Tulsa Firm Builds Trucks

Here is a success story that started with a surplus army truck.

In reality, it is a 3-man partnership enterprise dealing with two different operations that actually are not integrated.

In 1946, the Zeligson Truck and Equipment Co. was founded by Robert L. Zeligson, Sid Lieberman and Sam Zeligson. Since that time, the firm has expanded into two companies.

The Crane Carrier Corporation was formed by the three partners in 1953. This firm manufactures truck carriers for cranes, shovels, drag lines and pile drivers. The carriers are shipped to manufacturers for installation of the working equipment.

Crane Carrier also makes heavy duty trucks for the oil industry. Some time ago, the partners found that no truck manufacturer catered to the oil industry, one of the largest users of trucks.

When an oil company buys a truck it must reinforce the frame, convert it to 6-wheel drive, and practically rebuild the entire vehicle. The cost of these conversions is greater than the original cost of the truck.

One item to be mass produces at this plant is a ready-mix concrete truck, which will go where no other ready-mix truck will go.

The three partners are enthusiastic about the business and believe that there is no limit to its possibilities.

Hobby Becomes Paying Concern

Whenever his abstract business permits him to be absent, Wayne Fleming, Cordell, goes fishing, paying for his equipment with proceeds from sales of spinning lures.

Fleming began making the lures for himself about four years ago, and as the popularity of spinning rods and reels increased in Oklahoma, the hobby developed into a part-time commercial enterprise. Now, Fleming has a partner, Jim Welden, also of Cordell, and can make about 500 lures an hour.

Spin fishing originated in England and was developed in France. It spread through Europe, Fleming said, and was picked up by American military personnel and tourists after World War II.

Advantages of the spinning rod and reel are its light weight and freedom from backlash. Light tackle is used, as the lines will take a stress of not more than four pounds.

Fish are attracted by a brilliant red bead on the lure. The blades or spinners are brass or nickel. The hook is 3-pronged. The lure is used for all game and pan fish.

Retail price of the lures, marketed under the name, “fish gitters,” is 55¢ each.

Our Cover

Among the many outdoor activities at Lake Murray State Park, between Ardmore and Marietta, is the always popular horseback riding, depicted on this month’s cover. Many improved bridle paths are maintained, but riders can go anywhere that interests them in the 21,000-acre park.
New Ada Plant Makes Chairs

James and Burl Thompson are unrelated except in name and ideas. Both Thompsons are positive they can build a better steel folding chair and are out to prove it at the Thompson Manufacturing Co. in Ada.

James Thompson, owner of the Thompson Book Stores in Edmond, Durant and Ada, and president of the Thompson Manufacturing Co., envisioned the possibility of such a concern in 1946.

“There are only about four good steel chairs on the market,” he explained. “This new manufacturing concern is the second west of the Mississippi river. It is the only plant in the southwest and should be able to take freight advantages in several states of the area.”

However, this was not the only reason for starting the new company. Thompson said, “I would not start this thing if I didn’t think we could build a better chair at a fair price. The firm is establishing itself on quality and improved design.”

More than two years ago the Thompsons began working on design. They knew of improvements that would result in more comfortable and convenient chairs. A special designing engineer was employed to work out the details in a practical form for manufacturing.

The plant has one chair in production now, and by summer the Thompsons hope to market a chair with a padded seat and one with a veneer seat in two or three colors. At present, 20 employees working one shift a day produce about 500 chairs per day. Chairs are shipped over the country as rapidly as production will allow.

The plant started operations on October 15, 1954. Burl Thompson, vice president, hopes that within a year the plant will produce around the clock, three shifts per day. He believes that when sales and distributions are worked out and the production line is moving smoothly the plant will support at least 50 families.

The plant, built at a cost of $175,000, has about 20,000 square feet of floor space. It is located at the southwest corner of the Ada Industrial Development Corporation industrial sites. It was the first plant to buy one of the A.I.D.C. lots.

Left—Burl Thompson, vice president, and James Thompson, president, examine an experimental chair they hope to put into production soon.

Above—Backs and seats for the chairs are formed by a 150-ton punch press.
Carbide, an American invention discovered accidentally in the 1890's, can truly be called the wonder chemical.

Tribute to this fact is the new $3 million Midwest Carbide Corporation plant at Pryor. The firm is jointly owned by Shawingan Products Corporation, New York, and National Cylinder Gas Co., Chicago.

The plant makes calcium carbide, the principal source of acetylene, but carbide has a thousand other uses. Its by-products are used daily in homes, offices, shops, in wearing apparel and floor covering. Ball point pens and magnifying glasses are examples of carbide by-products.

Carbide was discovered by an engineer at Spray, North Carolina. Trying to prepare metallic calcium, he loaded his furnace with a mixture of lime and coal tar. The engineer, Thomas L. Wilson, did not recognize the resultant material as a useful product, so he threw it away in a nearby creek, where it began to bubble. The bubbles were acetylene gas, and that creek is where the carbide industry was born.

The job of making carbide is simple, to hear the corporation officials tell it. A 5-story electric furnace, heated to approximately 5,000 degrees, is loaded with a mixture of lime and coke. A few tons of molten calcium carbide are tapped from the bottom of the furnace every 50 minutes. It solidifies, is ground up and loaded into drums for shipping.

It takes 60 employees with an annual payroll of about $250,000 to produce calcium carbide. James A. Rohleder, plant superintendent, said that daily production of about 60 tons of carbide adds up to about 20,000 tons a year.

The furnace stands about five stories high and holds nearly 20 tons of lime-coke mix. It is 70 feet around, and its temperature ranges from more than 5,000 degrees at the bottom or fusion zone, to about 400 degrees at the second floor, where it is reloaded.

Bins containing fresh lime-coke mix to feed the furnace are at the third and fourth floor levels. The feeding is done by gravity through swivel-jointed pipes that direct the mix evenly over the topside of the furnace charge.

From the second floor level, little fire from the furnace operations is visible. Carbon monoxide, a by-product of the process, burns with a small yellowish flame.
Oklahoma's Mighty Tinker Air Base

One of today's industrial giants is located nine miles southeast of Oklahoma City. There a huge, complex plant now stands on the 3,000 acres which enclose Tinker Air Force Base.

Current Tinker assets are estimated at $1.7 billion, which puts the base in a class with Standard Oil of New Jersey. Its assets are more than the combined assets of Sears Roebuck and Montgomery Ward.

The economic impact of Tinker is felt throughout the world. The total amount of money the base brings to Oklahoma each year is difficult to compile. However, this much is certain—its $100 million annual payroll is the largest in the state, and its 23,000 military and civilian employees represent one out of every 100 persons in Oklahoma.

From his headquarters at Tinker, Major General W. O. Senter commands the huge Oklahoma City Air Material Area (OCAMA). Until 1953 Tinker was a depot which provided maintenance and supply services for Air Force and other military installations in a 9-state area in central United States. Today OCAMA's area of responsibility stretches around the globe.

America's entry into World War II was six months away when the first ground was broken for construction of Tinker in July, 1941. During the war B-24 and B-17 bombers, which helped smash the Nazi military machine, were repaired in Tinker's depot. Later B-29's, which played a dominate role in forcing Japan to surrender, were fitted for combat in the shops of the base. The first plane to drop an atomic bomb on an enemy target, the B-29 Enola Gay, raised the curtain on atomic warfare when it bombed Hiroshima. It was modified for its history-making job at Tinker.

Tinker supported operations during the Korean war by keeping the planes flying
Right—New engines are installed in a B-47 at Tinker.

Center left—B-47’s on the maintenance line at Tinker. Twenty-five four and six engine planes can be handled at one time on the line, which is almost three quarters of a mile long.

The Enola Gay was modified at Tinker before it dropped an atomic bomb on Hiroshima August 6, 1945. This picture was made in 1946 after the B-29 returned to Tinker to be prepared for atomic bomb tests on Bikini that summer.

and funneling supplies to the Far East. Its role in national defense today is even more important, and new and bigger responsibilities are due to be added. One of Tinker's big jobs now is to keep the B-47 Stratojet flying. This bomber with swept-back wings flies faster than 600 miles an hour. It is commonly called the backbone of the Strategic Air Command. In the future OCAMA responsibilities are scheduled to be increased to include such planes as the B-52, new eight-engine jet bomber, and the KC-135, four-engine jet tanker now getting into production.

Broadly speaking, OCAMA supports the fighter and bomber crews of the Air Force by getting the right equipment at the right place and at the right time. Its mission consists of three things—procuring, supplying and maintaining. Procurement does the actual buying of material and services for the Air Force. Supply decides what to buy and controls the distribution of what has been bought. Maintenance overhauls, repairs and modernizes planes, engines and accessories. These responsibilities are worldwide. For instance, OCAMA employees must make sure that the B-47 is capable of flying any hour of
the day, wherever it may be stationed around the globe.

Tinker is a big installation. There are more than 500 buildings on the base and 13 miles of runways and roads. The base has its own communication system and protective services, churches, hospital, recreation facilities and utilities for a system larger than that of a city of 30,000 persons.

Vast as it is, Tinker is just part of OCAMA. OCAMA has personnel stationed in 121 locations in 20 states and activity in 744 plants. It administers 25,000 contracts with a face value of $13.5 billion.

At 12 of the major firms, OCAMA has stationed plant representatives to work with manufacturers on all phases of procurement, production and inspection. One of these plants is the Douglas Aircraft Company of Tulsa, where B-47s are produced. OCAMA's present contracts with Douglas have a face value of approximately $643 million.

In addition, OCAMA administers $2.3 million face value contracts with other state firms. These contracts range from $2,232 with the Boardman Company, Oklahoma City, to $1,711,768 with Spartan Aircraft Company, Tulsa.

Last year OCAMA spent $8.2 million buying what the Air Force calls local purchase items—services and equipment needed for general housekeeping. To help small business concerns obtain Air Force contracts and contract information, OCAMA operates a small business office at Tinker. A specialist in the office provides assistance for firms with less than 500 employees. Approximately 60 per cent, or $4.5 million, of the local purchase items were bought from small business concerns. Of this total, $3.5 million went to Oklahoma small businessmen.

These figures refer only to contracts placed directly by the Air Force. Not included are subcontracts let to other state concerns by firms working on Air Force jobs.

Besides OCAMA, a number of other major Air Force organizations are stationed at Tinker. One of these is the 33rd Air Division, commanded by Brig. Gen. William P. Nuckols, which is responsible for defending Oklahoma, Arkansas, Texas, Louisiana, Kansas and Mississippi against attack from the air. Another is the 1800th Airways and Air Communications Service Wing, commanded by Brig. Gen. Thomas L. Bryan, Jr. The Wing installs, operates and maintains terminal air traffic control and navigational aids required for the Air Force all-weather flying mission.

The Sixth Weather Squadron at Tinker, under the command of Lt. Col. Ernest J. Fawbush, supports operational projects requiring portable weather stations. From February through October of each year the Squadron helps supply data to the famed Severe Weather Warning Center at Tinker.

The 505th Strategic Fighter Wing, which flies escort for bomber missions, is scheduled to move to Tinker this spring from Dow Air Force Base at Bangor, Maine. Commanded by Col. Richard O. Hunziker, the wing will bring approximately 900 additional military personnel to the base.

Tinker is still growing. Warehouse construction projects recently completed, now underway or to be let within the next month add up to almost $9 million. These structures will help house the some 270,000 different items supply must maintain in readiness.

Extensive airfield improvements started last August. The $2.5 million project, to be completed this autumn, includes extension and widening of the main runway to accommodate the B-52 and other big airplanes of the future.

Approximately 20,000 civilians, with an average monthly salary of $335, are employed at the base. The employees represent almost every community in central Oklahoma. A few of them drive as far as 125 miles a day to work.

Civilian and military personnel are proud of the base and its outstanding record. OCAMA has won the Merrill Mags plaque five of the eight times it has been awarded. The plaque is presented quarterly to one of the eight Air Material Areas in the United States with the highest rating on selected management items.

"OCAMA personnel have a great record of accomplishments in the past," General Senter, a native of Abilene, Texas, said. "I am sure they will go on to higher levels of endeavor in the future."

Oklahoma's riches are its friendly people, General Senter, who assumed command of OCAMA last May, believes.

"Around Washington, where I worked before I was ordered to Tinker," the general recently told a group of Midwest City citizens, "some people believe that Oklahoma's oil fields are its primary asset. I now realize that the greatest resource of this state is not the petroleum industry, nor even Tinker. Oklahoma's riches are you—its friendly people."
The beehive or updraft kiln holds about 450,000 bricks.

A man who not only makes brick but collects antique bricks for a hobby is Earl Hermes, manager of the Sapulpa Brick and Tile Corporation.

It wasn’t a matter of getting into the brick business for Hermes. “It is all I know, I grew up on it,” Hermes said. “It’s what my father did.”

At the turn of the century, a brick plant was established on the outskirts of Sapulpa, adjacent to the old Sac and Fox Indian trail. Mules were the motive power, and bricks were handmade. It became a “modern” plant in 1904, when steam and a brick pressing machine were installed.

Through the years the plant has been improved with the latest developments in the brick industry. Today it is an electrified modern plant, one of the most efficient in the state. The company employs 55 persons and has an annual payroll of about $175,000.

The plant occupies its original location on the west edge of Sapulpa, but the Sac and Fox trail now is known as U.S. 66.

Hermes and his family independently own and operate the plant. His sister, Mrs. A. A. Duca, is president of the firm, and another sister, Mrs. Louise Whittlesey, is office manager. Members of the family have been brick makers in Oklahoma for more than 50 years, and they have owned and operated the Sapulpa plant for longer than 30 years.

Although four generations of the Hermes family have been in the brick business to date, only three generations have worked at this plant. Earl Hermes hopes that his young grandson will become the fourth generation to participate in this operation.

He has two children, Richard, 24, a naval officer stationed at Valejo, California, and Betty, 28.

His son’s participation at the plant has been mostly during summer vacations, but in 15 months when he is released from the Navy, he is expected to come into the business.

Products of the Sapulpa Brick and Tile Corporation are varied and modern. The brick now being made, cored, textured and chemically treated is far different from the cumbersome handmade brick of half a century ago. The modern Roman and Norman brick, stylized for this section of the country, has won favor everywhere it has been shown.

At present, brick is shipped to Arkansas, Minnesota, Nebraska, Tennessee, Texas, Colorado and Louisiana. Although the plant manufactures both brick and tile,
Earl Hermes and Mrs. Louise Whittlesey examine one of the first bricks made by his father. His collection of bricks includes one from the White House.

The brick volume has been so heavy that only one special order of tile has been manufactured in the last three years.

The brick manufacturing process is relatively simple. Shale is "won" from the pit by a bulldozer and loaded into a car. It is ground to the consistency of coarse corn meal, put through the mill and moistened with water. It then goes through a vacuum chamber, which takes the air out of the clay. This operation determines the plasticity of the clay.

The clay goes through a dye and comes out as a ribbon of clay on a belt, where it is cut to size. The formed bricks are loaded onto trucks and fired in kilns at about 1,850 degrees Fahrenheit. They are then baked eight or nine days. Each brick is handled individually at least six times before it is finished.

Hermes is especially proud of the Student Union building at Oklahoma A&M College at Stillwater. This building, as well as others on the A&M campus, was built with brick furnished by the Sapulpa Brick and Tile Corporation.

Thus, the little plant beside the Indian trail has grown and prospered, changed and modernized, yet has maintained its independence.
State Firm Manufactures Drycleaning Machine

Soaps, cleansing fluid, machines and methods that were in standard use by the dry cleaning industry in 1920 are obsolete today. The ultimate in modern equipment is a commercial laundry machine manufactured by Midwest Laundry and Supply Co., Oklahoma City.

The firm was organized in 1947 as a dealer agency under the name of Midwest Cleaner Supply Co. In 1949 the name was changed and the manufacture of conventional commercial laundry and dry-cleaning machines begun.

About 13 months ago the company built its first combination washer and extractor, and within a year about 20 of their machines were in operation throughout the country.

The machine sells for $4,000, considerably underselling similar machines, which cost from approximately $10,000 to $15,000.

Company owners are Clair Hill and his son, Jim, who is engineer and designer of the machines. Presently, there are eight production employees, and the Hills hope to increase the number to 30.

Midwest makes several models on an individual order basis. The machines have a capacity of 1,200 pounds of clothes on an average day. They are powered by two electric motors which perform the washing and extracting operations at 25 and 620 revolutions per minute, respectively.

The larger of the two most popular machines weighs 4,500 pounds, is six feet tall, and has a washer cylinder 42 inches in diameter and 30 inches deep. The washer cylinder of the smaller model measures 36 by 24 inches. Height of the smaller machine is 5½ feet and weight is 3,200 pounds.

The younger Hill said customers prefer this manually operated machine to automatic models selling for about $1,200 more. Inquiries about it have come from points as distant as Canada, Dublin, Ireland, and Capetown, South Africa.

The heavy machine is designed for safety. It is built on its own dump tanks, used to store solvent when the washer is cleared of fluid. No solvent is spilled on the floor.

The cleaning fluid mixture used in the machine is made up of solvent and mahogany oil soap. Humidity in the machine is maintained at about 75 per cent.

Great Lakes Carbon Expands

Great Lakes Carbon Corporation has announced that it will build a plant in Ponca City to utilize petroleum coke in making coke briquettes for the aluminum industry.

The 20-acre tract on which the plant will be built is in the industrial area known as North Ponca, about two and a half miles north of the city limits. It lies just west of the Santa Fe Railway Company's main line.

Construction has begun on a railroad spur from the Santa Fe tracks into the site. Work on a $150,000 building to house the company's Ponca City operations is scheduled to start in the near future.

First reports are that Great Lakes Carbon will employ about 30 persons. Total number of employees of the corporation throughout the United States is more than 2,300.
Shawnee Fisherman Makes Bait Boats

Any fisherman who ever wanted to cast across a creek under low hanging branches knows what a problem it is to keep his hook from getting caught in the limbs, but a solution has been found.

D. U. McCabe, an avid angler from Shawnee, has perfected a small boat equipped with a miniature electric motor, lights, hooks, line and sinkers. The light attracts the fish and makes the boat easily visible from the shore at night.

Four flashlight batteries run the small motor and lights and also serve to balance the craft. An automatic switch on the rear of the boat turns off the motor and simultaneously causes the fishing line to fall into the water.

McCabe got the idea of the fishing boat one day while he and his wife were angling but not catching much "because we couldn't get our hooks where the fish were." The Shawnee man made three experimental models before perfecting the present design, for which a patent has been applied.

The bait boat can be used in water of any depth, McCabe said. A nylon line attached from the boat's switch to a regular casting reel is used to retrieve the boat.

A fishing line testing 10 pounds weaker than the main line is used on the front of the boat to hold the hooks and sinkers. McCabe explains that if the hooks become entangled the weaker line will break first, so that only the fishing line would be lost.

The boats, retail at $12.50 each.

Tulsa Company Weaves Fences

The International Chain Link Co., a fence manufacturing concern, is one of Tulsa's newest industries. Formal dedication of the plant, at 3349 West Fifth Street, was held in September, 1954.

The company is the only weaver of chain link fence in northeastern Oklahoma and was established primarily to defray high freight costs that faced prospective buyers of chain fences.

Jimmie Jones, owner of the new plant, formerly owned the Acme Fence and Iron Co., Tulsa.

The firm uses a Bergandi weaving machine, one of 40 in the United States, in the manufacture of the fencing. The company also makes posts and fence ornaments. One unusual aspect of the operation is that the posts are galvanized after cutting so that the coating is applied to both outside and inside.

Garform Molds Plastic Boats

Garform, Inc., a boat making firm in Wagoner, is rapidly making a name for itself since William F. Cody of Tulsa bought the concern last summer.

Garform was founded in 1947 by Gar Wood, Jr., who pioneered in making plastic boats. The plant changed hands several times and finally was closed.

Cody plans to expand the industry and increase the number of workers. The plant presently has 45 dealers throughout the United States and employs 16 to 20 persons.

The company produces a line of cabin cruisers, a deluxe model runabout, and a fishing boat suitable for commercial fishing on the Great Lakes and salt water shrimp-fishing and oystering.

The 22-foot cruiser sleeps four and has room for galley and wash room facilities. It is available with 45, 60, 75 or 90-horsepower engines or can be powered by one or two 25-horsepower outboards. Like all other Garform models, the hull and superstructure are made of fibre glass reinforced with polyester resin. Prices of fully equipped models range from $3,500 to $4,000, depending on the size of motor and other gear.

Cody said the firm hopes to turn out two 22-foot cruisers a week this year. Ten other boat models range from 12-foot outboards to 17-foot inboard runabouts.

"Our problem now is stepping up production," Cody said. "We can sell more boats than we can produce."

Hulls and other parts of the boats are formed by vacuum, air pressure or steam methods.

At the recent Kansas City Sports and Travel show, the Oklahoma Tourist Bureau's display (above) was judged the most outstanding entry from the standpoint of attractiveness and educational value. It was constructed by Russell Pearson, artist for the Oklahoma Planning and Resources Board, and will be exhibited this year at shows in Dallas, Des Moines, Wichita and Denison.
Bobbers Made For Fisherman

All over Oklahoma, sports, fishing supply, hardware and shoe stores sell wooden floats under the signature, Stevens Sport Shop. The floats are manufactured by Jim Stevens, a Sentinel barber who has been making them as a paying hobby for six or seven years.

Balsa wood from imported two by four and two by six beams is the principal material in the floats. Stems are plastic.

Stevens makes about 2,000 dozen floats a year. They retail for 20c, 25c and 35c. Colors are red, black and green, with white tops.

Best selling seasons are spring and summer. Fishermen buy floats anytime the wind blows, said Stevens.

A workman puts finishing touches on a clay replica of the state seal sculptured by Joe Taylor, professor of sculpturing at Oklahoma University. The replica will be cast in Harter Marblecrete stone and set into the wall of the bathhouse at Lake Texoma lodge, now under construction between Durant and Madill.

Drain Cleaner Developed

In 1926, H. G. Kopp landed in New York, a poor immigrant from Germany. In true Horatio Alger fashion, however, he rose in three years to become the owner of a large chemical concern.

In 1929 a disastrous explosion wrecked the plant and almost cost Kopp his life. Subsequently, the depression hit.

Kopp moved to Tulsa in 1933 and started to work as a salesman for the Ward Chemical Company. He received numerous calls from people who wanted to know whether any chemical would kill termites, but at that time the only effective termite treatment was a service offered at exorbitant prices by a St. Louis concern.

Kopp experimented until he derived a formula that was effective and could be mass produced at a reasonable price. He advanced within the company until he became a partner. In 1939 he founded the Atco Termite and Chemical Company in Tulsa. The firm sold chemicals to cleaning plants and the public.

Again, people inquired about a suitable drain cleaner. Kopp developed Quick Drain Pipe Opener, a caustic chemical solution that clears roots and debris from drain pipes.

The product has been so popular that Kopp plans to expand its sales area to include other cities and states.