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Russel Kirkhof: Mechanic to Millionaire

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**Russel Kirkhof
Mechanic to Millionaire**

a biography
by
Reid Holland
and
Gordon Olson

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Introduction

This is not a story of a Rockefeller or a Carnegie. It is the biography of Russel Kirkhof, a "simple mechanic and electrician," who worked hard, became a millionaire, and in October 1978 gave \$1,000,000 to Grand Valley State Colleges.

The gift attracted a great deal of media attention, both for its size and because Kirkhof was a school dropout. In recognition of his gift, one of Grand Valley's four component colleges was named Kirkhof College in his honor.

Kirkhof never sought public attention or recognition, but he was proud of his name. Because he didn't have children, it meant a great deal to him that the college would remember him and preserve his good name. At the press conference announcing the largest gift in Grand Valley's history, one of the television newscasters asked Kirkhof how he felt about having a college named after him. His answer revealed a certain humility, but at the same time a delightful sense of humor. He responded: "Who? Me? A Dutch boy with only a seventh-grade education?" And then after a short pause, he added, "It didn't make me mad."

During the past five years, as dean of Kirkhof College, one of my responsibilities has been to represent the Kirkhof name. A part of that responsibility has been to remember the man, Russel Kirkhof, and to tell his story. This brief history carries out that task.

Kirkhof College existed for five years as one of the four federated colleges of Grand Valley State Colleges. Then, in 1983, as a result of financial retrenchment and shifting enrollment patterns, the Board of Control of Grand Valley State Colleges found it necessary to consolidate the four units--the College of Arts and Sciences, William James College, Seidman College of Business and Kirkhof College--into a single institution. Although they eliminated Grand Valley's

federated structure, college officials did not want to eliminate the use of the Kirkhof name. They took several steps to continue the recognition of their most important benefactor. One of the busiest buildings on campus--the Campus Center--is now known as the Kirkhof Center, and is the site for conferences, seminars and student activities. In addition, the college's very successful undergraduate and graduate nursing program has been renamed the Kirkhof School of Nursing.

Kirkhof's home that he loved so much will continue to be known as Kirkhof House and be used by the college as a meeting place and planning center. Funds from the Kirkhof Endowment will be used to maintain the house and to support special enrichment activities in the School of Nursing and in the Division of Science and Mathematics.

I am grateful to Reid Holland, former assistant dean of Kirkhof College, for organizing Russel Kirkhof's papers and preparing the first draft of this biography. Gordon Olson, the City Historian for Grand Rapids, completed the project and brought it to publication.

Those of us who have worked on this project believe that Russel Kirkhof's story should be remembered; we hope that it will inspire others to make their own contribution to their community in their own way. If Kirkhof had lived to read this record, I trust that his response would have been: "Well, it didn't make me mad."

P. Douglas Kindschi
Dean of Science and Mathematics
Grand Valley State College

Acknowledgements

Seldom is a piece of writing the product of only one person's work. As authors of this biography of Russel Kirkhof, we can genuinely say this book was the result of the efforts of many generous and thoughtful people.

The Russel Kirkhof College Endowment Committee, and in particular, Kirkhof College Dean P. Douglas Kindschi, have supported this project from the beginning stages of arranging Mr. Kirkhof's papers to the final editing and printing.

Two special assistants also provided invaluable insight and research throughout the project. Sherry Schouw, a 1977 graduate of Grand Valley Kirkhof College and President of the Grandville Historical Commission, conducted family and photographic research as well as numerous interviews with relatives and friends of Mr. Kirkhof. Michael Bacon, literature teacher at East Kentwood High School, was responsible for cleaning and arranging Mr. Kirkhof's records and for providing many insightful judgments about Kirkhof.

The editing and design of this book are the work of Ellen Arlinsky, Marg Ed Conn Kwapil and Barbara McGuirl of Editorial Consultants of Grand Rapids. They revised the manuscript and searched through hundreds of photographs to find those that best illustrate the Kirkhof story. It is their work that has made this an attractive and readable book that captures much of Kirkhof's personality as well as the events of his life.

A special thank you is due to the many people who were interviewed for this project: Russel Kirkhof, Mrs. Kathryn Kirkhof, Randall Dekker, William Carrigan, John Scherff, Dietrich Roth, Robert Hofman and Irwin Tiejema. Carrigan, Scherff and Tiejema also read drafts of the manuscript

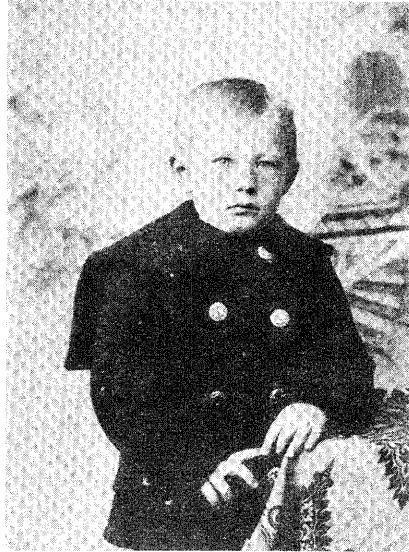
and offered valuable suggestions and corrections.

Pat Haynes and Ruth Ann Stone patiently typed and retyped the manuscript, often meeting tight deadlines with little advance notice. We are grateful for their help and good humor.

The people acknowledged above have done their best to make this biography accurate and free from error. Mistakes of judgment or fact that persist must, of course, remain the responsibility of the authors.

Reid A. Holland
Gordon L. Olson

“Just a Mechanic”



Photographer's portrait of five-year-old Russel Kirkhof, taken just after the turn of the century. (All photos are from the Russel H. Kirkhof Collection, Grand Valley State College, unless otherwise noted.)

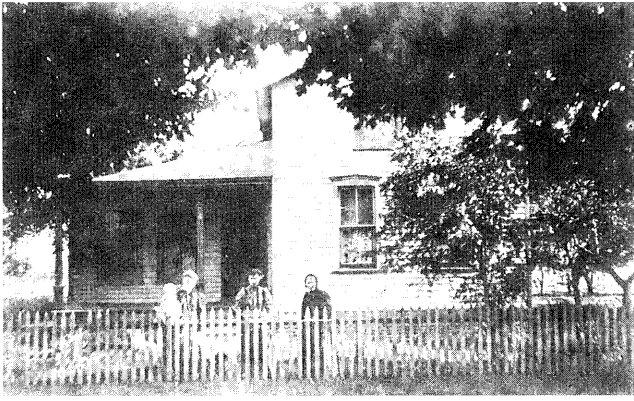
A propensity for hard work, a talent for invention and a good head for business cast Russel Kirkhof as the leading player in a Horatio Alger-style success story. The school dropout who later gave a million dollars to Grand Valley State College began his career as an errand boy. Crediting his success to a combination of "hard work," taking advantage of the "opportunities as we found them" and "just plain luck," the self-described "dummy who couldn't spell cat" built a one-man electrical shop into a multimillion-dollar enterprise.

From self-taught electrician to self-made millionaire, Russel Kirkhof's story is the story of the American dream: the virtues of talent, hard work and personal determination rewarded by well-deserved success.

Yet Kirkhof's story is not very different from that of many other American businessmen. He built his business without fanfare, supplying machinery for American industry and jobs for as many as 200 Grand Rapids workers at one time. Still, he was relatively unknown, even in Grand Rapids where he spent most of his working life. It was not until near the end of his life, when he made a significant gift of part of his accumulated wealth, that Kirkhof set himself apart from most of his contemporaries and made his name and achievements a matter of public knowledge.

Despite his wealth he lived modestly--immensely proud of his success, but happiest when he was working with his hands, tinkering with new gadgets and inventions or puttering in his garden. And, near the end of his life, he continued to subscribe to the values that had guided him from the beginning: "Be honest, keep your word, have a good reputation. That means more than anything else."

Those were his father's standards and he learned them as a boy when he was caught in a lie. Sent with a dime to buy three, three-cent cream puffs, he spent the penny's worth of change on candy and told his mother that the price of the cream puffs was three for ten cents. His father, when informed, promptly marched young Russel to the



(Above) The Kirkhof homestead in Holland, Michigan. Alice Kirkhof is on the left, holding John. (Right) The Kirkhof brothers, John, Russel and William.



grocery store for a more accurate account of the transaction. Vivid memories of the incident, the subsequent lecture about honesty and his father's statement that "you always get caught" remained with Kirkhof all his life. "That one lesson," he said, at the age of 83, "was certainly worth a million dollars."

The great grandson of immigrants from The Netherlands, Russel Kirkhof was the product of a traditional Dutch upbringing. His great grandfather, Frederick VanLente, was born in Zwolle, Overijssel, The Netherlands, in 1801. A cooper by trade, Frederick was also a song leader in the local church and even traveled briefly with a carnival show before his marriage to Maria Horning in 1823. More than 20 years later, the couple and their seven children joined the tide of immigration to the United States, arriving in 1847 in the Kolonie, the Dutch immigrant settlement founded that year in Holland, Michigan.

VanLente, who made barrel staves and pine shingles for the pioneers of western Michigan, became the "voorzinger," or leader of congregational singing, in the Pilgrim Church of Holland. Under his leadership, the VanLente Choir was organized and gained a notable reputation.

Four years after the VanLentes settled in Michigan, daughter Roelofjen (Ruth) married Jan (John) Marinus Kerkhoff. An only son,

orphaned at a young age, Jan, like his in-laws, had emigrated from The Netherlands to the Kolonie.

After their marriage, John and Ruth began homesteading a 20-acre plot outside the city of Holland. John was a successful farmer especially interested in fruit trees and horticulture, and Ruth was known locally as a gifted "needlewoman" and nurse. John and Ruth were members of Nederlands Hervormd, the Dutch Reformed Church, and John was superintendent of the Sunday school.

Like other Dutch immigrants, John and Ruth typically Americanized their first names although they -- and their descendants -- continued the Dutch tradition of naming children after grandparents. The first son was named after the father's father, the first daughter after the father's mother, the second son after the mother's father and so on.

Surnames were also Americanized. The Kirkhof family name was originally spelled K-e-r-k-h-o-f-f and comes from the Dutch word kerkhof meaning churchyard. The spelling of the name changed over three generations, from Jan Kerkhoff (grandfather) to Cornelius Kerkhof (father) and finally to Russel Kirkhof.

Traditional spellings were further confused when a grade school teacher with two Russells in class asked Kirkhof if he

would drop the second "l" from his name. In the 1960s Russel also occasionally used an "H" as a middle initial, but no middle name is noted on his birth records.

Russel Kirkhof's father, Cornelius, born in 1869, was the youngest son of Ruth VanLente and John Kerkhoff. A tanner at the Cappon and Bartsch Leather Company near Black Lake (Lake Macatawa), he also worked as a farmer. Alice Smit, Russel's mother, was the daughter of an Olive Township farm family. Like so many young Dutch farm daughters of the time, she contributed to the family income by working as a domestic in Grand Rapids until her marriage to Cornelius in 1890.

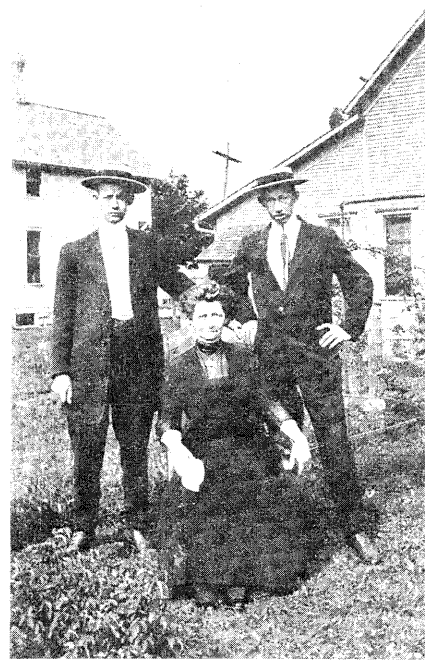
Alice and Cornelius had six children -- three of whom died in infancy. The three surviving brothers -- John (1892-1912), William (1894-1968) and Russel (1896-1979) -- and their parents lived at 60 East 16th Street in Holland.

When Cornelius died of tuberculosis in 1907 at the age of 38, his widow and sons were faced with the necessity of supporting themselves. For a while, John and William worked as shoecutters at the Cappon and Bartsch Leather Company. But John suffered from tuberculosis, and sometime between 1908 and 1910, the family accepted travel aid from their church to send Alice and John to Arizona, where they hoped he would fully recover. William and Russel remained in Holland with their father's sister, Johanna Kerkhof Oosting. Alice and John returned a few months later, and the reunited family moved to Grand Rapids, where Russel attended school.

"I didn't like school," he later said. "I wanted to monkey with my hands."

What he also wanted was to be an electrician. A year or so before his father's death, young Russel watched, intrigued, as an electrician wired the Kirkhof home. "I can still see him standing there putting in the switch," Kirkhof recalled in an interview more than 70 years later. "I talked to him and asked questions and I made up my mind then I wanted to be an electrician."

Kirkhof liked to say that he left his Grand Rapids elementary school and went to work as a 13-year-old dropout from the seventh grade. According to city directory information, however, the Kirkhof family did not arrive in Grand Rapids until 1910. So it is quite likely that Russel was at least 14 or 15 and in the ninth grade when he left school to take his first job as a \$5-a-week errand boy



Alice Kirkhof with William (left) and Russel.

at the Lewis Electrical Company of Grand Rapids.

Fascinated by the new world of electricity and endowed with considerable mechanical skill, the teen-aged Kirkhof set about learning the electrical trade. Some of it he learned from books and some from correspondence courses taken over the years, but mostly, he said, he learned by doing. He even practiced at home, using his new skills to turn the family house at 959 Scribner into a "modern electric home."

One of his jobs at Lewis was to help Edward Baldwin, an electrician, install and repair telephones. After Baldwin left Lewis to work for the Edison Dictating Machine Company of Cincinnati, Ohio, he remembered the quality of the young man's work and recommended that Russel be offered a job as a repairman. Russel accepted immediately.

Thomas Edison was by that time an American hero, and what young boy would not want to work under the Edison banner? But while the opportunity to expand his electrical skills and to work for an Edison affiliate were attractive to young Kirkhof, he seemed most attracted to his new salary --\$15 a week -- which he later observed was "a hell of a lot of money at that time."

A shy teenager, away from home for the first time, he arrived in Cincinnati on a

"Made by
Edison---
Installed by
Barnes"

The Edison Dictating Machine

Edwin C. Barnes & Bros.

The Edison Building, 72 West Adams Street
Randolph 6732



Thomas A. Edison
Dictating Machine
Telescribe
Transophone

Chicago Sept. 15th, 1915.

Mr. Russell Kerkhof,
959 Scribner Ave.,
Grand Rapids, Michigan.

Dear Sir:-

If you are not not employed I would be pleased to have you consider the following proposal.

I can use a good man for a combination position to help with the care of stock, filling orders, inside repairs and outside repairs. The position may only be a temporary one, or it may develop into a pretty good permanent position. We cannot tell just now so we are not in a position to make any definite promises.

If you have nothing else just at the present time we would be pleased to have you try it out. The salary will be at the rate of \$15.00 per week while the position lasts with all kinds of opportunity for advancement if the position proves permanent.

You can arrange to start in next Monday morning, September 20th if you are free to accept this kind of a proposition but I would thank you for a letter by return mail as to whether we are to expect you at that time or not.

Very truly yours,

EDWIN C. BARNES & BROS.

MRS

This letter invited Russel Kirkhof to work for the Edison Dictating Machine Company.

Sunday. Nobody met him at the station, so he walked until he saw a sign that said "Rooms." The \$4 price was right, but bedbugs shared the room, and Edison's newest repairman reported to work the next morning with his suitcase in hand and his body covered with bug bites. A coworker mentioned a spare room where he lived and Russel moved in that night, to cleaner lodgings over a saloon.

While he was employed by the company, Russel had several opportunities to meet Thomas Edison, who made it a practice to visit all his affiliates once or twice a year. Many years later, Kirkhof recounted his first meeting with the Wizard of Menlo Park:

"My first job [at the Edison Company] was to put up some steel shelving, unwrap stock and pile it on shelves. I did that. I'm naturally neat and I like everything lined up. Mr. Edison came in on a visit, noticed the shelves and said 'Who did that?' When they said 'Russel,' he said, 'I'd like to talk to that young man.'

"He complimented me on how neat it was, and I said it was just natural. Some people like to sing. Some people like to draw. Some people like to bake. I'm just a mechanic."

As an Edison company repairman, Kirkhof made service calls to factories and businesses throughout Cincinnati, adjusting the dictating machines so that the sound, which was recorded on a wax cylinder, reproduced properly and played back clearly. He also set the shavers which erased the sound by removing a thin layer of wax so that the cylinders could be reused. The trick, according to Kirkhof, was to "set them so they shaved just enough. That way the cylinder would last a good long time."

He did the same kind of work after he transferred in 1915 to another Edison company in Chicago. He lived at the YMCA, made service calls all over the city and devoted much of his leisure time to photography. He often sent pictures of the city to his mother and brother Bill in Grand Rapids (John, his oldest brother, died in 1912). Despite his self-professed inability to spell "cat," he wrote home faithfully and often, filling his letters with the everyday details of his life -- from trips to the dentist and the price of an insurance premium to a description of a "big box of eats" he had gotten from Aunt Hana.

Like so many other young men at the time, Russel's life was interrupted by World War I. His experience during the war,



(Left) Russel Kirkhof in Cincinnati, decked out in his best suit. (Below) Kirkhof posed for this formal portrait while working in Chicago.



however, served as training for his postwar career. Russel joined the army in 1917 and after basic training in North Carolina was shipped to France. Well away from the front lines, he did electrical and general repair work on army airplanes and, as he reported in a letter to his mother, gained so much weight that "I had to turn in one of my uniforms because I couldn't get it on."

In 1919, still in France, he was assigned to a special project for the army's technical library: making working models of the army airplanes that had fought in the war. The models were to be sent back to the United States and exhibited. "I certainly enjoy work of this character," he wrote to his mother, "and we are spending all our time there."

During his off-duty hours, in order to earn extra money, Russel set up a darkroom on the army base and developed photographs for his comrades to send home to families and sweethearts. He left France with nearly \$1,000 in his pocket, and when his ship docked he spent almost all of it on the "most

expensive camera in New York City." He remained a photography buff throughout his life.

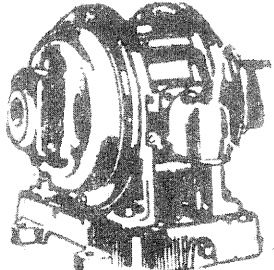
When Russel Kirkhof received his army discharge, he was just another doughboy returning from overseas. But with the war over, the use of electrical power in businesses, industries and homes was rapidly being transformed from a novelty to a necessity. The young man with a grade-school education, an interest in electricity and an aptitude for "monkeying with his hands" would find his skills in considerable demand.



Russel Kirkhof as a doughboy.

Electricity: A Young Man's Opportunity

Grand Rapids Press, March 6, 1929.



**Telling
the World**
of our resources to serve well in electric wiring and motors is the object of these little ads which we hope are attractive enough to carry their message.

LEWIS ELECTRIC CO.
THE MOTOR FIRM
15-17 IONIA AVENUE, N. W. PHONE 4384.

It was at the Lewis Electric Company that Russel Kirkhof first developed his electrician's skills.

After leaving the army, Kirkhof returned to Chicago where he continued to work for Edison, servicing and repairing various types of electrical and mechanical equipment and, by his own recollection many years later, getting into the business of making fountains. He made a fountain, in fact, for the Marshall Field department store, and found himself at odds with the store's management when it did not work as planned. Although he was intrigued by fountains and the effects that could be created by water pressure, Kirkhof correctly saw that electricity offered the best prospects for his future.

On a visit to Grand Rapids to see his mother, who had remarried in 1917, Kirkhof called on his former employer, Guy D. Lewis, and came away with a job offer which he promptly accepted. He took a room at the YMCA and went to work -- not as the errand boy he once was, but as one of Lewis' top mechanics.

In those days, according to Kirkhof, Lewis was the biggest electrical contractor in Grand Rapids, with a crew of 40 to 50 men, a motor shop, a repair shop and a long list of industrial wiring accounts. Lewis had established his company in 1906, and by the time he hired Kirkhof as a mechanic, electricity had become a national growth industry.

Of all the technological advances of the 20th century, none had a greater impact on American lifestyles than electricity. When World War I began, electrical power and lighting were changing the American landscape. Electric street railways speeded the tempo of American life, linking outlying areas to the cities and moving workers to their jobs quickly and cheaply.

Perhaps the greatest change took place in American homes. Technology had developed a variety of new uses for electricity and the war had shown countless young men -- Russel

Electric power use grew rapidly in the early 1900s.



From *The Power Back of Consumers and Its Securities*, 1920.

Kirkhof among them -- its potential. All that remained was to turn on the switch.

The new electric age glowed with bright lights as gas and kerosene lamps went the way of the horse-drawn trolley. Postwar American homes hummed with the whirr of appliances as small electric motors ran everything from stoves and refrigerators to lamps, fans, mixers, vacuum cleaners, hand tools, phonographs and radios.

Utility companies could not put power lines up quickly enough, and manufacturers were unable to keep up with the demand for electrical appliances. In the decade between the end of World War I and the beginning of the Depression, millions of American homes were electrified, and the appetite for electrical power was still growing. By 1930, only remote rural areas were without electricity.

As one of Lewis' electricians during the early 1920s, Kirkhof made the rounds of factories and offices, servicing and repairing all kinds of electrical machines, from doctors' and dentists' equipment and office dictating machines to the linotypes and press molders at the city's three newspapers. He considered himself a "specialist," and after a time he decided he was worth more than the dollar an hour Lewis was paying him. Lewis, he said, agreed, but told him that "this is a union shop and I can't pay you any more because if I do I have to pay all my men more. What I advise you to do is go in business for yourself. I'll help you get started."

Lewis admired the young man not only for his ability, but for his "being fastidious," wrote Lewis' daughter, Caroline Lewis Clapperton, in a letter to Kirkhof in 1978. Kirkhof himself recalled that after he left Lewis, his former employer would tell Russel's regular service customers that "Russel's gone into business for himself." Then, according to Kirkhof, "he gave them my number and told them to call me."

Years later, after Lewis had either sold or retired from his business, Kirkhof returned the favor. Aging and ailing, Lewis wanted to feel useful and was determined, his daughter later said, not to become dependent on his family. Kirkhof gave him a job, and because Lewis tired easily, fixed him up with a little office where he could privately enjoy an afternoon nap.

Kirkhof opened his own electrical shop in 1925, he later said, and the Grand Rapids city directory for 1926 does include a listing for "Russel Kirkhof, electrician," but no business address. According to a piece of stationery, however, found among Kirkhof's papers, his first shop was at 27 S. Division, and its proprietor specialized in "electrical equipment for doctors and dentists, small motors, appliances and radio service." He had no employees at the time and it is likely that the shop was quite small, probably space rented from another business on the premises. But he did have steady customers, including the Grand Rapids Press and the Herald, who had followed him from Lewis.

In 1926, on Christmas Eve, the 30-year-old Russel married Ethel Elizabeth Wernette, a young woman of French and German ancestry who had spent most of her childhood years in Caledonia, Michigan. Ethel graduated from Grand Rapids South High School in 1915, and after teaching in Ada a short while, took a job at Consumers Power Company, where she and Russel later met and where she continued working as a clerk until 1931.

Ethel, along with Russel's friends and family, regarded Russel as a serious worker, and, in truth, business was seldom out of his mind. He worried when he was not constantly busy. In a tongue-in-cheek letter to Ethel just before their marriage, he lamented a temporary work lull at his little one-man shop: "The vast rooms of machinery shut down, men stand idle at their benches, profits cease, and all is quiet in the mighty

firm of Kirkhof, Kirkhof, Kirkhof and Kirkhof." His letters were usually filled with news of customers, jobs completed and new jobs to be done. "I get my enjoyment out of working," was a statement he often made.

Kirkhof's new business prospered, and its founder, like many Americans with a little extra cash, began speculating on the stock market. Buying on margin with only 10 percent down and hoping for quick returns, he bought widely, spending hours, he recalled, watching the stock quotation boards at a local brokerage house. He kept careful track of the prices he paid for each stock and the date and amount of sale. Later, he said that the Chrysler stock he purchased at \$16 a share was sold just one month later for \$32 a share. He also told of one instance where he watched a stock double its value weekly until it was worth eight times its purchase price in just three weeks.

Kirkhof said years afterward that in the four years before the crash of 1929 he sometimes made "a couple of thousand dollars a day on margin," and estimated that he may have had as much as \$150,000 tied up in stocks -- "all paper profits," as he later pointed out. Prudently, though, when he made money on the sale of a stock, he took some of the profit out of the market and put it in the bank. Despite the sizable losses he suffered when the market crashed in 1929, he had about \$30,000 in cash on hand. Keeping a promise he had made to Ethel at the time of their marriage, he used the money to build a new home in Cascade. Ready for them in late 1933, the house at 3120 Orchard Drive was one of only a very few homes built locally during the early Depression years.

In the few years that Kirkhof had been in business for himself, he had done well. Technological advances in the electrical industry, which boomed despite the Depression, presented the opportunity for him to do even better.

Before 1920, electric motors were powered at 30 cycles per second, a frequency which caused lights to flicker, radios to hum and the motors themselves to run unevenly. During the 1920s, innovations and improvements made it possible to run motors at 60 cycles per second, and electric companies began converting their equipment to the higher, more efficient frequency. Consumers Power Company was ready to make the changeover in Grand Rapids, Muskegon and 45 other western Michigan

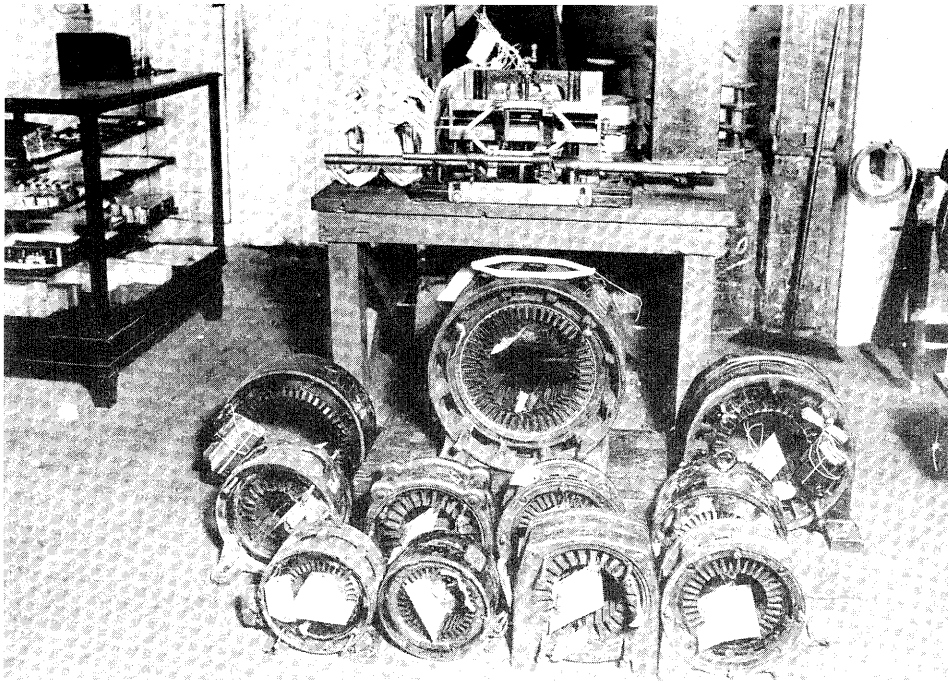


(Top) Ethel Kirkhof at about the time she and Russel met. (Above) The house at 3120 Orchard (now Brentwood) Dr. built by the Kirkhofs in 1933.

communities just at the time of the Depression, in 1929.

The utility company advised its customers that the change from 30 cycles to 60 cycles would improve household lighting, eliminate annoying radio hum and mean customer savings in the form of lower rates. The changeover would be accomplished, moreover, at no charge to the customer and with minimal disruptions in service.

Consumers Power also assured customers that most of their small household appliances -- electric coffee pots, heating pads, toasters, water heaters, stoves, curling irons



Stripped electrical motors in Kirkhof's shop, ready for new coils to be installed.

and flatirons --would not be affected by the higher electrical frequency and would run just as "satisfactorily and economically" as they had before. However, larger motors -- generally those of one-sixth horsepower or more -- would have to be rewound to run at the higher frequency. Rewinding involved stripping all the old wires from inside the motor and replacing them with new ones arranged in a different configuration. In instances where rewinding wasn't feasible, the motor would be replaced.

When the project began, Consumers Power estimated that the citywide frequency conversion would be completed in 1933. Later, that estimate was revised, and completion was scheduled for 1934. In fact, it was closer to 1937 before the changeover was complete.

The job of managing the conversion in Grand Rapids went to Allied Engineers, a subsidiary of Commonwealth and Southern Corporation. Consumers Power itself was also a subsidiary of that same large utilities holding company.

Allied sent two representatives to Grand Rapids to supervise the changeover: Edgar B. Clement, who was in charge of the project, and Harlow Crooks, an engineer and graduate of Ohio Northern University.

In order to avoid service disruptions, Allied divided the city into two- or three-block target sectors, and the changeover was made in one sector at a time, usually in a single day. In the morning the current was

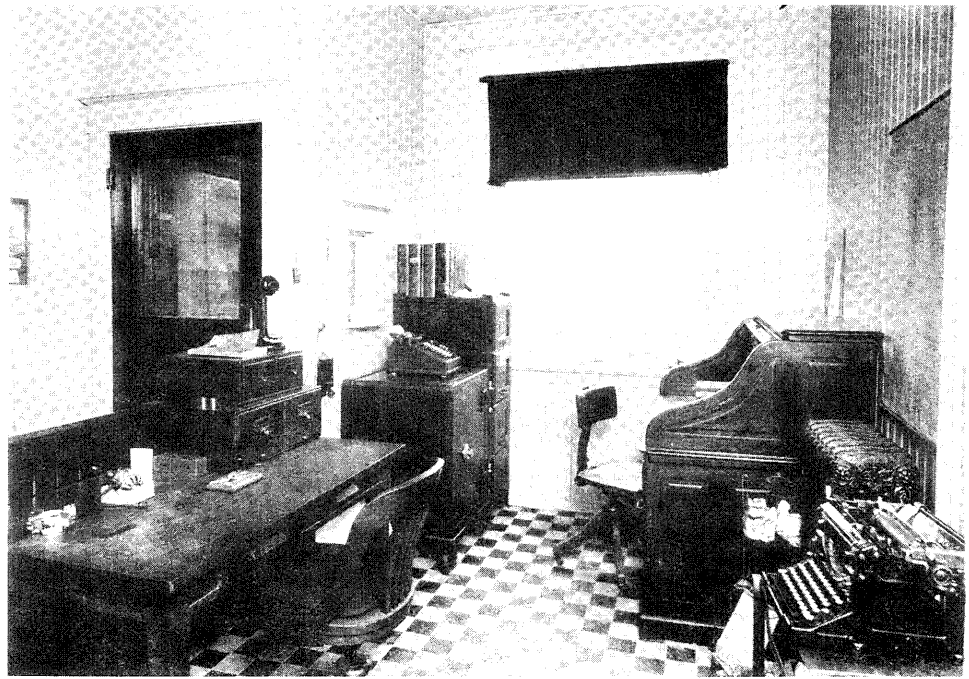
turned off. Then, by nightfall, after 60-cycle equipment replaced 30-cycle motors wherever necessary, the higher frequency was switched on.

During the seven years it took for the changeover to be completed, tens of thousands of 30-cycle motors had to be stripped and rewound to be compatible with the higher frequency. Consumers Power electricians did the work on larger industrial motors of one horsepower or more; Russel Kirkhof landed the contract to rewind the small motors on such household appliances as washing machines and refrigerators.

In 1929, possibly as a result of the Consumers Power contract, he had moved his shop from 27 S. Division to 45 S. Division across the street. His city directory listing changed that year, too -- from "Russel Kirkhof, electrician" to the "Kirkhof Electrical Company." Two years later, the Kirkhof Electrical Company moved to larger quarters at 344 Commerce to accommodate the growing volume of business, and Ethel Kirkhof left her job at Consumers Power to work for Russel as his office assistant. No longer able to keep up with all the work himself, Kirkhof started hiring workers, eventually increasing his payroll to 30 men.

One of those new workers was Irwin Tiejema who, as a junior high school dropout and a talented electrician, had a lot in common with his employer. Tiejema began at Kirkhof Electrical in 1932 as a part-time, summer employee hired specifically to

*Kirkhof's office in the shop at
344 Commerce St.*



rewind the 30-cycle motors. He remained a Kirkhof employee until his retirement in 1983, and says he never received a paycheck that did not bear the Kirkhof name.

Tiejema remembers that Kirkhof purchased a large supply of the more common types of household motors and rewound them for the 60-cycle frequency. Then, when 30-cycle motors were removed from homes in each target sector, 60-cycle replacements were ready for immediate installation. The removed motors would then be rewound at the shop and later used in other residences.

Kirkhof recalled that the rented building where the rewinding was done had two stories and a basement. "In the basement we stripped the motors and took all the old wire out. On the second floor we wound them and on the first floor we assembled them." He charged from \$4 to \$8 a motor, depending on the size, and he often picked up 500 to 600 motors at a time from a target area.

The tedious job of keeping track of each motor and billing for the work called for close attention to detail as well as accurate record keeping. In the beginning, Kirkhof paid his workers by the day. But, he said, "a day's work wouldn't turn out a day's work," and he began paying by the piece. That wasn't satisfactory either, he claimed, because the men "would try and gyp me with sloppy work." A meticulous worker himself, Kirkhof complained that his employees were taking short cuts, causing motors that should

"go for ten years to burn out in a year" and have to be returned to the shop for repairs.

Finally Kirkhof arrived at a solution. Each man was given an identifying number to be stamped on every motor he rewound. Faulty motors were returned to the man who originally rewound them and, said Kirkhof, "he'd have to make do. He'd have to pay for the materials I put in it in the first place, too. They learned . . . after a couple of times."

Kirkhof carefully monitored every detail of his business operation. A methodical man, he wrote everything down in a daily diary. He had begun keeping a diary when he worked for the Edison company in Cincinnati, recording his carfare and assorted expenses in a little black book. He kept a diary when he went to war, too, noting such items as "the time on the boat, where we landed in France, who the captain was, your first payday, how much you drew, . . . just the facts."

As his Grand Rapids business grew, he recorded other facts -- his expenses, the types of motors rewired, the cost of a part or the wage paid to an employee. These daily jottings were the habit of a lifetime. "I kept a record of every penny I spent for years and years," he said. "If I spent five cents for a paper I kept a record."

For several years, Ethel took her husband's diaries and typed the information onto sheets that were kept in huge blue ledgers. But even when the typed versions

were finished, Russel insisted on keeping his bulky, scribbled notes -- just in case. Well into the 1960s, when his business had become an international enterprise with a department full of accountants, Kirkhof was still recording the facts and figures into his daily diary.

The diaries seldom revealed anything of a personal nature. Said Kirkhof, "I just wrote the facts in my diary -- how much I made, when and how." Kirkhof's facts were what he considered the elements of a successful business. They were the measure of his achievement.

The Consumers Power contract kept the Kirkhof Electrical Company busy throughout the Depression and laid the groundwork for his later successes. This steady source of income enabled him to buy real estate at low prices. "People in those days had a problem," he later recalled. "They had land but they didn't have anything to eat."

Kirkhof also began investing again in the stock market. His investments were less speculative in the thirties than they were in the twenties, and he began seeking the advice of brokers. In 1936, his broker was Mrs. Janet Trap, the wife of Walter Trap, a Consumers Power service man. If she did well for him, he later claimed, he agreed to give her half the profits. "She was on the ball all the time," he said. "The first year she worked for me she bought a new Cadillac."

Throughout the Depression, Kirkhof did authorized warranty service and repair work on the appliances and small motors produced by a number of major manufacturers, including Westinghouse, Delco, Emerson, General Electric, Marathon, Burroughs Adding Machine and Singer. He also did electrical wiring and repaired larger equipment at local factories. Sometime in the early 1930s, while doing some wiring at the Rose Patch and Label Company plant in Grand Rapids, he observed workers at the time-consuming chore of lining up the labels to be sewn.

Kirkhof had been tinkering with the recently developed electric eye and realized that the device could be used to line up Rose Patch's labels much more quickly and precisely. Kirkhof built a prototype machine, incorporating the electric eye, that would automatically pull the label material from a spool, feed it into the sewing machine and then pull it out for automatic cutting. Kirkhof's prototype could do the work of four

manually operated devices, and Rose Patch wanted to buy it. But because cash flow was tight, the company offered \$1,500 worth of stock as payment. Kirkhof accepted the offer and became a stockholder in what eventually became the hugely successful Rospatch Corporation. He and Ethel continued to purchase Rospatch stock until the late 1960s when the value of all their stock holdings, including Rospatch, was estimated at several hundred thousand dollars. Kirkhof himself claimed in an interview that in 1973 the value of his Rospatch stock alone was \$845,000.

Automatic labeling machines are commonplace today, but the prototype for Rose Patch was a major innovation for its time and a significant milestone for Kirkhof. Until then, his energies had been directed towards mechanical and electrical repairs -- first of Edison's dictating equipment, then of army airplanes and finally

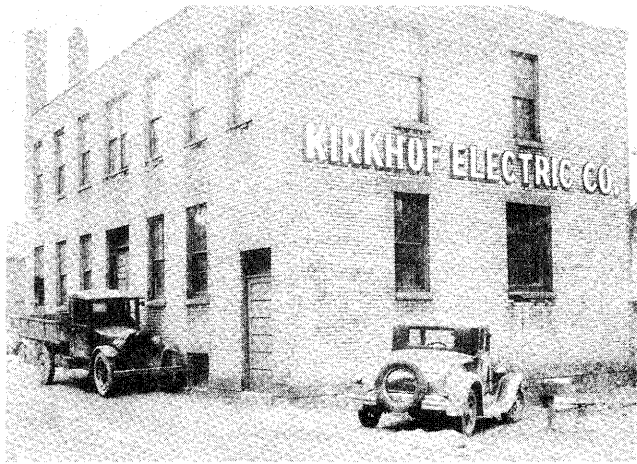
Book of Stocks December 31, 1958

No. Shares	Stock Name	Value
3000	Consumers Power	15,000.00
50	General Electric	1,500.00
50	Westinghouse	1,500.00
200	Marathon Co	2,000.00
200	Delco	2,000.00
54	Michigan State Bank	2,700.00
59	Michigan National Bank	2,700.00
101	First Bank & Trust Co	2,700.00
110	Tramontina Mfg	2,700.00
500	East Ohio Pub & Wine	2,700.00
1000	Labeling Mfg Co	10,000.00
1000	Labeling Mfg Co	10,000.00
10,000	Rose Patch Co	10,000.00

Ethel's record of the stocks she and Russel owned in 1958.

of outdated, underpowered motors. The Rose Patch labeling machine, which demonstrated Kirkhof's inventive abilities, was one of his earliest attempts to apply the use of electricity to the solution of manufacturing problems.

By 1937, most of Kirkhof's conversion work for Consumers Power under supervision of Allied Engineers had come to an end. At the same time, Harlow Crooks, one of the Allied engineers who had managed the conversion project, was also out of work. Friends and business associates since the Consumers Power project began, Kirkhof and Crooks decided to form a partnership. They retained the name Kirkhof Electrical Company and did electrical contracting and small motor repairs.



Three Kirkhof Electric Company locations. (Clockwise, left to right) 344 Commerce St., 79 Front St., 101 Sheldon St.



Crooks described to an interviewer the early days of the partnership: "There were Russel and I and three other employees [Irwin Tiejema was one of them], and we had a place in an alley back of 344 Commerce Ave., no money and few prospects." But Crooks was a trained engineer with experience in designing the switchboards and control panels which regulate the flow of electricity to homes and businesses from power stations and substations. Kirkhof, recognizing that the ever-increasing use of electricity made this an excellent market, was eager to get into the panel board business.

In 1938, the company received an order, probably through Crooks' connections, to build panels for the Penn-Ohio Edison Company, like Consumers Power a subsidiary of the Commonwealth and Southern holding company. The partners moved to a new and larger shop at 79 Front and began producing two types of panels -- control and relay. Control panels, equipped with dials showing amperage and voltage, allowed an operator to monitor and regulate the flow of electrical current at generating plants and substations. Relay panels automatically

adjusted to power surges and declines, allowing the equipment to run smoothly and preventing burnouts.

During World War II, the Kirkhof company was awarded a \$500,000 contract to build 1,500 panels for the Signal Corps. Kirkhof and Crooks leased a building at 430 W. Bridge St., painted the windows black as a security measure, and installed Irwin Tiejema and a work crew of about 20 men to build the panels. In about a year, the 1,500 panels were completed, and the company managed to build a few panels for local clients as well.

One of those clients was a small power plant in Burnips, Michigan. Tiejema remembers working late one night to ready a panel for delivery the next morning. The next morning, however, turned out to be V-J Day, and delivery was delayed while Tiejema and his coworkers celebrated the war's end.

Throughout the war, the Kirkhof Electrical Company was a major regional contractee designated by the War Production Board to produce many specialized electric motors and parts, including portable generators run by small engines.

One mark of business success, and certainly a key to understanding the growth

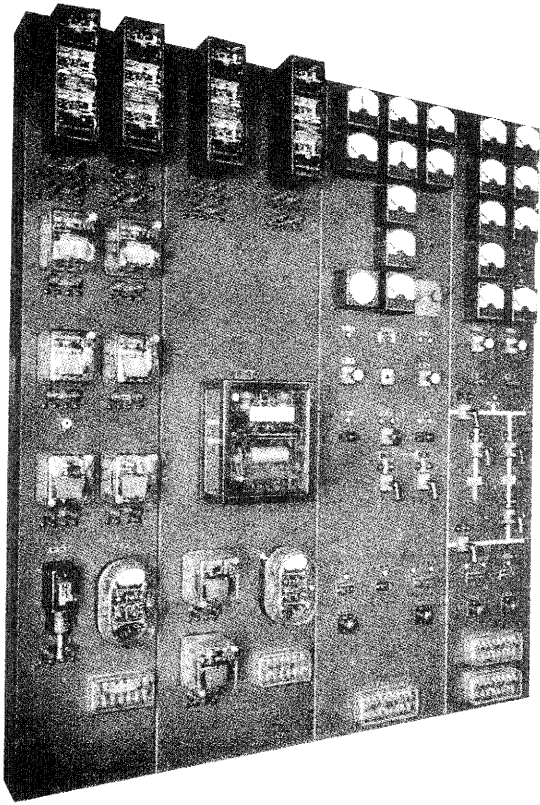


Photo courtesy William Carrigan

(Left) Relay, metering and control panel made by Kirkhof Electric for Consumers Power. (Above) Two longtime Kirkhof employees, Irwin Tiejema (who worked for Kirkhof from 1937 to 1983) and George Bareza (1938-1981) pose in front of one of the control panels they built.

of the Kirkhof-Crooks venture, is possessing the ability and confidence to take advantage of new opportunities. One such opportunity occurred about midway through the war when the company received a contract to build engine mountings, part of the chassis, and the masts for "shop trucks," similar to fork lifts. The Service Caster and Truck Corp. of Albion had gotten a government contract for 1,000 shop trucks. According to Harlow Crooks, the Albion company had never made such a device and its representatives turned for help to Kirkhof and Crooks, who had never made such a device either. Rather than turn down the work because it was unfamiliar to them, the partners accepted the challenge. "The contract was for the government, and the military had provided the specifications -- how high they should be, how much they should lift, such things," Crooks explained, "so we made them."

In 1943, the partners set up a separate plant at 101 Sheldon to house their manufacturing operations and called it Kirkhof Manufacturing. Soon, other

manufacturing opportunities presented themselves. Increased business created the need for more space, and Kirkhof Manufacturing expanded to a second shop down the street at 121 Sheldon. Crooks and Kirkhof kept the 79 Front St. building for their small motor repair and construction wiring business.

The end of the war brought the end of wartime austerity. Just as it had after World War I, industrial and individual demand for electricity surged, creating an expanding market for the panel boards which the Kirkhof Electrical Company was in a perfect position to supply. And with the postwar demand for consumer goods skyrocketing, Kirkhof Manufacturing, too, found many opportunities to move in new directions.