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Reflections

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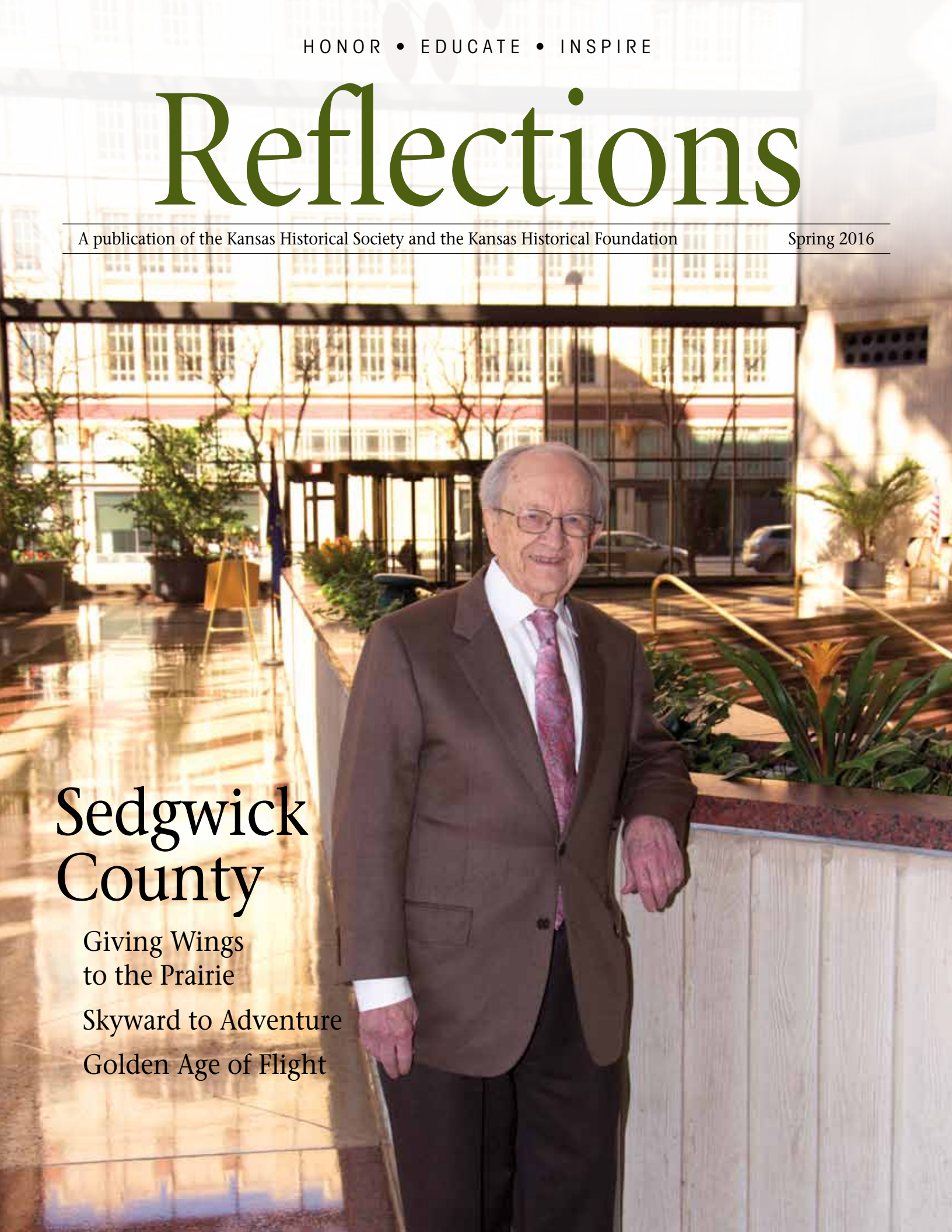

Sedgwick County

Giving Wings to the Prairie

Skyward to Adventure

Golden Age of Flight

Reflections

SPRING 2016
VOLUME 10, NUMBER 2

Contents

2 GIVING WINGS TO THE PRAIRIE

8 SKYWARD TO ADVENTURE

16 GOLDEN AGE OF FLIGHT

All photographs and artifacts in the Kansas Historical Society collections unless noted.

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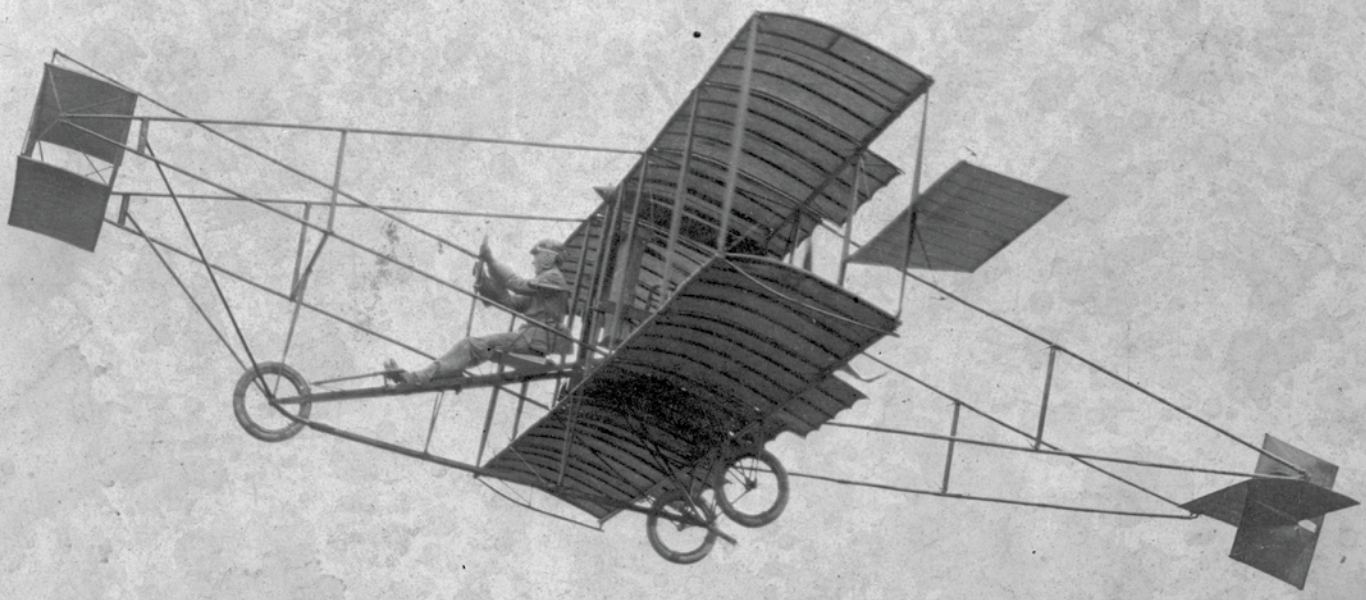
ON THE COVER: Hal Ross, a Wichita attorney, is a longtime member of the Kansas Historical Foundation and past president. See story page 21.

Right, Olive Ann Beech with a Beechcraft circa 1950.

WICHITA
AIR CAPITAL



The advent of first flight in 1903 awakened a yearning among people around the world. Kansans were no different. They were inspired by the challenge of heavier-than-air craft. After the Wright brothers' success, fliers kept pushing the boundaries. Alberto Santos-Dumont achieved the first power flight in France in 1906. French flier Louis Blériot was first to cross the English Channel in 1909. American John Moisant conducted the first passenger flight across the English Channel in 1909. These and many others continued to find ways to mark new successes in the skies.

Kansas, with its open prairies, offered the perfect place to make test flights. Inventors from the state like Clyde Cessna soon took on the challenge of building their own airplanes. They discovered that the task was dangerous and costly. Since the public was willing to pay to witness aviation exhibitions, these demonstrations helped fund their expenses. In an effort to meet the public's insatiable thirst for daring stunts, aviators became barnstormers, wing walkers, and parachute jumpers, risking their lives to finance their inventions.

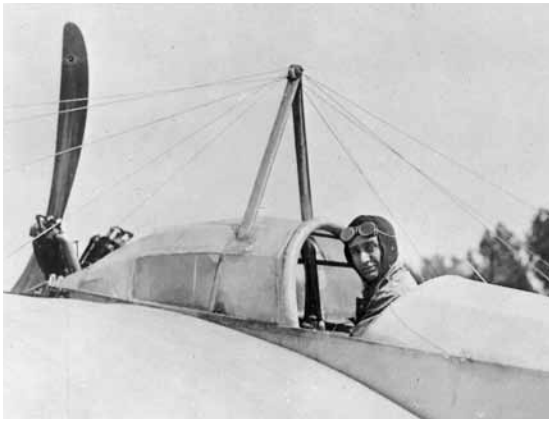
The successes of these aviators inspired others and helped to bring some of the best minds in flight to Wichita where oil supplies were plentiful. The Air Capital of the World, as it became known, eventually had 16 airplane manufacturers with names like Boeing, Cessna, Beechcraft, and Learjet; six engine factories; 11 airports; and dozens of flying schools. Here manufacturers set the standard for the nation's production efficiency. Today more than 32,000 people are employed in aerospace in Kansas.

Explore this rich history.

An early flight demonstration in Wichita, 1911.

GIVING WINGS TO THE PRAIRIE

CLYDE CESSNA



Clyde Cessna looked out from the cockpit of his new airplane toward the flat Salt Plains of Oklahoma. The winds were fairly calm but the white sand still stung his face. He had been anticipating this moment for months. He was going to attempt the first test flight of the monoplane he had built.

Cessna was concerned about his lack of flight experience along with the performance of his untested aircraft. He called his wooden monoplane *Silverwing*, for its shiny body. She was fragile, made of spruce and linen; he worried that he would damage her before mastering his skills.

Taking a deep breath, Cessna motioned for his brother, Roy, to turn the propeller. When the engine fired, Cessna smelled the strong scent of castor oil and his pulse quickened with anticipation.

The plane responded as he adjusted the throttle then bounced as he was attempting take off. Cessna lost control as the plane went into a spin and crashed into a ditch. He breathed a sigh of relief, having escaped injury, but the damaged nose would require repairs back in the shop at home.

After growing up in Kansas, Cessna had moved with his family to Enid, Oklahoma. He had been inspired by Louis Blériot's crossing of the English Channel in a monoplane in 1909. The single wing design, Cessna reasoned, was simpler and more elegant than the biplane with its struts and wires. When he had the chance to see a flying circus in Oklahoma City in January 1911, he became convinced he could build a plane. When he discovered he could make as much as $10,000 from flight exhibitions, he sold his automobile dealership and set his sights on aviation. He spent one month learning about construction at a factory in New York and used his savings to purchase an airplane kit for $7,500. At his home in Enid, Cessna began assembling the plane kit with his own water-cooled engines. In June 1911 he began testing on the Salt Plains some 35 miles from home, along with other would-be fliers.

The Cessna brothers returned once repairs were complete but the plane failed to lift on the second attempt. They spent 10 days on the plains living in a tent

If the engine stops for any reason, you are due to tumble, and that's all there is to it!

—Clyde Cessna

and surviving on water and flapjacks. Each time they sustained a "crack-up," they made repairs. During one attempt Cessna was so badly injured he remained on a pallet for several days before he could drive back to Enid.

"I am going to make this thing fly," Cessna said in frustration to Roy after a dozen attempts. "Do you hear me? I am going to make this thing fly and then I am going to set it afire and I'll never have another thing to do with aeroplanes."

For the 13th time Cessna donned his goggles and fired the engine. The salty dust and sand burned Roy's face as he tried to stabilize the plane in the wind. Clyde nodded for him to release his grip and step away from the machine. He throttled the engine and fought to keep the plane on track amidst the wind gusts. Building speed, the plane reluctantly rose to 50 feet as another gust shifted the balance. The engine spurted in resistance and began to overheat. Cessna hadn't yet learned to turn and he realized he needed to land. He frantically worked the rudder, just as the plane stalled and struck the ground, bouncing then hitting again before coming to rest.

Clyde and Roy celebrated their first successful flight. The engine had performed well, but Clyde knew there was much to learn if he was to become successful. He soon forgot about quitting.

Cessna made his first public appearance in Enid on Independence Day. He flew two successive days in Jet and received $300, then another $300 in Cherokee. While making another trial flight on the Salt Plains he fell 75 feet, escaping serious injury but crashing his plane. He rebuilt and tried in vain to support his family with proceeds from the exhibition flights.

In December 1912 Cessna made a solemn decision. He sent a message to his mother in Rago, Kansas. "Will make a flying trip home Saturday," he wrote. He shipped his plane by rail, assembled it at the station, and flew home. Circling over the family farm, he landed near the front yard and climbed down from the cockpit while his mother watched. Cessna rushed to give her a kiss on the cheek.

"Beats old Dobbin, doesn't it mother?" he asked.

Finances required that Cessna move his wife and two children back home where he resumed farming. He continued to pursue his dream, building new and improved models. In 1916 the Jones Motor Car factory invited him to build the first airplane in Wichita. He flew the *Comet* in 30 exhibitions and set a speed record of 125 miles per hour. He became known as one of the most successful aviators in the West. Then the outbreak of World War I put a temporary halt to Cessna's career.

I am going to make this thing fly, … Do you hear me? I am going to make this thing fly and then I am going to set it afire and I'll never have another thing to do with aeroplanes.

—Clyde Cessna

Aviation
AND WORLD WAR I

The advent of World War I changed focus for aviators like Clyde Cessna. The nation no longer needed exhibition fights; these resources were required to support the Allies.

The first flying corps, launched at the start of the war in Europe in 1914, pushed beyond current technology. Airplanes were made of wood with open cockpits for a maximum of two crew members; they had no means of navigation or communication. Flying at a low altitude, pilots could provide visual reconnaissance of enemy ground troops. Forces on the ground could not easily identify the aircraft, and often fired on their own planes. Flyers used pistols to fire at other airplanes, while avoiding shooting their own propellers, or dropped small bombs by hand. Eventually aviation advancements during the war made air combat possible.

By the time the United States entered the war in 1917, Allies needed a large supply of engines. U.S. military contracts focused on fulfilling that need.

Cessna saw an opportunity to assist with the war effort. He proposed a military flight school in Wichita and to manufacture reconnaissance aircraft. He failed to receive funding for either proposal and decided to return to farming until the war's end.

The war proved the value of the airplane. American aviators enjoyed the surge in enthusiasm for airplanes after the war. Wichita businesses, like those around the nation, quickly saw opportunities in commercial aviation. They established aviation manufacturing plants, taking advantage of the large source of low cost military surplus materials like engines. They hired returning soldiers with new skills in flight and engineering. They worked to develop fast and reliable aircraft for business and individual travel.

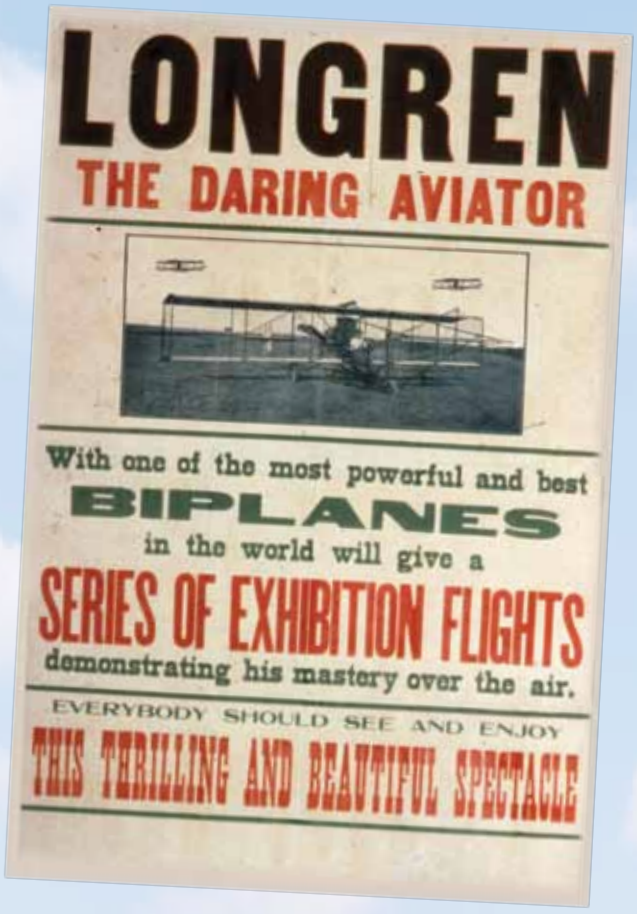
EMIL LAIRD

Emil "Matty" Laird's company, begun in Wichita in 1920, produced the *Swallow*, and gave a start to the careers of Walter Beech and Lloyd Stearman.

ALBIN K. LONGREN

Around the same time that Clyde Cessna was building and testing *Silverwing*, A. K. Longren was working on his own creation, *Topeka I*.

Longren of Clay Center was known locally as a genius who made his own car and motorcycle. He built and successfully flew a biplane in Topeka on September 2, 1911. Over the next few years Longren made 1,372 exhibition flights. Failing to land a military contract during World War I, he became a test pilot. Then he returned to open a manufacturing factory in Topeka to produce the Model AK in 1921, designed for individuals. The factory closed in 1926. The 1914 version of his biplane is on display in the Kansas Museum of History.



LLOYD STEARMAN

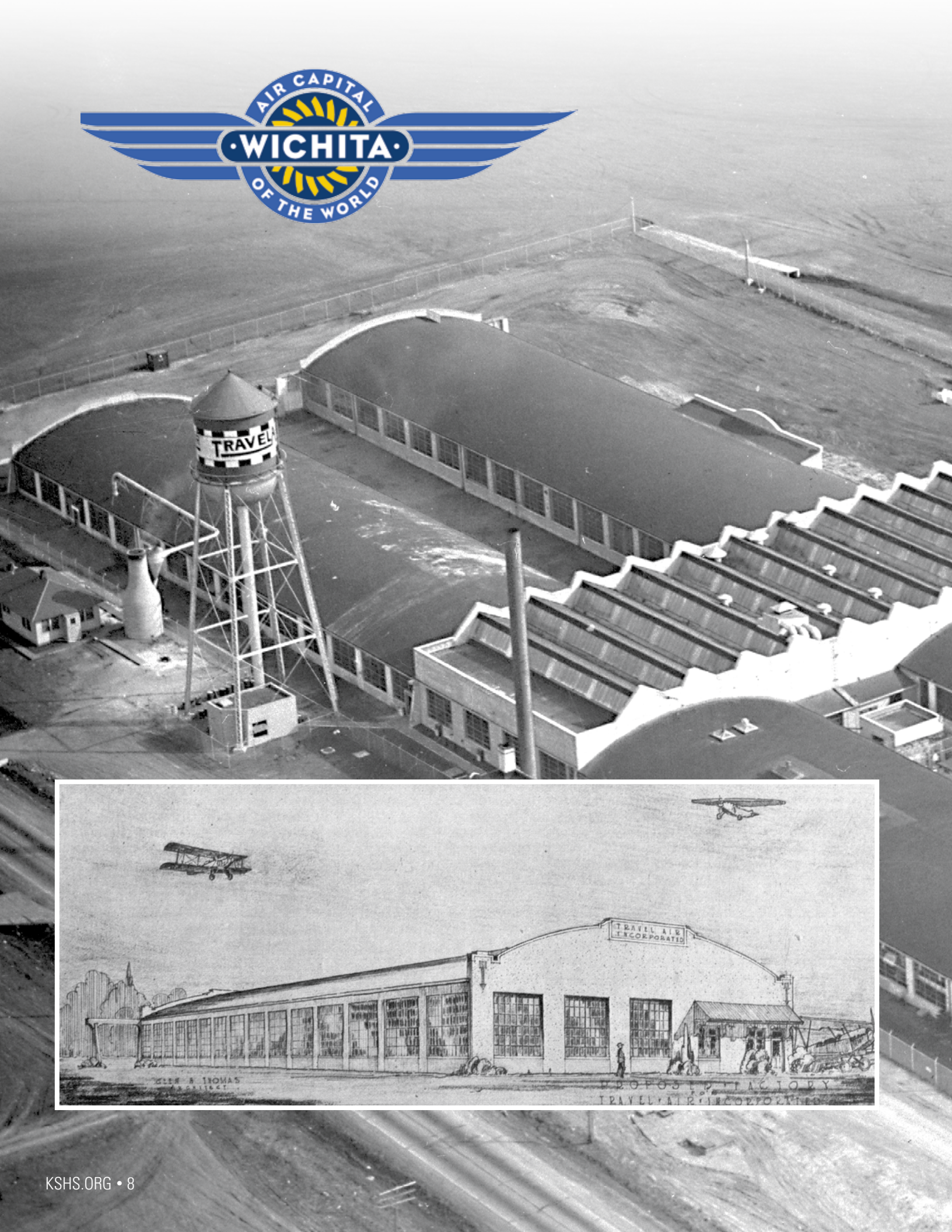
World War I introduced Lloyd Stearman to flying. After the war Stearman returned to finish his architectural degree at Kansas State Agricultural College, but soon returned to aviation. While working as a mechanic for the E. M. Laird Airplane Company in Wichita, he met Walter Beech. He was just 27 when he helped found a new airplane company.

WALTER BEECH

A pilot, flight instructor, and engineer during World War I, Walter Beech easily transferred his experience to become general manager for Laird. Beech and Stearman thought they could improve on the Laird *Swallow* and spent their own time building a new prototype. The company's owner did not agree. Beech was 33 when he decided to begin producing their new designs.

OLIVE ANN MELLOR BEECH

Pushing traditional gender roles, Olive Ann Mellor had taken on bookkeeping for her family at a young age. She completed business college and went to work for an electrical supply and contracting firm in Augusta before moving to Wichita at the age of 21 in search of more a challenging position.


AIR CAPITAL
WICHITA
OF THE WORLD
TRAVEL
TRAVEL AIR INCORPORATED

SKYWARD TO ADVENTURE

Fortune brought together the team of four to form Travel Air Manufacturing Company on January 26, 1925. Clyde Cessna, at the age of 46, was the experienced builder; Walter Beech, the manager and engineer; Lloyd Stearman, the designer and mechanic; and Olive Ann Mellor, the office manager. In just a few short years their association would set a course for aviation history.

They opened the business in a 30-foot square rented industrial space in downtown Wichita. Using military surplus engines that were in plentiful supply, they introduced the Travel Air Model 2000 biplane in March 1925, pictured below. As a way to prove the plane's performance, Beech entered competitions, earning visibility, prize money, and orders. By the end of the year the company had grown to 30 people and expanded to multiple locations.

Cessna pushed for newer designs and rented a separate space to construct a faster and more powerful monoplane. He introduced his Model 5000 in March 1926. By the end of the year he resigned to start his own company.

With Travel Air's continued growth came the need for an airfield to test new models. The company purchased six acres east of the city in late 1926 and construction soon began on a new facility. The city acquired the adjacent property for a municipal airport. It began a campaign to promote Wichita as the Air Capital. Stearman, hoping to focus more on aviation design, resigned to start his own company in Venice, California, in late 1926.

At Travel Air City, a state-of-the-art facility, 25 new aircraft were rolling out each week with 650 employees working two shifts. The new six-seater, Model 6000, introduced in April 1928, became known as the Limousine of the Air. Popular with celebrities of the day, the aircraft was featured in several movies.

Beech, who hoped competition would increase the company's success, developed two secret racing models that he unveiled at the National Air Races in Cleveland in August 1929. One of the Model R *Mystery Ships* easily won the race.

By late summer 1929 the economy was showing signs of distress and Travel Air's sales began to slow. The owners made a deal to merge with aviation leaders Curtiss and Wright. In fewer than five years Travel Air had built 1,800 aircraft in 16 basic designs. Stearman, Beech, and Mellor were ready for the next step in aviation.

Cessna

By the end of 1927 Cessna's new company offered its first plane; the Model AW monoplane could reach 120 miles per hour. Cessna's son helped to design racing planes and the company introduced its DC-6 high-wing four-seat touring plane in 1929. Unable to survive the stock market crash, Cessna closed in 1931. Cessna Aircraft Corporation reopened in 1934. Cessna decided to return to farming two years later and sold the company to his nephews, which they built into a global leader. The Cessna 172, introduced in 1956, is the most produced airplane in history. Today Cessna is a subsidiary of Textron Aviation.

Beechcraft

Walter Beech accepted an executive position with Curtiss-Wright in New York and he and Olive Ann Mellor married in 1930. They returned to form Beech Aircraft Corporation in Wichita in 1932. In the old Travel Air plant on East Central, they introduced the Model 17, a five passenger biplane with speeds up to 200 miles per hour. Known as the *Staggerwing* because the top wing aligned in back of the bottom, this model became important to the war effort for bombers, ambulance planes, and air attachés. The Beechcraft *Bonanza*, introduced in 1947, had the longest production run of any airplane in the world, with more than 17,000 built. Olive Ann operated the company when Walter became ill. After he suffered a fatal heart attack in 1950, she continued to expand the company's reach, providing equipment for NASA. Beechcraft today is a subsidiary of Textron Aviation.

Stearman

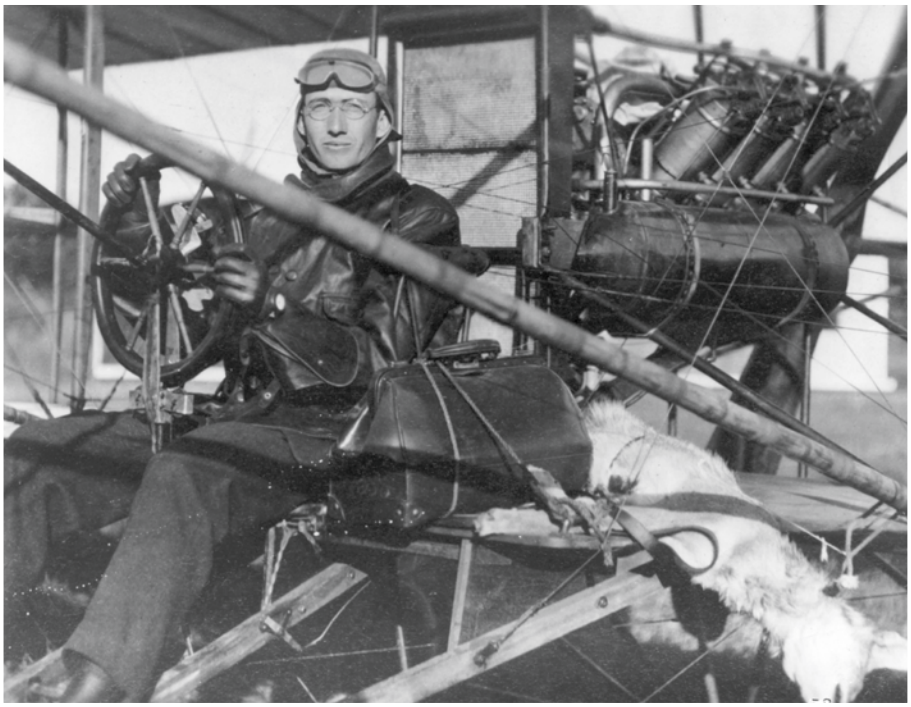
Tuskegee Airman pilots train in the Boeing-Stearman *Kaydet* during World War II. Photo courtesy National Museum of the U.S. Air Force.

After briefly operating a company in Venice, California, Stearman returned to Wichita. There the Stearman company produced biplanes used for mail delivery. Stearman designed a military trainer, Model 6 *Cloudboy*, introduced in 1931. Stearman sold the company to what would become Boeing, and he joined Lockheed Aircraft Company as president. While only a few *Cloudboys* were produced, the plane served as the basis for Boeing's Model 70 *Kaydet*, which became the leading trainer during World War II, with nearly 11,000 planes built. After the war the *Kaydet* became a popular choice for crop dusting. Boeing's Wichita plant went on to build the B-29 *Superfortress*, the B-47 *Stratojet*, and the B-52 *Stratofortress*. The plant was also involved with the KC-135 refueling aircraft and produced two 747 versions as *Air Force One*.

Under Stearman's leadership the Lockheed 10 *Electra* was introduced. Amelia Earhart chose Lockheed's first all-metal, twin engine plane for her around-the-world flight in 1937. Lockheed Martin today is a leader in aerospace, defense, security, and advanced technologies.

The Wichita Air Capitol made an impact on the aviation industry around the nation.

GLENN LUTHER MARTIN



Born in Iowa, Glenn L. Martin grew up in Liberal and Salina, Kansas. At the age of six Martin began building box kites. In the family's kitchen, he constructed the kites he sold to friends for 25 cents. He used the Kansas wind to propel a toy wagon with a sail. He adapted the sail to increase his bicycle and ice skating speed. Martin attended Kansas Wesleyan University before moving with his family to the West Coast by 1910. There he built and learned to fly a pusher-type biplane. In 1912 he founded his own company, becoming the youngest aviation manufacturer in the world. He soon merged with the Wright Company, then eventually with the Lockheed Corporation, forming Lockheed Martin, the major U.S. aerospace and defense contractor later led by Kansan Lloyd Stearman.

CHARLES LINDBERGH

As a barnstormer and parachute jumper, Charles Lindbergh lived in Bird City, Kansas, in 1922 and 1923. There he became known as "The Daredevil," entertaining crowds in the Midwest with his wing-walking feats and parachute jumps. Lindbergh gained "considerable respect for the wind in Kansas." As he sought a suitable airplane for his trans-Atlantic flight, he turned to Travel Air in Wichita. Unable to come to an agreement with the company, he found another source for the *Spirit of St. Louis* at Ryan Airlines.

Photos courtesy Wikimedia Commons.

LOUISE THADEN

Thaden pictured at right, 1932. Photo courtesy Wikimedia Commons.

Resolved to become an aviator, Louise McPhetridge made such an impression that Walter Beech hired her as a Travel Air sales representative in the predominantly male aviation industry. Working at the company's Oakland, California, dealership, McPhetridge received free pilot's lessons as a part of her salary. She earned her license in 1928. After marrying Herbert von Thaden, she went on to set altitude and speed records, winning the National Women's Air Derby in 1929 in a Travel Air plane. She and her co-pilot, Blanche Noyes, flew a Beechcraft *Staggerwing* to become the first women to win the Bendix Transcontinental Air Race in 1936.


TWA
Coast to Coast
Celebrating O
Glendale
Winslow
Kingman
Albuquerque
Clovis
Waynoka
Wichita
Kansas City
St. Louis
Columbus
India
TWA Celebrates the
1929 Inaugural of
Transcontinental
Air-Rail Service
By its Predecessor
—TAT—
TRANSCONTINENTAL
AIR TRANSPORT

GOLDEN AGE OF *Flight*

The gathering of men, women, and children studied the stormy summer sky in eager anticipation. Standing on the green lawns at Wichita's municipal airport, they hoped to catch a glimpse of aviator Amelia Earhart. She was a passenger on the Transcontinental Air Transport (TAT) *City of Columbus* flight launching coast-to-coast air and rail service.

"Look, I see them," someone yelled, pointing toward the dark sky. They watched as the large tri-motor plane landed at 4:48 p.m. Tuesday July 8, 1930. The *City of Wichita*, the second of the westbound planes, landed just eight minutes later.

Laura Ingalls, left, and Amelia Earhart, right, descend airstairs at the Wichita Municipal Airport in 1935.

The crowd moved closer to the gates where five dignitaries and three crew members from each plane descended the airstairs and were greeted by city officials. They were most interested in seeing Earhart, the first woman to cross the Atlantic as a passenger. As soon as officials opened the gates, the crowd raced toward the planes to get a closer look. Twenty minutes later, after speeches, presentations, and refueling, the planes departed on their westward journey. The next morning two eastbound planes made similar stops.

The crowds had reason to be proud. They could see the new state-of-the-art airport building under construction nearby. Charles Lindbergh claimed that Wichita had one of the finest airports in the nation. Now the city would be a major hub in the nation's air travel.

At that time only about 6,000 people in the nation traveled by air. The public lacked confidence

in the safety of air travel. The airlines hoped to change attitudes with better aircraft and service. TAT soon became the Transcontinental and Western Air, Inc., (TWA) and introduced all air 36-hour coast-to-coast service in October 1930. A fatal TWA crash the following year in Bazaar, Kansas, killed all on board, including the Notre Dame coach Knute Rockne. The public's confidence was further shaken and TWA nearly closed.

Wichita celebrated once again when the beautiful new administration building opened on March 31, 1935. The grand Art Deco style airport featured many unique aviation details. A large cast stone mural with colored glass depicted Charles Lindbergh's flight in the *Spirit of St. Louis*. Inside, the two-story waiting room had aviation touches and terrazzo and mosaic floors. Travelers could dine in the elegant restaurant and watch planes take off or land every 90 seconds at this "country club without dues." A hot dog vendor served food while people picnicked and gathered to watch stars like Fred Astaire, Jimmy Doolittle, Howard Hughes, Bob Hope, and Harpo Marx arrive.

Kansans enjoyed the convenience and elegance of travel from the Wichita airport. Flights served delicious meals—soup, lamb chops, vegetables, salad, ice cream, and coffee—on china with silverware. Sleeper flights offered cocktails and berths with goose-down comforters and feather mattresses. The captain occasionally strolled down the aisle to greet passengers. The large DC-2 and DC-3 planes had roomy cabins that were comfortable if not pressurized. Since turbulence could be a common occurrence, passengers had oxygen tanks to assist with breathing and air sickness bowls under their seats.

NATIONAL AND STATE REGISTERS

The Administration Building, below, was listed in the National Register of Historic Places in 1990 for its contribution to the nation's transportation history. Find more at kshs.org/14638.

By 1940 nearly 1.2 million Americans were traveling by air, many passing through Wichita's airport. That role began to change during World War II with increased military use. The airport was sold to the federal government in 1951 and became McConnell Air Force Base, used primarily to train B-47 crews. All of the non-military traffic was moved to the new Mid-Continent Airport in 1954. The building became the Kansas Aviation Museum in 1991.

President Dwight Eisenhower at the Wichita Municipal Airport in 1953. Photo courtesy Wichita-Sedgwick County Historical Society.

Aviation Collections Needed

The Kansas Historical Society asks for your help in locating objects, documents, manuscripts, and photographs that tell the story of aviation in Kansas. Please contact us if you have items to donate or can connect us with potential donors. We appreciate your help in our effort to tell the story of Kansas through our collections. Find more at kshs.org/11376.

Board Member Highlight


Hal Ross

Wichita has long held a special interest for Hal Ross. He wants to share his deep love for the history of his city and state with future Kansans.

The Wichita attorney was working on a postcard book when he discovered a way to make an impact in history. "I was deep into Wichita history at the time," Ross recalled. "I saw an old rifle from the same lot as the Beecher Sharps rifles and thought this would be an excellent addition to the Historical Society collections. It was selling for $4,000 or $5,000, but the agency was unable to react quickly to make this type of purchase. That got me to thinking that an acquisitions fund could make possible these more timely purchases."

The Ross Foundation, where Ross serves as one of three trustees, established the endowment with the Kansas Historical Foundation that has since received several contributions. Ross hopes to inspire others to support the fund and help the Historical Society obtain documents and objects that strengthen the agency's collections.

Ross' involvement with the Kansas Historical Foundation began in 1975 when a friend recommended he join. He was elected to the board of directors in 1994, and the executive committee in 1997. Ross served as president in 2004, and was re-elected to the executive committee in 2009 where he continues to serve.

A 1949 graduate of Kansas State University, Ross studied milling science and today has a flour mill named in his honor. In 1951 he joined his family grain milling business, and then in 1952 received a law degree from the University of Kansas. Ross has continued his work in grain milling as an attorney in Wichita.

That got me to thinking that an acquisitions fund could make possible these more timely purchases.

— Hal Ross

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To learn more please contact Tom Ellis at 785-272-8681, ext. 210; tellis@kshs.org.

Kansas Historical Foundation

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Kansas Historical Society

Kansas Historical Foundation

Learjet

A self-taught radio engineer, William Lear began to apply his knowledge to aerospace electronics. He operated facilities in California and Switzerland before moving to Wichita in 1963 where he developed the first mass-produced business jet. Offered at a competitive price, the eight-passenger aircraft could reach 560 miles per hour. Lear was forced to sell the corporation in 1967. Today Learjet are still being produced in Wichita by a Canadian business, Bombardier Aerospace.