



The Invention of Miniature Pneumatics

The Story of Leonard Clippard and Clippard Instrument Laboratory, Inc.

In Loving Memory of Buck

1930-2017

“People believe they are cared for at Clippard. There are many stories people will tell of moments they faced adversity and the Clippard family was there, unasked, to help out in whatever way they could. There’s a depth of character there that people develop deep loyalty for.”

—*John Campbell, 4 years*

“Loyalty and trust go hand-in-hand when you’re working in manufacturing, and people stay at Clippard a long time because there’s that sense of loyalty. I never felt untrusted and always felt I could speak my mind.”

—*Lee Fuller, 22 years*

“It was a good place to work with good people to work with. There’s also an open door policy at Clippard where you can go right to the top and speak about any problems. You have that access, that freedom, to do so without fear.”

—*Joyce Fuller, 32 years*

“The Clippard leadership has always encouraged and supported learning and education. The opportunity to expand one’s professional knowledge and personal growth is an appreciated benefit.”

—*Michelle Rolfes, 33 years*

“Everyone is treated with respect no matter what their job is.”

—*Dick DeStaffany, 27 years*

“We’re people-centric. While most decisions are made from a business perspective, we take into account how it impacts everyone else.”

—*Steve Schutte, 12 years*

“Clippard has a great culture—our employees have an open door policy to any manager, all employees are on first name basis, we know everybody and a little something about them, everybody gets along and goes out of their way to help each other out, especially in times of need. For example, fund raisers and donations for an employee who is out of work due to an illness. Clippard treats all employees respectfully and equally and cares for their employees.”

—*Lynn Kerr, 30 years*

“It’s not all profit and bottom line, it’s family first. We’re also not micromanaged, but have the freedom—and are even expected—to maintain a level of responsibility for Clippard.”

—*Gary Dilonardo, 26 years*

“It’s like you are family and everyone will do whatever they can to help you when you’re in a bind.”

—*Tom Hodge, 45 years*

“It’s a good atmosphere. Any company has a wide array of people, but there’s a lot of good people here. There’s good people hiring them, and good people in management. There’s no other way to put it.”

—*Rich Humason, 34 years*

“When I came to Clippard I wasn’t sure if I wanted to stay in the manufacturing business, but since then it’s been the best job I’ve ever had. When I first started, I had no family. Now not only do I have a family, but Clippard is my family.”

—*Allen Rahm, 29 years*

“I have been working at Clippard for 30 years. Sometimes I find that so hard to believe, but this is the norm! Longevity is one of the things that makes Clippard unique. I know the word ‘family’ gets thrown around often, but Bill and Bob always made sure we knew that we were part of their family.

That is what keeps us here for 30+ years.”

—*Ruth Crank, 30 years*

“It’s not so big that you’re a number. You know most everyone here. It’s a small company feel and a family environment.

There’s great freedom in that.”

—*Scott Lamb, 25 years*

“We are a family company that makes you feel like family. I like the various “hats” we all wear, even though it would not be considered your area of expertise or your role at a bigger company. I feel this makes us unique, and people have a much stronger feel of belonging/contributing.”

—*Michelle Freeman, 30 years*

“They value people here. Everyone is important, from every role that’s needed to make this company run. They know everyone on a first-name basis.”

—*Doug Robertson, 31 years*

“If you want to be challenged, you get challenged. We’re not so big that our people are super-specialized— you get really good at what you do, but you also get to wear many hats if you want to.”

—*Robin Rutschilling, 29 years*

“I liked what I was doing and I liked where I was. There was always something new going on at Clippard, so it never became routine. As a pilot I also liked the business advantages and fun of the company aircraft.”

—*Jim Crain, 43 years*

“I’ve never been considered as just an employee at Clippard, but as family. It’s a wonderful story that I’m honored to be part of.”

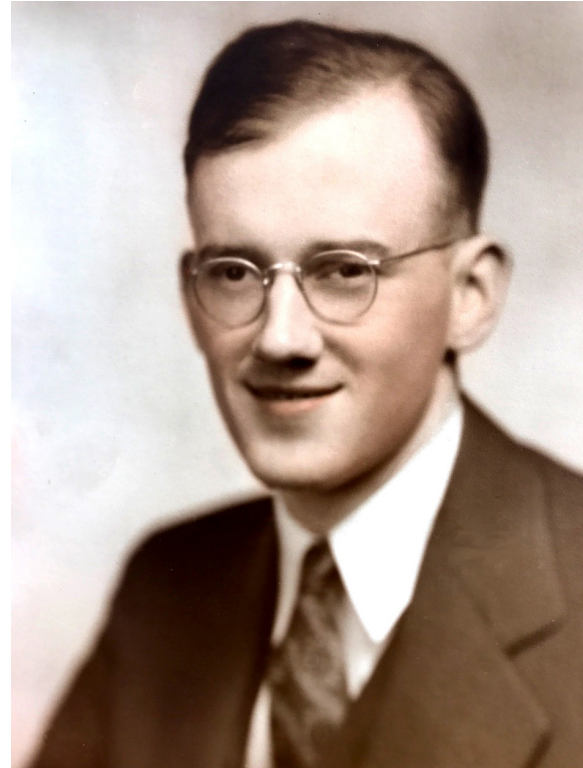
—*Max Comes, 41 years*

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“I have been approached daily on purchase or merger by many companies. I am not interested in this, knowing full well and being advised that to do so is the best way to get back the dollars and effort I have ploughed into it. I simply want to see if there still isn’t room in this country of ours for an independent small company to exist and be successful.”

—Leonard Clippard, 1967 letter to Mark Berliant



The Invention of Miniature Pneumatics

The Story of Leonard Clippard and Clippard Instrument Laboratory, Inc.

The story of Clippard is multi-dimensional. There are many parts of Clippard's past that fit into multiple places in history, each impactful in a unique, cohesive way. It's a story of the entrepreneurial spirit, reinvention and ongoing growth of a family company, and how its people and products impact our world. Pride is another word that describes this 75-year-old company. Pride in being an American manufacturer, pride in maintaining a solid company culture, and pride in the quality products made by top-notch employees who seek to solve customer problems with innovative solutions.

The Ohio-made brand has grown immensely since its inception and is known throughout the industry for creating the standard for miniature pneumatic products. Clippard products are used across the globe and in a variety of different markets. But while the name is big and constantly gaining recognition, the company itself feels small. Walk into the Clippard offices and you will instantly feel at home. Warm smiles, hearty handshakes, and stories—lots of stories. Stories of past employees who helped build the company, accounts of current team members and fun events, and tales of Clippard's

ingenious founder. Through the years, the company has been able to maintain its small-business feel internally while making leaps and bounds in sales. Culture is a big part of the Clippard legacy, which aids in the company's success. All those involved in the process, from employees to distributors to even the community itself, are treated well by the team at Clippard Instrument Laboratory, as was the standard set by the founder.

From the very beginning, the desire for Clippard wasn't to be a big-name success or to make an ever-increasing profit, but to create an independent company with a product that benefits many while providing for the employees' families. That is the business of Clippard. The stories you read in the pages that follow are only a mere fraction of what has occurred since Leonard Clippard began making coils out of his home in 1941. The names mentioned and events, both good and bad, have molded the company into what it is today. These are the stories behind the quality people and quality products of the world's very first miniature pneumatic manufacturer.

1910-1930

1910-1930

When weaving a tapestry, each individual thread has a beginning and an end, its own color, texture, and purpose it adds to the whole. The same can be said about the long-standing history of Clippard Instrument Laboratory, Inc. Founded in 1941 by William Leonard Clippard, Jr., the story of the Clippard legacy is woven together with accounts of success, innovation, hardship, and reinvention, all beginning with Leonard's birth in 1910.



Leonard (third from left) with his high school wrestling team, 1926

Born during the Taft Administration in Little Rock, Arkansas, Leonard was a true American entrepreneur from the very start. Proclaimed an “absolute genius” by all four of his children, Leonard was the second of three children born to William Leonard, Sr. and Veronica Clippard. In the time of societal advancements, Leonard found himself, from an early age, interested in the new technology of radio. Leonard spent his childhood tinkering with these emerging gadgets and machinery, often taking them apart to increase his understanding of the inner-workings. He was the type of personality that yearned to know things from the inside-out, which is a trait he carried into his business years later.

In the time of societal advancements, Leonard found himself, from an early age, interested in the new technology of radio.

When not off on his own learning about radio technology, Leonard enjoyed time with his older brother Sam and younger sister Katherine. These adventures varied, yet one left Leonard blind in his right eye at the age of nine after Sam accidentally shot him in the eye with a supposedly unloaded BB gun. However, despite being crippled in sight, Leonard had great vision for the future. He strongly pursued his quest for knowledge and love for everything technological.

Radio Service Data Sheet (Page 1) 163

RETRO AIR-RAE SERIES M 9-TUBE 4-BAND SUPERHET,
(Range: 160 to 30 mc; output about 400 output tubes; 1 from each 4:3:2)

Band which shows phone operation when the receiver has broken. Also that it is not in the receiver. The band is a combination of all tubes which include bands 1 and 2, and a combination of all tubes which include bands 3 and 4. The I.P. is not used in the receiver. The I.P. is in the last transformer to be used up. A second capacitor should always be used between service oscillator and mix.

LET RCA INSTITUTES START YOU ON THE ROAD TO . . . SUCCESS IN RADIO

Radio needs you . . . That's why the entire Radio industry is calling for trained men. Radio is thrilling work . . . easy hours. Vacations with pay and a day after that week. Maintenance and manufacturing stations are more easily working trained RCA Institute men.

Millions of sets need servicing . . . Thousands of those require expert RCA Institute men.

Radio is the future . . . The child of tomorrow . . . the child of today. That's why every graduate of RCA Institute is in demand.

Clip this Coupon NOW!

RCA INSTITUTES, INC.
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RCA INSTITUTES, Inc.
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ERGON
FORWARD MARCH!
To Better Radio Reception

The JRC Tube Vitalizes Radio Reception. Sealed Cellophane of new factory. No germs. No air-drawals.

Stern & Company, Inc.
255 Columbia Street, Newark, N.J.



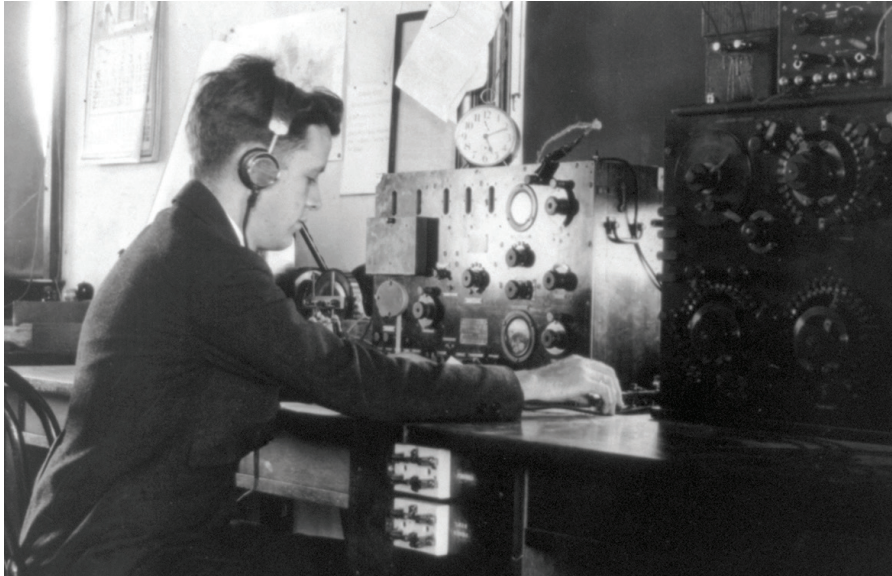
The JRC Tube Vitalizes Radio Reception.

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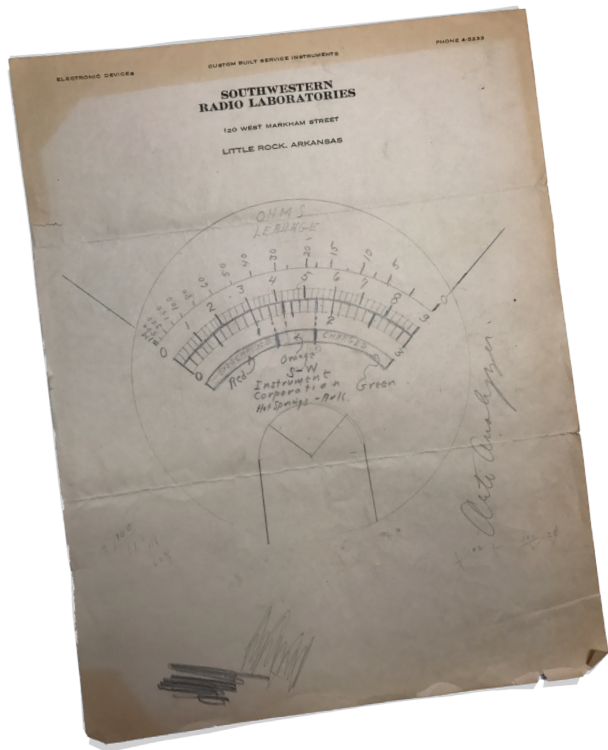
JRC Radio Tubes

Stern & Company, Inc.
255 Columbia Street, Newark, N.J.

Being the middle of three children made pursuing his unique interests difficult, as the Clippard family only had enough money to send one child to college. As the oldest child, Sam was given the privilege of continuing his education to chase his dreams of architecture. When it came to be Leonard's turn to graduate high school, he was unable to afford to put himself through college. He decided to leave Arkansas in order to pursue alternative opportunities to learn more about the new technologies of radio and electronics.



This was the first of many important moves the Clippard founder would soon make in his life. He attended RCA School in New Orleans for a short period of time, installing shipboard radios in the afternoons. From there, he spent time in Galveston, Texas to continue this type of work, where he learned in-depth how to build and repair radio equipment. Because of his experience in these areas, Leonard was proficient in Morse Code and was recruited to act as the radio operator on several trips along the Gulf of Mexico.



SOUTHWESTERN RADIO COMPANY

During this time Leonard also joined forces with a partner to start Southwestern Instrument, a tube tester company they boldly launched in the midst of the Great Depression. It was located at 120 West Markham Street in the center of downtown Little Rock, Arkansas. This small area in the basement of his father's company, Clippard Builders Specialties, was his first bold venture. Whether due to the economic devastation of the Depression, his sour partnership, or a combination of both, Southwestern Instrument went under and Leonard vowed not to enter business partnerships ever again.



Leonard and Dorothy had a son, Oscar (Buck) Clippard, born in December, 1930. Since Leonard was young, did not attend college, closed his business, and was an occasional musician during the great depression, his new bride's family feared the future for Dorothy and their new grandson. Her parents were no longer approving of the marriage and the couple split in 1931. Buck remained with his mother after the divorce while Leonard went on to different business ventures.

1930s



1930s

In 1931 Leonard continued his efforts to advance his understanding in radio and took a job with Supreme Instrument in Greenwood, Mississippi. Leonard worked for a production engineer learning the components and processes to build radio test equipment.



Between this and his next job, which would take him out of Arkansas once again, he moved back to his hometown of Little Rock to help out at his father's company while searching for a job in radio. This was where he met and married Harriet Hirte, in 1933. Harriet, occasionally teased by her southern peers for her northern roots, had moved to Arkansas from Minnesota as a young adult to live with her sister, Louise Orne.

Profile

William Leonard Clippard, Jr.

Creative. Mechanical. Unusual. Driven. Genius. All are words used by Leonard's children and former colleagues to describe the founder of Clippard Instrument Laboratory, Inc. and inventor of the miniature pneumatic air cylinder, miniature air valve, and accessories. Fueled by his passion for technology, Leonard created this brand new industry for miniature pneumatics in the midst of the World War II recovery and with only a high school education. Though he never went to college, Leonard often said he had more than 20 years of on-the-job experience before starting Clippard due to his many jobs in the electronic industry where he learned from college-educated engineers and was able to work with products in person.

Aviation was also a strong passion of Leonard's. From his first flight with his brother Sam, he knew this was worth pursuing. A loving husband to Harriet, these two American entrepreneurs lived a life of hard work and dedication to their business, their community, and their children, Oscar (Buck), Patricia (Pat), William (Bill), and Robert (Bob). With a heart for people, a just-do-it attitude, and a knack for engineering, William Leonard Clippard, Jr. was a true early twentieth century entrepreneur, innovator, and businessman.

Leonard was instrumental in every aspect of the business until his retirement in 1975, and eventually moved to live in Green Valley near Tucson, Arizona, where he resided until his death in 1983.



Leonard (back right), with sister Kay and brother Sam, standing behind their parents in 1952

THE MOVE TO CINCINNATI

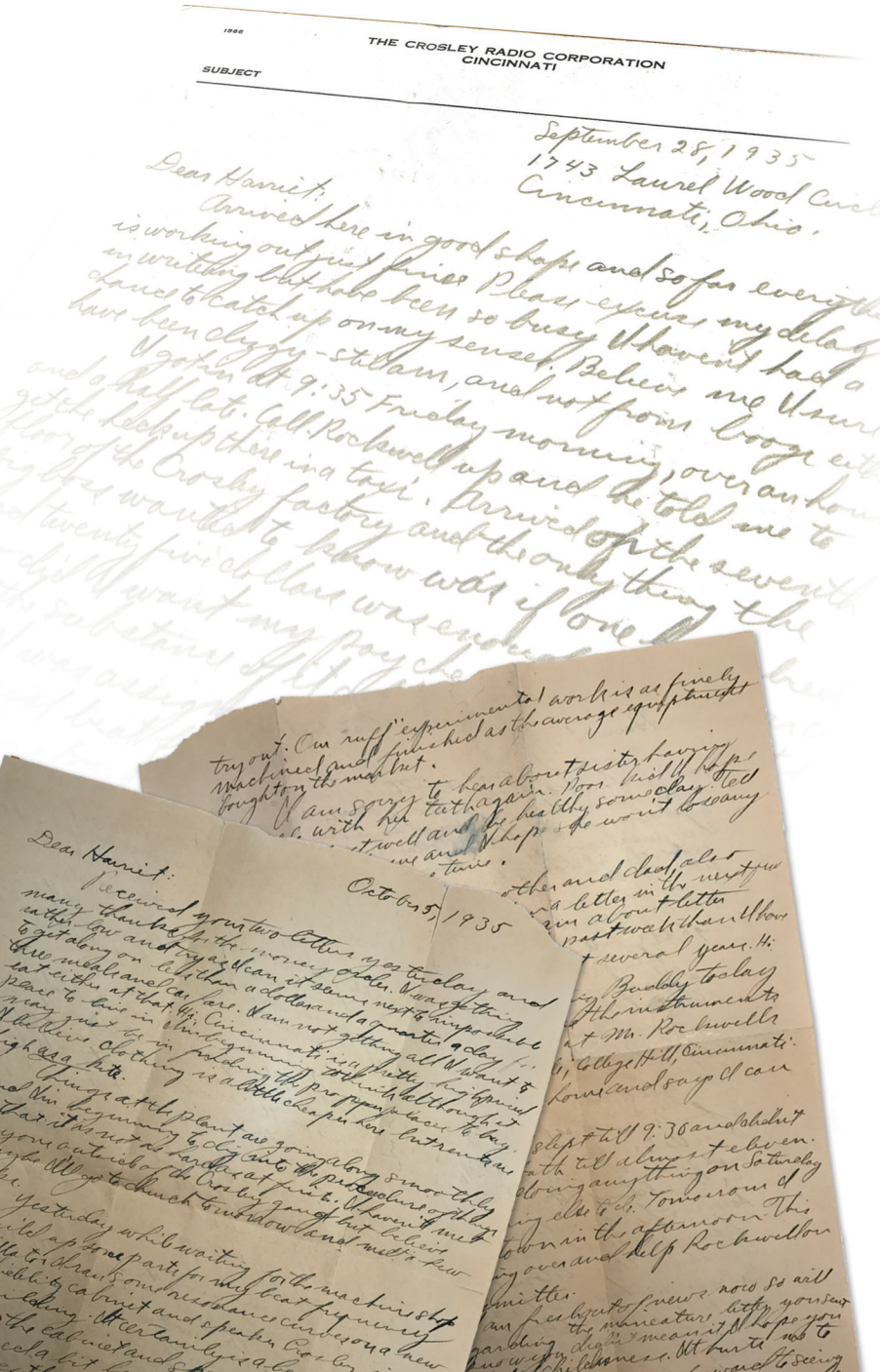
From the 1920s to the 1950s, Cincinnati, Ohio was the radio mecca of the world. Leonard applied at several Cincinnati radio stations and manufacturers. Harriet and Leonard's new marriage was tested when a telegram arrived one Friday afternoon in 1934, calling Leonard to report for part-time work in Cincinnati, Ohio, the following Monday. During the Depression, good jobs were hard to come by, so Leonard jumped on a train the next morning and arrived in Cincinnati on Sunday.

With his new bride still behind in Arkansas, he found lodging in a small second story apartment and began working for Crosley Radio Corporation the next day. In 1935 when he first moved to the Queen City, Leonard wrote to Harriet:

"Cincinnati I believe is an older town than St. Louis, although not quite as dirty and extremely hilly. I believe you will like it here."

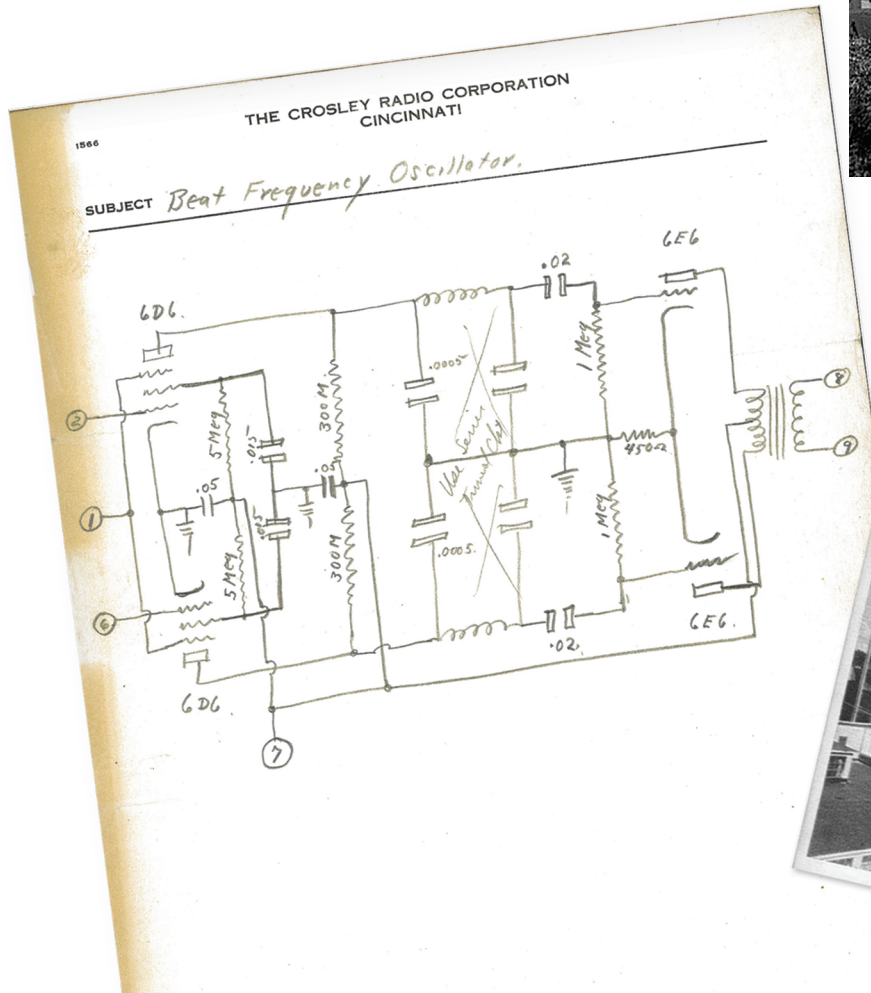
The sudden opportunity left Harriet to continue working in Little Rock until Leonard was sure the job in Cincinnati was permanent. During that time, she worked as a secretary in an insurance office for a woman she greatly respected and admired. Leonard wrote letters to his wife describing the difficulty of the transition, saying he felt disadvantaged in a field of college-educated men:

"The only trouble is there are so many other fellows who know so much more than I do that it makes me feel mighty dumb. I am just learning what the lack of an engineering education really means. It's hard to deliver the goods without it."



In an effort to catch up with his peers, Leonard studied late into the night every day after work, reading radio handbooks and engineering manuals Harriet sent him.

Though he was not traditionally educated like his peers, Leonard was hired on full time in September of 1935 to focus on a new project to develop a beat frequency oscillator. With the on-the-job experience he gained, combined with his motivation to learn, he continued to move up in the corporation. By the time he left Crosley seven years later, he was in a management position supervising 37 engineers in the Test Construction department.

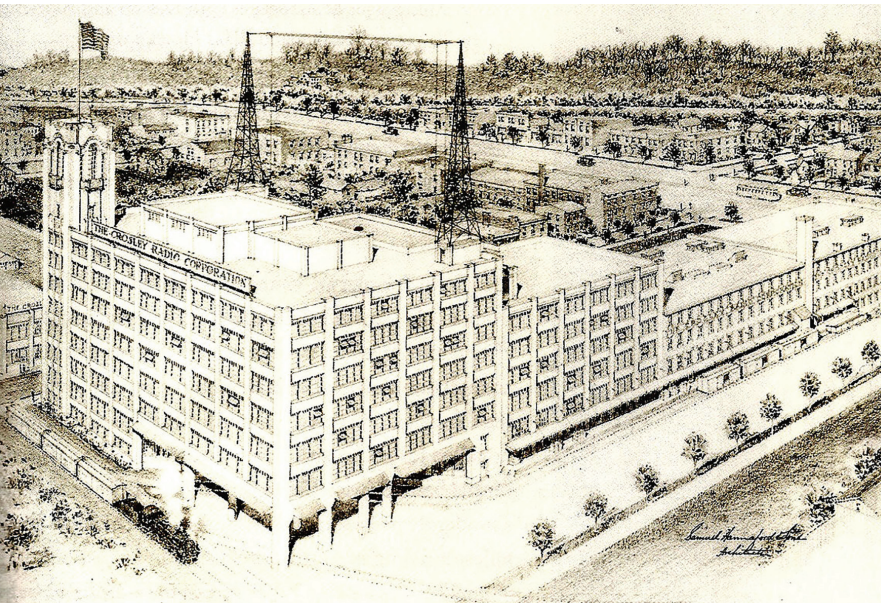


CROSLY





May, 1934 - Powel Crosley, Jr. (right) and Joseph Chambers, WLW Technical Supervisor, "hefting" one of the twenty huge 100,000 watt tubes used in the new 500,000 watt WLW Transmitter



Powel Crosley, head of the corporation, valued the success of his company deeply. His office—built above the rest of the headquarters—was referred to by many as his tower, and he was known to call employees there to discuss ideas. The team he often called on for these late-night brainstorming sessions was an engineering group that, due to his own self-teaching, Leonard had been included in. Interestingly, several members of this group went on to create strong Cincinnati-based corporations. In addition to Leonard, the group also included Ted Tedford who went on to create Tedford Crystal Laboratory, Arnet Foster who created Foster Transformer Company, and Louie Toerner who created American Sound and Electronics, Inc.

Though none but Clippard remain family-owned, all remain in business to this day. It seems perhaps Crosley was more of an early business incubator than radio corporation. Regardless, Powel Crosley certainly hired extremely talented, driven men that he could collaborate with, thereby surrounding Leonard with men from whom he could learn and network with.

Over the course of Leonard's first year with Crosley, Harriet moved to Cincinnati. In 1936, the couple had their first child together, Patricia Louise. Shortly later, Leonard's first wife Dorothy passed away and their six-year-old son Buck came to live with Leonard and Harriet. With a growing family at home, Leonard continued to learn and develop his skills at Crosley.



Leonard and Harriet's first child, Patricia Louise.




At that time, quality radios were priced close to \$200, making Crosley's \$39 bullet-shaped radio a gateway product that allowed more people to gain access to this new technology. Leonard became deeply involved in the creation of commercial radio stations like WSAI and WLW, which were created as a means to expand the sales of Crosley's affordable radio brand.

Whatever happens—You're there with a
CROSLY

NO matter whether you want music, drama, sports, comedy—whether you want American or Foreign reception—or whether you want to enjoy public, religious, amateur broadcasts... You've done with Crosley! The astounding performance, distinctive beauty, amazing value—the new Crosley Radios are successful!

TUNE IN FOREIGN STATIONS

The Crosley SIXTY-ONE R. F. American and Foreign reception in a beautiful and remarkably performing on table radio and in a portable design of only one size. Best thing worth an investment since 1929. \$39.00



CROSLY RADIO



During the 1937 flood, Powel Crosley volunteered Leonard to be involved in a medical mission along the river because of his experience with shipboard radios. Leonard spent two weeks operating the ship radio for a group of public health nurses administering Tetanus and Typhoid shots to flood victims up and down the Ohio River.



As Leonard worked for Crosley, he kept dreaming of starting his own company. Shown here is the earliest reference to the name Clippard Instrument Labs—it was a side project for a local school, designing and installing a PA system. The final page of this document noted “100% tested”. Still touted today, it is a testimony to the ingrained culture of quality Leonard began so long ago.

Part of creating radio stations included the building of powerful transmitters to broadcast the radio signals over wide areas. A 500,000-watt transmitter built in Mason, Ohio radiated so much energy that it interfered with the primitive open electrical wiring in many of the homes and barns in the area. In these days, household power was run with open wiring, which picked up the radio transmitter signals. This particular transmitter’s signals were so strong that they caused the lights in a number of homes to stay on as long as the signal was on. Unable to shut their lights off at night, many residents complained. Crosley paid to rewire every affected house so the radio signals no longer controlled the light switches.

Showing the relative power of

WLW
"the Nation's Station"

**500,000
Watts**

Most Powerful in the World

At all hours WLW has such a great portion of the national radio audience that no national radio campaign is complete without it. By itself WLW offers a vast radio audience in the center of America's best market.

THE CROSEY RADIO CORPORATION
FOTEL CROSEY, Jr., President CINCINNATI



Public Address System
Serial #101 Type PA-3
23rd Dist. School RFA.

I guarantee equipment described in this folder to be free of any defects in materials or workmanship for a period of six months, and, barring physical abuse, will replace any parts necessary within this time. All vacuum tubes guaranteed for a period of one year.

Clippard Instrument Labs.

By *Wm. Clippard Jr.*

12/18/39

1940s

THE MOVE TO FORT WAYNE, INDIANA

Leonard remained with Crosley Radio Corporation for seven years, before deciding to leave his position in charge of Test Construction to pursue an Assistant Manager position with Magnavox Corporation in Fort Wayne, Indiana. Magnavox was another well-known electronics company, so the move to Indiana seemed, at the time, to be a beneficial career move. While at Magnavox, Leonard became fascinated with the concept of producing component parts for radios instead of larger, overall systems and began to look into starting his own coil company. Until then, he had been building electronic instruments and volt meters, but these larger systems were hard to produce in large quantities. The components—coils—that made up the meters could easily be mass produced as more and more technology was emerging. And so in 1941, Leonard began working on his coil business at home.

From 1935 to 1946 the Clippard legacy has always read, "Founded in 1941, incorporated in 1946." However, early documentation of Leonard's personal resumé states he started his own company in 1935. While this document doesn't say what that company was, it is possible this could have been an early concept for Clippard Instrument Laboratory that he returned to in 1941 after he left Crosley. Due to his involvement with Magnavox, Leonard was not able to devote time to this new business fully until 1943 when he moved back to Cincinnati, which is why many documents say he began work full-time with his own business that year. The business was then incorporated three years later in 1946.

RECEIVED
RECEIVED
FEB 26 1946
EDWARD J. HUMMEL
SECRETARY OF STATE

RECEIVED
RECEIVED
FEB 26 1946
EDWARD J. HUMMEL
SECRETARY OF STATE

193249
Articles of Incorporation

DATE: 2-26-46

CLIPPARD INSTRUMENT LABORATORY INCORPORATED
(State of Corporation)

The undersigned, a majority of whom are citizens of the United States, desiring to form a corporation for profit, under the General Corporation Act of Ohio, do hereby certify:

FIRST. The name of said corporation shall be Clippard Instrument Laboratory
Incorporated

SECOND. The place in Ohio where its principal office is to be located is Cincinnati, Hamilton County.
(City, Village or Township)

THIRD. The purpose or purposes for which it is formed are:
To design, produce, plan, service, buy, sell, construct, manufacture, assemble, repair and tool electrical and electronic equipment, and any and all devices, appliances, machinery, apparatus and equipment capable of being employed in connection with electricity and electronics; and for and in connection with such business to hold, possess, purchase, lease, mortgage and convey real and personal property and to maintain offices and agencies either within or anywhere without the State of Ohio.
To establish, maintain and operate laboratories for purpose of carrying on research of every kind and nature in the field of electronics and electricity, and in connection therewith to purchase, own, exchange, sell or otherwise dispose of or turn to account and generally deal in and with anything invented or developed thereby.
To apply for, obtain, purchase, use, grant licenses in respect of or otherwise acquire, and to hold, own, use, grant licenses in respect of, manufacture under, sell, assign, mortgage, pledge or otherwise dispose of: any and all inventions, devices, processes and any improvements or modifications thereof; and any and all letters patent of the United States or of any other country, state, territory, or locality, and all rights connected therewith or appertaining thereto; any and all copyrights granted by the United States or any other country, state, territory, or locality; and any and all trade-marks, trade names, trade symbols and other indications or origin of ownership granted by or recognized under the laws of the United States or of any other country, state, territory or locality.

FOURTH. The maximum number of shares which the corporation is authorized to have outstanding is Five hundred (..... 500), all of which shall be without par value

FIFTH. The amount of capital with which the corporation will begin business is Twenty five thousand Dollars (\$ 25,000.00).

IN WITNESS WHEREOF, We have hereunto subscribed our names, this 21 day of February 19 46.

Edward J. Hummel
Ralph Sparker
Wm. L. Clippard Jr.

N. B. Articles will be returned unless accompanied by form designating statutory agent. See G. C. 8623-129.

THE START OF CLIPPARD INSTRUMENT LABORATORY

The U.S. had newly entered the war against Nazi Germany and the military had begun calling on civilians to contribute to the war effort. Being blind in his right eye, Leonard was classified as 4-F and was unable to join the military. Because of this, he expanded on his interest in component parts and began making small coils for war walkie talkie radios out of his home after work. During the day he would perform his typical duties at Magnavox, and in the evenings he and a couple neighbor ladies would sit around the table winding coils. Harriet diverted the attention of curious young Buck and Pat from the operations at the table, saying to them, "Don't bother the nice ladies. Dad is starting a business."

Longing to strike out on his own, Leonard relocated his family back to Cincinnati in 1943, after spending only 18 months in Indiana. Cincinnati had been home to Harriet and Leonard, the place where they had started their family, and, due to being recognized as the machine tool capital of the world, it was also a gold mine for manufacturing. Its central location was also ideal—80% of the U.S. population was within a day's drive. Cincinnati was the logical choice. With just a few household tools and \$11.45 in the bank after paying his moving expenses, Leonard rented an old, dilapidated storeroom in Northside, where he planned to live and work full-time until Clippard Instrument Laboratory got off the ground.

For six months, Leonard worked out of the storeroom, just a few feet away from he and his family slept. With the help of Harriet, 11-year-old Buck, and five-year-old Pat, he made due with the resources he had to get his business started. He made workbenches and coil-winding machines by hand and started building inventory with his first hired employee, Mickey Deters. One of their first projects was what he referred to in a letter as a "small job of instrument work for a New Jersey firm."

Motorola Radio delivers!

... from
A RECENT NEWS RELEASE

The first portable two-way radio set made by the Galvin Walkie-Talkie Corporation, known as Walkie-Talkie, was developed in 1933 in the laboratories of the Signal Corp. Galvin, chief engineer of the development for the Signal Corp. Walkie-Talkie was the name given by the soldiers to these sets, and as the popularity of the device grew, "walkie-talkie" became official Army jargon.

The Walkie-Talkie is basically a Galvin idea, having been hatched in 1910 by the Company's chief engineer while he was watching infantry maneuvers in Wisconsin.

For the continued development and production of these communications and other services, the Signal Corp. has been working to improve the Walkie-Talkie. It has been improved to play in the quiet of a storm.

FROM the Motorola Engineering Laboratories there has come a steady stream of vital Electronic developments. As a result of our executive pre-war pioneering in the engineering and production of Home and Car Radio, and Mobile 2-Way P.M. Communications Systems for city, state and government agencies, the entire Motorola organization was fit and ready. It is a matter of record that when our government called, Motorola delivered and is still delivering in volume, the Military Radio Communications so urgently needed for Victory. It is a Motorola habit to be First!

What Electronics in War Means to Motorola Radio in Peace

Everything we have learned and are learning about Electronics during the War cannot possibly be incorporated into the first Post-War Motorola Radios. But you may be certain that because of our new Electronic knowledge, the new Motorola will look smarter, smarter and making you the most efficient Radio listener in the home.

EXPECT BIG THINGS FROM MOTOROLA. THEY'RE IN THE MAKING!

MOTOROLA RADIO
FOR HOME & CAR
GALVIN MFG. CORPORATION - CHICAGO, ILLINOIS



“Dad also had me and Buck in on the business putting washers and screws in tiny little condensers. I call it our Lego days back before Legos were around. We thought we were playing but in reality, we had the small hands dad needed to put these parts together.”

—Pat Dudsic

CHASE STREET FACILITY

While in Northside, Harriet tried her best to make the most of the small living quarters they shared with the new business. One way she did this was by arranging the furniture in such a way as to divide the wall-less area into rooms. Walls were a small sacrifice the family made during those first six months. The building had only one toilet and one sink that was shared between the family and the nearly ten employees Leonard hired in their short time there. With a workforce quickly outgrowing the storeroom, Leonard moved the business to a larger store facility on Chase Street in 1944, and subsequently rented a furnished apartment in which to live.



Clippard Corporate Office in 1944. Pictured above is Leonard, Harriet, young Buck, and Ralph Sparks





Top Left: **Chase Street lab**; Top Right: **Chase Street testing area**; Above: **Chase Street workers performing instrument assembly and testing**



Component assembly area at Chase Street facility

A TOP-SECRET WAR PROJECT

A sense of constant awareness blanketed the country during World War II. Every able citizen and business did their part to contribute. One of Leonard's Crosley acquaintances, George Platts, went on to become a Commander for the U.S. Navy and was based in St. Louis to work procurement during the war. Having worked with Leonard previously, George knew of his former colleague's talents in design and

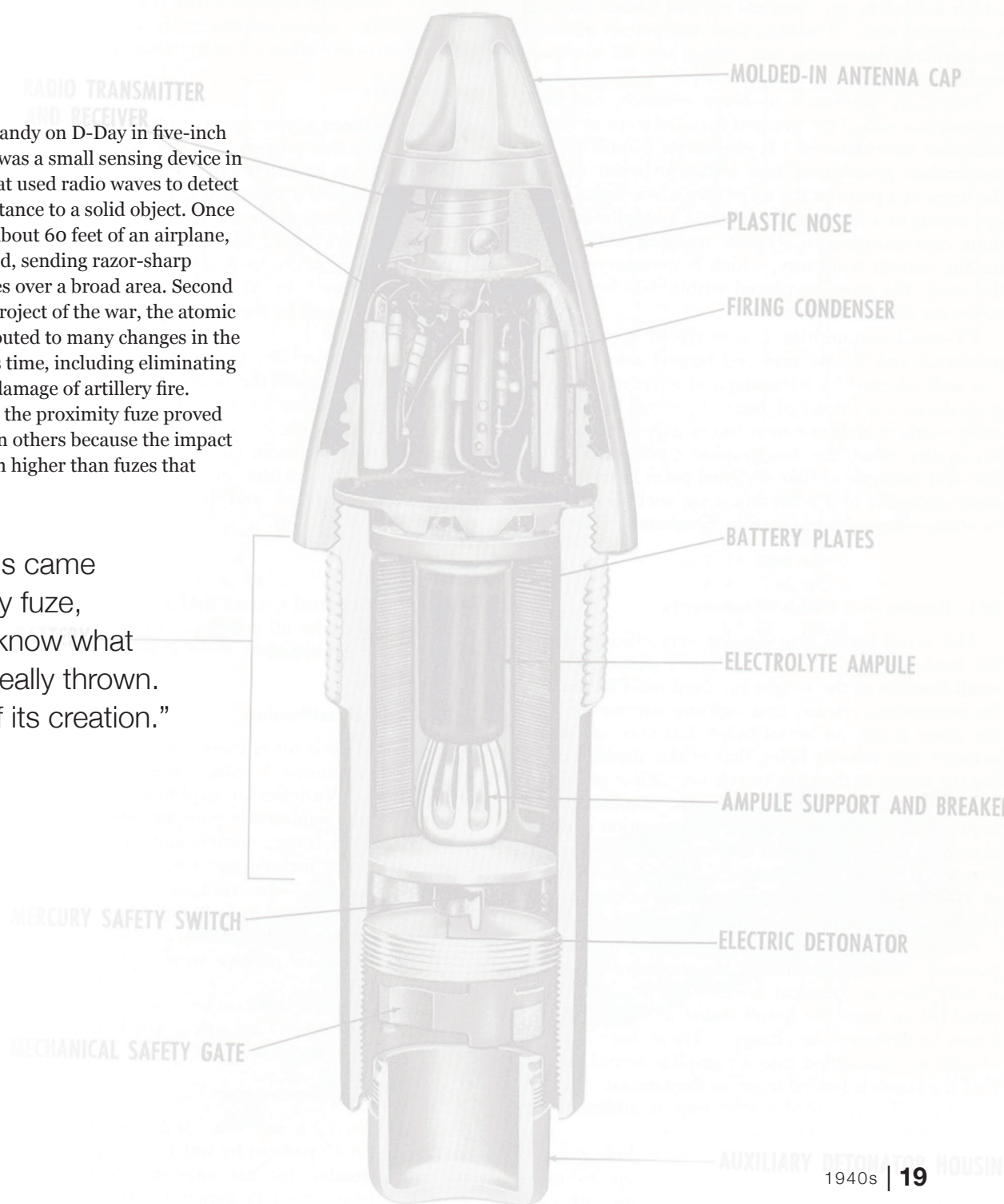
mechanics. In need of materials and components for the Navy, George sent many of his job requests to Leonard, providing him with supplies, light fixtures, and other materials Leonard needed to complete the work. Along with the job requests for George, Clippard employees were unknowingly involved in making coils for the second most top secret project of World War II—the proximity fuze.



Used for the first time in Normandy on D-Day in five-inch naval guns, the proximity fuze was a small sensing device in the head of an artillery shell that used radio waves to detect when it got within a certain distance to a solid object. Once the fuze reached a distance of about 60 feet of an airplane, ship, or the ground, it detonated, sending razor-sharp shrapnel flying at high velocities over a broad area. Second only to the single most secret project of the war, the atomic bomb, the proximity fuze attributed to many changes in the way war was fought during this time, including eliminating guesswork and increasing the damage of artillery fire. Used first to bombard beaches, the proximity fuze proved increasingly more effective than others because the impact of the shrapnel range was much higher than fuzes that detonated upon impact.

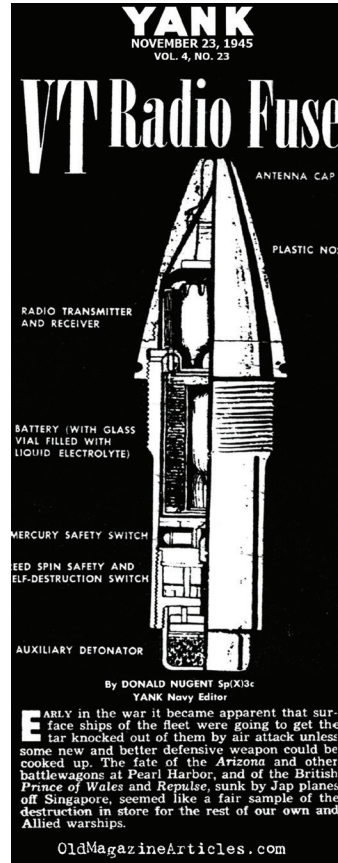
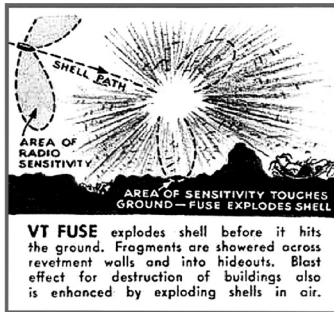
“When the Americans came out with the proximity fuze, the Germans didn’t know what to think. They were really thrown. And Dad was part of its creation.”

—Buck Clippard





Five companies collaborated on the creation of this project, each manufacturing a different piece, most without knowledge of what the end result would be. Fear of the fuze's design falling into the wrong hands fueled this secrecy, resulting in the device's initial use over water or in the air as to ensure it either detonated or was lost, unable to be recovered intact by enemy forces. Leonard, however, was given special clearance by the government through his ties with Navy Commander Platts and took special, top-secret trips to the Pentagon to discuss the development of the device. In the end, Clippard manufactured coils as well as developed the testing equipment for the proximity fuze. Because there was no secret in the component coils, employees and family members remained unaware of this project until years later when the information was made public in a biography about the Crosley Corporation, which was also involved in the project.



THE LATE FORTIES

The war was a challenging time for the start of a business as it not only took many able bodies away from the workforce, but also shifted the focus to manufacturing items specifically for that effort. But this did not stop Clippard from growing. Though the work requests from Commander Platts helped keep Leonard busy, he needed more trained employees. By extending working hours, training people, and providing work to part-time workers from other plants, Leonard was able to take on additional work requests and prove the worth of Clippard to a number of outside contractors. These contractors gave Clippard enough production work to keep moving forward through the end of the war in 1945. In a letter Leonard wrote to attorney Mark Berliant, he says it wasn't until the war ended that Clippard's true opportunity for growth came.

With all the war contract work cancelled, American companies abruptly converted back into civilian mode, and many didn't know what they were going to do. Leonard hit the ground running, personally calling on radio manufacturers who were anxious to get back into regular production. Through these calls, he secured orders for radio frequency coils and started building more equipment to fill his Chase Street plant with the tools necessary to fulfill the orders.

Growing production orders demanded a growing staff. George Platts, who had been providing work to Leonard during the war, was let go from the Navy, along with his assistant Jim Dillon. With nowhere to go, Leonard invited both of them to work for him at Clippard. Up until this point, Leonard was heavily involved in the labor of the business, working alongside his employees as the head engineer, the salesman, the one who built equipment, and the man responsible for signing the checks. While this remained true through his entire career, Leonard also brought in key players who had strengths in areas where he was weaker, beginning with these two men. Where Leonard's key strengths were in building and engineering, George was a born businessman, and Jim had a knack for purchasing. Combined with Leonard's mechanical talents, Clippard's reach began to expand to more and more companies in need of coils.



Leonard and Harriet with their accountant, Mark Berliant, at "Sloppy Joe's" bar on a visit to Cuba

"Leonard always had the ability to pick people well—people who did their job well. One characteristic I adopted from him was I never had any qualms using the talents of people working for me, even when I didn't necessarily have the abilities they did. That's how you grow a business, by hiring people with talents outside your own."

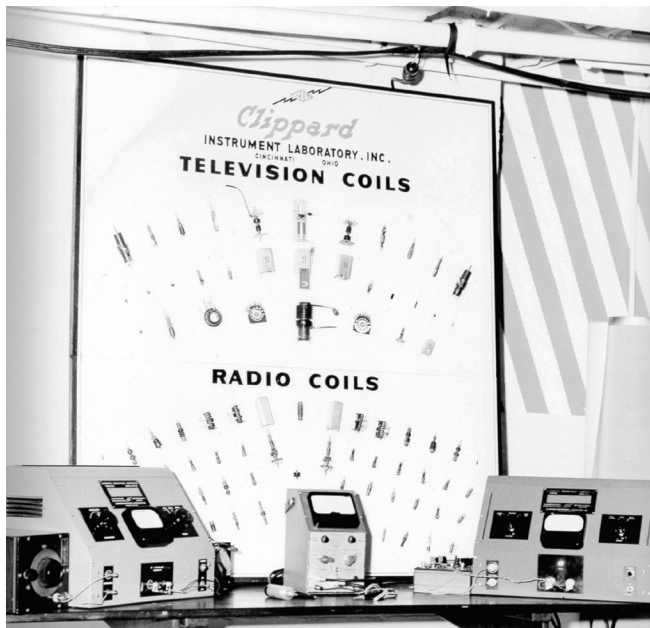
—Jim Crain



The end of the war brought about a shift in the coil market. While radio frequency coils were still a necessity to electronic companies in 1949, TV started making its way on the scene at this time as well. Still a new technology, TV sets consisted of a large wooden box filled with dozens of tiny coils and other components. Big-name electronics companies such as RCA, Magnavox, Sylvania, Motorola, and General Electric soon became Clippard customers with large orders of coils.



The name Clippard Instrument Laboratory is owed to Leonard's original passion to produce instruments for the measure and test of electrical devices



Trade show display for coils, 1948



Shown here are several of the original instruments that bear the name Clippard Instrument Laboratory



Clippard
INSTRUMENT LABORATORY

Manufacturers of
 Precision R. F. Coils

Specialized Electronic and Electrical Equipment

CINCINNATI, OHIO

Sub-Assemblies Electro-Magnetic Windings

Specialized Instruments For Electrical Inspection and Calibration

Clippard
INSTRUMENT LABORATORY

CINCINNATI, OHIO

Complete DEVELOPMENT, ENGINEERING AND PRODUCTION FACILITIES

Expediting
Manufacturing, Engineering, Production and Test facilities are available to expedite your program in the most efficient manner. Our facilities are available for the design, development, engineering, production and test of your product. We are able to handle your product from the initial design to the final production run.

Engineering
Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities. Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities.

Tooling
If your order calls for special tooling or special equipment, we have the facilities to design, develop, produce and test your tooling. Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities.

Timed TO MEET TOUGHEST PRODUCTION SCHEDULES

Production
Rapid production schedules are met by our production plant. Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities.

Control
Your production is under strict control. Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities.

Assembly
Special assembly jobs are met by our production plant. Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities.

ONE TO ONE MILLION UNITS MADE TO

Clippard is one of the largest centers in the R. F. coil, electro-magnetic winding, sub-assemblies and precision electrical and electronic instrument field. Our plant is the largest in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities. Our production plant is the largest of its kind in the industry. It is equipped with the latest in production equipment and the most modern of engineering facilities.

Clippard INSTRUMENT LABORATORY CINCINNATI

MEET MOST EXACTING REQUIREMENTS

Many of the jobs we handle have required not only highest technical skills, but also the most exacting requirements, accuracy and timing in the "fit factor". As a result, a number of production "firsts" developed by Clippard are now accepted standards. That is why our customers require our coils and sub-assemblies to be produced in the exact manner in which they are required.

Clippard INSTRUMENT LABORATORY CINCINNATI

Specialists IN THE MANUFACTURE OF ELECTRICAL AND ELECTRONIC EQUIPMENT DESIGNED TO FIT YOUR SPECIFICATIONS AND PRODUCTION SCHEDULES!

WHATEVER your needs may be in R. F. Coils, Electro-magnetic windings, sub-assemblies or specialized electrical or electronic instruments for production, inspection or calibration, you'll find Clippard personalized experience and service invaluable.

Our reputation for workmanship and service in the small parts manufacturing and test instrument field dates from the founding of Southwestern Instrument Corp., Little Rock, Arkansas, in 1932 and later in 1938, the Clippard Instrument Laboratory. A number of "firsts" introduced by Clippard are now accepted "standards" in test and production equipment.

During the past few years, Clippard has concentrated exclusively on the manufacture of high priority Army and Navy Electrical and Electronic equipment. Expanded facilities, plus a wealth of knowledge gained in solving "tough" government assignments, make Clippard the ideal concern to handle YOUR government and power development, coil, sub-assembly and specialized inspection equipment.

On the pages that follow is a pictorial summary of Clippard's facilities and unique method of making and testing "tough" assignments. Spend a few moments, please, looking through this folder. You'll then remember exactly where to send the next exacting winding, sub-assembly or inspection instrument problem for skillful solution—no substitute!

Clippard INSTRUMENT LABORATORY CINCINNATI

Clippard
INSTRUMENT LABORATORY

Manufacturers of:
Precision R. F. Coils
Specialized Electronic and Electrical Equipment
Sub-Assemblies
Electro-magnetic Windings
Instruments for Electrical Inspection and Calibration

We hope you have enjoyed the brief glimpse of the engineering and production facilities at our Cincinnati plant. We hope, too, that you'll give us the opportunity to prove how our highly personalized methods of operation can help you on precision R. F. coils, electro-magnetic windings, sub-assemblies or specialized equipment for testing or calibration. Explain your requirements as we understand, and our distance competition through Clippard quality, workmanship and speed of delivery.

Clippard INSTRUMENT LABORATORY CINCINNATI

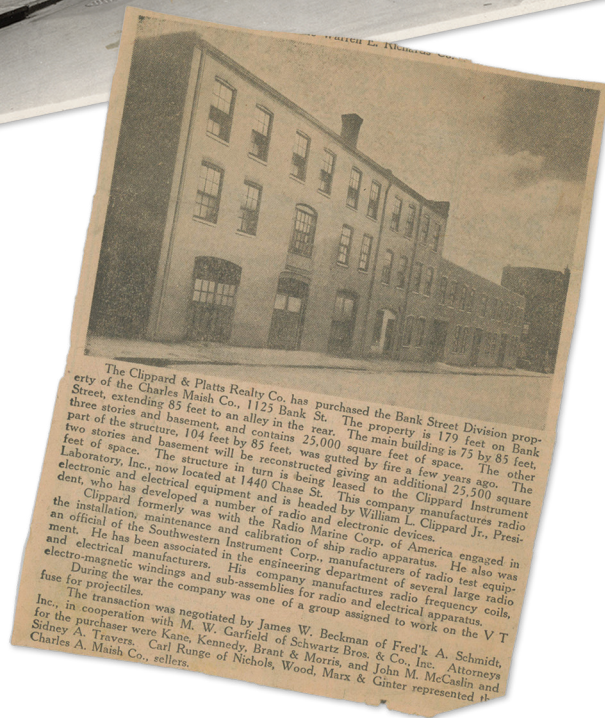
Original Clippard Catalog, 1940



BANK STREET FACILITY

In 1946, with a staff of over 40 employees, the Cincinnati operation outgrew their facility on Chase Street and moved to a larger, old meat packing factory on Bank Street, which provided for current and future growth needs.

Still young, the Clippard children were allowed to roam the factory while Leonard and Harriet worked. Buck and his friends spent many afternoons hunting rats in the basement when he wasn't sweeping the floors for extra cash.





Corporate Offices—Jim Dillon's and Leonard's desks, side-by-side



Top: Machine Shop—Bank Street Facility; Above: Main assembly line

Profiles

George Platts

George, a former professor at the University of Cincinnati, first met Leonard at Crosley Radio Corporation where they worked together. When the U.S. entered World War II, Platts went on to become a Commander in the Navy, and sent many production requests to Leonard for the war effort. Once the war concluded, Platts entered back into civilian life and Leonard asked him to work for Clippard full-time. George is credited with being a phenomenal businessman and a driving force for getting Clippard off the ground. During his tenure at Clippard, George was promoted to Vice President under Leonard, and was given company stock under the condition that once he left, he would have to sell it back. George eventually left Clippard to pursue a plant manager position at General Electric in New York, where he remained until his retirement.

Jim Dillon

Jim came to Clippard Instrument Laboratory, Inc. through his connection with George Platts. He was Platts's assistant in the Navy, and didn't know what to do once he entered back into civilian life. Jim was invited to join the Clippard staff and work in the purchasing department, an area Leonard wasn't as involved in. Jim is credited with George for helping jumpstart the success of Clippard during those early years. He remained in this position until George left the company to work for General Electric, at which time Jim became Vice President. He was also given stock, which he sold back upon his retirement from Clippard.

"We owe so much of our early start to George Platts. He and Jim Dillon really helped the company get going."

—Buck Clippard

Navy Confers Honor Upon George Platts

Cmdr. George F. Platts, son of Mr. and Mrs. George E. Platts, 3140 Epworth Ave., Westwood, has

received the Navy's Commendation and Ribbon Bar for outstanding performance of duty. Platts, who was released from the Navy September 8, 1945, pioneered in the production of the radio proximity fuse for the Crosley Corp. Later he established production plants in Ipswich, Mass.; Rochester, N. Y., and St. Louis.



COMDR. PLATTS established production plants in Ipswich, Mass.; Rochester, N. Y., and St. Louis.

"By his tireless efforts, leadership and devotion to duty throughout, Commander Platts contributed to the successful prosecution of the war and upheld the highest traditions of the United States Naval Service," the commendation declared.

An electrical engineering graduate of the University of Cincinnati, Platts now is employed by the General Aniline and Film Corp., New York.



Jim Dillon, 1952



The Cincinnati Post

Afternoon
EDITION

U. S. WEATHER FORECAST: Cloudy today. Occasional rain tonight, Friday. Low tonight 40. High Friday 50.

VOL. 67. NO. 277.

PHONE PA-1111

CINCINNATI, THURSDAY, DECEMBER 2, 1948.

Entered at Cincinnati as Second Class Matter Jan. 15, 1881. Act of 1970.

PRICE FIVE CENTS

U. S. Sues Goldfarb on Rent Violation Charge WOMEN STRIKERS BATTLE HERE

Official Says Fee Too High, Asks Refund

Tighe E. Woods, area housing expediter, Thursday asked Federal Court to force Nate Goldfarb, of 414 Rosedale avenue, to "stop rent ceiling violations at the Palmer Hotel and refund overcharges amounting to double the legal rate in some cases."

The hotel, at 341 W. Fifth street, recently was called a fire trap by Joseph Feldman, state fire marshal.

Mr. Woods' suit also asked for "refunds in other cases where overcharges may be found." He said that "dozens of complaints have been received."

Mr. Goldfarb charged Alivius M. Winkler \$12.50 a week for a room that should have rented for \$8 the action asserted. Five other alleged violations were cited with overcharges reportedly ranging from \$1.50 to \$7 weekly.

City Pay Hike Cash Yet To Be Obtained

Most of the money needed to pay a recommended \$1,355,950 wage increase for city employes is not yet in sight, City Manager Kellogg said Thursday.

The manager's disclosure was made as it was learned that the county and board of education probably will follow recent custom and adopted similar pay boosts for their several thousand employes.

"It will be up to Council and Finance Committee to find the money for the city increase," Mr. Kellogg said.

Explaining that \$1,141,530 of the money involved must come from the city's general operating fund, the manager said: "I don't see any of that in my budget. Balance of the pay raise money will be available in other funds."

The budget now is being revised and will be presented to Council soon by Mr. Kellogg.

The manager did not indicate possible sources of increased revenue.



"A" BOMB EXPLOSION
... happened at Bikini.

Probe Begins On Vet's Charges

Inquiries were begun Thursday by City Manager Kellogg and Henry M. Bruestle, city solicitor, into a charge an assistant city prosecutor was rude and insulting.

U. S. Leads World on 6th Birthday of Atom Power

By Science Service.

WASHINGTON, Dec. 2.—Six years after scientists first achieved the self-sustained release of energy from the atom, there are 13 atomic piles, or "furnaces," in operation or about to operate in eight locations in three countries.

USSR Puppets Claim Rule Of All Berlin

Legal City Council
Meets in West;
Communists Riot

BERLIN, Dec. 2 (UP).—The two-day-old Soviet sector puppet government claimed jurisdiction over all Berlin today when it met for the first time in the city hall in the Russian sector. Across town the legally elected city assembly, forced out of the city hall by Communist riots last September, held a meeting of its own.

The first meeting of the Communist city council was called to consider measures "to safeguard the food supply of all Berlin." The Soviet council is headed by Friedrich Ebert, renegade socialist and son of the first president of the Weimar republic.

As the puppet government met, German police in the western sectors prepared to turn back expected new invasions by Communist agitators.

Session Secret

Secrecy surrounded the Communist rump session. Only reporters for the official newspaper of the Soviet military administration and the Soviet-sponsored news agency were admitted. The British sector meeting was open to the public.

The Communists were arrested last night when they tried to break up a demonstration rally in the American sector. Police dispersed the rest of the group with nightsticks. Those arrested were released early today.

It was expected that other bands of Communist agitators, described by police as "organized interference groups," would invade the western sectors Sunday in attempts to break up the scheduled municipal elections.

Patrols Set Up

Strong motorized police patrols were alerted to fan out to possible western sector trouble spots on



MRS. CHRISTINE REDMOND
... shakes fist at assailant.



MRS. GLADYS STANSBURY, left, and MISS ELSIE RAYBURN
... on the instrument company picket line.

Hair Pulled, Three Hurt In Skirmish

A hair-pulling, face-scratching running battle between strikers and non-strikers broke out Thursday on the third day of a strike at the Clippard Instrument Laboratory, Inc., 1125 Bank street. Three women were hurt slightly in the melee.

Additional police protection is to be placed at the plant Thursday night. There were reports that some employes had threatened to stone the plant.

The skirmish began three blocks from the plant where a group of about 25 non-strikers formed and began a trek to the plant. One hundred women strikers were lined along the route.

Patrolman John O'Neil said non-strikers rushed out and tried to prevent the others from reaching the plant. There was pushing and shoving. Patrolman O'Neil called for help.

Two Knocked Down

Mrs. Christine Redmond, 28, of 811 Bank street, said the husband of a woman worker struck her in the back. Two women seeking to work were knocked down. One said her face was scratched.

Pickets Take Posts

When it was all over, there were 70 workers in the plant, the company said. Strikers said there were only 20. They are members of the International Association of Machinists (Independent).

Strikers remained in little groups near the plant. The allotted four pickets took their posts.

The union Local 789 seeks to become bargaining agent for employes, according to Charles Gowen, business agent. The union has demanded a labor board election.

Won't Cross Lines

NLRB has not decided yet on its action. Meanwhile two international representatives were scheduled to arrive to help iron out the situation. The executive board will try to establish benefit funds for strikers.

There are no truck deliveries since Teamster Union drivers won't cross the picket line.

Names of two employes knocked down were not obtained. Mrs. Redmond threatened to file a war-



1948 EMPLOYEE STRIKE

When writing a book to capture the history of Clippard, it is important to have a record of the events that helped to forge a vibrant culture, despite how dark those events may have been.

As the U.S. came out of the Great Depression and WWII, job growth and wages were naturally on the rise, as was the average wage for Clippard's staff. Unions approached Clippard employees and convinced many that their assembly wages should be the same as a machinist, despite the technical ability, training, or education.

On November 31, 1948, 150 assemblers went on strike until December 12, 1948.





STURGIS, KENTUCKY PLANT OPENS IN 1949

In the wake of the strike, Leonard worried about the exposure to the Machinist Union, considering that the company was based in the capital of the machine tool world. He began exploring options to open another facility and settled on Sturgis, a small town in western Kentucky, as the ideal location for the next plant.

The first factory in Sturgis was in an old house until a manufacturing facility became available later that year. The plant remained in operation until 1955 when it was moved to Paris, Tennessee.



Coil winding rooms in first Sturgis factory



Coil winding rooms in first Sturgis factory



Above:
Sturgis, KY
employee photo, 1950



Main assembly room floor in Sturgis, KY manufacturing facility



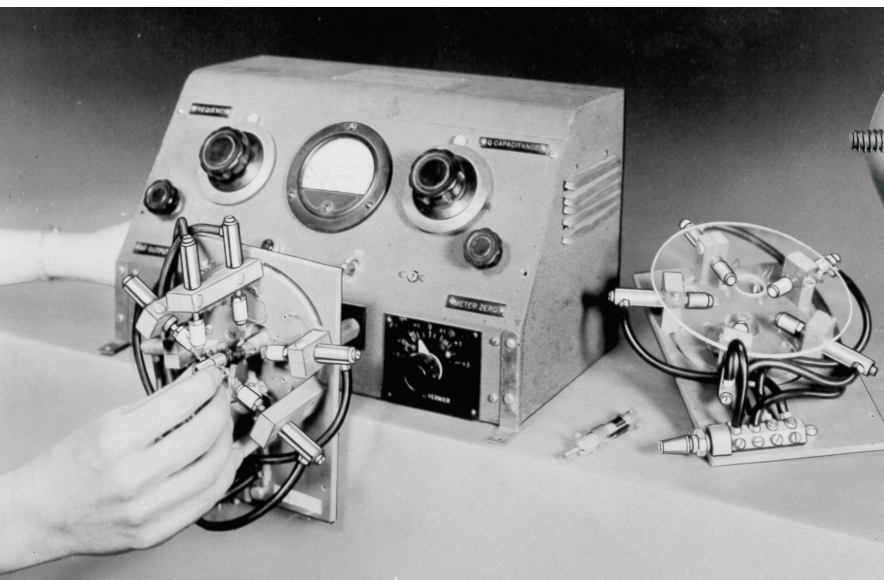
Plant Manager of Sturgis, KY Operations, 1950

THE BIRTH OF MINIATURE PNEUMATICS

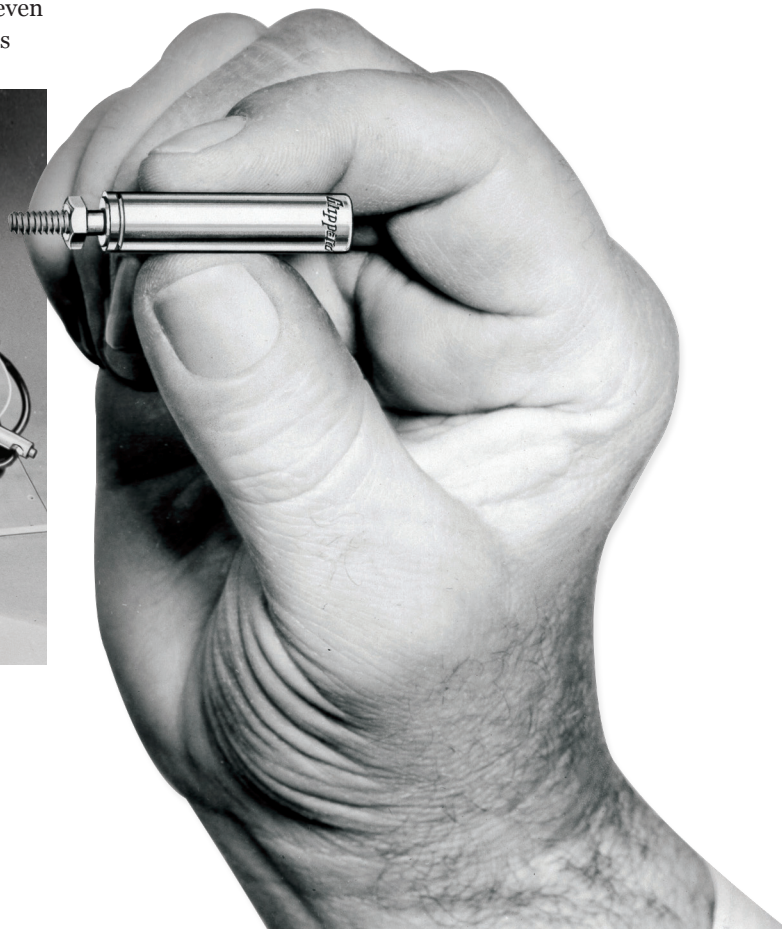
In the manufacturing industry, testing products is key. If a component doesn't work or is ill-produced, it will impact the entire system it's placed in, not to mention dissatisfy the customer. The coil business was no different. Each coil was manufactured with a core that had to be aligned just the right way when installed in order to do a particular job. Clippard had to test to make sure the core in the coils was adjusted and performed appropriately. In order to test this, workers would have to insert the coil into a fixture and connect wires to it—a time-consuming process, as each coil had anywhere from four to eight terminals to connect to. For most of the connections, mechanical needles were placed on specific points of the coil. But these needles weren't reliable in their contact. Bad contact between the needles and a coil skewed the testing results, showing the coil as improperly made even if it wasn't. This was a huge obstacle in the testing process

because it not only took time to connect coils to the testing equipment, but it was also an inconsistent, flawed method of testing. When producing hundreds of thousands of products to supply customer demands, Clippard couldn't afford to continue guessing whether or not a coil was bad because of its production or because of the testing connection. So Leonard began devising a better way.

In the manufacturing industry, testing products is key. If a component doesn't work or is ill-produced, it will impact the entire system it's placed in.



Above: **First miniature pneumatic application—testing fixture.**
Right: **MAC-385 original rolled air cylinder, 1949.**

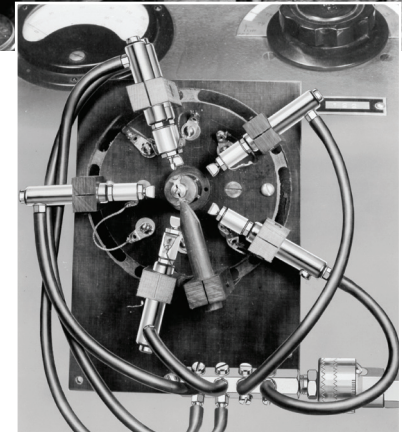
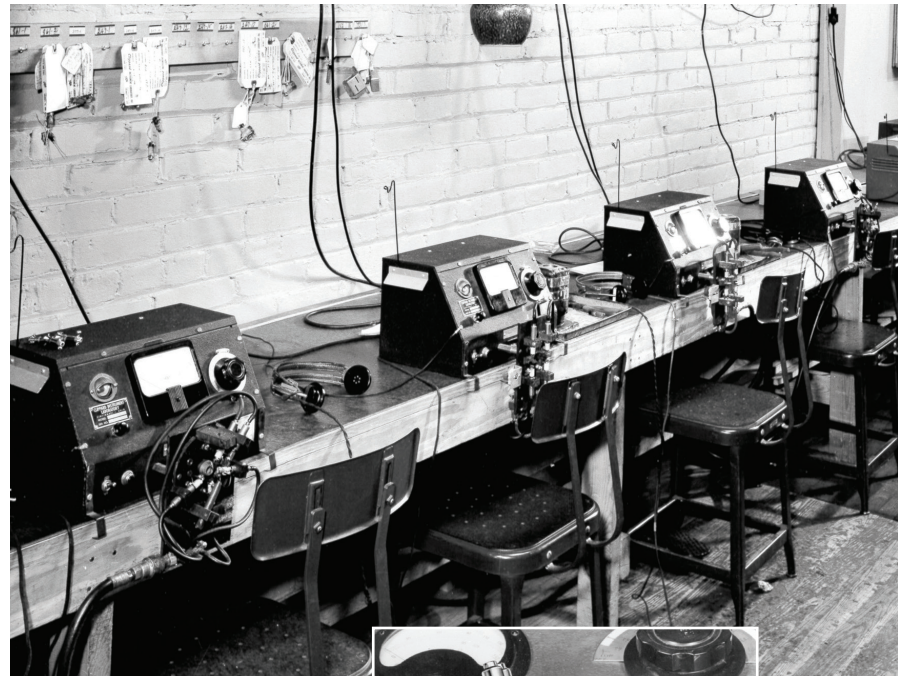


Leonard approached the problem with the mindset that the product was good and the general concept for the testing process was good, he just needed a better testing device. He racked his mind for answers to the problem, for how to create a testing device that would make better contact, more consistently, and in less time. In 1949, he found the solution. Cylinders on each corner of the device, driven by air, would power the needles enough to make good contact with the coil and would save time by automating the tedious connections. It was an ingenious idea, but the solution carried with it a catch—where would he find tiny air cylinders?

Every manufacturer he approached told him it wouldn't work, that what he wanted was too small. They weren't interested in the "midgets," as they called them. Leonard was left with no other option than to make the cylinder himself.

Pneumatic air cylinders existed, but even the smallest, measuring over one-inch in diameter, was too big and too powerful to put in the device. The force from the stroke length would crush the coil. Leonard was interested in the coils and improving the testing process for that product—he wasn't interested in building pneumatics. However, in pursuit of this, he designed the air cylinder he wanted and began searching for someone to make it. Every manufacturer he approached told him it wouldn't work, that what he wanted was too small. They weren't interested in the "midgets," as they called them. Leonard was left with no other option than to make the cylinder himself. And thus, the first miniature pneumatic cylinder was born.

The original product was nothing more than a brass tube with a piston rod and a leather seal, but it did the job he needed it to do. When put on the testing device, the cylinders made perfect contact with the coil every time, thus enhancing the reliability of the process. The cylinders also reduced time



for the tester because a foot pedal activated the cylinders, making the process semi-automatic. Formerly known as the MAC-385—now known as the 3PS-1/2—this was the first miniature rolled construction air cylinder to ever be built. A brass ferule allowed a hose to slip on the tube at the end. Leonard preferred to use a threaded connection, but no standard pipe fittings were small enough for the cylinders, so he developed the #10-32 port to fit it, another industry first. Miniature cylinders used small amounts of air, but the air valves commercially available at the time were also all too large, so Leonard developed a small 3-way valve using the new #10-32 ports. At the time, it did not even occur to him that he had created a whole new world of possibilities for pneumatic technology.

1950s

THE COLERAIN PLANT OPENS

Just as before, the business began to outgrow its location. As Leonard began searching for another place to house Clippard Instrument Laboratory, he happened upon a cornfield along a two-lane road in Cincinnati. Leonard resolved that Clippard was no longer going to modify existing spaces for their headquarters, he would build his own customized plant. With just enough money to purchase five acres of the 300-plus-acre field, Leonard contracted his brother Sam to design the facility. Once the designs were in place, they broke ground and in 1952, Clippard Instrument Laboratory became a permanent landmark along Colerain Avenue.



Above: From right to left—Bob, Bill, and Pat Clippard with a friend of Pat's
Left: Leonard Clippard





The building of the Colerain plant was a significant point in Clippard's history because it established the company as part of the local community—an aspect that would grow to become a large part of the company's culture.

The building of the Colerain plant was a significant point in Clippard's history because it established the company as part of the local community—an aspect that would grow to become a large part of the company's culture. Throughout the years, the two-lane road has widened to five lanes and a multitude of businesses popped up along its stretch. As the business grew, their connection to the community grew as well. Clippard engaged with the local schools and became involved with a large variety of local philanthropic efforts.

Though he wished he was able to buy more in 1950, the few acres Leonard bought allotted the company enough space to expand the facility three times. The first of these expansions was in 1966 when Clippard needed to add factory space to the back of the building to accommodate new machining equipment. In 1975, an office wing was added along with 27,500 square feet to the basement and manufacturing floor. In 1989, another office wing, meeting room, lunch room, and shipping area were added as part of the location's final expansion.



Above: **Pat, Bob, and Bill—holding the family pet, Toby the raccoon, 1956**
Right: **The Clippard family with Buck's soon-to-be wife, Carol, 1955**
Right, Top: **The family home on Northbend Road**

LEONARD'S FAMILY

Not only had the business grown, but so had the Clippard family with the birth of Bill in November, 1941 and Bob in April, 1945. This motivated Leonard even more to make the business a success, in order to provide for his family of six. With the amount of incoming orders increasing steadily, Leonard was able to scrape together enough finances to move their growing family into a house in Mt. Airy, a suburb of Cincinnati.





Above: **Bill and Bob Clippard, 1954**
Top: **The Clippard family, 1952**
Right: **Bill, Pat, Bob, and Leonard Clippard, 1950**

MOST VERSATILE CONTROL IN YOUR LINE (and ours!)

MPA-3 MINIATURE PILOT ACTUATOR

Pilot operates valves for remote control of cylinders — acts as an air relay for one pressure to another, air or hydraulic.

Serves as an electrical safety switch, interlock, electrical take off for air or hydraulic circuits, electrical counter, or electrical indicator for panel lights.

MAV-4 or 4-D 4-WAY AIR VALVES

MAV-2 or 3 2 and 3-WAY VALVES

ES-1 ELECTRICAL SWITCH

Only 1" x 9/16" overall. Screws directly on the mounting stud of the entire family of Clippard miniature 2, 3 and 4-way air-hydraulic control valves and single pole, double throw snap-action electrical switch ES-1. Small bore, floating piston, spring return, with 1/4" stroke, requires less than 1/2 cc. of air to operate. A few suggested uses for MPA-3 are shown above, but you'll think of many more.

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106

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MINIMATICS FOR SALE

For years Clippard manufactured tiny pneumatic cylinders and valves for internal use, enhancing their own machines with the miniature devices. They were simply a resolution to issues within the production process—it wasn't until around 1953 that the idea of the selling the cylinders surfaced. If the miniature pneumatic cylinders and valves had resolved a problem within Clippard's production process, could they possibly solve an issue in another company's production process? This was the kind of thinking Buck contributed when he joined the family business full time after returning home from college. Seeing the potential to expand in this new market, the oldest Clippard son convinced his father to pursue the opportunity.

“When I got here I thought this was the cutest manufacturing plant I'd ever seen. The products were so small. It was a real toy house.”

—Lee Fuller

Selling pneumatics was a difficult challenge. The first hurdle to overcome was the product itself, or rather the perception of the product's size to outside manufacturers. People looked upon the miniature pneumatics as toys—cute and powerless models of the larger components that already existed. They didn't see how anything so small could be of any use to them. Clippard was ahead of its time in the eventual trend towards miniaturization in virtually every industry.

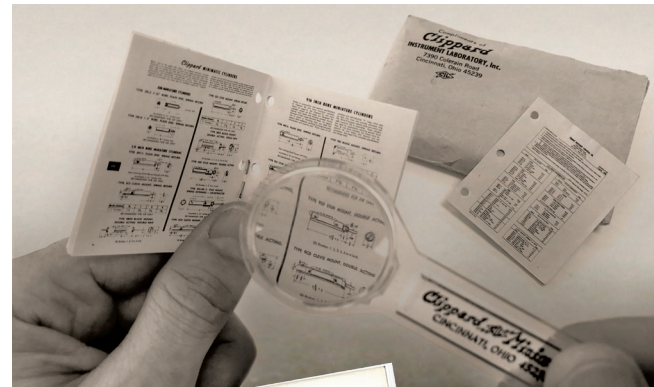
Originally brought into the family business as a coil salesman, Buck grew increasingly interested in pneumatics and spent a great deal of time on that front trying to get the new product off the ground, first by showcasing the powerful performance of these small devices. Under Buck's lead, Clippard advertised in six magazines—Applied Mechanics, Automation, Machine Design, Design News, Applied Pneumatics, and Equipment Digest.



Buck was instrumental in the development of many of Clippard's early valves, such as needle and shuttle valves.

With the ads in place, Clippard's miniature pneumatics starting getting attention from potential customers, which created their next hurdle—the product line. Because it had been developed to solve an internal issue, Clippard hadn't produced an entire line of pneumatic devices. All they had at the time was a cylinder, a valve, and a few fittings they'd used for their own purposes. Early dealers were uninterested, saying they'd reconsider when the company developed a complete line of cylinders, valves, and fittings that all went together. So the Clippard team began designing new products that they could add to what would become the first full line of Clippard miniatures.

Through his interest in transportation, Buck designed what is now known as the MAV-4, a 4-Way valve that he modeled after valves used for steam engine trains. The MAV-4 worked well with another new product, the double-acting cylinder, and is still sold today. Buck was instrumental in the development of many of Clippard's early valves, such as needle and shuttle valves, the latter being another product he modeled after valves used for brake systems of Air Force planes.



To enhance Clippard's advertising reach, Buck partnered with a small advertising agency run by Tom Burch, who helped design the company's brochures. A tiny miniaturized catalog was handed out at trade shows along with a small plastic magnifying glass—it was an instant hit. Leonard was still unsure about the viability of pneumatics and was not in favor of spending Clippard's coil profits on the brass hardware. He wanted Buck to focus on making sales calls to coil customers, telling him that if they focused on coils "they would go somewhere." But Buck saw the long-term profitability for pneumatics and began traveling to establish relationships with distributors.

Profile

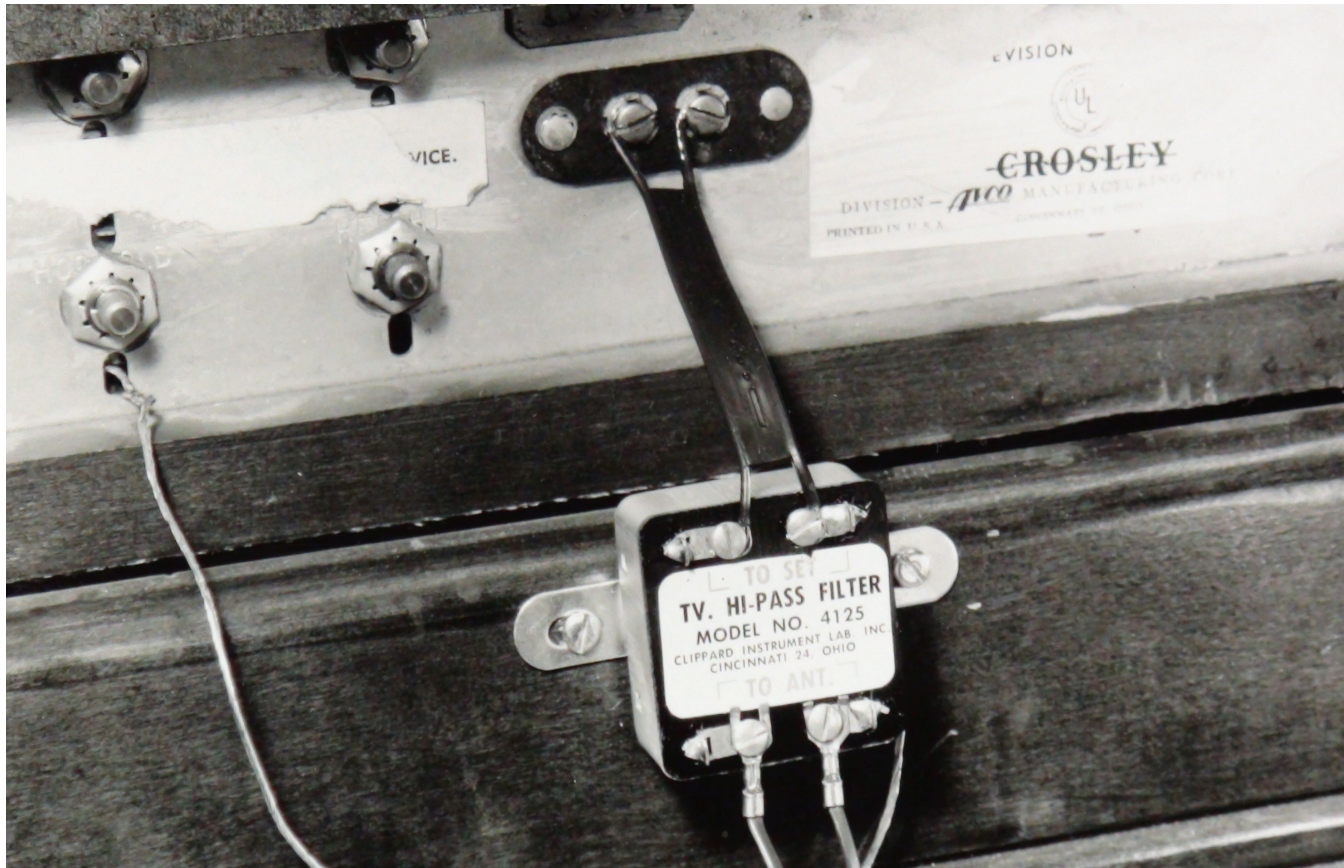
Buck Clippard

The eldest of Leonard's children, Buck was born in 1930 to Leonard and his first wife Dorothy in Arkansas. He moved to Cincinnati in 1936. At the age of 12 he was working for the family business, sweeping the floors after school for \$0.25 an hour. After high school Buck attended Ohio University to study Industrial Engineering. Buck fell in love with flying soon after his dad earned his pilot's license. He even learned how to fly in an old airplane he bought himself for \$325. During college he joined ROTC and went into the Air Force after graduation.

After graduating college and attending flight school, Buck returned to the family business where he worked in sales, flying for recreation on the weekends. But when they built the wall around Berlin and President Kennedy mobilized the National Guard, Buck was called to active duty and was based in France for a year, interrupting his time at Clippard. When he returned to civilian life, he continued to fly and brought in Jim Crain, a friend from the National Guard, to take over his position at Clippard. He then applied at Eastern Airlines. Buck flew with Eastern for a year until he was offered the opportunity to fly worldwide with Pan American Airlines full-time. The Captain of a 747, Buck flew round-world trips with Pan Am, visiting 125 countries. In retirement, he lived in Arizona with an airplane hanger next to his home and continued to travel the world until June, 2017 when he passed away at the age of 87.



Though he did not carry on in the family business, Buck was a large influence in Clippard's early days in pneumatics. Fresh from flight school, Buck worked in sales where he helped initiate the advertising for Clippard's first miniature pneumatic products and began setting up distributor relationships. He also assisted in the development of the original line, designing products such as the MAV-4 4-Way valve and the MSV-1 shuttle valve, which are still popular items in Clippard's catalog.

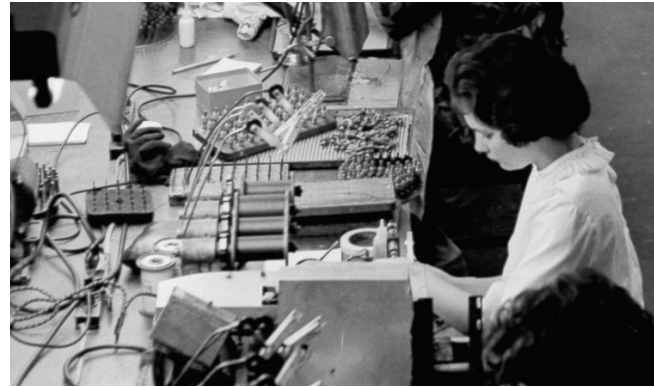


THE DECLINE OF COILS

During the late 1950s, a major change started rattling the manufacturing industry in the U.S. Many of the manufacturers who had once made their products on American soil began moving their production overseas, shifting the market for Clippard and everyone involved in the electronics business. By moving overseas, many companies became harder to compete with, as they could make and ship coils to the U.S. much cheaper than Clippard, one of the last coil producers left in America. The coil business had become strictly feast or famine. Electronics such as television and radio were still mainly seasonal products, meaning

Clippard could only mass produce so many and could not stock them on the shelves—a practice that usually lost money, as the coils needed to be made to the specifications of certain products and couldn't be stocked. Advancements in technology such as transistors began emerging, slowly making the need for vacuum tubes, and therefore coils, obsolete. The shifting market and decreasing marginal profits made Clippard's founder question whether he should continue in the coil business, but not until after union trouble caused the Colerain Plant to suspend production and seek production facilities elsewhere.





PARIS, TENNESSEE PLANT OPENS

In 1955 Leonard moved the facility from Sturgis, Kentucky to Paris, Tennessee. Leasing a 30,000 square foot facility for nearly 100 employees, this plant was very attractive to new employees as a state-of-the-art, semi-automated assembly plant for radio and television components.



Top, Bottom, and Far Left: **Component assembly workers in Paris plant**
Center, Right: **Paris employee photo, 1962**



The triage nurses rolled Leonard's stretcher to the side while they worked on Bill and his friend, under the impression that Leonard wouldn't survive even if they did treat him immediately.

DISCHARGE SUMMARY

NAME: Wm. Clippard, Jr.
DOCTORS: Boyer-Martin

Admitted: 9-15-50
Discharged: 12-1-50

Jan 7, 1950

This patient was involved in an airplane accident and was admitted to the emergency room in extremely critical condition with the following complaints: A compound, comminuted fracture of the right ulna and radius at the elbow.
Compound, comminuted fracture, right tibia.
Compound, comminuted fracture, left tibia, astragalus and
Fracture of thumb, 1st, 2nd, 3rd and 4th fingers at carpal metacarpal joint areas, combined with dislocations of each of these.
Fracture of mandible in three different areas.
Fracture of maxilla and nasal bones
Cerebral concussion
Fracture of skull in basal area with rhinorrhea
There was an avulsion of right eye
Multiple lacerations of face, hands & legs.
Patient was immediately taken to surgery upon admission, where tracheotomy was done and the fractures were splinted, and blood was given. Following a better condition of the patient, the right eye was removed and the fractures were reduced. The maxillary and mandibular fractures were treated by Kirschner pinning and traction, and the extremity fractures were treated by open reduction and ankylosis. Patient did remarkably well throughout his entire hospital course, considering the fact that all four extremities were fractured and all facial bones were broken. The nasal fracture was not attempted to be reduced because of rhinorrhea. Patient was finally discharged in a wheelchair to be followed in the office by the various physicians connected with the case, 12-1-50.

Dr. Martin:ms
1-7

BM

THE PLANE ACCIDENT

Clippard Instrument Laboratory has a long-standing history with aviation that began with Leonard earning his pilot's license and buying his very first plane, a Cessna 170. Years later, on September 6, 1956, Leonard was involved in a serious plane accident with his son, Bill, and his son's friend, Richard, as his passengers. The plane was a Cessna 182 Leonard had bought a few months earlier. With Bill, 15 at the time, in the front passenger seat and Bill's friend, who was an airplane rookie, in the backseat, Leonard eased the plane off the ground. As the plane ascended, a key that held the propeller blades in place broke, sending one of the blades completely out of pitch. Unable to climb, the aircraft descended into a wooded area and when the wing tip clipped a tree, the plane cartwheeled to the ground.

The plane was completely demolished. Leonard, Bill, and Bill's friend Richard were rushed to the hospital to be treated. When they arrived, the triage nurses rolled Leonard's stretcher to the side while they worked on Bill and his friend, under the impression that Leonard wouldn't survive even if they did treat him immediately. Bill's friend received the least of the injuries, staying only four days in the hospital for observation due to a burnt ear from where the plane caught fire. Bill was in the hospital for a month with a broken jaw and fractured skull. Once the nurses realized he would survive, they began treating Leonard's extensive injuries caused by the plane's engine being driven into him upon impact. His right elbow and ankle were crushed, his left hand bent over backward, his left leg was broken in several places, and he had multiple facial injuries, including almost every bone broken in his face, a fractured skull, and his right eye had been torn from the socket. It took close to a week for the nurses to confirm that Leonard was going to leave the hospital alive, and he remained there in recovery for another three months.

Existing health insurance only covered 90 days in the hospital, so Harriet set up a hospital bed in the living room and nursed him to health at home after he was released from the hospital. Over the course of the next two years, Leonard was in and out of the hospital for operations as

insurance would allow. Despite all he had endured, Leonard was determined to be back at work and made arrangements with a few Clippard employees to be back in the office much sooner than expected. On their way to work, a few men would back their truck up to the Clippard house, roll Leonard's wheelchair over planks into the truck bed, and take him to the Colerain facility each morning. While Leonard had hired capable employees who could keep the business going in his absence, he was still involved in every aspect and needed to return to the business.

It took close to a week for the nurses to confirm that Leonard was going to leave the hospital alive, and he remained there in recovery for another three months.

Leonard never fully recovered from the accident—his elbow didn't heal properly, and he lost his right eye. Luckily, the eye he lost was his blind one, which allowed him to keep his sight. Surprisingly, the accident didn't deter any involved from flying again. Bill later went on to get his pilot's license at age 17, and his friend Richard eventually went into the Air Force. During his recovery in the hospital, Leonard even made it priority to replace the Cessna 182 with a used 170. Though the accident could have been a major obstacle in the growth of the business, the Clippard family and management team persevered and continued to expand the new industry they had created.

THE CINCINNATI ENQUIRER
 MONDAY MORNING, SEPTEMBER 3, 1936
 116th YEAR NO. 147—DAILY
 *****FINAL—93 PAGES*****
 LARGEST CIRCULATION OF ANY DAILY PAPER IN THE SOUTH
 DAILY 210,453
 SUNDAY 270,830
 Entered Post Office at Cincinnati, Ohio, as Second-Class Matter, October 3, 1902, under Post Office No. 1170.
 Single copies, 10 cents
 50¢ retail trading stamp

32,559 SEE REDLEGS EDGE CUBS, 3-2
AIR CRASH KILLS GINGINNATIONS
INDUSTRIALIST Is One Victim
Secretary, 22, Also On Business Trip
Pieces of Aircraft Fall On Two Farms—On Louisville Flight

Cluzewski Delivers, Bating For Grammas
Ted Drives Home Pair, Helping Joe Nuxhall To Victory No. 11

How They Stand

THE CRIB IS EMPTY
 Mr. and Mrs. Stephen Rusokolo and their 20-month-old daughter, Susan, remain sadly alongside the empty crib of their kidnapped baby, Cynthia, at their Hamilton, Conn., home.—AP Wirephoto.

"Conscience" Is Hope As Woman Is Suspect In Kidnaping Of Baby
 HAMDEN, Conn., Sept. 2 (AP)—Investigators are hopeful that an intangible—woman's conscience—may bring about the safe return of kidnapped eleven-month-old Cynthia Rusokolo, State's Attorney Abraham S. Utman said today.

MISS RUTH REAY
 Mrs. Adams was the scene when the bodies were found and helped lead Miss Reay's body into an ambulance. "She was still strapped to a plane seat," she said. She was found "about a half-hour later when the man about 300 feet from the farm of Turner called the man on the road," Mr. Clifton, coroner, was taken to the hospital.

Three Injured When Plane Falls; Father, Son And Friend On It
 Mr. Clippard's daughter, Patricia, 18, said the plane dived into the trees, Marshall County police reported. The wings and tail section were sheared off and the feet crumpled in two and the fuselage burst into flames. Mrs. Albert L. Clippard said she was watching the plane from the kitchen window at her home at 1807 Strickland. She saw the craft tilted and the nose of the wing tilted, and the plane dipped out of sight in the woods.

It's No Holiday On Highways—270 Are Dead
 By Associated Press



Clippard
PNEUMATICS • ELECTRONICS

CLIPPARD MINIMATIC
Representatives Feb. 1, 1964 R-4

<p>ALABAMA Birmingham 35211 Dixie Industrial Equipment Co. 355 2nd Ave. N., P. O. Box 3655 205-323-8705</p> <p>ARIZONA Phoenix 17 Air-Draulics Co. 3135 N. 29th Ave. 602-AL 4-8414</p> <p>ARKANSAS Little Rock Lyons Machinery Co. 904 Broadway 501-FR 4-5006</p> <p>CALIFORNIA Barbours Roger Howell Co. 1802 W. Olive 213-W 9-1803</p> <p>San Francisco 10 Power-Mac Corp. 1999 Bryant St. 415-HE 1-3584</p> <p>COLORADO Denver 23 The Witt Company 1163 So. Dearborn St. 303-744-1253</p> <p>CONNECTICUT Waldo H. Blackmer Palmer House Larchmont, N. Y. 914-TE 4-4990</p> <p>FLORIDA Jacksonville 7 Circuit Engineering, Inc. 1565 San Marco Blvd. 305-FI-9-2114</p> <p>Miami 43 Air Equipment Co. 6835 S. W. 81st St. 305-663-0878</p> <p>GEORGIA Decatur Power Tech 2900 Pine Street</p> <p>ILLINOIS Chicago John S. Tipler Co. 4614 Elm St. Downer Grove 312-WD 9-4543</p> <p>INDIANA Indianapolis 9 Indianapolis Belting & Supply Co. 212 S. Capital Ave. 317-642-28604</p>	<p>IOWA Cedar Rapids Globe Machinery & Supply Co. 309 8th Ave. S.E. 319-EM 9-6911</p> <p>Davenport Globe Machinery Supply Co. 401 East 2nd Street 319-322-7151</p> <p>Des Moines 6 Globe Machinery & Supply Co. East 1st and Court Ave. 515-CH 4-3231</p> <p>LOUISIANA New Orleans 12 Simes Sales Engineers 332 So. Diamond St. 504-JA 2-2882</p> <p>MARYLAND Washington D. C. Area Baltimore 18 N. B. Cochran Co. 2828 Loch Raven Road 301-HO 7-4884</p> <p>MASSACHUSETTS Boston Knox, Inc. Union St. 617-MO 8-1270</p> <p>MICHIGAN Detroit 11 The R. M. Wright Co. 7401 Dahms 313-TR 1-7540</p> <p>MINNESOTA Minneapolis 6 Air Engineering and Supply Co. 2719 East Franklin 612-FE 9-5579</p> <p>MISSOURI Kansas City 9 Zopf Engineering Co. 3269 Gillman Rd. 816-WE 1-7772</p> <p>St. Louis Flo-Products Company 147 Brown Road Hazelwood, Mo. 314-PE 1-1010</p> <p>NEW JERSEY (N. Y. City) The Alloyal Corp. 1990 Springfield Ave. Madisonwood, N. J. 201 SO 2-1700 for New York City: CO 7-9614</p>	<p>NEW YORK (Up State) Rochester 17 Roessel & Company, Inc. 1370 Hudson Ave. 716-FI 2-8230</p> <p>NORTH CAROLINA Charlotte 5 Barker Instr. & Machine Co. 1157 Commercial Ave. 704-534-1222</p> <p>OHIO Cincinnati 15 The Isaacs Co. 595 E. Galbraith Road 513-761-8855</p> <p>Cleveland 12 Auridol Products, Inc. 16517 Euclid Ave. 216-KE 1-7720</p> <p>Columbus 11 Dyke-Air Equipment Co. 1576 East Hudson Street 614-267-0383</p> <p>Dayton 6 The Isaacs Co. 2676 Saloma Ave. 513-GR 5-4341</p> <p>Toledo 13 Midwest Fluid Power Co. 4325 Harris St. 419-479-2271</p> <p>OKLAHOMA Oklahoma City 9 Nix Industrial Supply East Walpole 2230 S. Prosser 405-OR 7-6623</p> <p>Tulsa Nix Industrial Supply 4525 Charles Page Blvd. 918-DO 3-8916</p> <p>OREGON Portland 14 Western Machinery Corp. 1035 S. E. 9th Ave. 503-236-4117</p> <p>PENNSYLVANIA Erie Adam Industrial Distributors, Inc. 12 W. 30th Street 814-GL 3-6784</p> <p>Philadelphia 24 Airline Equipment Co. 553 E. Hunting Park Ave. 215-426-5820</p> <p>SOUTH CAROLINA Greenville Barker Instrument & Machine Co. P. O. Box 5896, Station B N. Pleasantville Dr. 803-235-5022</p>	<p>SOUTH DAKOTA Sioux Falls Globe Machinery & Supply Co. 1700 N. Minnesota Ave. 605-ED 8-9609</p> <p>TENNESSEE Chattanooga 4 Airdraulics, Inc. 1300 E. 23rd St. 615-629-7353</p> <p>Nashville 2 Tennessee Machinery Co. 1133 Park Ave. 615-242-1742</p> <p>TEXAS Dallas Industrial Air & Hydraulics, Inc. 1228 N. Industrial Blvd.</p> <p>Fl. Worth Industrial Air & Hydraulics, Inc. P. O. Box 387 817-JE 4-0013</p> <p>UTAH Salt Lake City 1 The Rain Co. 756 South 1st West St. 801-EM 4-2683</p> <p>VIRGINIA Richmond 20 C. Arthur Weaver Co., Inc. 2610 West Cary St. 703-359-3771</p> <p>WASHINGTON Seattle 44 H. F. Soderling Co. 1214 Poplar Place, So. 206 EA 2-3593</p> <p>WEST VIRGINIA Wheeling Scott-Air Corp. 3825 Jacob St. 304-CE 2-6006</p> <p>WISCONSIN Milwaukee 14 Ray M. Condon Co. 8942 W. Schlinger Ave. 414-CL 3-9220</p>
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DISTRIBUTORS

A critical step in increasing miniature pneumatic sales was to grow the reach of the business. With an aggressive advertising program, the Clippard Minimatic® brand was becoming widely known in fluid power circles. In order to reach more customers, Clippard established distributor networks. While the sales team in Cincinnati was working hard to get the products out to the public, they were limited in numbers. Having a dedicated team of distributors selling products would not only increase the number of people promoting the Clippard brand, but it would also allow the company more time to focus on product development. A 1958 list of distributors for air cylinders tallies a total of 33 companies that represented Clippard products, and confirms the company's understanding, even in the early stages, of the importance of these relationships. Of these listed, seven still continue to sell Clippard air cylinders today.

"I can't emphasize enough that having the distributor network was immensely beneficial to growing the company, growing the market, and making it the success it is today."

—Jim Crain

Part of the reason for the long tenure of these distributors is Clippard's reputation for quality—not just quality products, but quality people. As a distributor-oriented company, maintaining relationships with these partners is important, and Clippard does so by treating them like they do their own employees—with respect and compassion. One way Clippard ensures distributors remain satisfied is through face-to-face interactions. Thanks to the company's involvement in aviation, employees, particularly sales team members, freely fly to distributor locations to discuss new products, resolve issues, and even simply check in. Over the years, these

Top: Isaacs trade show booth, 1964—In 1960 Isaacs did \$531.32 in sales. Today Isaacs sells over \$3 million a year in Clippard products
Bottom: Listing of Clippard Distributors, February, 1964



Meeting on the tarmac—common for dropping off product or signing contracts

personal interactions have demonstrated to those who sell Clippard products that, though they may sell other products from other manufacturers, they are a valued part of the Clippard family.

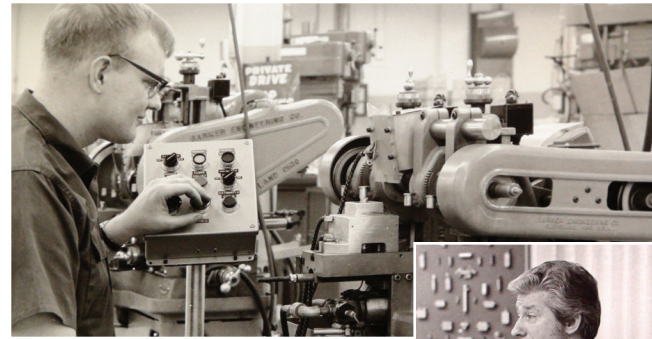
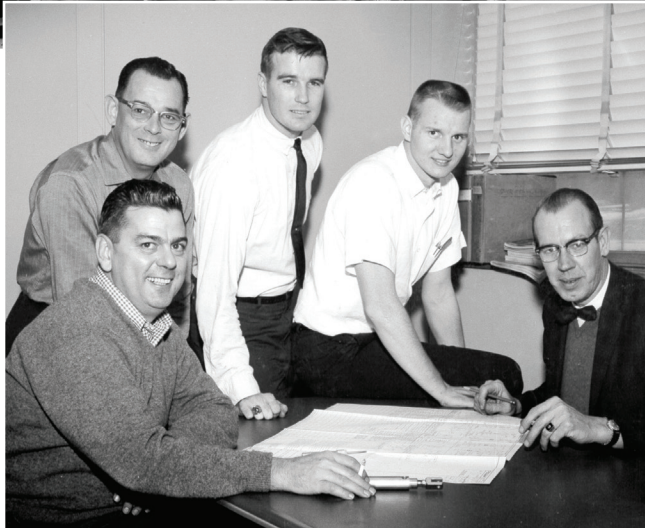
Another reason for Clippard's long history with many of their distributors is because they grew together over the years. As the Clippard brand grew and became more popular, the distributors selling Clippard products also benefited. When two entities grow and develop together, the relationship is strengthened, and the two stay together. A mutual trust is formed, that is able to endure even as the world's markets change and evolve. This has been the case with many of Clippard's distributors.

Clippard's relationship with distributors goes deeper than mere sales. Distributor networks and the clients they attract have been vital contributors to product development over the years. Responsible for promoting the application of the products, those selling the products became very familiar with them, and discovered alternative applications that Clippard had yet to consider or perfect. This collaboration led to the modification and enhancement of many standard Clippard products, thus expanding the company's offering. The development of products in response to customer needs—solving problems customers are facing by modifying standard products or developing custom products—continues to be an important part of Clippard's business today.

A number of Clippard employees have come from distributors as well. Max Comes, the first employee for Clippard Europe, first started selling Clippard products through Rocke International, one of the company's dealers. Recently retired Regional Sales Manager, Dick DeStaffany originally encountered Clippard products while working for Barker. Ken Lappin, another retired Regional Sales Manager, originally worked for Keystone Components in Cleveland. Hoang Do, present day Regional Sales Manager covering the west coast, worked for Bay Advanced Technologies in San Francisco before joining Clippard. These team members who joined Clippard after working for Clippard distributors have been able to, in turn, provide excellent service back to Clippard distributors due to their firsthand knowledge and experience.

Today Clippard has one of the world's best distributor networks. With over 120 distributors, the company is supported by key partners operating in all 50 states as well as in over 40 countries across the globe. Even those who have left the Clippard family for one reason or another, such as John S. Tipler Company, or Roger Howell Company—both distributors for over 50 years—are still part of the company's rich history. Each of Clippard's distributors have played an important role in making Clippard the dynamic, successful company it is today and continue to play an important role in its future growth and development.

1960s



Len Barrett

1960s

According to one of Leonard's letters, the sale of air cylinders and pneumatics grew from \$458.15 to \$1,128,841.84 between 1953 and 1963. Distributors and new customers were a huge contributor to this. Clippard's own sales team was finding new markets in which pneumatics could be used. The 1960s were a time of aggressive planning and strategic sales for Clippard, and there were many talented individuals who took part in making that happen. Jim Crain, who joined the Clippard sales team in 1963, served as Sales Manager and teamed with Clippard engineers and advertising consultants to target key distributors for the company. Partnering with reputable distributors like Rossel, Airoyal, Tipler, Barker, and Knox were huge accomplishments for the company at this time.

Other significant team members joined Clippard's history during this time as well. In 1963, Bill Clippard started working in the engineering department full-time after graduating from The Ohio State University. His brother, Leonard's youngest son, Bob Clippard, began working full-time for Clippard in 1968, focusing on advertising. Part of the early expansion for the Clippard sales department was the introduction of Len Barrett, who originally worked for Machine Design magazine and called Jim Crain to sell advertising space. Little did he know that Jim would convince him to join the Clippard team. Len soon entered the company and became Regional Sales Manager, a position Jim says he excelled in with outstanding sales presentation ability.

Profile

Jim Crain

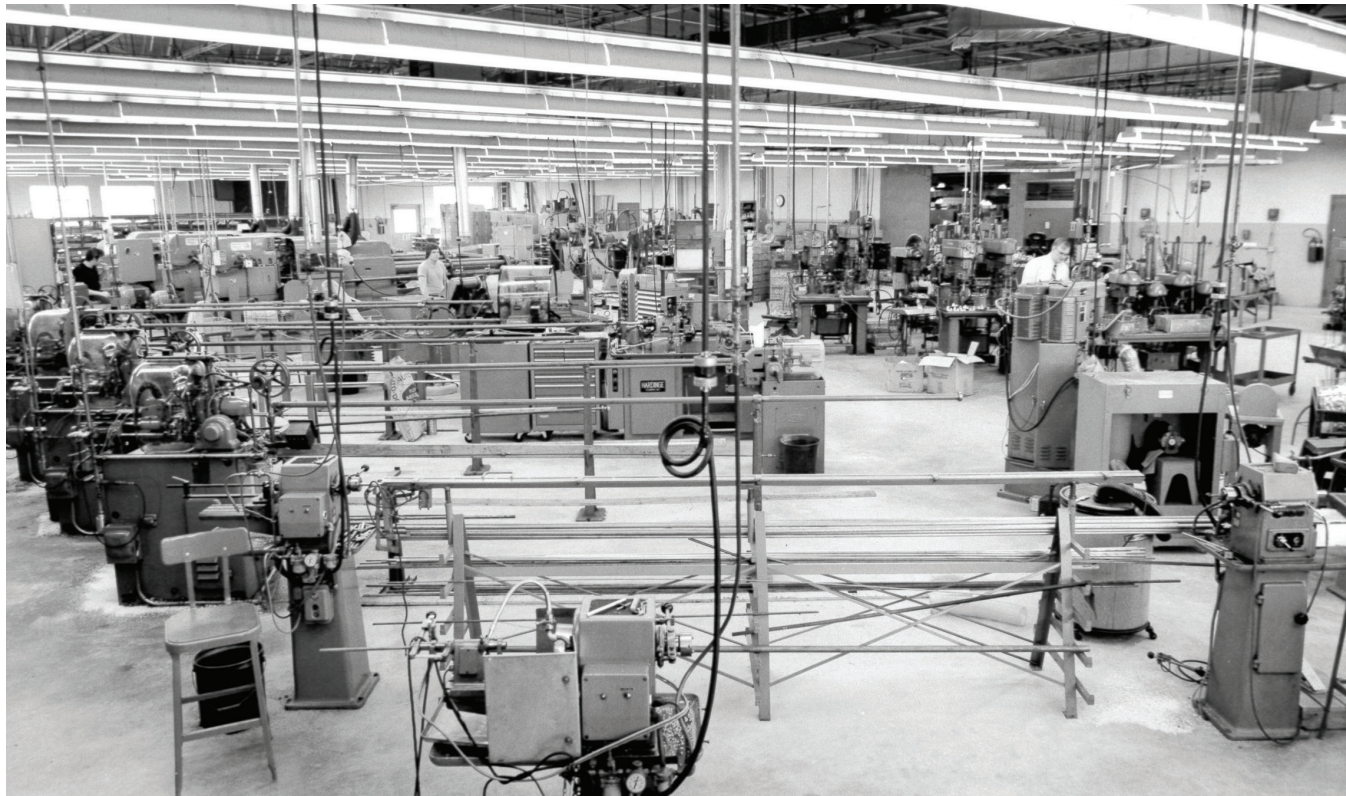


Jim Crain was brought into the sales department of Clippard in 1963. After a year, he left to pursue a Master's Degree in Mechanical Engineering at New Mexico State University. When his time in New Mexico lasted longer than expected, and Leonard received word that Jim had used Clippard as a reference to apply for an airline pilot position, Leonard called Jim and talked him into flying in for a re-employment interview. Jim flew into Springfield to meet Bill and Anne (Bill's soon-to-be-wife) for his interview and, according to Jim, "That was the start of a 42-year exciting, challenging, and successful employment history at Clippard Instrument Laboratory."



Jim Crain with former Sales Manager Sid Hendry

Beginning as a member of the sales staff, Jim quickly moved into the position of Sales Manager and began developing strategies that would launch Clippard's pneumatic line into the hands of significant distributors. Some of the successes Jim was actively involved in during his time at Clippard were the creation of the plant training school for distributors as well as the company's first national sales presentation conducted at a hotel in downtown Cincinnati. He was also a key advocate for Clippard's emphasis on aviation as a strategic benefit for sales. During his time at Clippard, Jim not only saw the growth of product sales, but also of people. He trained and worked with numerous talented people that he, to this day, names by name and gives credit to for Clippard's long history of success. As Vice President of Sales & Marketing, Jim retired in 2005, after spending four years serving as Regional Sales Manager based in Texas, where he still lives today.



NEW MACHINERY & EXPANSION

Leonard was conservative in nature, yet did not slow down due to risk. When Clippard needed more machines to keep up with demand, he explored expensive, high capacity machinery. A salesman for the Warner Swasey Company visited Leonard and his team to talk about the equipment's capabilities. When it came time to purchase, Leonard took him to his office to discuss the cost. When a fair price was reached, the salesman began his a discussion about finance options and ways to afford one of these machines. Leonard pulled out the checkbook and wrote a check for three machines on the spot. To this day, Clippard has never taken a loan or owed money for any capital investment. This point was very important to Leonard, and made him proud of his success.



The first plant expansion
of Colerain, in 1967

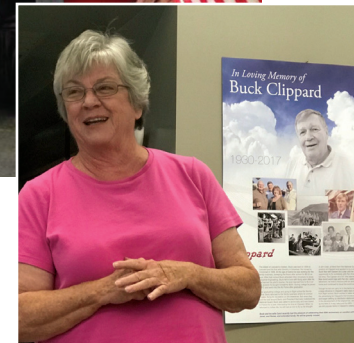
Profile

Patricia Dudsic

The first and only daughter of Leonard and Harriet, Patricia Louise was born in 1936 in Cincinnati, Ohio. Like Buck, Pat saw the earliest days of Clippard unfold as Leonard moved from his job at Crosley to work for Magnavox in Indiana. Growing up, Pat and her brothers were a constant presence at the different coil plants, running around and playing as their father and his steadily increasing staff worked.

Unlike her siblings, however, Pat did not work for the family business full-time once she was grown. Though she never entered the business, her husband, Gil Dudsic, became Purchasing Manager for Clippard in the 1960s, later going on to become Vice President, then Director until his retirement in 1996. Pat and Gil have four children together, two boys and two girls.

Compassionate and empathetic, Pat has spent her adult life dedicated to volunteering and helping those in need. She has always had a heart for others, from sponsoring less fortunate people from the Middle East through the 1970s and 1980s, to her involvement with the American Red Cross and the City Gospel Mission for more than 30 years.



A NEW ERA OF MANUFACTURING

Toward the late 1960s and into the early 1970s, the American era of extensive manufacturing began. Small applications began making their way into the production processes of certain manufacturers. For the textile industry, Clippard created an air cylinder that could be used in sewing shops to cut a line of thread with a tiny attached blade, thus saving time in the making of garments. Carpet manufacturers saw the benefit of using air cylinders in their process, sometimes using thousands of products in one machine. Newspaper presses also began using Clippard cylinders in their printing processes to control the ink supply as well as the tension and guiding of the giant paper rolls.

Though these were small applications to improve production procedures, they were significant. As these various small applications began to multiply, other potential customers began to see new opportunities for their own processes in the wide variety of uses for Clippard products. Applications in the medical and analytical industries also began expanding during this time as more manufacturers began to see that air control offered reliable and safe solutions that fit their needs. One of the early medical applications for

Clippard's miniature products was in dentistry, with hand held instruments that used compressed air. As these types of applications continued to branch out and reach new industries, Clippard was also improving their own production and testing processes to improve their products.

As these various small applications began to multiply, other potential customers began to see new opportunities for their own processes in the wide variety of uses for Clippard products.

Logical Choice

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Miniature Moving Parts Pneumatic LOGIC CONTROL COMPONENTS

Plus...
PRESSURE CONTROLS and REGULATORS • FITTINGS
AIR OPERATED DRILL QUILL • PROGRAMMERS
VOLUME CHAMBERS • HOSE IN 10 COLORS
MOUNTINGS • QUICK CONNECTS • CYLINDERS • FILTERS
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For faultless operation it is logical to choose the miniature logic control devices proved by more years of successful use than any others. That is why more and more design engineers specify components "precisionered" by Clippard — pioneer of the miniature fluid power and pneumatic control field. Our products are stocked by leading distributors worldwide for IMMEDIATE delivery. Ask for our design handbook detailing more than 400 of these time-proved components. Write NOW for Bulletin No. 168.

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Pneumatics has come a long way since the era of the old player piano, powered by foot and programmed with an 11-inch-block-long punched paper roll.

Clippard MINIATURE Fluid Power, Fluidic and Pneumatic Logic Control Devices help you play "sweeter" production and control music because they offer all the advantages of long life, positive action, flexibility, safety and simplicity of maintenance found in other automated systems; plus BIG performance in SMALL space. That is why more and more design engineers today are "doing their thing" pneumatically... and looking to Clippard for components that do the job inexpensively and well.

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- FITTINGS • AIR OPERATED DRILL QUILL
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CYLINDERS

DRILL QUILL

CONTROLS

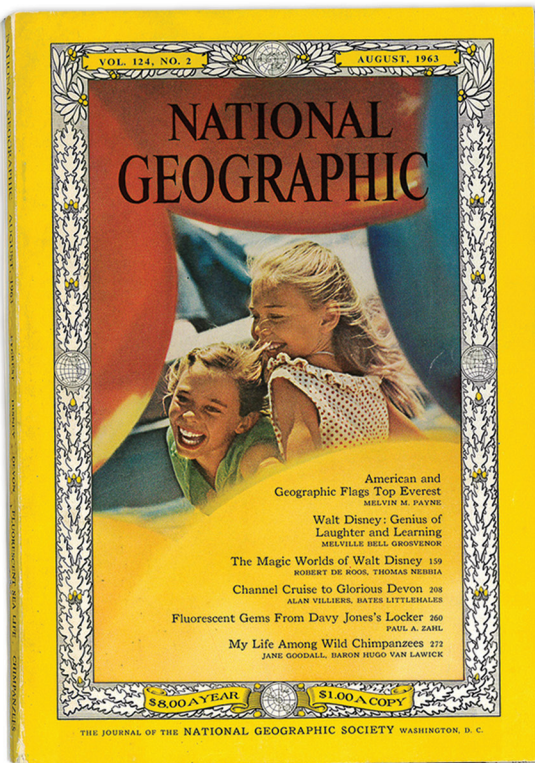
ACTUATORS

VALVES

HOSE and FITTINGS

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Industry's MOST COMPLETE Miniature Fluid Power Line



DISNEY & CLIPPARD

As Walt Disney was working on the encore of Disneyland, Clippard was widely used in the animatronics Disney became famous for due to the miniature size and power the products offered. The August 1963 issue of National Geographic highlighted many of the Disney creations with Clippard products prominently seen on each page.



Profile

William L. Clippard, III



Mechanical and precise, Bill is known throughout the company as the product half of the motto “Quality People, Quality Products.” Though he, like the rest of the Clippard family, cares deeply for the people within the company, his expertise was in the area of engineering – designing the products and processes that made Clippard a world leader in the miniature pneumatic industry.



A 1963 graduate of The Ohio State University in Mechanical Engineering, Bill, born November 1941, took after his father on the technological side. With a strong passion for tinkering and an interest in machinery, he knew from an early age he wanted to work in the family business because of the company’s focus on engineering, machines, and innovation. Growing up, Bill, like his siblings, worked odd jobs around the plant such as sweeping floors. He even went on sales trips with Buck when home from college in the summer. Bill started working full-time for Clippard in 1963 in the engineering department. There, he was heavily involved in the design process for new products—something he was and continues to be extremely passionate about—and moved up to the position of Chief Engineer and eventually Vice President of Engineering.

Bill remained in this position until his father transferred leadership of the company prior to his retirement in 1977. During this transition, Bill took over as President of Clippard in 1975, where he stayed until his own retirement in 2014. Working together with his brother Bob, Executive Vice President, he helped lead the company into changing markets and times with new, advanced products. In the midst of his professional life, Bill also settled down and had five children with his wife Anne. Bill’s son, William A. Clippard, and son-in-law, Ernie Doering, currently work for Clippard.

With over 50 years dedicated to the company, Bill’s influence and impact in Clippard endures as the business continues developing products for the future.



OPERATION EXPANDS TO NEW FACILITY

The 1967 opening of a new plant in Paris, Tennessee, which employed nearly 300 women, was part of the separation Leonard had made in the late 1950s of his two product lines—Clippard Instrument, Inc., the coils business, and Clippard Instrument Laboratory, Inc., the pneumatics. The pneumatics were becoming a growing main focus product at the Colerain facility, while the Paris plant was a significant contributor to the coil side of the business.





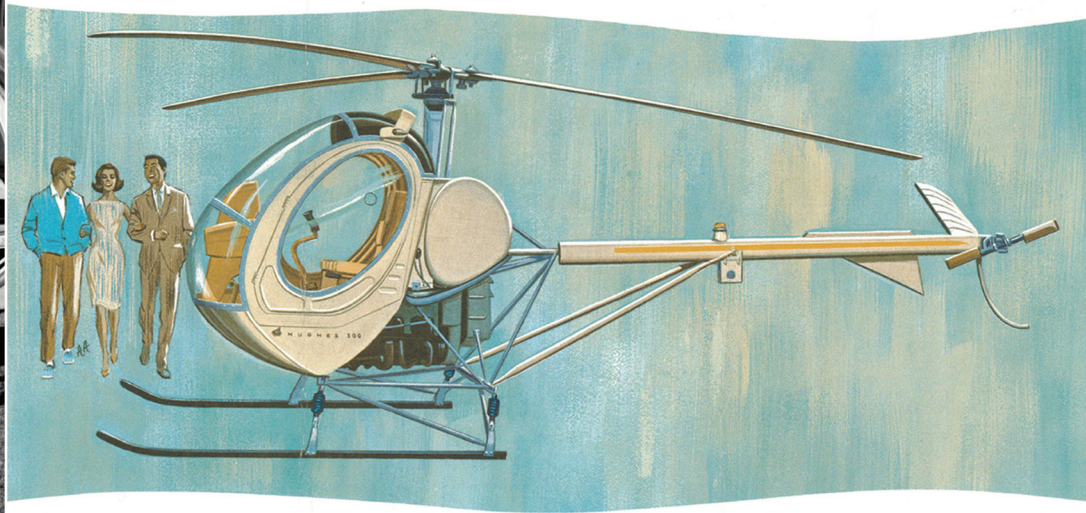
Quality has always been a staple in the Clippard culture. Above: Leonard and Jim Dillon receive an award from RCA



LEONARD'S OTHER BUSINESSES

While the pneumatics business was growing fast, Leonard was always interested in other endeavors. His brother Sam, an architect in Little Rock, approached Leonard about buying a hotel that he had designed. Soon, a new sign was raised announcing “Clippard Courts Travelers Hotel,” “Complete with Pool, and TVs in Every Room.” This facility was very profitable for many years, and was later sold.

Leonard established another less successful business in Cincinnati—Midwest Helicopters, Inc. Based at the main Lunken Field Airport, the plan was to sell the new line of Hughes helicopters, as well as to provide ground transportation services to travelers between airports. Leonard closed the business in 1966.



NEW 3 PLACE HELICOPTER

HUGHES 300

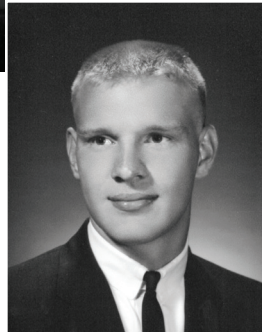
Top: Clippard Courts Travelers Hotel
Above: Midwest Helicopters, Inc.

Profile

Robert L. Clippard



Originally tasked with advertising, Bob quickly moved into other departments, as sometimes happens in family businesses. He soon became responsible as a backup for bookkeeping and shipping, worked in foreign sales, performed personnel duties, and even worked in accounting. But as the company grew, Bob focused on improving personnel policies, legal and regulatory matters, buying and operating their first computer, and creating advertising in collaboration with Russ Kelly, whose advertising firm was hired by Clippard. When the ad firm dissolved, Russ was hired full-time to help start Clippard's in-house agency.



Bob had become Vice President of Administration and Corporate Secretary and remained actively involved in various aspects of the business, including the planning and construction of the Colerain plant expansion, the Fairfield plant, the corporate hangar, and the Clippard Europe facility. Bob married his wife, Joanne, in 1967 and together they raised five children. Of the five, three currently work at Clippard.

The youngest of the Clippard children, Bob, born April 1945, started working for Clippard as a teenager doing random jobs around the plant. Often seen outside mowing the lawn or welding table legs, Bob grew up along with his father's company and aspired to work for the family business. Like his brother Bill, Bob got his pilot license at age 17. There was one point in high school when he expressed interest in majoring in English in college, but one of his teachers told him that he would be a fool if he didn't go into the family business. A writer at heart, Bob found a solution and graduated with a degree in Economics and Liberal Arts from the University of Cincinnati in 1968. Upon graduation, Bob was brought into the business full-time and settled into an office across from his father and older brother Bill.

Bob retired from the company as Executive Vice President in 2014. In his 46-year tenure at Clippard, Bob became known for his speeches and daily interactions with employees. Bob had a knack for walking the floor daily, knowing every employee by name, and kept morale high with a long list of jokes at the ready. Many say that in correlation to Clippard's motto, "Quality People, Quality Products," which Bob established, Bob represents the people side. Energetic, compassionate, and encouraging, current and former employees rave of Bob's natural ability to mingle with team members throughout the plant and interact with them on a personal level. His lasting impact on the company is through the culture he helped establish and carry on—a culture of people who care for one another and work together to create a quality product worthy of the Clippard name.

1970s



Leonard and
Harriet in
Maquiladora

THE DEPARTURE FROM COILS

Over time, unions started organizing in Paris and filling the heads of Clippard employees with false dreams of higher wages and more benefits comparable to nearby automotive plants. This was not, however, the reality of the situation. Because of huge overseas competition and increasing obsolescence of coils, Clippard couldn't afford all the unions were promising employees, and unfortunately, management couldn't tell them this. Strict labor laws were in place that prohibited employers from speaking against unions to their own employees.

With union organizations planting these ideas into employees' minds without balanced information, the Paris plant workers voted Pro-Union and after the vote was announced, Leonard announced the plant was closing immediately. Realizing what they done, the employees, in a last ditch effort, asked for their jobs back without the union vote but it was too late.

By this time, word had spread about Clippard's up and coming revolutionary miniature pneumatic line. Realizing he could no longer compete strictly in the coil business, the Paris plant was closed and Leonard shifted his focus strictly to pneumatics. Prior to this, Leonard bought LEPCO (Leonard Electric Products Company) in Brooklyn, New York, and moved it to Matamoros Mexico. A new plant was built as part of the Maquiladora Border Industrialization Program, which was sold to Ralph Smith in 1971 when Clippard got completely out of coil production. Clippard Instrument, Inc. (a Tennessee corporation) was dissolved and Leonard was ready to devote his full attention to the pneumatic line.

Profiles

Key Leaders of the 1970s



WALTER LEWIS

Walter Lewis was a great machinist and supervisor of people. Walter oversaw several of the machining departments and was a great process-driven person who laid out many of the manufacturing techniques still used today.



MAGGIE WYATT

Maggie Wyatt was one of the first assemblers on the EV line. She worked directly with Leonard in developing the department, which she supervised until her retirement in 2004.



BILL WHEELER

Bill Wheeler, or “Smokey” to most employees, managed the machining and assembly departments for all of Clippard’s cylinder production from 1975 to 1988.

BETTY SMALLWOOD

Betty Smallwood joined Clippard in 1972. She worked her way up to become Supervisor for Department 500, which produced many of the brass control valves, and remained with Clippard until her retirement in 2006.



H.O. KYLER

H.O. Kyler was the second cousin of Leonard. He was Clippard’s Plant Manager throughout the 1970s and 1980s until Lee Fuller joined the company.



ALBERT SHAEFER

Al Shaefer joined Clippard in 1974 and oversaw the receiving department. Al was a great mentor that represented Clippard with a strong work ethic and high integrity until his retirement in 2009.



THE NEXT LEVEL OF INNOVATION

Clippard had already done an excellent job of establishing themselves as the pioneers of pneumatic technology, but the product lines introduced in the 1970s significantly increased the company's sales and reputation as leaders in the coming electronic era.

The first of these products, debuting in 1973, was the electronic valve, otherwise known as the "EV." The idea behind the creation of the EV was that Leonard wanted to build a valve that would turn on with a very small amount of power. Typical valves of the time took 6 to 7 watts to operate, but Leonard wanted one that operated on only about half of a watt. No one else had ever made a low-power valve, and Clippard needed a product that would transition the company into the electronic market. This product revolutionized the industry and set new standards that would last for the next 40 years. It was the final large product launch of Leonard's career, and is still one of Clippard's most popular and well-known products.

Another revolutionary product launched at this time was the modular valve, which had a full line of all-pneumatic controls. This line was unique—then and now—for being the most complete, versatile line of pneumatic logic components. The modular valve was developed by Leonard's son, Bill Clippard, in the early 1970s and made Clippard a leader throughout the world in pneumatic logic controls. To this day, it is difficult to find a machine or fixture within the Clippard plants that does not utilize one of these devices.

Until 1976, Clippard only produced brass and aluminum cylinders. Stainless steel cylinders were introduced and became the third major product line success of the 1970s. Although Clippard was releasing products each year to further complement the large variety of brass control valves, these three particular product lines took Clippard into new areas and markets that would continue to propel the company's growth for the next several decades.



Above, Left: **First EV advertisement**
 Above, Right: **EV valve on front cover of Design News magazine, 1975; Left: EV valve**

Below, Left: **Stainless steel cylinder line**
 Below, Right: **Modular valve**



Profile

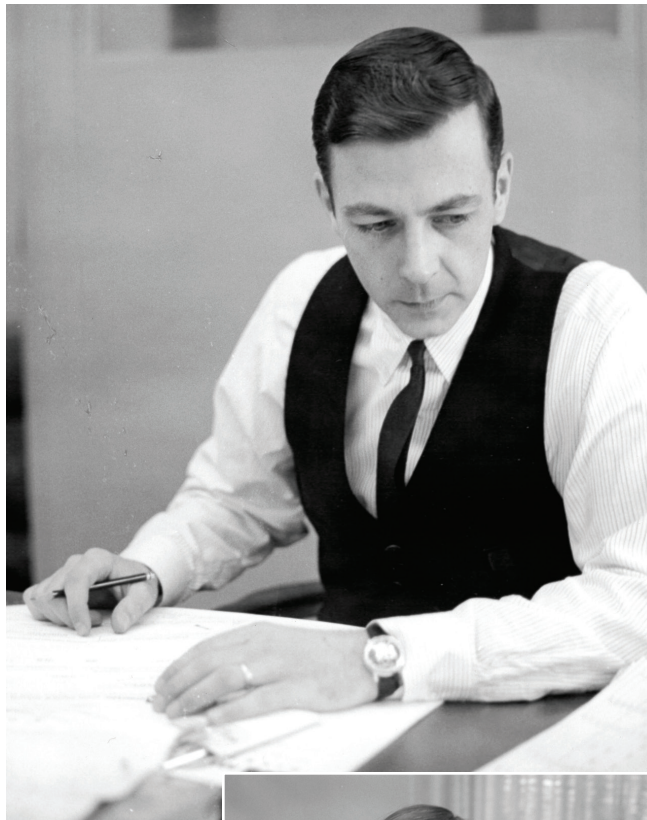
Gil Dudsic

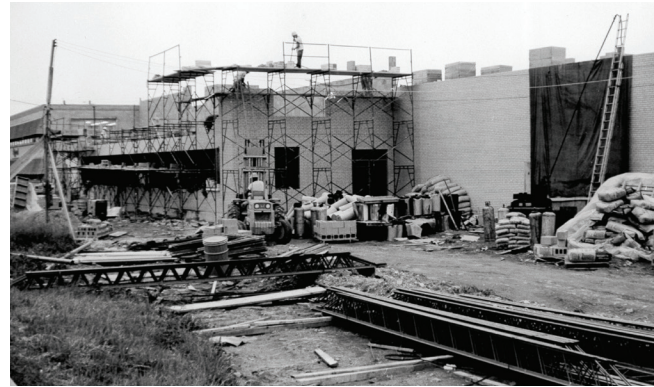
Starting as Purchasing Manager in 1966, Gil made a strong impact on the Clippard family and company, so much so that he joined the company's executive team soon after, which at the time consisted of Jim Crain, Bill Clippard, and Bob Clippard. A good businessman with a dynamic personality, Gil married Pat Clippard, Leonard's only daughter, and the two of them had four children together. Though the union did not last, Gil was a crucial part of establishing early vendor relationships and making sure each of the suppliers Clippard partnered with were good, upstanding companies Clippard could reputably support. Gil eventually became Vice President of Purchasing and a Director, which gave him responsibility of managing the stock room, production scheduling, and the operations departments until his retirement in 1999.

Before retiring, Gil's final and most impactful impression on the company was in choosing the right companies to supply Clippard's production materials. As engineers created products, Gil was challenged to find people who could make a certain spring, seal, or other component to make the new product work. Tenacious in his search, Gil was known to call and visit numerous vendors before making a final decision to ensure they treated their employees with respect. Putting a face and personality with a company name and understanding the motivations of organizations they partner with has remained part of Clippard's purchasing strategies to this day.

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1975 PLANT EXPANSION

With sales driving production beyond capacity, an expansion took place in 1975 that more than doubled the facility's capacity. In addition, the office space was greatly expanded to accommodate the growing need for support and the main lobby was constructed for welcoming distributors, vendors and customers.





Employee group photo, 1974



THE FIRST SALES MEETING

With the launch of these new products, particularly the popularity of the EV, competitors began surfacing. Manufacturers began creating smaller pneumatic devices because of the market Clippard had created. Yet this didn't effect Leonard's team. Their sales efforts had succeeded; word was spreading quickly about Clippard's revolutionary products as well as the great Clippard team. In 1974 Jim Crain, Len Barrett, and other members of Clippard's sales department worked together to conduct the first national sales presentation for Clippard. Meeting at a hotel in downtown Cincinnati, over 100 distributor personnel were in attendance. Follow-up sales meetings were then conducted at the Colerain facility, including plant tours and presentations of the various departments. Here distributors were shown how Clippard products were made, showcasing the talent and care Clippard employees had in creating solutions and producing quality products for any type of client.



Top Left: **First sales meeting, 1974**
 Above: **Leonard looking on**
 Bottom Left: **Jim Crain**
 Bottom Right: **Ken Lappin**





TRAINING SCHOOLS

A year later in 1975 these sales meetings sparked the idea for a distributor plant training school distributors could come into the Colerain plant and learn about the products from the Clippard employees who produce them. The program was quite basic—participants were taught how to hook up circuits, engaged in discussion over the different applications for products, and were shown how products were made and used in the shop. One of the attendees to the training school was Ken Lappin, who was participating with his employer Keystone Components. Ken joined the Clippard sales staff a year later.



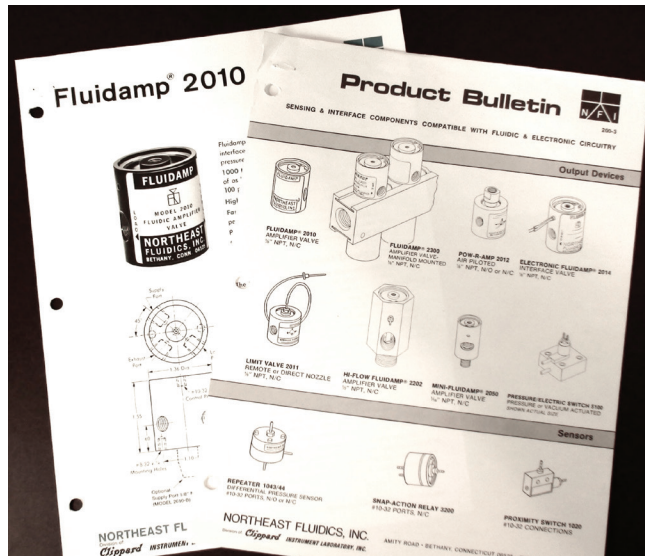


Clippard would also sponsor and encourage employee sport programs—from bowling in Paris, Tennessee (below) to softball and flag football in Cincinnati (left)

COMMUNITY SPORTS

Leonard was a big fan of children’s sports programs. He religiously attended multiple games every Saturday morning during the season. Many of these sponsored teams would carry the Clippard name. The Clippard Red Sox, White Sox, Clippard Comets, the mini-Comets, Clippard Eagles, Clippard Cardinals, Raiders, Cosmos and of course, the Clippard Sockettes to just name a few. Many local families would stop in the lobby of Clippard in the 1960s, 1970s and 1980s to see the pictures and trophies of the many Clippard teams.





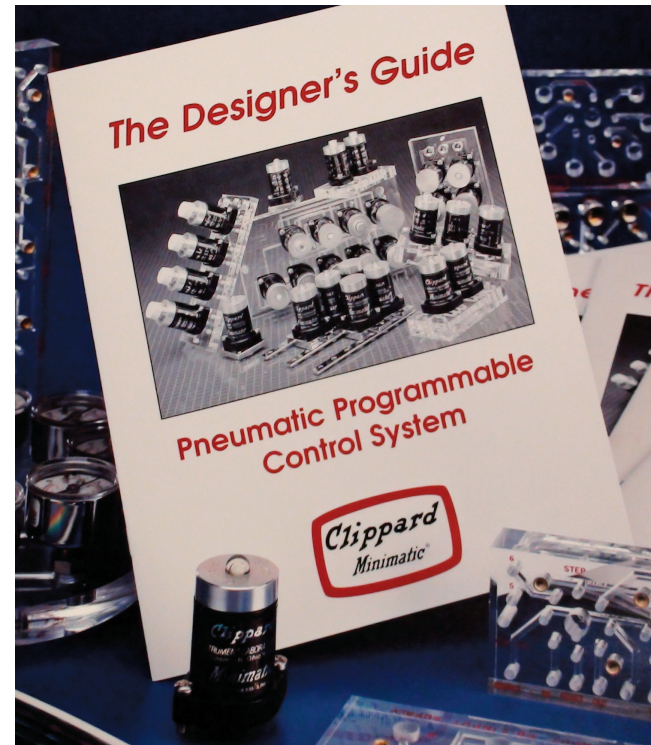
MERGER OF NORTHEAST FLUIDICS

In the 1970s Clippard became the largest customer of a small manufacture of unique valves for ultra-low pressure. Northeast Fluidics was located in New England and was merged into the Colerain facility in 1977. Many of the products were redesigned for its manufacturability.



MERGER OF IMAGE CONTROL

Again, Clippard became the largest customer of the small family company in Madison, Indiana which produced acrylic manifolds. In 1984 Clippard acquired the company as it was a great fit for Clippard's modular valve line. Paired together, the products were a clean, leak free solution for packaging typical pneumatic logic circuits. Kathy Ayers, daughter of the founder, stayed on with Clippard and ran the facility until her retirement in 2006 when the company was merged into the Colerain Facility.





CLIPPARD EUROPE

The launch of Clippard Europe started with Max Comes in the 1970s. Max sold fluid power products in some European countries through Rocke International, an export company in New York who was a Clippard distributor. While Rocke sold many different fluid power products, Max was extremely interested in Clippard's because of their innovation and quality. After some time with the distributor, Max began working more closely with Clippard, organizing exhibitions and training seminars of the products in different countries for international distributors. Once Rocke's partnership with Clippard was dissolved, Max and Bob Clippard started discussing the possibility of opening an office for the company in Europe as a way of controlling international distribution and sales. To show their commitment to the project and discuss details with the Clippard staff in person, Max and his wife Doris travelled to the



Left: First European sales training seminar; Above: Max Comes

U.S. in September, 1975, warmly welcomed in Ohio. Leonard Clippard was very impressed with them and directed that Clippard Europe be established. Bob travelled to Belgium (on a PanAm plane flown by Buck), and he and Max finalized the plans that following spring. On April 1, 1976, the first European office for Clippard opened in Wavre near Brussels.

Running business out of a small rented house, Max and Doris began supplying orders to customers by June 1st of that year. Because of the many different languages spoken across the continent, Doris was a large asset to the success of Clippard Europe due to her multi-lingual and organizational abilities. Upon opening, Clippard Europe established a bonded warehouse, allowing it to receive and inventory products shipped from the U.S. Once the paperwork was complete and administrative work had been handled, the location was up and running.

Much like the beginning of Clippard in America, the business eventually outgrew their small rented facility and needed a bigger location for employees and products. Bill, Bob, and Leonard all worked together to begin planning for the construction of a new Clippard location in the same area. In 1985, Bob and an architect flew to Belgium to scope out potential building sites chosen by Max. Within the next two years, construction for the facility was complete and Clippard's brand new European office opened in the Scientific Park of the University of Louvain-la-Neuve July, 1987.



Office in Belgium

Clippard Europe in Belgium was the springboard for the company's international presence. The staff in Belgium, though small, services many different countries and cultures from the industrial countries of France, Holland, and Germany, to Eastern Europe and the UK. As the face of Clippard Instrument Laboratory in Europe, all European sales go directly through the Belgium office. Though separated by the Atlantic, Clippard Europe upholds the same principles of quality and maintaining strong relationships as the U.S. offices, keeping strong ties with all of their distributors and customers throughout the continent.



Max Comes with Leonard Clippard



Rich Boutell, Engineering Manager, discussing the next metric product line with Max Comes and Bill and Bob Clippard

“There are many competitors internationally—Germany and Japan are strong competitors in the industry. We’ve always been successful because of our quality. That’s how we compete. Our products are used, for example, in the medical field. Instruments such as respirators need components that are made precise. That’s Clippard’s specialty—quality, reliable products that contribute to those important, precise applications.”

—Max Comes

Profile

Max Comes

Max's career with Clippard began through one of the company's distributors, Rocke International. Working from Brussels, Max sold fluid power products for the company and was instantly enamored by the Clippard brand. After the distributor's contract with Clippard was dissolved, Max began speaking with the Ohio team about opening a Clippard office in Europe to work as an international distribution center. Working closely with Bob, Max and his wife Doris spearheaded the project, committing themselves wholeheartedly to opening the first ever Clippard office overseas. The Brussels office opened in a small rented housed in 1976. When it came time to build a larger facility to accommodate growth, Max again worked closely with Bob and an architect to plan out the construction of the new location, which would later open in Belgium in 1987.

Now retired, Max stays involved in the business of Clippard Europe, as a Director, sharing his extensive knowledge of the company and its products with current employees at the Belgium office. With over 50 years experience selling Clippard products, Max's passion for Clippard is evident in his speech. If given the chance, he could talk about Clippard Europe for a week straight.



Left: **Clippard distributors join Max and Francis for a trip to Cincinnati in 2006**



Above: **Max, Bill, and Paul Gant, International Sales Manager, interview Francis DeRuelle as Max's succession plan. Though leadership at Clippard Europe has been transferred to Francis DeRuelle, Max's contribution and impact on Clippard's physical international presence through distribution centers will forever be part of the company's long-standing history.**



THE RETIREMENT & DEATH OF LEONARD CLIPPARD

Leonard continued to work in every aspect of the business and serve as President of Clippard until 1975. Aging and ready to slow down, Leonard transferred leadership of the company to his son Bill, yet remained involved for another couple of years. In 1977 Leonard retired from his day-to-day responsibilities and started spending a great deal of time in Arizona. The transition from Ohio to Arizona was slow—the Clippard founder gradually spent more and more time out west as he grew accustomed to the relaxing climate and days spent in his machine shop. Leonard passed away in 1983 at the age of 73. His wife, Harriet, died not long after him in 1984, leaving the Clippard legacy and future of the business completely in the hands of Bill, Bob, and the trusted team Leonard had helped build.



Even in retirement Leonard tinkered away—pictured above is a mini wind powered pump he designed for a rinse shower by his pool

1980s

GROWING SALES & BUILDING CULTURE

The 1980s saw much of the same as the 1960s and 1970s. Clippard was experiencing up to 40% growth years thanks to the combination of passionate people, effective sales methods, strategic business expansions, and their well-known quality products. Exciting advancements were continuing to happen in the business.



Employee photo, 1985

Moving forward from Leonard's retirement, the start of this next decade brought grief into the company when Leonard passed away at his Arizona home in 1983. The death of Harriet the following year added to the heartbreak of the family and company. But that was not going to keep the Clippard team from carrying on their founder's legacy. By the end of the 1980s, Clippard had finished construction on their new Belgium facility, which would be the headquarters for all of the company's international sales in Europe. They had also completed the third and final expansion on the Colerain plant in 1989, a direct reflection of Clippard's massive growth over the years.

EVERYTHING
UNDER
CONTROL

Clippard

industry's most complete line of miniature fluid power components



The final expansion of the Colerain facility was completed in 1989, adding a cafeteria, training room, and additional office space.



LISA SOUDERS/PRESS STAFF

Bob and Bill Clippard, outside the family business on Colerain Avenue. Clippard Instrument Laboratories has been a familiar landmark to township residents for more than 30 years.

PUSH

Continued from A1

The Colerain Avenue site is being expanded, adding another 19,000 square feet of office and some more...

The company's attitude toward its employees is summed up in the design for the company's new building wing. "Our people come in at the front of the building," said Bob. "The philosophy," said Bob...



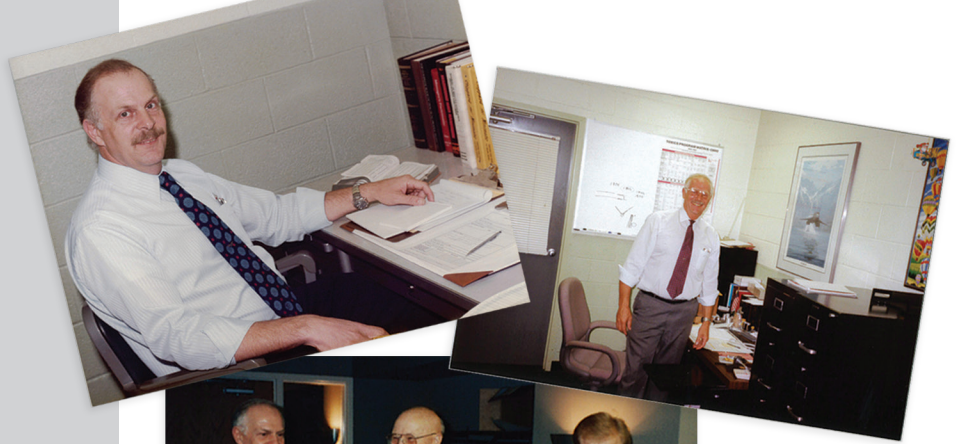
Top: Joyce Hackman, HR Manager; Above: Michelle Rolfes, Customer Service

Profile

Lee Fuller

Lee's 21-year career at Clippard was nothing short of entertaining. An industrial engineer and former Chief Pilot for Cardinal Air Training, Lee's interview at Clippard was with Bob Clippard. The moment Lee walked through the door and saw Bob he thought the interview was over because he recognized the current Vice President as one of his flight students he'd sent back for more training. After talking about flying and the direction the plant was taking, Lee was hired as an industrial engineer, thinking Clippard, with its little parts, was "the cutest manufacturing plant he'd ever seen."

Lee's first day was October 31, 1984. Walking into the Colerain location in his suit and tie, Lee was shocked to find goblins and ghouls roaming around the plant. He went straight to Bill's office and to this day remembers what he said: "You and I are going to work together. Our best friends are a yellow pad and #2 pencil." From that day forward, Lee worked closely with Bill on the production process. The two of them could be seen some afternoons working on each other's cars, ties thrown over their shoulders and sleeves rolled up. Lee, as well as Jim Crain, was a leading contributor to helping Clippard incorporate aviation into their sales process. He was a chief pilot for Clippard, flying with many of the sales and engineering staff, which afforded him the opportunity to work with all of Clippard's departments in a true collaborative fashion. Lee eventually succeeded HO Kyler as Plant Manager.



"Lee was a natural fit at Clippard. His manufacturing expertise solved a lot of problems. He was a great mentor to many employees."

—Bob Clippard

From his start date on Halloween, 1984 to his retirement in 2005, Lee always showed up to the office in a tie—the only time he didn't was during his retirement party when Bill cut it off. During his tenure at Clippard, Lee met and married Joyce Hackman, who was Bob's secretary and the HR Manager. Through his engineering expertise and aviation strengths, Lee's impact on Clippard, from buying machines to flying company aircraft, carries on today.





The Clippard family has always been die hard Bengals fans. Regardless of the record, you can count on Clippard employees and family to be at a home game.



1990s

SALES TREK

The Sales Trek meeting was conducted in 1990 to show the recent expansion and bring the key personnel of the Clippard distributor network together. The theme-based meeting was a huge success followed by consecutive sales records for the company.

CAMPAIGN '96

With the success of a national meeting in 1990, Clippard had the next meeting in 1996 with a political theme. Delegates from around the world came to elect their leader in The Great Fluid Power Race. Clippard won!

One of the many big announcements at the 1996 meeting was the next big step for Clippard. A new plant was to be built and a ribbon cutting ceremony was conducted with the distributor network.



Profiles

Clippard's Executive Team



WILLIAM A. CLIPPARD

Bill, son of former President Bill Clippard, came into the family business in 1992. A graduate of The Ohio State University, Bill started working at Clippard under the mentorship of Purchasing Manager, Gil Dudsic. After working in various production departments and later becoming a buyer in the purchasing department, Bill became the General Manager of the Fairfield plant from 1997 to 1999. He was then promoted to Purchasing Manager, moving back to the Colerain facility, when Gil retired in 1999. While in this position, Bill successfully implemented new purchasing procedures that resulted in high cost savings and broadened the company's scope by establishing numerous new international supply channels. Bill now serves as Clippard's Vice President of Operations, overseeing production and purchasing matters at both Cincinnati locations.



JENNIFER CLIPPARD-CAUNIN

Growing up, Jennifer's father, Bob, continually told her and her siblings that they should never waste the opportunity to work for the family business. Jennifer remembers wanting to work for Clippard ever since the second grade, and she began her career at Clippard in 1998 as the administrative assistant to Joyce Fuller. In this position she updated many of the department's older systems and processes, including teaching many of the staff how to use a computer. After Joyce's retirement, Jennifer was promoted to Human Resources Manager. Here Jennifer helped establish many new company policies in recruiting, education, and various insurance benefits, allowing the company to increase benefit options without increasing cost. In addition to becoming the Vice President of Human Resources, Jennifer is also the Corporate Secretary for Clippard.



QUALITY PEOPLE, QUALITY PRODUCTS

Though technology evolves and products change as the years progress, one aspect of Clippard has remained the same since its inception—the people-centric culture. Rooted within the Clippard family nature, the business is first and foremost concerned with the well-being of employees, customers, distributors, vendors, and the community. Within the doors of both manufacturing plants, everyone is greeted with a handshake, warm smile, and sometimes even a hug. Even those who are retired still come back for company-wide events to visit with old friends and catch up on the direction of the business. At Clippard, employees are not just a number—they are a name, a face, and an important part of company history. Because of their heavy focus on people, Bob created the company’s simple yet profound motto, “Quality People, Quality Products.”

“The story of Clippard is not just these dynamic individuals like Leonard Clippard and Bill or Bob Clippard, but it’s the fact that we were able to create a culture that encouraged and brought forth the talents of a lot of dedicated and talented people.”

—Bob Clippard

Putting people over products is essentially what the company is all about. Despite being a manufacturer of miniature pneumatic products, Clippard focuses on the well-being of the people involved in the process, knowing that the treatment of employees directly impacts the production of quality goods. The quality treatment of employees begins with the management team, who take strides to understand the individual personalities of those inside the company and connect with them on a personal level. During their time as President and Executive Vice President, Bill and Bob were very interested in the psychology of management. An avid reader, Bob recommended a book for the employees to read

that included a quiz at the end to determine their top five strongest personality traits. Knowing these top traits allowed management to communicate with employees better and delegate tasks more efficiently. A majority of the employees participated.

The Clippard company is founded on the belief that quality people make quality products, and in order to have quality employees you must, first, treat them as such. One way Clippard does this is by ensuring all employees have a clean, safe, and comfortable work environment. Unlike many other manufacturing plants, both the Colerain and Fairfield facilities have spotless production rooms, except for the occasional oil spot and stray metal chip, with air conditioning for the hot summer months and heating for the Ohio winter. Because of the clean, controlled environment, many past and current employees admit they didn't believe actual, powerful products were made there when they first stepped foot in the facility.

Past the physical conditions of the plant—which are some of the best conditions for a manufacturing facility—employees are treated more like family than employees. Company leadership makes it a priority to remind employees of their worth and understand their personality. One perfect example of this is from an interaction in 2004 Bob had with Betty Smallwood, a supervisor who was retiring at the end of the year. After expressing her appreciation for the retirement card he had written her, she said she liked how Bob would “come out and visit everyone and make them feel important.” Bob replied, “They are important, and I just remind them of that because sometimes they forget.” This kind of affirmation for employees is one of the reasons why Clippard has such a long tenure of employment. Employees don't just come to work for a paycheck, but they enjoy the environment and feel as if they're part of the family.

A list was recently compiled of the aspects that make up corporate culture at Clippard, pinpointing the features that set the company apart from others and those that are most impactful to employees. While some on the list are benefits most expect to see—cleanliness and nice work conditions—others are unique and show the care Clippard takes in



maintaining a happy and healthy team. On a list of over 100 features, standouts include advancement opportunities, tuition reimbursement, employee longevity recognition every five years, the encouragement of charitable projects, and an open-door policy that gives employees access to management whenever needed.

Every month the team at Clippard tries to hold a special event for the employees. Whether celebrating big holidays, special days invented by the staff, a birthday or retirement, there is usually a lot going on at both facilities. Holiday events at Clippard are especially exciting and many attend in order to spend time with each other and catch up with old coworkers.

FAIRFIELD FACILITY

In need of more space, Clippard began planning to build another production plant in Cincinnati. The perfect plot of land was found in Fairfield, about 13 miles from the Colerain facility. The area afforded the company enough space to accommodate future growth as well as assist in the present need in production. Construction began and phase one of the new Fairfield facility opened in 1997. The opening of the new plant might have been a helpful contributor to the 1998 sales boom—one of the best sales years the company had ever seen. According to former sales representatives, products were selling quicker than Clippard could make them, a good sign for the company as it approached the coming millennium.

Products were selling quicker than Clippard could make them, a good sign for the company as it approached the coming millennium.

Less than 30 minutes away, the company bought 17 acres in Fairfield and came up with a three-part expansion plan. Partnering with an architecture friend, David Wheeler, who helped in the 1989 expansion at Colerain, the design of the building was planned with worker efficiency and aesthetics in mind, as well as the future. The first impression visitors receive when touring the plant is the grand entrance to the facility's lobby with large columns shaped like air cylinders on each corner.

Currently in phase one, the manufacturing floor was built for future expansion. Two large windows in the plant look out onto the empty field that will one day be home to building phases two and three once the present facility runs out of room for new machinery and employees. When construction for phase two begins, these windows, two doors, and a large truck door will be the connecting point of the two expansions.

Clippard Laboratory set for expansion

Company will employ 115 workers at Thunderbird Lane facility

By Aaron London

Clippard Instrument Laboratory is set to open a 55,000-square foot production facility on Thunderbird Lane in Fairfield. The facility is an expansion of the 51-year-old company's Colerain Township production facility and will employ 60 relocated workers. An additional 55 new jobs are to be created as a result of the expansion.

Clippard manufactures miniature pneumatic valves, cylinders and electronic interface valves. The company operates offices in 30 countries and throughout the U.S.

The company received a 10-year abatement of 65 percent of real and personal-property taxes from Butler County in October 1995. Clippard will spend a total of \$4.6 million on the project, with \$3.2 million slated for construction costs and \$1.4 million for equipment, machinery, fix-

Business

tures and furniture at the Fairfield site.

According to Robert L. Clippard, vice president, the expansion gives the company a 60 percent increase in manufacturing space with its Colerain facility.

"The expansion gives us the ability to expand production for the next five to six years," he said.

"Our customers include companies like Disney, who use our equipment for a variety of things at Disneyland and Disney World, as well as agricultural companies and packaging," Clippard said.

Clippard said the company pioneered several miniature pneumatic devices. Its Mini-matic line includes more than 3,400 standard products.

The Fairfield location encompasses approximately 16 acres and is part of the company's long-term expansion plans.

The company chose the Fairfield site because of its proximity to the Colerain headquarters and because the site allows for further expansion, Clippard said.

"With this facility we have the ability to expand in Fairfield," he said. "We can add two more 50,000-square-foot modules to the original plant."

The facility is expected to be



Photo by Greg Lynch

Clippard Instrument Laboratory's Fairfield facility will increase the company's production capacity by 60 percent, according to Robert Clippard, vice president. It is scheduled to be completed in August.

Seminar focuses on global business opportunities

Companies looking to expand their markets were encouraged to explore global trade opportunities May 20 at an export conference presented by the Ohio Export Assistance Network.

The event was partly sponsored by the Fairfield Chamber of Commerce.

Participants received information from the Ohio Department of Development, the U.S. Department of Commerce, freight forwarders, banks and resource centers for international trade.

The seminar was conducted by Roger Pfister, executive director of the Ohio Department of Development.

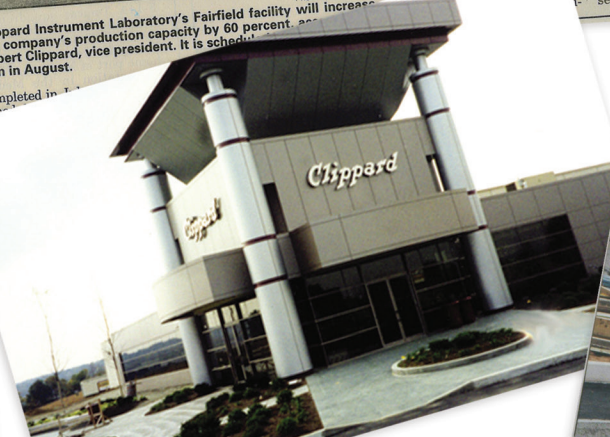
ous state programs designed to assist Ohio companies interested in the export market. He said that companies have gained increasing share of trade, including \$414 million in exports created by trade by Gov. George

Pfister said commitment to trade is exceeding the governor's expectations "open" missions "open" for companies

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Clippard to build airport's first corporate hangar



Profiles

Clippard's Executive Team



ROBERT S. CLIPPARD

Rob began working full-time at Clippard in 1998. Son of Bob Clippard, Rob starting his career in the IT department and is credited with developing the company's new website and ecommerce business. During his time with the company, Rob has served as Regional Sales Manager, using his pilot's license and avid love of flying to reach potential customers, as well as International Sales Manager. His experience in these business arenas lead to his promotion as Vice President of Sales and Marketing in recent years. Under this title, Rob continues to support the sales department and actively works in numerous capacities of the business from application engineering to value-added assemblies.



ERNEST DOERING

Son-in-law to Bill Clippard, Ernie's first touch with Clippard was in 2003. Spending only nine months with the company on a specific project, Ernie and his wife travelled overseas to live in Africa for two years. Upon their return, Ernie spent another six years working in Clippard's engineering department from 2006 to 2012 before leaving again, this time to pursue his MBA in Spain. Ernie returned to his position thereafter and worked in that capacity until his promotion to Vice President of Corporate Development in 2014. In this position Ernie is tasked with seeking out new technology that can be used or modified to enhance Clippard products, as well as working toward expanding Clippard's international reach.



Above: **Bob, Pat, and Bill Clippard with Leonard's first Cessna 170, 1956;**
 Right: **Leonard's brand new 180 during construction of the Clippard Airpark**



Above: **Leonard with David Wheeler in the N894B, Leonard's 4th aircraft;** Right: **Lee Fuller and the Beechcraft Baron, 1983**



AVIATION

With Cincinnati a mere 60 miles from Dayton, Ohio, where Orville and Wilbur Wright invented and successfully flew the world's first plane, it is fitting that aviation be an aspect of the Clippard brand. In fact, a love for aviation is deeply rooted within the Clippard family, tracing back to Leonard's first experience flying with his brother Sam. When Sam became involved in aviation, he took Leonard flying with him in a small two-seater plane. These trips were enlightening to Leonard, immediately showing him the advantage of air travel over long train rides. For a number of his sales trips, Leonard traveled by train—a time-consuming practice that kept him away from the business for days at a time. Some of Bob's earliest memories as a young boy are going to the train station with Harriet to pick his father up from a multi-day trip. But, like the development of the coil testers, Leonard knew there had to be a better way.

Though originally unable to fly because he was blind in one eye, the laws of aviation were eventually revised, and Leonard was able to earn his pilot's license. He began flying a Cessna 170, but soon moved up to a Cessna 180. To accommodate his plane, he cleared a piece of land along Colerain Avenue and created a 1,500-foot grass airstrip he called Clippard Air Park which was the location of the 1956 crash. As plans for the new I-275 loop around Cincinnati unfurled in the late 1960s, Clippard Air Park was set to be divided right down the middle. Due to the construction of the new interstate, the western section of Clippard Air Park was sold and is now a commercial property. The east section of the land was donated to Colerain Township Parks where they later built Clippard Park, a public park in the Colerain Township.

While renting a hangar at Hamilton Airport, the company built another hangar in 1997 at the renamed Butler County Regional Airport. Clippard's involvement of being the first company to invest in a corporate hangar not only helped the development of the airport, but reinforced the company's brand as aviation-minded. Housed at the Clippard Hangar was an A36 Bonanza and a twin engine Baron 58, which was augmented in 2003 with another A36 Bonanza. While it would be possible for the company to invest in a larger corporate aircraft, Leonard said, "that



would take away the fun of flying.” Leonard’s love of aviation trickled down into his descendants, resulting in most of the Clippard family earning their pilot’s license, some even pursuing airline careers. In addition, at one point in time, Clippard boasted eight pilots on its staff. The running joke was that you had to be a pilot to work for Clippard. Though untrue, it was an entertaining reflection on the company’s deep love for and involvement in flight.

“The cost of flying is not just measured in dollars, but in speed of response—customer service. You can never underestimate the value of showing up and being face to face with a customer.”

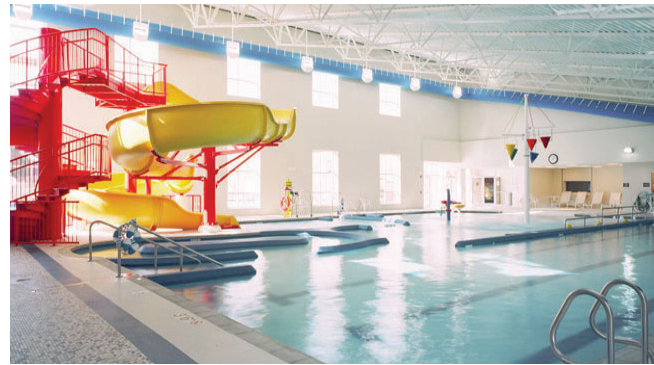
—*Rob Clippard*

With pilots on staff and corporate planes available for use, Clippard ingeniously utilizes their aviation resources as effective sales tools to be available at any time for their customers. This has proved extremely beneficial in not only maintaining relationships with distributors and vendors, but also in setting Clippard apart in crucial sales deals. One such time was in 2001 when Rob Clippard, Bob’s son, was serving as Regional Sales Manager and working to secure the biggest single account in the company’s long history. The company disclosed over the phone they had decided to take their business overseas, an answer Rob simply wouldn’t accept. Grabbing his files off his desk, he drove to the corporate hangar and flew to the company’s location in Rhode Island, where he was able to successfully convince them why Clippard was their best option.



Stories like that are numerous among the Clippard sales team, not only because of the easy accessibility to aircraft but because of employee willingness to be involved with customers in a personal way. Moving forward, the Clippard team is working on developing an in-house aviation program that allows employees with interest in flying to get their license. Efforts such as this reinforces Clippard’s dedication to their people, vendors, community, distributors, and customers.

Outside of the sales aspect of Clippard’s aviation roots, the company used to be heavily involved in an aviation event known as Wings Weekend during the 1990s and early 2000s. Held at the Clippard Hangar in collaboration with Martha Lunken, an FAA safety officer and now a writer for *Flying* magazine, Wings Weekend was a two and a half day event where pilots could learn from flight instructors about aviation safety and earn mandatory dual flight instruction hours to go toward their FAA Wings certification. In order to attract large crowds to the event, a banquet was held at the hangar each year with a special guest speaker. The speakers were well-known members of the aviation community and ranged in experience. In 2001 Wings Weekend welcomed Sean Tucker, a famous aerobatic pilot, to speak, and the next year invited Colonel Joseph Kittinger, who broke the world record for jumping out of a balloon at 100,000 feet. The final year Clippard held the event Paul Poberezny, founder of Experimental Aircraft Association (EAA), and Neil Armstrong spoke at the banquet. Though the FAA Wings Weekend was discontinued, ending it with words from the first man on the moon was quite the way to go out.



THE CLIPPARD FAMILY YMCA

One organization that is close to the family is the Colerain YMCA facility, also known as the Leonard and Harriet Clippard YMCA. When it was originally built, the Colerain YMCA only consisted of an outdoor pool, a couple tennis courts, a small parking lot, and an office in a small house trailer. In 1991 the facility's president George H. Edmiston approached the Clippard family to help build a full-service branch for the Colerain community. Clippard agreed to make a lead donation to start the building, which led into a domino effect of giving by employees as well as outside individuals and organizations. With the funds in place, the new facility opened March 6, 1994, and was dedicated to the Colerain Township. A plaque hangs in the lobby commemorating Harriet and Leonard as two true American entrepreneurs.

While the facility continues to develop, it now has an indoor waterpark, large indoor pool, workout space with equipment, indoor basketball court, and a preschool and autistic children's learning center. To this day the Leonard and Harriet Clippard YMCA is the most successful branch in Cincinnati thanks to past and present donations and involvement from Clippard.

The Enquirer

COLERAIN TOWNSHIP

Provided
Pictured from left are William Clippard III, Robert Clippard, Patricia Dusic and Oscar Clippard. The YMCA of Greater Cincinnati honored the children of William and Harriet Clippard with a Strong Families Award.

Clippard family honored by YMCA

Members of the Clippard family are definitely no strangers to Colerain Township. Their philanthropy has impacted lives throughout the neighborhood.

The YMCA of Greater Cincinnati honored the children of William and Harriet - William Clippard III, Robert L. Clippard, Oscar S. Clippard and Patricia Dusic - with a Strong Families Award at the YMCA Character Awards event.

The family's story began in 1941 when William L. Clippard Jr. founded Clippard Instrument Laboratory, a manufacturer of miniature and

ment reminder of their vision. In 1991, the Clippard Instrument Laboratory made a lead gift to kick off a capital fundraising campaign. After others rose to the challenge, the new YMCA facility was dedicated in 1994. Clippard family members and employees continue to help the Colerain Township branch grow with fundraising efforts.

"It is truly an honor for the YMCA to celebrate and acknowledge the Clippard family and these brothers and sister who have been so very generous with their community service and leadership to the Colerain Township community, and to the YMCA," Walker, president of

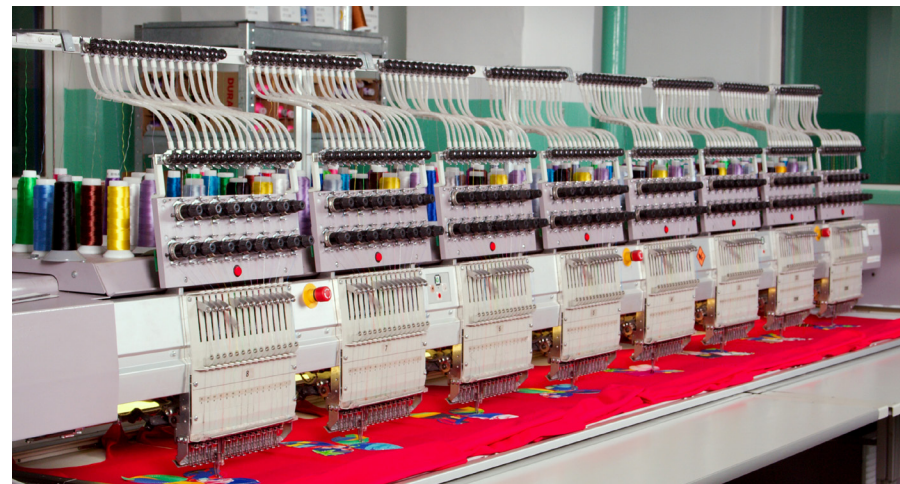
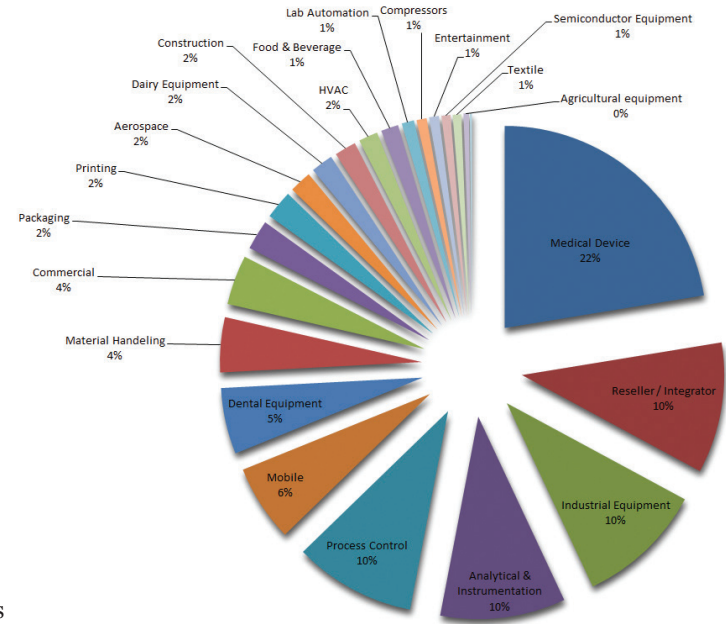
THE CHANGING MARKET PLACE

One of the largest evolutions in Clippard's long history has been the market shift. In the 1960s, 1970s, and 1980s, apparel manufacturing companies and textile industries used to be big customers of the Clippard brand, but over time many of these types of companies moved overseas. While the need for miniature pneumatics in these markets is still present, the late 1990s and early 2000s were a time of growth and expansion for Clippard in the realm of technology, particularly in semi-conductor, medical and analytical markets. Clippard's products were already very broad in their applications, but regular advancements in technology fueled the company to pursue newer, bigger, and better uses.

Clippard's market started to ease toward more and more customer-driven production. One customer wanted a slight modification to this valve and another wanted this cylinder, but for this purpose. Special orders—modifications to standard products—were piling up, and with many competitors now making similar products the company was faced with the choice of making specials or losing business. Leonard had originally backed the company selling quantities of special coils from one to tens of thousands. Specials gave the company a great advantage.

“From a sales perspective, modifying products makes the product easier to sell because customers like options that fit their specific need.”

—Dick DeStaffany, retired Regional Sales Manager



In the Movies

Hollywood special effects artists and engineers were always looking for ways to bring their characters to life or to automate futuristic devices and other movie props in unique ways. Being the first in miniature pneumatics allowed Clippard products a role in many Hollywood movies.



Star Trek

Where do you think the idea came from for the famous sounds of the bridge doors opening and closing? Set designers for Star Trek used Clippard products for several props and automating doors in the early 1960s.

James Bond

As the special effects engineer for the Bond films said, "We loved Clippard products. We used those miniature pneumatic parts on all kinds of devices made by Q."



Star Wars

Several characters used Clippard to bring them to life behind the scenes, including Yoda, Jaba, and the crazy band in the cantina. Onscreen, R2D2's remote arm was a Clippard cylinder.

Gremlins

The father in Gremlins was an inventor of not so successful inventions. One such invention was a hammer with a hinge that would rock the head of the hammer back and forth. When the MAV-3 was pressed as a trigger on the handle the two modular valves would cycle the cylinder.





Ghostbusters

The proton packs used in the 1980s Ghostbuster films used two Modular valves. More recently, in anticipation for the third movie (which opened summer 2016), Mattel® partnered with Clippard to use the company's trademark and modular valves' likeness in making replica Ghostbusters™ Neutrino Wands, the hand held device that attaches to the signature proton backpack. A replica wand from Mattel® is on display at Clippard's Colerain facility.



Of all the groups who have toured Clippard over the years, none enjoyed seeing the Modular Valves Dept. more than this one!

Local Theaters

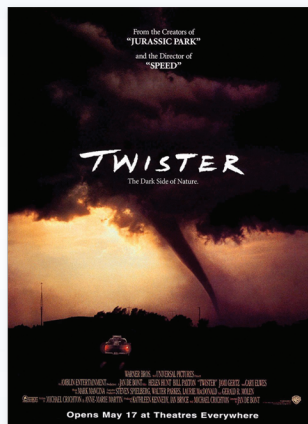
From trap doors to controlling blasts of air to vomit—yes, vomit! Using pressurized tanks to release blood or vomit on stage is a simple application using Clippard product. Haunted houses around the country use props developed by several companies using Clippard product to bring their characters to life.

Teen Wolf

Makeup artists would insert tiny latex balloons behind the mask on Michael J. Fox as his character turned from a high school teen to a werewolf. Miniature Clippard SMAV-3 Valves would fill these balloons, stretching and manipulating the latex skin above.

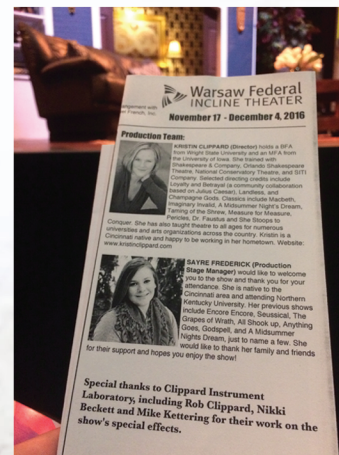


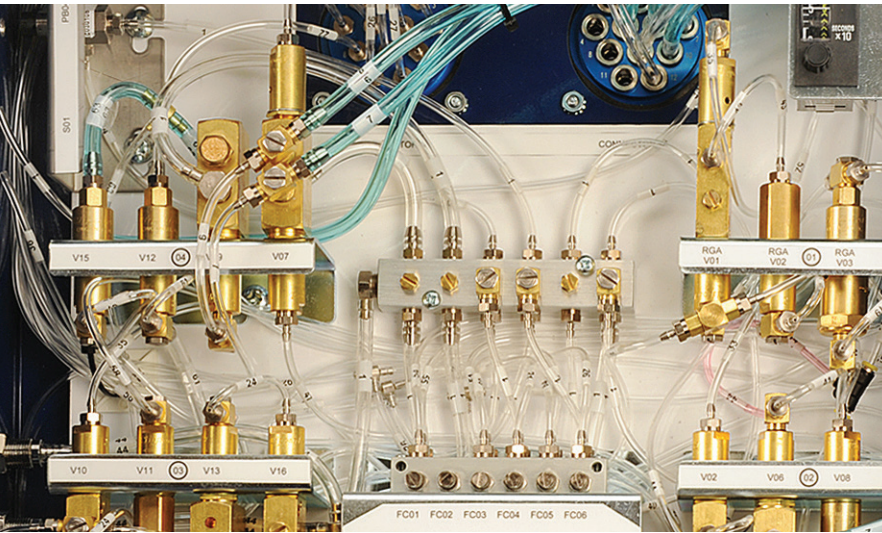
*A similar application was used on Michael Jackson in the filming of the hit music video **Thriller**, as well as in the Broadway show **CATS**.*



Twister

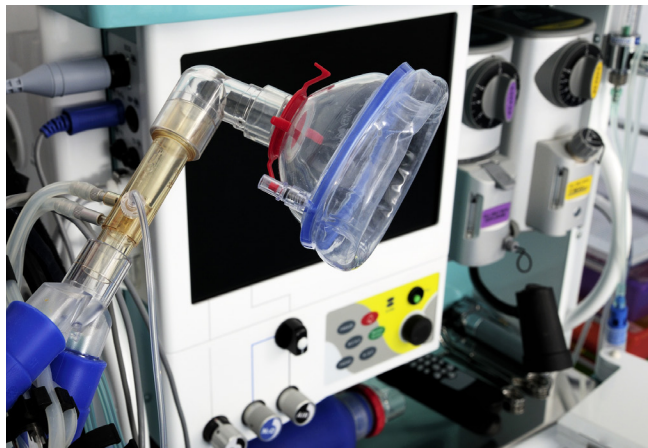
When motion was required to shake and rattle homes and fences in scenes where tornados were ripping through farms, special effects personnel lined entire sets of fences and barn boards with hundreds of two inch bore cylinders to give the visual effects needed.





“I always thought of pneumatics as an art rather than a science. It’s both, certainly, because it involves precision in the production. But all the creativity comes in the application.”

—William L. Clippard, III



PRODUCT APPLICATIONS

To the outside world a miniature pneumatic air cylinder is simply a metal tube. To a Clippard employee or customer, that tiny tube of metal can be anything you want it to be. Whatever your hand can do, a pneumatic cylinder can do—pull, push, grip, hold, eject, etc. The application of Clippard products is vast and constantly evolving, which is why not just so many different markets, but the thousands of potential applications within those markets are able to incorporate miniature pneumatics. In the words of Rob Clippard, “Pneumatics is only limited to your imagination,” and Clippard proves that with their extremely horizontal customer base. From a tiny air valve in a dentistry tool, to paintball applications, to Clippard valves used on the international space station, to multiple cylinders working together to help President Lincoln talk in Disney’s Hall of Presidents, Clippard’s products are used all over the world in exciting and innovative ways.



On the other side of entertainment, Clippard’s product line has a large presence in the life sciences, particularly in the medical field. Almost half (41%) of the company’s North American markets consisted of customers in the life sciences in 2015. The growth in miniature pneumatic use in these industries is due to the reliability, long life, compact size, and quiet nature of Clippard products. As devices decreased in size, Clippard’s lightweight yet powerful valves and cylinders have been a standout contestant to medical instrument manufacturers. Applications can be seen in the incorporation of pneumatic measuring devices, which use a valve to control the inflation and deflation of the cuff. While there are countless other uses of these products in the medical field, such as in analytical equipment, this Cincinnati-founded company is making a huge mark in the advancement of the life sciences industry.

PRODUCT DISPLAYS

Clippard takes great pride in the demonstration of their products and incorporates miniature pneumatics into their office space as well as in the factory as proof they can be used for limitless purposes. Stepping foot onto the sales and advertising floor of Clippard's Colerain facility, you are immediately greeted by a large clock with numerous pneumatic features. With a single hand that counts the minutes using timed air cylinders, the clock alerts employees for breaks throughout the day with various sounds. The training room on the same floor has pneumatically-controlled blinds on the windows and the doors can open and close using pneumatic control technology. But the trade shows are where the Clippard team has really shown what they can do.

Other displays not pictured here included a pneumatic "wall walker" and a pneumatic foosball table. Designed by Ken Lappin, the "wall walker" was used at numerous trade shows and later offered as a kit. The pneumatic foosball table was a challenge to build for Ernie Doering. It utilized miniature joysticks to control proportional valves and cylinders that moved all the players on the field. It was a huge success and always had people lined up to play.



Above: **Pneumatic "Air Guitar"**

Clippard's world famous "air guitar" is pneumatically-controlled with 50 cylinders and valves that are programmed to play over 30 songs. A crowd favorite for many years, this display shows Clippard's creativity as well as the control capabilities of Clippard products.



Left: **Pneumatic clock on display in Clippard's Advertising Department**



Above: **Pneumatic music tree**

The pneumatic music tree, which was built with 24 unique branches, each filled with pneumatic and mechanical components that lit up and played music. Designed and built by Rob Clippard for the Hannover Fair in Germany, this display made it to two continents and six shows before being ruined by salt water returning home on a cargo ship.

In 2010, the pneumatic tree was upgraded and loaned to the Cincinnati History Museum as a Christmas display highlighting Art and Technology.

Right: **Clippard's animatronic fox from the 1960s trade shows**



Below: **Pneumatic pinball machine**

In the late 1990s, the engineering group lead by Rich Humason built a pinball machine display that demonstrated a wide mix of pneumatic controls. The machine was later invited to the National PinBall conference to be highlighted.



TRADE SHOWS

Clippard attends about a dozen shows a year through either distributor or direct. Shows range across a variety of industries and a variety of continents.

“Our participation in focused global exhibitions remains an important part of our marketing mix today. Trade shows allow us the opportunity to meet with customers to strengthen current relationships as well as develop new contacts for the future.”

—Chris Agricola, Advertising Manager



2015



1975



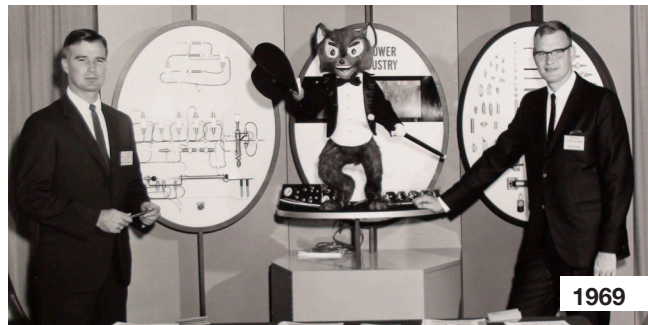
2009



1971



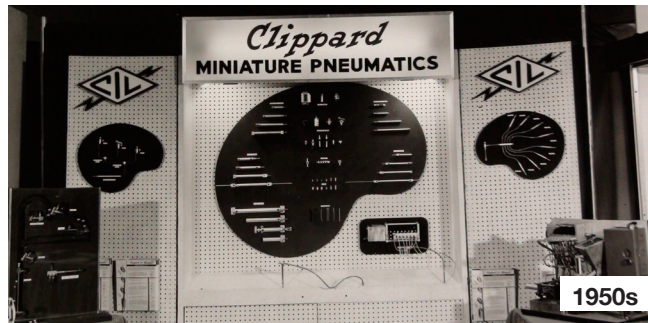
1995



1969



1984



1950s



MARKETING TODAY

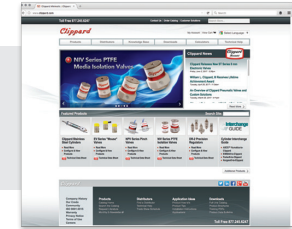
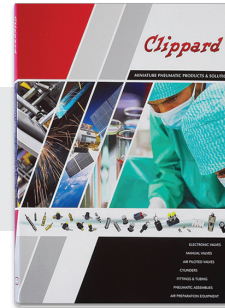
From the first ads in the late 1950s highlighting the uses of pneumatics to competing with thousands of manufacturers of pneumatic components around the world, Clippard has always invested in the Clippard brand. Although the media and channels are changing, Clippard remains ahead of its competition in digital and print advertisements. Generating nearly 17,000 leads in 2016, Clippard is among the best in the industry for attracting new customers.

“I’ve always felt encouraged and supported to do what I thought best to promote a truly great company with quality products through effective advertising and communications. I take pride in being able to continue the tradition of decades of branding Clippard as the pioneer of pneumatics.”

—Chris Agricola, Advertising Manager

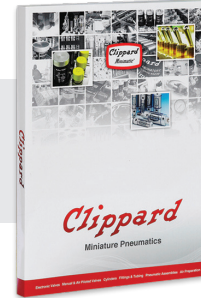
Current

Clippard



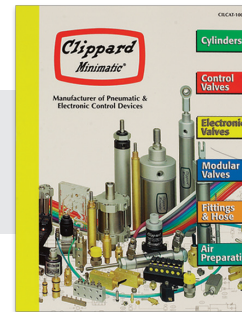
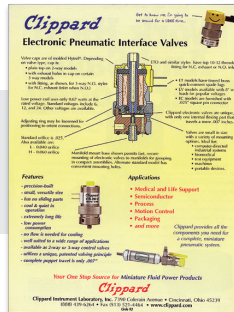
Previous

Clippard
Minimatic[®]

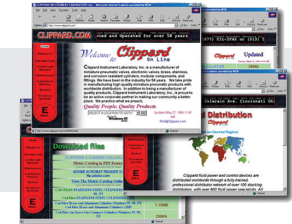
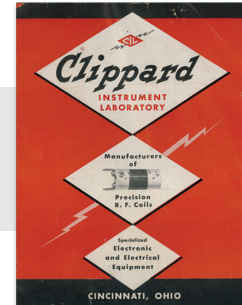


Early

Clippard
FLUID POWER



Original



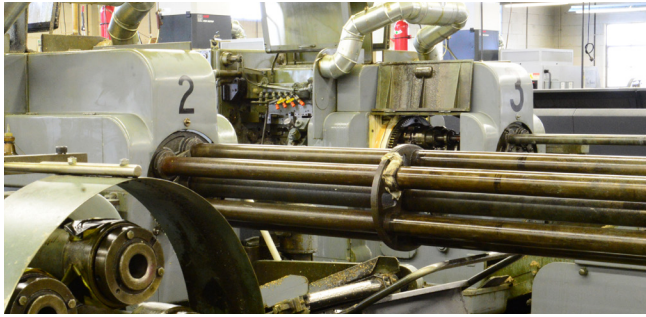
MANUFACTURING CAPABILITIES

In the manufacturing portion of the Colerain facility, machines are lined up in rows across a clean floor. Whereas some machines date back to the early days of the Colerain plant, others are newer machines that have, depending on function, either been bought and modified by the company or designed and built in-house. Technology ranging from manual to fully automated fills both facilities, each one used for a specific purpose and with its own story. The Fairfield facility even has a section

of the plant completely dedicated to unused machines. This section—known as the “graveyard”—is for machines that are outdated, but which the company hopes to either modify for newer purposes or scrap for parts. With a long reputation of building and modifying technology, these machines will likely find some way back into use. Bill Clippard, Vice President of Operations, could be considered the “Master of Procurement” with his relentless research and negotiation skills in acquiring new machinery and equipment. From



Keith Peterson, Director of Production Systems (left) with Bill Clippard, Vice President of Operations (right)



perusing eBay to driving to Chicago for an auction, his persistence has paid off time and time again as he saves the company money while building and maintaining capabilities beyond those of the competition.

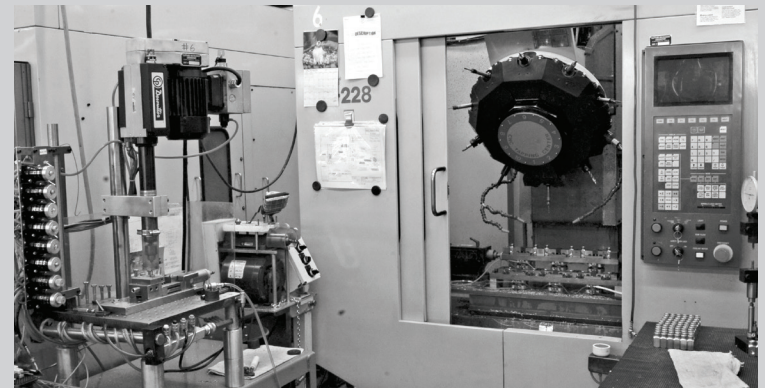
Although Clippard still utilizes a hands-on approach for creating products, the incorporation of more CNC automated equipment has led them to bring more employees onboard who can work with new technologies. When the company began manufacturing pneumatic components, they produced products in bulk, creating thousands of their most popular items and stocking them on shelves. However, when customer demands started to increase, the company had to rethink their manufacturing processes. In bulk manufacturing, a machine would be held up making one product for an extended amount of time, meaning another product couldn't be put on the machine until the first was complete. Set-up for these new products also took a considerable amount of time, especially in comparison to the number of special orders the company needed to fulfill. The answer to this was lean manufacturing.



THE FIRST CNC MACHINE

When looking to buy new machines, the Clippard company has always been very smart about perusing the market for options, sometimes even buying machines on auction to test them out and learn how they work. In the case of the first CNC machine, there was a great debate over what kind to buy. Bill, President at the time, wanted a Yamaha model with an overhead moving part but the Production Manager Lee Fuller preferred the Brother machine. While Bill was on a trip overseas, Lee and Bob, Executive Vice President, met about the purchase of the new machine, Lee telling Bob how he thought the Brother was the better buy. Bob told him the company could purchase the one Lee thought was best as long as he could set it up and get it ready to show Bill when he returned. Up for the challenge, Lee purchased the company's first CNC machine and worked all weekend to set it up in anticipation of the president's return.

When the next Monday came, Lee was prepared to present the new machine to Bill with Bob by his side. However, conveniently, Bob had a trip planned that week, which meant Lee was alone in his presentation. "I was ready to slay the dragon with my stack of paperwork and data," said Lee in recollection of that morning, "but when I got to the office Monday there was Bill's car already parked and he was waiting for me inside. I thought I was receiving my last paycheck that morning." Lee sat in Bill's office the entire day, his stack of data untouched. At the end of the work day, Lee stood up, told Bill he would see him in the morning, and that was end of it. After a few years Lee says his purchase was finally validated but telling the story of how they bought their first CNC machine still brings laughs around the office.





LEAN MANUFACTURING

In order to meet all of these needs, Clippard needed to rearrange their production processes to accommodate for smaller more frequent orders of varying kinds. At the time, the company was working under a batch manufacturing process that produced standard items in bulk, which led to a lot of inventory that sat on the shelves. In 2004 Clippard made a shift toward a more economical way of manufacturing that eliminated the products collecting dust on the shelves and allowed for higher production with less waste.

Simply put, lean manufacturing means every employee identifies and eliminates waste in production. In preparation for this transition, many in management visited other companies who had “gone lean” and even attended Lean Simulation seminars that demonstrated the advantages of one-piece flow and improvements in achieving it. The simulations provided great examples of how the process worked, but didn’t translate well to Clippard’s line of work.

Simply put, lean manufacturing means every employee identifies and eliminates waste in production.





This led the company's lean champions to create their own simulation for other employees. The team, which included Larry Clines, Keith Peterson, Doug Robertson, and Robin Rutschilling, created a gameshow-type simulation where employees raced against the clock and learned the benefits of lean over non-lean processes. The simulations, which were conducted for all 250 employees in a series of two classes, were a success and many came out of them seeing what areas of their work could be improved.

New lean manufacturing processes were developed to eliminate excess inventory and increase the speed of production. Along with these new processes came smarter machines and skilled people who could program and operate them. In the past, the company recruited employees with mainly machinist skills, but they now look for those with a passion for mechatronics—a combination of mechanical, electrical, hydraulic, and pneumatic knowledge. These individuals are able to program, fix, and set up new technology in the facilities. When they arrive at Clippard they are taught basic machinist skills which are still needed in order to work effectively in the plant. This shift from straight machinery to programming has allowed the company to be more inclusive and efficient in their production methods, moving them forward into the future of manufacturing.



“In today’s world we are competing with Asia, Europe, and South America. We have to compete with quality, price, and more recently, delivery. All of our competitors have fair quality, some have lower costs overseas, but they have trouble making what the customer wants and getting it here quickly. If we can reduce waste and deliver faster, we can compete with anyone, anywhere.”

—Bob Clippard

THE RECESSION

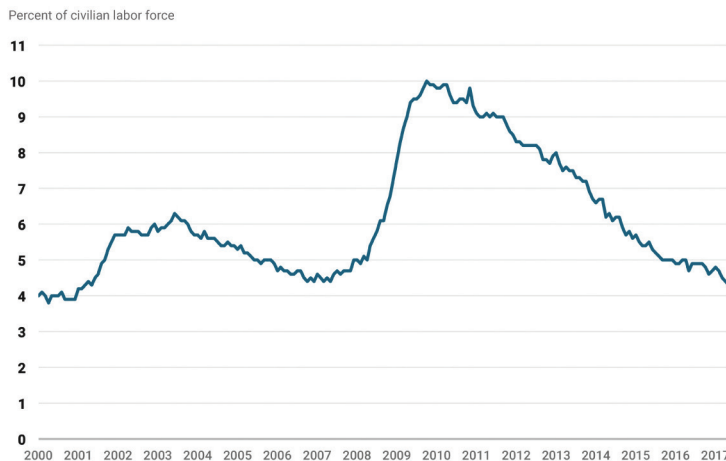
While the transition to lean manufacturing was working smoothly, nothing could have prepared the company for the recession that hit November, 2008. Never having had to lay off a single employee in their almost 70 years, the management team brainstormed tirelessly to come up with a solution that didn't involve letting anyone go.

The first plan of action was to cut down on any frivolous costs. Next came company-wide hour cuts. From the tip top of management all the way down to the most entry-level position, the entire plant went to working 36 hours a week starting in December of that year. This carried on until April when, once again Clippard cut work hours, this time lowering them to 32. Still not enough, the company had to lay off 10% of staff—23 employees. In pure Clippard fashion, each of these employees were given a financial package that padded the cut.

Though the layoffs were a loss for the company, all of their efforts through cutting hours and cost helped ensure the least number of families were impacted by the recession as possible.



UNEMPLOYMENT RATE



SOURCE: Bureau of Labor Statistics via FRED

BUSINESS INSIDER



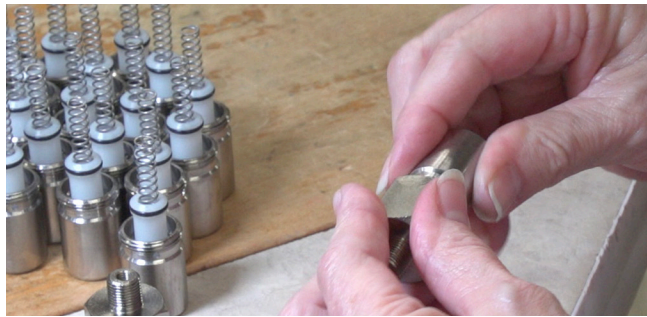
PRODUCTION TODAY

Clippard Instrument Laboratory is no ordinary manufacturer. When team members take groups on tours of either plant, a considerable amount of time is blocked out for guests to walk through each section. Not necessarily because there is a lot to see or because the facilities are exceptionally large, but because guests are usually stopped and introduced to employees working in the different departments. Each and every line has a story and a person attached to it. While the tour guide will speak about the company as a whole, a lot of information about the individual products and procedures comes from employees. Those working in the plant enjoy telling others about what they do, how they do it, and about their experience in the company. More times than not, those making the product know exactly what the tiny product they are making will be used for—and if not, they strive to find out.

The plant floor is divided into sections—primary, secondary, stock, assembly, and shipping. In the past, almost all of Clippard's products were passed on to the secondary line for completion because the primary machines did not have tools in the turret to finish parts. Today, the machines in the primary section have more tooling that enables them to perform a variety of functions such as spinning, turning, and drilling. These added capabilities now allow many finished parts to be completed in the primary section.

In addition to advanced manufacturing techniques, Clippard also utilizes their own in-house engineering and automation capabilities for continuous improvement. New systems are regularly developed to replace manual tasks and increase efficiencies. For example, a robotic machine was recently created to take over the monotonous task of assembling o-rings on parts. Before this machine, an employee had to tediously place the tiny rings on each part—now, they can move to a more exciting part of the factory while the robot speedily performs the task day or night.

A unique aspect of Clippard’s manufacturing is the lack of a second shift. All those who work on the production side of the business work during the day, arriving and leaving earlier than those in other departments. The idea of a second shift was first brought up when the company realized they needed to produce more in order to compete with the output standards of overseas manufacturers. The answer to this would be to continue production into the night, however the addition of a second shift contradicted with the company’s values.



Since its foundation, Clippard had been a family-friendly company. Employees worked during the day and then spent the evenings with their families. With the increased need to make more products, the company sought to find a solution that would not affect the home life of employees. The answer to this dilemma was Lights Out Manufacturing. Clippard currently has 13 machines in its Colerain plant that operate 24 hours a day, 7 days a week, year-round. The Fairfield location also has a number of machines that can load bar stock automatically for Lights Out Manufacturing. Except for spot checks, which are performed on the weekends to ensure the machines are running properly, these machines run independently and eliminate the need of a second shift.

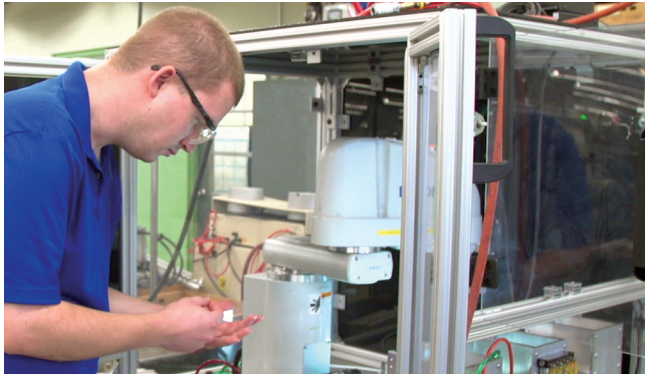


“We have never had a second shift at Clippard. Even when it could have financially benefited the company, they never went that route because family comes first. That’s the culture at Clippard.”

—Tom Hodge

LOCAL RECRUITMENT

One unique aspect of the Clippard culture is how they recruit new employees. Being a manufacturing company, a number of positions are trade-based. Clippard begins recruitment of potential employees early by partnering with local high schools to offer senior year co-ops. Clippard is affiliated with multiple high schools in the greater Cincinnati area, the longest of these affiliations being with Colerain High School. During the co-op, seniors work four hours a day through different areas in the manufacturing department. The co-op lasts six months as a two-way interview between Clippard and the student, resulting in a decision whether or not to hire the student full time after graduation. This program has been helpful to the company in educating students on the benefits of vocational professions and training potential future employees on their equipment and processes.



“Clippard isn’t necessarily trying to develop quality people for the company, but they’re developing quality people into their passions. The leadership team recognizes the willingness to learn and work hard, and if that results in an employee earning an education so they can go on to a different profession then that is okay too.”

—Gary Dilonardo

To supplement their efforts in high school recruitment, Clippard started an apprenticeship that helps discover and train individuals with backgrounds in mechatronics. In the program Clippard sponsors an apprentice whose schedule is split between college classes, training, and working in different participating companies. While working in the different companies, apprentices learn machining skills as well as how to set up, program, and fix various technology used to manufacture products. After two years, the student receives an Associate’s Degree in Mechatronics and has the skills necessary to work in a number of different types of plants.

For others who wish to take a different route, the entry-level position at Clippard is “chip-spinning.” This requires an individual to take the metal chips that fall from the machines and put them in a spinner, which extracts the oil from the

chips. The oil then goes back into the machines and the dry chips are recycled. From here, and other positions at Clippard, employees can choose where they want to go in the company. As long they are willing to work and put in the necessary time to get the required education, employees have the ability to move up in the company and even switch departments. Instead of promoting employees based on seniority, Clippard implements an education policy that recognizes when employees invest time to continue their education. Whether it is in learning a new technology skill, management traits, or machining techniques, employees have the freedom to choose to continue learning with the company's help and support. Instead of forcing education on employees, it is each individual's choice whether they are content in their position or wish to move. For those who do seek additional education, Clippard has a tuition reimbursement program that pays back the money spent taking college classes.

“When someone would come up to Lee Fuller and ask about a new position, he would ask what they had done to deserve it. Just working in one position for a long time doesn't cut it. You have to show commitment to the role by gaining the knowledge for it.”

—*Bob Clippard*

There are many employees along Clippard's past and present who have taken part in the company's generous academic offerings, but two are often asked to represent the company's career opportunities to potential recruits—Gary Dilonardo and Scott Lamb. Scott started in Clippard's entry-level position spinning the oil out of chips and worked his way up to the machine shop building test fixtures. Through his exposure to the product line in the shop and through college classes, he finally moved into his current position as Technical Sales Manager, completely switching from one

side of the business to another. Gary's story is similar in that he started in the shop working on a tube saw and then moved to the CNC machine. He worked his way up to becoming Quality Manager and is now the Purchasing Manager, also experiencing multiple aspects of the company. This is the kind of free culture Clippard promotes. Employees are guaranteed that, as part of the Clippard family, they are not stuck in one department if they decide they want to challenge themselves to learn another skill or part of the business.

“The key to becoming successful at Clippard is the willingness to learn. If you're willing to learn and sacrifice a little bit of your time, you'll go far.”

—*Scott Lamb*

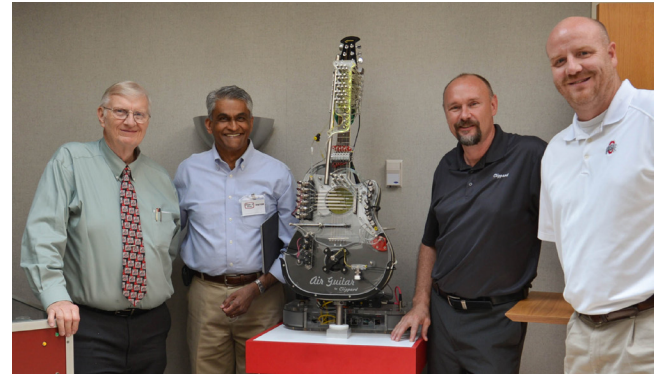


STILLMAN ROBINSON LIFETIME ACHIEVEMENT AWARD

In 2017, William L. Clippard received the highly prestigious Stillman Robinson Lifetime Achievement Award presented by the Department of Mechanical and Aerospace Engineering of The Ohio State University (OSU) for his commitment to the field of engineering.

The Stillman Robinson Lifetime Achievement Award honors retired or emeritus alumni who have distinguished themselves over their lifetimes by contributing to the advancement of their chosen profession. Robinson joined OSU in 1878, and was the founding chairperson of the Department of Mechanical Engineering. He was also one of the founders of the American Society of Mechanical Engineers, and received an Honorary Doctorate of Science degree from OSU in 1896.

Bill is clearly an accomplished individual, both professionally and personally. He has distinguished himself as an outstanding entrepreneur, innovator, teacher, and servant-leader. Since his graduation from OSU, Bill has applied his creative mind along with his engineering disciplines to design and create many unique products and manufacturing processes used in a variety of industries throughout the world. His accomplishments have served as the catalyst in establishing Clippard as a world leader in miniature pneumatics.



THE OHIO STATE UNIVERSITY

The Ohio State University Mechanical Engineering building features lab space that has been dedicated as the “Clippard Laboratory” in honor of William L. Clippard, III, Class of 1963. The lab is used for engineering design courses where students have access to prototype-producing machinery to design, program, and run their parts.

Bill Clippard was a graduate of The Ohio State University Mechanical Engineering program in 1963. Bill has always had an engineering mind and the ability to put design ideas into practical applications. His natural depth of understanding for mechanical systems, coupled with engineering technical disciplines acquired at OSU, has allowed him to create unique designs for products, equipment, and processes. Through a partnership between OSU and engineering-oriented companies like Clippard, the need for graduates to have more practical knowledge and exposure to real world challenges is being addressed through curriculum changes. The Clippard Engineering Lab enhances these initiatives by allowing students to gain practical hands-on experience.

Top—From Left to Right: **William L. Clippard and Vish Subramaniam, Chairman of the Department of Mechanical & Aerospace Engineering at The Ohio State University** pose with Clippard’s pneumatic air guitar alongside Rob Clippard and William A. Clippard

Left: **William L. Clippard and family** in the Clippard Lab at OSU

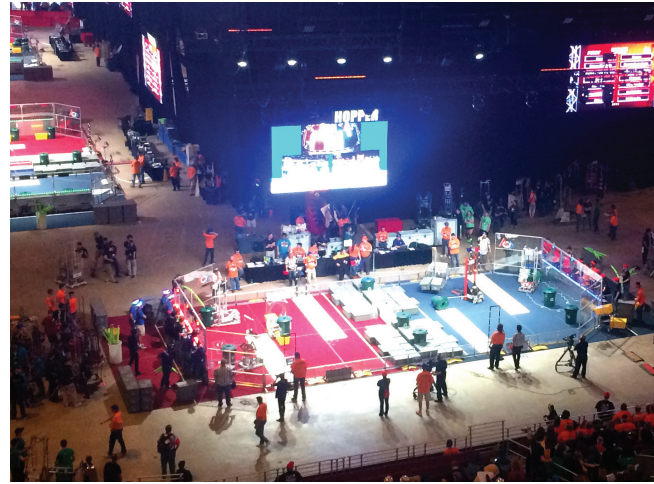
FOCUS ON EDUCATION

Clippard is not only a team sponsor for the FIRST Robotics Organization, a high school robotics competition that challenges students to design, build, and program an industrial-sized robot to complete specialized tasks, but Clippard has been a contributor of parts for the robotics kits for over 17 years. FIRST teaches high school students how to incorporate real-world engineering skills in a fun environment, which is why Clippard engineers volunteer their time to help local teams prepare for competition.

As mentors to these students, Clippard engineers assist in guiding students toward creating a successful robot for competition. Employees also often attend local competitions—either as volunteers or spectators. Everyone enjoys cheering on the local teams, and it's always impressive to see the teamwork and spirit the students express.



Right, Center: **Dean Kamen, Founder of FIRST** (left) and **John Campbell, President of Clippard** (right) discuss the upcoming FIRST competition during a tour of Clippard's Fairfield facility





“It isn’t just a family-owned company. We grew up in a family of the business and the employees have been in our lives just as any other relative.”

—Deborah Clippard Ray



COMPANY CULTURE

In the later months of the year, Clippard’s halls become quite festive and filled with celebration for the year-end holiday trio—Halloween, Thanksgiving, and Christmas. Every year for Halloween, the company has a costume contest. While participation fluctuates from year to year, the company has had quite a lot of fun and genius costumes in years past, and everyone who participates has a blast dressing up and coming to work. During Halloween the company also has a chili cook off. Between both Cincinnati facilities, Clippard usually has at least 20 pots of chili ranging in four categories of spice level. The winning bowl is then shared for all to enjoy.

To celebrate Thanksgiving as a work family, the company brings in a catered lunch for all the employees to enjoy together. During the recession the Thanksgiving lunch was brought into question because the company could not afford to cater it in. Instead of cancelling the lunch completely, employees decided to bring in their own dishes and host a potluck lunch. Efforts such as this are perfect examples of the company’s culture as the employees cared more about spending time together than receiving a catered meal. The company also brings in a catered lunch for Christmas each year and purchases a gift for every employee, usually with the words “Quality People, Quality Products” on it. Events such as these truly bring the staff together and allow them to get to know each other on a deeper level, strengthening their comradery and making the thought of coming to work more fun as well.

Outside these three major holidays, the company also celebrates warmer weather with outdoor picnics, such as on Memorial Day and Labor Day. During these Clippard usually invites community service men and former employees to join, making the event a whole family affair with catered food, games, and good company. Another national holiday the company joyfully celebrates is Manufacturing Day. Though they’ve only been celebrating it for a few years now, Clippard is proud to be an American manufacturer and employees love showcasing that pride for this day. The Clippard leadership team has also invented holidays over time, making sure every month has at least one fun day for

the employees to enjoy. These days include Ice Cream Day, Hat Day, and many more. Even when there are no holidays to celebrate, birthdays, retirements, and anniversaries are special events always deserving of commemoration and cake. Employees celebrate each other's milestones, in life and with the company, together as a family. Clippard employees are also friends outside of work and spend time together, whether on camping trips, at football games, or simply dinner outing.



Right: Deborah Ray (left) with her twin sister Jennifer (right), helps organize many of the employee events shown here





“My goal from the beginning has been to enable the third generation of family to take the business and enable it to be successful for yet another generation—to grow the leadership of the family until my job isn’t necessary anymore.”

—*John Campbell*

CHANGE IN LEADERSHIP

As the 21st century progressed, the team at Clippard began discussing who would take over the company’s leadership when Bill and Bob stepped down. As a family-owned, family-run business for over half a century, the management team introduced the idea of bringing in an outside president for a limited amount of time to groom the third generation of the Clippard family to lead the company. Statistics on family business evolution, and the business knowledge of the third generation, had a large impact on this decision. According to many studies on the stages of family businesses, the majority do not make it through third generation leadership either because the grandchildren are not interested in inheriting the business or make unwise decisions that cause the company to dissolve. Some even refer to this stage as the “blunder years,” following the wonder years (inception) and thunder years (growth). The Clippard family did not want this to happen and it was the third generation in 2008 that purposed someone with outside business experience was needed to transition the company.

Together the management team compiled a list of qualifications for the future president, including someone with international experience who could expand the company’s global scope and someone who was experienced in company acquisitions. After reading through close to 100 resumes and interviewing 40 candidates, the team narrowed the applicants down to the final six from which the family would choose from. From these final candidates came John Campbell. John was brought into Clippard in 2013 to mentor the third generation family members, who serve as company vice presidents in their respective departments, into leadership roles. His time with the company is based on a five-year contract, in which time he will have successfully transferred his own outside business knowledge and experience onto Leonard’s grandchildren so they can, then, eventually step up and take the leadership of the company back into the family.



SALES WARS 2014

In 2014, Clippard hosted “Sales Wars,” another themed sales meeting. Based on Star Wars, the meeting featured the tagline “Power of the Past, Force of the Future.” The rebel alliance was invited to Cincinnati to meet Jedi John Campbell and the new executive team. The meeting was a tremendous success, with distributors hearing from key managers and executives about defeating the dark side and moving forward with great momentum.



Below: On the final evening of the event, employees and distributors gathered to honor Bill and Bob Clippard. Several distributors spoke, giving kind words and sincere thanks to the Clippard family.



INTERNATIONAL SALES

When thinking about the future, the team at Clippard cannot help but include international sales into the mix. Comprising around 18% of the company's revenue, sales outside of the U.S. are a growing focus for Clippard. Though most of this revenue is from Europe and serviced by the Belgium office, the Pacific Rim is also a strong market. China, Korea, Taiwan, Singapore, Malesia, and Australia are all countries serviced by Clippard's sales office in Wuxi, China, which opened in August, 2015, and have prominent customers of the company's innovative miniature pneumatic line. Clippard also has a presence in Latin America, particularly in Puerto Rico, Brazil, Mexico and Columbia.

"Increasing the global connectedness of our company is naturally going to increase the innovation of our company simply because we'll have new ideas, new markets—people who are looking at things differently."

—Ernie Doering

Part of Clippard's future vision is to grow their international sales even further. While there are many options and factors to consider in brainstorming the execution of this goal, Ernie Doering, Vice President of Corporate Development, says one solution could be to move manufacturing to the market it serves. This would mean building manufacturing plants in other countries that would then fulfill orders for that area, which was a point of contention when the company decided to build a sales office in China. Many questioned whether the company was moving their manufacturing overseas to then service U.S. customers, but this was indeed false. Though it makes sense to manufacture products in the area of service, Ernie says it is a double-edged sword because many overseas customers like the idea of an American-made product. The company has looked into potentially moving forward with this idea in India, but there are many factors to overcome, the two biggest being quality control and profit.

Profiles

Clippard's Executive Team



DOUG ROBERTSON

As the Director of Engineering for Clippard, Doug has been with Clippard for over 30 years. He graduated from the University of Tennessee with an Electrical Engineering Degree and earned an MBA from Xavier University while working for Clippard. Doug moved through the company working in Engineering and Product Development prior to running the engineering department. He was a key manager in organizing and moving much of the production to Fairfield at the completion of its construction. Doug is also a company pilot and uses the company's plane to visit customers around the U.S.



PAUL DORGER

Paul joined Clippard in 2012 from ITW and is Vice President of Finance. In the past, Clippard had always used outside companies to manage its finances and was looking for more capabilities with internal auditing and reporting—Paul was the “numbers guy” Clippard needed. His first year was unusual as this was new to Clippard which left him having to find his own way. Paul brings a new level of professionalism to Clippard along with a higher level perspective of data and numbers than Clippard was previously accustomed to.



CLIPPARD PARK

In 1974, Interstate 275 was being completed and the final plans called for cutting the Clippard Air Park in half. The northern portion of the property was sold and is now retail space while the 15 acre southern portion was donated to Colerain Township to be used as a park. Clippard Park received a makeover in 2009 and now has two baseball fields, a nature walk path, a large skate park, several shelters, a huge kids playground and water park.



PHILANTHROPY

Clippard is well-known throughout the Colerain community and the city of Cincinnati for their involvement with and generosity toward a wide variety of local organizations and charities. Leonard began a tradition of giving to several charities every year at Christmas, which the company has upheld throughout the years. In addition to this tradition, Clippard also supports other causes throughout the year. Organizations Clippard has supported include City Gospel Mission, Matthew 25 Ministries, Pro Kids, Relay for Life, Anthony Muñoz Foundation, Susan G. Komen, and the Leukemia Society. The company also supports local food banks twice a year with a “Souper Bowl” food drive in February where employees donate canned goods to vote for the team they think will win the big game. In most cases, giving and participating in local charity events is employee driven. Employees at Clippard like to support different causes and often present them to the executive team.

Clippard is well-known throughout the Colerain community and the city of Cincinnati for their generosity toward local organizations and charities.

Throughout the years, the company has been a loyal supporter of the U.S. military and the men and women who fight for our freedom. On many different occasions, employees have collected items to create care packages for soldiers stationed overseas including food, books, stationary, toiletries, and other supplies the soldiers might have need for while in countries such as Iraq and Afghanistan. Clippard has a collection of letters sent in gratitude for the packages, many describing their thankfulness for support from home and the reminder of why they do what they do. It is efforts like these and many more that make Clippard a rare and special place to work.



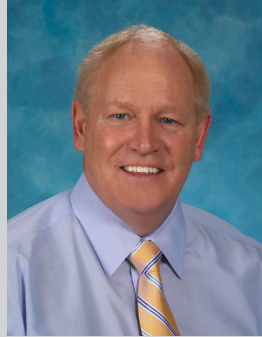
Profiles

Board of Directors



WILLIAM L. CLIPPARD, III

William L. Clippard, III currently serves as Chairman of the Board of Directors. Bill retired as President of Clippard after 50 years of service.



JOHN CAMPBELL

John Campbell is the current President of Clippard and also serves as a member of the Board of Directors.



ROBERT L. CLIPPARD

Robert L. Clippard currently serves as Vice Chairman of the Board of Directors. Bob retired as Vice President of Clippard after 45 years of service.



BILL MEIER

Bill Meier currently serves as Chief Financial Officer of JTM Food Group in Cincinnati.

Until April 26, 2017, Clippard's Board of Directors was comprised of only Bill, Bob and Buck Clippard. With the desire to have good corporate governance and strong outside experience to help grow the company, the voting shareholders unanimously voted yes to approving three additional board members to the team. This was a substantial step forward in adopting a best-practice model that requires a tremendous amount of trust and respect for the new members. Unknowingly at the time, it was Buck's final contribution to the company's success and long term sustainability.



RONALD D. BROWN

Ronald D. Brown currently serves as Chief Operating Officer of Cincinnati-based, The Armor Group.

Conclusion

We are engaged in honorable work, providing the world with useful, productive, affordable products.

We do this with the distinction of a long reputation for Quality, Service, Performance, and Value.

We deal fairly. We keep our word.

We understand profit is a vehicle to our purposes and not our only purpose.

We support our community.

We enjoy what we do. We are good at it.

We are getting better all the time.

We are grateful to God for our blessings.

We respect and encourage each other.

We show pride in our work.

We are Clippard.

Clippard

Every year the Clippard management team gives each of their employees a gift with the company's simple yet profound motto—"Quality People, Quality Products." One Christmas the motto was printed in reverse, leading the phrase with products instead of people. It's interesting how something as minor as switching two words can mean so much to the meaning of a phrase. "Quality Products, Quality People," wasn't how the motto was supposed to read because the focus shouldn't be on the products but the people who make them.

The story of Clippard is a story of passionate people of all backgrounds coming together with a common purpose to create a quality product. After all, the story of Leonard Clippard and his ingenious invention of the first-ever miniature pneumatic product wouldn't exist without his passion to solve production problems. The sale, growth, and success of the product wouldn't have happened without dedicated people backing and promoting Leonard's idea. And the massive success and longevity of Clippard Instrument Laboratory, Inc. wouldn't be half what it is today without the numerous names that have been mentioned throughout the pages of this story. Even those who haven't been mentioned are part of a history that far extends the Clippard family.

The beauty of Clippard's credo statement is that every line begins with the word "We." Each line defines the company and the mission of those who work there through the all-encompassing "We" statements. The statement says it is a desire company-wide to give back to the community, not just among leadership. These statements say all employees from 1941 to 2017 and beyond are part of Clippard history—we are Clippard.

Timeline

- 1939** Company Founded
- 1943** Company Operational Full-Time
- 1944** Chase Street Facility Opens
- 1945** End of World War II
- 1946** Company Incorporated
- 1946** Bank Street Facility Opens
- 1949** Pneumatic Line Invented
First Rolled Cylinder Created
- 1949** Sturgis, Kentucky Facility Opens
- 1950** #10-32 Threaded Fittings Introduced
- 1952** Colerain Plant Opens
- 1952** Buck Clippard Joins
First Pneumatic Catalog Published
Advent of Pneumatic Product Sales
- 1955** Sturgis, Kentucky Facility Closes
Paris, Tennessee Facility Opens
- 1956** Leonard Clippard Survives Plane Accident
- 1973** MAV-4 Introduced
- 1963** William L. Clippard, III Joins
Jim Crain Joins
- 1965** Paris, Tennessee Relocation/Expansion
- 1966** Colerain Plant Expansion
Gil E. Dudsic Joins
Introduction of Miniature Toggle Valves
- 1968** Robert L. Clippard Joins
Northeast Fluidics Aquisition
- 1971** Paris, Tennessee Plant Closes
Mexican Coil Operation Sold
- 1973** Modular Valve Line Introduced
- 1974** EV Valve Series Introduced
"Super Salesman" First Distributor Sales Meeting
- 1975** Colerain Plant Expansion
William L. Clippard, III Named President
Max Comes Joins
- 1976** Complete S/S Cylinder Line Introduced
Clippard Europe S.A. Established
- 1977** Founder William Leonard Clippard, Jr. Retires
- 1980** Image Controls Acquisition
- 1982** "Full Steam Ahead" Distributor Sales Meeting
- 1983** Death of William Leonard Clippard, Jr.
- 1984** Death of Harriet H. Clippard
- 1987** Clippard Europe Operations Opens
- 1988** "Air Commander" Distributor Sales Meeting
- 1989** Colerain Plant Expansion

- 1990** "Sales Trek" Distributor Sales Meeting
- 1991** Clippard.com Launched
Colerain Township Clippard YMCA Dedicated
- 1992** William A. Clippard Joins
- 1993** "VIP in '93" Distributor Sales Meeting
- 1994** ES Series Valve Introduced
- 1996** "Campaign '96" Distributor Sales Meeting
- 1997** Fairfield Plant Opens
Hanger at Butler County Regional Airport Opens
- 1998** Robert S. Clippard Joins
Jennifer Clippard-Caunin Joins
- 1999** E-Commerce Launched
Gil E. Dusich Retires
- 2000** "Air Corp" Distributor Sales Meeting
- 2001** First Full-Line Catalog Introduced
- 2004** Lean Manufacturing Begins
Maximatic® Line Introduced
EVP Proportional Valve Introduced
- 2005** Jim Crain Retires
- 2006** 10/15 mm Valves Introduced
Ernie Doering Joins
my.clippard.com Launched
- 2007** First Oxygen Clean Room Built
- 2008** Value-Added Department Created
NGI at UC Goering Center, Strategic Planning
Recession, Staff Hours Cut/Layoffs
- 2010** Sales Recover
Board of Advisors Formed
- 2012** Robert S. Clippard Named VP Sales & Marketing
William A. Clippard Named VP of Operations
Jennifer Clippard-Caunin Named VP of HR
ISO 9001:2008 Certified
- 2013** John Campbell Named Interim President
Ernie Doering Named VP International & Innovation
- 2014** "Sales Wars" Sales Distributor Meeting
William L. Clippard, III Retires
Robert L. Clippard Retires
Board of Directors Formed
- 2015** NR Valves Introduced
7 mm EV Valves Introduced
Shanghai China Sales Office Opens
- 2016** New ERP System Integrated
2017 Strategic Business Plan Developed
- 2017** Extruded Cylinder Line Introduced
DVP Proportional Valve Introduced
Death of Buck Clippard
Clippard publishes awesome history book

Special Thanks to:

*All the family members, friends, and employees—past and present—
who have contributed to this story*

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Clippard

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