an interest in purchasing the company. Ray Kempner and Nieman, both ready to retire, decided to sell the company to their two executives. Shortly thereafter an agreement was reached under which Dennis Kempner was named President, Joel Murphy moved to the post of Senior Vice

President and Francis Ostrander became Vice President of Finance. Ray Kempner and Neiman retained offices at the company's West Seneca facility and subsequently assumed rolls of consulting and advisement.

At this time Murphy and Kempner decided that they were ready to expand their geographical territory in order to more effectively service their regional customers. The area most in need of additional support was the company's client base to the west. Under Nieman and Ray Kempner, Biel's had expanded its sales territory into Western Pennsylvania and had developed a substantial customer base in Erie Pa. and the surrounding area. Up to this point, records were transported approximately 100 miles from Erie to Buffalo to be microfilmed after which the finished product was shipped back to the customer, all at considerable expense.

It was realized that a service facility in the Erie area would be beneficial in eliminating the shipping of records and microfilm, in presenting a local image to the western territory and to provide a base for sales and technical support. As it happened, the fortune of good timing was with Biel's. Robert Herrod had been in the microfilm business in Erie since 1949 and had built a substantial customer base himself. His company, known as Erie Microfilm Systems, had been established in Erie and he had already expanded to Buffalo where EMS and Biel's had been engaged in fierce competition for many years. This competition also took place in

¹⁸The Courrier Express, "New Chief Named at Biel's Microfilm". 22 Oct. 1984 p. 6.

Erie with Biel's having moved into that territory and it was realized that a merging of the two company's resources would be mutually beneficial.

EMS was staffed with roughly 15 employees and had annual sales of approximately \$100,000. Herrod had been approached by other parties who were interested in purchasing his company but had turned them down for various reasons. When Murphy and Kempner approached him with an offer to purchase his company, however, he was very interested. The two parties reached an agreement that included EMS's Erie and Buffalo facilities and the deal was made. Erie Microfilm Systems' Erie, Pa. facility was to become Biel's Microfilm's Erie Branch while their Buffalo facility would be closed. The employees of the Erie operation were hired by Biel's and Herrod was to remain in charge of the Erie facility as Branch Manager. This completed the transfer with virtually no disruption of business, the creation of a combined customer base and a trained staff of employees who were already familiar with the requirements of their customers.

In addition to the acquisition of EMS's Erie facility, Biel's had also set up a smaller branch operation in Rochester, New York. This facility was established primarily to serve as a sales office but also served the important function of film processing for many customers, mostly banks, in that area. In addition to the processing accounts, a few cameras were installed to handle a limited filming requirement. Thus the Rochester branch was set up to handle the company's eastern customer base in much the same way

as the Erie operation was to the west.

Not limited to the services of source document microfilming and the sale of equipment and supplies, Biel's was also outfitted with a complete COM (Computer Output Microfilm) operation and a complete service department. Computer Output Microfilm was a relatively new technology in the early part of the 1980's in which information was transferred from magnetic tape directly to microfilm, eliminating the need for the paper copy.

The Service Department was responsible for an entire array of maintenance and repair functions. This included the installation of equipment, whether individual units or complete systems which were sold to customers, service and technical support for these systems and maintenance of the company's internal machinery. In addition to these functions, there were other service related duties such as building repairs, sales support and other tasks. Overall, Biel's had evolved into a full scale, self-sufficient microfilm service bureau.

The company continued to enjoy a successful and expanding operation for most of the 1980's which, for a number of reasons, was a very prosperous period. The technology of automated retrieval with the use of image marks and frame numbers was now widely used and Biel's was the regions principal supplier for these systems, handling units from Minolta, Canon and other leading manufacturers. Furthermore, COM operations were growing in volume and profitability as were virtually all other facets of business.

Also during this period, a new and exciting technology was

introduced to the information management scene which would provide vast opportunities to a dynamic company like Biel's. Known as optical imaging, this innovation promised to revolutionize the field of information management. It involved the transfer of information by digitizing documents through the use of a scanning device and storing the information on optical disks, magnetic tape or other electronic media. There are many benefits associated with optical imaging that are unavailable with the use of conventional microfilm. One advantage is the ability for multiple users to access the same document simultaneously from different locations. Other benefits include very fast retrieval time, the ability to manipulate information and an even greater reduction space than that allowed by microfilm.¹⁹

It was also recognized that optical technologies could be used as a powerful alternative to conventional micrographic systems or in conjunction with them, as microfilm is one of many sources which can be scanned and digitized. Given the seemingly unlimited possibilities presented by this development, Kempner and Murphy realized that it was of paramount importance to gear their company to be competitive in this field as it evolved. With this in mind, they turned their attention to the celebration of Biel's 50th anniversary which would take place in 1989.

Unfortunately, however, this celebration would be abruptly interrupted. In April, 1989 disaster struck in the middle of the

¹⁹ West Seneca Bee, "Business Booming at Biel's; Celebrating
50th Anniversary," 30 March 1989 p.10

night during third shift operations when a gas valve failed in a suspended heater which was located in the corner of the main filming area. This caused a fire which spread rapidly throughout the building, completely gutting the entire production area, service department and the COM room.²⁰

Fortunately, no employees were injured as everyone vacated the premises in an orderly manner but the devastation that resulted from the fire was seemingly insurmountable. All equipment was ruined either by the fire or from smoke damage, production offices had been incinerated, film was obliterated and most damaging of all, the documents of all customers who had jobs in house at the time were destroyed. The magnitude of such a tragedy was extremely difficult to comprehend when one considers the damage that occurred in a single night to an entity that was built in fifty years. To the credit of everyone involved, however, it was determination rather than exasperation that would prevail.

Kempner and Murphy immediately set to the task, in conjunction with their sales force, of contacting all customers affected by the blaze to notify them of the extent of their damage. In addition, temporary offices were set up near the original location, at 609 Indian Church Road, and the difficult and painstaking task was undertaken of sorting through the damage. It was most fortunate that a fire wall had separated the administrative offices from the production facility, sparing most of the financial,

 $^{^{20}\}underline{\text{The Buffalo News}}$, "Biel's Officials Unable to Asses Damage," 26 April 1989 p. 8

accounting and other records that would be essential to the reconstruction of the business. In addition, sufficient insurance coverage was in effect to compensate for the revenue that would be lost during reconstruction and to provide the capital required to reinvest in new equipment and supplies.

After the long and difficult process of sorting through all of the administrative details and reconstructing what was once their prosperous company, key personnel who were retained during the interim period were able put enough of the pieces together to carry on with the business. A very significant factor that would contribute to this effort was the assistance provided by many sister companies across the country. Calls came in from a number of service bureaus offering to donate equipment, supplies and other items that would be necessary to carry on. These offers were graciously accepted in some cases, a major contributor being Allied Microfilm Systems from Akron, Ohio. The father and son team at Allied, Sam, and Mike Zulia, had been long time friends to Biel's and were most willing to lend their assistance.

Thus a larger temporary facility was acquired with adequate space for all facets of production and administration at 210 French Road, approximately two miles from the company's permanent location, where operations once again resumed. Although slow at first, it was not long before Kempner and Murphy had the company in full stride and it was time to address the matter of rebuilding their West Seneca facility.

²¹Dennis L. Kempner "To All Customers", 26 April 1989.

Financing for the rebuilding would come partly from New York State's Erie County Industrial Development Agency which approved \$1 million in bond financing in late July, 1989. 22 Other sources that would be drawn on to finance the project would include insurance settlements, bank loans and various assets owned by the company. In 1970, when the building was constructed, Ray Kempner and Nieman had the foresight to set the structure on a foundation that would allow for the addition of ample space if future growth deemed this necessary. While the original building occupied approximately twelve thousand square foot of total production and office space, the foundation was extended to allow for an additional 5,000 square feet. Being that the substructure was not affected by the fire, Kempner and Murphy decided to take advantage of the situation and construct a larger building to accommodate the company's growing space requirements. In addition, the new structure would be outfitted with many features that the earlier building did not have.

One of the most important of these improvements would be the addition of two large fire-proof, climate controlled vaults for the storage of microfilm, and customers' documents. One vault would be used strictly for records storage, guaranteeing the safety of all documents while on the premises for microfilming. The second vault would be used for the storage of microfilm, providing a

 $^{^{22} \}underline{\text{The Buffalo News}}$ "New Biel's HQ Set on Old Site," 24 Oct. 1989 p. 17

secure facility for customers to store copies of their microfilm while creating an additional source of revenue for the company.

Other features of the new building included a complete security system, an improved COM facility, a completely modernized film processing operation, an improved source document filming department, a separate and secured area for filming military and other government spec. jobs and expanded sales offices with a most impressive equipment demonstration area. In all respects the new building was designed to accommodate the company's existing operations while facilitating its entry into the new technologies that lay in store.

With the new building now complete, the company moved into its modern facility and began preparations for an open house to be followed by a vigorous agenda of continued growth. Customers were invited into the new plant with the re-opening of their West Seneca location and the facility's many features were showcased.

Having settled into their new home, Kempner and Murphy started planning for the expansion of their sales territory into Ontario, Canada, that market being very promising. In addition, the digital technologies that had presented themselves before the fire were again incorporated into the company's long term planning and steps were taken that would lead to active involvement in this area. The company decided to shift its sales effort to include optical technologies while demonstration units were purchased and sales and

West Seneca Bee, "Company Survives Fire; Looks to Become Bigger," 14 June 1990 p. 6.

service personnel were given extensive training on the installation, operation and maintenance of these systems.

Furthermore, the conventional micrographic operations that the company was founded on were in full stride and the advancements that had been made here were extensive as well. Microfilm was being used in conjunction with computer systems to implement extremely fast automated retrieval systems that only a decade ago would have been unthinkable. New cameras had been introduced that combined the speed of rotary filming with the image quality of planetary cameras and source document filming had reached a new level of efficiency and practicality.

Film processing techniques were also in a period of advancement. Biel's, still unwilling to limit its options for sources of equipment and supplies, reached an agreement with Fuji to retail their film and processing. The Japanese based firm had recently made huge advancements in the processing and manufacturing of silver halide film. Biel's, not insensitive to the concept of "buy American", did not hesitate to retail Fuji products being that the Japanese based firm had recently opened emulsion coating operations in the United States. The overriding factor, however, was simply the superiority in quality of Fuji over its competitors.

Biel's, being the oldest Microfilm Service Bureau still operating in the United States, was chosen as the testing ground for many of Fuji's new products and procedures. The company's new processing facility provided the stable, controlled environment that would be required for the proper testing and analysis of these

advancements. Fuji, in turn, provided extensive support for Biel's overall processing operations.

Looking to the future, it was decided that the name Biel's Microfilm Corp. was no longer adequate in its description of the company. While Biel's is still primarily a microfilm service services, the word 'microfilm' in the company's name failed to indicate the many other areas of information management into which the company was planning to move. Therefore the name was officially changed in January, 1994 to Biel's Information Technology Systems. The new title is less restrictive in that it points to the general range of technological alternatives which are available.

With the establishment of Biel's new image and marketing strategies, the task remains for the company to move into the future and prove its abilities in new technologies. While a long time power in the field of conventional micrographics, the company's status as a leader in the information management industry is no longer as certain as it once was. In addition to the conventional services that Biel's has always provided with confidence, there is the added dimension of electronic imaging. It is here where Biel's faces its biggest challenge. Not only will there will be a rather extensive learning period in which all of the technical elements must be mastered, but more importantly, there is the task of finding the niche in the marketplace where these new services can be applied in a manner that is profitable.

This will require the sale of systems that not only work with digital technology, but also with the conventional microfilm which many customers have accumulated in the past. The degree of success with which Biel's meets this challenge will determine the company's status as a leader in information management, or something less, as it enters the 21st century.

BIBLIOGRAPHY

NEWSPAPERS AND PERIODICALS

Buffalo News. 11 August 1946; 14 April 1956; 15 July 1974; 26 April 1989; 24 October 1989.

Courrier Express. 22 October 1984.

National Micronews. October 1964 (72).

The Office. May 1971.

West Seneca Bee. 30 March 1989; 14 June 1990.

INTERVIEWS

Mrs. Kate Biel, interview by author, 17 July 1991.

Mr. Ray Kempner, interview by author, 29 October 1992.

Mr. Joel Murphy, interview by author, 15 April, 1994.

Mr. Lloyd Nieman, interview by author, 28 November 1990, 7 May, 1991.

PUBLISHED WORKS

DeSola, Ralph. Microfilming. New York: Essential Books, 1944.

Rosenblaum, Naomi. A World History of Photography. New York: Abbeville Press Publishers, 1984.

UNPUBLISHED WORKS

Biel's Scrap Book. Compiled by R. Kempner, D. Kempner and J. Murphy.

Letter. Dennis Kempner, "To All Customers". 26 April, 1989.