

HAROLD E. MOREHOUSE

The Flying Pioneers Of Aviation

MAX T. LILLIE (1881-1913)

Maximillian Theo. Liljestrand was born in Sweden, 1881. He graduated from an Engineering University there in 1903, and came to U. S. in 1904. After he became an American citizen he changed his name to Max T. Lillie.

Lillie went to work for an engineering and construction firm in St. Louis, Missouri and later he established a business of his own, known as the Lillie Construction Co.

In 1911 Lillie was approached by Andrew Drew, a local newspaper reporter and aviation enthusiast, about forming a syndicate to deal in aeroplanes and give flying exhibitions. He became interested and on July 11 a Company was formed known as The Pioneer Aeroplane and Exhibition Co. Incorporators were Lillie, Drew and three others.

Drew was interested in learning to fly at once, so he was sent to the Wright School at Dayton. He completed his training in time to enter the Chicago Meet in mid-August and immediately following, Drew induced Walter Brookins to join the Pioneer group, and together they started flying a Wright at Kinloch Field, St. Louis, Mo. on August 30. There, Lillie started taking instruction from Brookins on September 7 and made his first short solo flight on October 23. October 24 he made a 12 minute flight alone and October 24 a 25 minute flight. October 28 he flew for his license, No. 73, and October 29, 1911, he carried his first passengers.

As the group finished up the late fall season of flying at Kinloch Field, Lillie personally bought out the Pioneer venture and took the plane South for the winter to fly exhibition engagements. Brookins went with Burgess and Drew went to the Chicago Aeroplane Mfg. Co. That winter Lillie got in a lot of practice and really learned to fly. His first exhibition was at Atlanta, Ga. on December 20, 1911, with Frank L. Albert as his Manager.

When Bob Fowler completed his West-East transcontinental flight at the

EDITOR'S NOTE

Mr. Morehouse began this series in the Summer 1959 (Vol. 4, No. 2) issue of the Journal with the biographies of Walter Brookins, Arch Hoxsey, A. L. Walsh, DuVal LaChapelle, Ralph Johnstone, and Frank T. Coffyn. The six men of the series, like those of the previous article, were trained on Wright aircraft.

Moncrief Race Track, San Pablo Beach, Florida on February 17, 1912, Lillie was giving exhibitions there and flew out to meet him. In late March, after a busy winter season, he shipped north to Cicero Field, Chicago, where he intended to make his headquarters for the summer, doing school work, passenger carrying and exhibition work. He began flying there in mid-April and flew in the official opening day meet on May 30. By late June DeLloyd Thompson had joined him as an assistant Instructor and they had 17 pupils, including Katherine Stinson who graduated July 24.

About mid-July Chance Vought started taking instructions, and in addition, Lillie made frequent cross-country flights taxiing passengers. That summer the airport manager, Andrew Drew, helped Lillie as an assistant instructor when needed, and his personal mechanic was W. C. Robinson who later Lillie taught to fly and who became a nationally known pilot himself. The school had a very active season in 1912, training and graduating many well known personalities.

During the Cicero Meet, September 12-22, Lillie was an active participant in all the major events and on September 14th he flew for his Expert Pilot License, No. 1. This Meet was moved to Grant Park for the last few days when Hydro flying was also included in the program. On October 1-3 he and Lincoln Beachey flew at Peoria, Illinois and a parachute jumper made daily descents from Lillie's plane. October 12 he was at Kinloch Field making arrangements for the School to move there as an intermediate point on the way south for the winter. He then flew three days at Carrollton, Illinois, beginning October 17, having flown there from St. Louis. Before leaving Cicero that fall the School had graduated eighteen students. Lillie and associates left Kinloch December 14th for San Antonio, Texas where they were in operation on January 4, 1913.

After the holidays they again had a good sized class, with Thompson, Drew and Vought still with him as assistants and instructors. That winter the Lillie organization did much to help popularize flying through public exhibitions and passenger carrying in addition to their school work.

Lillie returned to Chicago February 15, 1913, where he announced the formulation of the Weckler-Armstrong-Lillie Corp. to manufacture airplanes and airboats. Lillie had become a staunch advocate of over-water flying. Weckler was the owner of a successful boat building company and Armstrong was a graduate Engineer, specializing in aviation and the former Technical Editor of Aero & Hydro. Lillie wanted to add water flying to his School at Grant Park during the 1913 session, and it was hoped they could have a new airboat ready to fly in May. While there, Lillie made arrangements for the school to open the summer season at Cicero on April 6, and announced that all instruction that season would be given on machines equipped with standard "DEP" controls.

In mid-March Lillie did some test flying of the McCormick Umbrella-plane at Cicero. By April he hoped to have their new airboat ready for entry in the Great Lakes Reliability Tour in July. This machine was to be a tandem monoplane type on a sort of conventional boat hull with a Sturtevant 6-cylinder engine mounted below, driving a single propeller mounted high amidships by chain transmission. It was designed by Armstrong but was not a success. The Company dissolved later after unsuccessful flight tests.

On April 19 the School had moved from San Antonio and was in operation

at Cicero on May 3, 1913. Throughout May and June he was very busy with his School flying and carrying passengers, including Mrs. Lillie who often flew with him. The School was booming and they again had a sizeable class. In June he was trying hard to have the new airboat ready for the Cruise but tests were not encouraging and he had to give this up. July 4th he flew from Cicero to Waukegan, Ill. for an exhibition date, returning by air on July 7th. During the early Summer of 1913 he began to fly more types of planes at Cicero and enjoyed the experience. He flew one week at the Iowa State Fair, beginning August 23 with a parachute jumper as a daily added attraction. He then went to Storm Lake, Iowa, for one week, ending on September 13.

On September 15, 1913, while making a check flight in preparation for exhibitions at Galesburg, Illinois, Lillie was killed due to a wing collapse shortly after take-off from a small Fair Grounds race track. It was necessary to go between the end of the grandstand and some trees in order to get out of the race course enclosure and it was believed that extremely turbulent air near the grandstand caused the accident. Mrs. Lillie and his mechanics and booking Agent, Frank Albert, witnessed the fatal crash.

Lillie had made more than four thousand flights and carried over seventeen hundred passengers without a major mishap. He was rated as one of the safest and most trusted pilots in the game and no one ever hesitated to fly with him. A staunch advocate of safe flying, he never engaged in fancy flying and his sole aim was to sell and further aviation. He had definite plans to discontinue exhibition flying at the end of September and devote his time exclusively to the manufacture of planes and his School work.

He still retained his interest in the original Lillie Construction Co. in St. Louis at the time of his death. He had just finished a new Gnome-motored tractor biplane which Thompson had been testing. This plane was designed by Vought and later turned out to be a first class machine. Following his death Lillie's various aviation interests were dissolved.

Max Lillie had taught a great many people to fly, many of whom later gained world renown. He started the Stinsons and Chance Vought on their way to fame and contributed a great deal to the progress of early aviation. Without doubt, he was one of the best and most active of the early pioneer pilots who deserves everlasting credit for his devotion to the cause for which he gave his life.

CALERAITH P. RODGERS (1879-1912)

"Cal" Rodgers was born in Pittsburgh, Pennsylvania, February 12, 1879 of well-to-do-parents. He was a large, tall man, college football star, auto racer and yachtsman. He was a great grandson of Commodore Oliver H. Perry, hero of the Battle of Lake Erie.

He became interested in aviation when he visited his cousin, Lt. John Rodgers, U.S.N. at Dayton while Lt. Rodgers was taking flight instruction at the Wright School in April, 1911. The flying bug bit him and he joined up for a course himself and entered the school in June. He took up flying purely for the fun of it.

He was trained on a Wright by Al Welch and passed his tests for Pilot

License No. 49 on August 7, 1911 at Simms Station. During training he became interested in a young lad, Charles Wiggin, who was always hanging around the field. Wiggin was mechanically inclined, always trying to help in any way possible, and very eager to get into aviation. When Rodgers finished his course he bought a Model B Wright plane and prepared to start out entirely on his own, not with the Wright Exhibition team. At this time he invited young Wiggin to join him as helper and mechanic and he jumped at the chance.

Threeday after he got his new plane he flew for the National Cash Register Co. in Dayton, photographing their buildings and grounds from the air. Then he towed his plane to Urbana, Ohio, for his first exhibition engagement, following which he flew to Springfield, Ohio (14 miles) where he flew at the County Fair for several days. They then went to Lima, Ohio where he took Wiggin for a ride, his first passenger. While there Rodgers took a liking to another fellow, Frank Shaffer, who was with a carnival and asked him to join them. The plane was then towed to Greenville, Ohio, for an exhibition, following which they moved on to the famed Chicago Meet where he was a very active participant. He was determined to break existing endurance records, and did. After less than 60 hours of flying time to his credit, he spent 29 of the 33 flying hours of the meet in the air and received over \$11,000 prize money.

Following the meet, he remained in Chicago for a few days carrying passengers, many of whom were distinguished in the social life of the city. Mrs. Rodgers also flew with him at that time. During the Meet he became interested in entering the \$50,000 Wm. Randolph Hearst Race for the first person to fly from Coast to Coast within 30 days. At this time he learned that Armour and Co. were about to put a new soft drink on the market and would sponsor his flight for the nation-wide publicity. September 4th and 5th he flew an exhibition engagement at Appleton, Wisconsin, again carrying passengers, including Mrs. Rodgers. This was the last flying done before starting the transcontinental flight. Returning to Chicago, he completed negotiations with Armour & Co. and made formal entry for the contest. Several other well known pilots had also announced their intention of entering the race. His plane was to be called the VINN-FIZZ-FLYER after the soft drink being introduced and he was required to land in Chicago enroute to the West Coast at Grant Park on the Lake front. He purchased a new model EX Wright for the race and took his Model B along as a spare, together with a supply of parts most likely to be needed.

Arrangements were made for a special train to follow him, with Pullman car and complete living facilities. Wiggin and Schaffer were retained as his mechanics and in addition they secured the part time loan of Charles Taylor, No. 1 Wright Factory Mechanic, as added assistance. On the trip were Mrs. Rodgers, his Mother, the Armour & Co. representatives who were to make all arrangements and provide the necessary supplies, and the three mechanics, as well as newspaper reporters.

Rodgers started from Sheepshead Bay, L.I., September 17, 1911 and made his first stop at Middletown, N. Y. without mishap. Beyond there he was beset with bad weather, smashups and repair jobs, making slow progress. By the time he reached Chicago on October 8 it became obvious he could not possibly reach the West Coast in the allotted thirty days; however, with Armour's assurance to continue, he decided to try and complete the trip for the sake of aviation progress.

Shortly after leaving Chicago he had made enough mileage to set a new cross-country record. At Tucson, Arizona, he met Bob Fowler on his way East on his West-East flight attempt. About every conceivable mishap hampered his progress, but at last on November 5, 1911, he was actually in sight of the Pacific Ocean. Again he was plagued with serious mechanical trouble and forced to land near Compton, Calif. In attempting to land in what turned out to be a plowed field, he piled up and was quite badly injured, including a broken ankle, which laid him up for some time. The plane was again rebuilt but he was not able to actually complete the flight until December 10 when he finally landed on the beach in front of a hotel at Long Beach, and his wheels were taxied into the surf. This last leg of the flight was made with his ankle still in a cast.

It had been 49 days since he left Long Island, but his total flying time was a little over 82 hours. He had traveled a total estimated distance of 4,257 miles, with stops made at 29 points. The longest distance flown any one day was 265 miles - the shortest 5 miles. He had 19 smash-ups and very little of the original plane remained when he reached his destination. Enroute there were three 4-day delays, two 3-day and six 2-day, as well as several one-day delays for weather or repairs.

Certainly great credit is due him for his courage and determination. It was generally believed it could not possibly be done at that time. Even the Wright Brothers strongly advised against the undertaking, and told him he "would never make it", and his mother was constantly trying to get him to give up the trip. Only his wife and mechanics gave him encouragement and support, yet he would not give up. He was determined to prove that aviation could develop into something more than a sport. There was hardly a part of his body that was not injured and bandaged at some point during the trip. He would pile up, dig himself out of the wreckage holding his injuries and tell his mechanics "Fix her up, boys, I'll be ready". When it is remembered that there were no facilities whatsoever for such a trip, that they had to land into and get out of wherever they could and provide for themselves as they went, it was indeed an enormous and extremely risky undertaking, especially considering the fragile, unpredictable planes of that day. He received no remuneration for the trip, except the Gold Medal of the Aero Club of America which was awarded him for the achievement.

He remained on the West Coast during the winter months resting and recuperating from his rough-and-tumble trip and towards spring he started flying some exhibitions and carrying passengers in and around the Los Angeles area. On April 12, 1912 while flying alone at Long Beach he crashed into the edge of the surf and suffered fatal injuries from which he died within a few minutes. He had been flying less than a year, but earned everlasting fame. He was buried in Allegheny Cemetery, Pittsburgh, Pennsylvania. On his tombstone are written the words: I ENDURE - I CONQUER.

Calbraith P. Rodgers was a very serious and skillful pilot, one of the largest men in the flying game at that time and was characterized by his ever present half-smoked cigar. Truly "one of the greatest" of the early aviation "Greats", his name will forever command a rightful place in the early history of aviation for his wonderful FIRST to fly across the United States. His name appears on the Wright Memorial Plaque at Dayton along with the other pioneers who learned to fly on those historic grounds.

ANDREW DREW (1885-1913)

Andrew Drew was born in St. Louis, Mo., January 21, 1885, the son of a prominent banker. He first gained recognition as an amateur balloonist; was a member of the early Aero Club of St. Louis, and had his first aeroplane ride there with Arch Hoxsey at the 1910 Meet. He was at that time a writer for the St. Louis Post Dispatch and Aero Magazine.

By 1911 Drew had become so interested in aviation that he started to organize a local company to deal in aeroplanes and engage in exhibition flying. Together with Max Lillie of the Lillie Construction Co. and three others, the Pioneer Aeroplane and Exhibition Co. was formed on July 11, 1911. He was interested in learning to fly at once so the group decided to send him to the Wright School at Dayton, O. for instruction. He started his course about July 20, 1911, first with Cliff Turpin as instructor and later finishing his course with Walter Brookins on August 8, 1911. That same day he flew for his license No. 50 on a Wright.

Immediately after this, he left for the Chicago Meet where he made his aerial debut, winning several places in the events. During the Meet Brookins decided to leave the Wright Co. and Drew induced him to return to St. Louis with him and join the Pioneer group. By August 30 Drew and Brookins had procured a Wright plane and both started flying at Kinloch Field, doing passenger carrying and some exhibitions in the surrounding vicinity, and Brookins began to teach Max Lillie and A. B. Lambert. Drew flew in the local Meet at Kinloch October 14-21 and also filled several exhibition engagements that fall.

As the season closed, Lillie bought out the Pioneer venture and Drew went to Chicago as Manager of the American Aeroplane Mfg. Co., and Brookins went east with the Burgess Co. When the flying season opened at Cicero in spring of 1912, Drew was appointed Field Manager and flew in the opening events there on May 30. He continued flying actively all summer, having opportunities to use several types of planes on the field during the season. He also assisted as instructor at times for Max Lillie who had now started to operate a flying school there. In late October, 1912, Drew finished his term of office as Field Manager and joined the Lillie School as instructor.

As the School went south for the winter it stopped at Kinloch where he continued to train students until mid-December, 1912, then they shipped to San Antonio for the winter at the Army flying field at Ft. Sam Houston. There school operations got under way on January 4, 1913, and he was kept busy teaching and giving "Sunday exhibitions" through January and February. During February he also did some flying for a movie being made there at that time. March 1st he left for a short assignment in Mexico City as a special war correspondent for the St. Louis Post Dispatch, but was back at the school the latter part of the month and was there until the School returned to Cicero the end of April.

In early May, 1913, he left the Lillie group to become Pilot-Instructor for the new Shaffor-Brabazon Co. of Lima, Ohio, formed to start a school, carry passengers, and engage in exhibition work. They also proposed building a 50 Gnome tractor plane for exhibition flying. A temporary flying field was established north of the city and flying operations started, using the Model "B" Wright purchased by Shaffer and Brabazon from Mrs. Cal Rodgers. This plane

had been carried on the Rodgers cross-country flight expedition as a spare, but had never been used. With this plane Drew began to make publicity flights over Lima, then to Anna and Ottawa, Ohio, and nearby points and return. On May 26th he shipped to Springfield, Ohio, where he flew a 3-day engagement. June 10 he flew at Napoleon, Ohio. During this interval he was also giving both Shaffer and Brabazon some flight instruction.

On June 12, 1913, while flying at their field near Lima, Drew crashed from about 200 feet and burned. He was instantly killed, putting a sudden end to the Lima venture. His body was sent to St. Louis, Mo., where he was buried in Calvary Cemetery. He had never married and was survived by five sisters and two brothers, all of St. Louis. He was prominent in the social life of St. Louis, a member of The Racquet Club, both the St. Louis and Chicago Aero Clubs, and was at the time a regular member of the staff of Aero and Hydro Magazine.

At the time of his death he had made about 1700 flights without serious accident and was considered a very careful and skillful pilot. A very well liked man and an active pilot Drew flew for the pure sport of it.

His name appears on the Wright Memorial Plaque at Dayton with the other pioneers who learned to fly there.

J. CLIFFORD TURPIN

"Cliff" Turpin learned to fly at the Wright School, Simms Station, Dayton, Ohio. He started training the latter part of June, 1910, along with Phil Parmelee. Both were taught by Walter Brookins.

He joined the Wright Exhibition Team after finishing his instruction and flew his first public exhibition engagement at Sedalia, Missouri, October 1-7, 1910. From there he went to the St. Louis Air Meet October 8-19 where on the 18th he flew for his license, No. 22, in his Wright.

From their training period, he and Parmelee became close friends and worked together quite closely until Parmelee's death.

Turpin became more of an instructor than an exhibition pilot and began teaching with Frank Coffyn when the Wright School opened in April, 1911. Together that summer they taught a number of world renowned pilots, among them being Gen. T. D. Milling, Commander John Rodgers, U.S.N., Harry N. Atwood, Cal Rodgers, Oscar Brindley, Howard Gill, Andrew Drew, Leonard Bonney, Louis Mitchell and Eugene Heth.

August 12-20, 1911, he flew at the famed Chicago Meet, where the Wright Company had all their available pilots.

Turpin spent the following winter in California, returning to Dayton in March, 1912, to start training activities. On April 6th, 1912, he and Parmelee flew an engagement at Venice, California. On May 18, 1912, both he and Parmelee were released by the Wright Co. and they immediately bought two GAGE tractor planes with Hall-Scott 8 cylinder engines, on the west coast and started flying exhibitions as a team.

They started at Vancouver, B. C., May 24, then on May 29 at Seattle, Wash. where Turpin crashed into the grandstand. He was not seriously injured but the accident resulted in one fatality and 21 seriously injured among the spectators. From there they went to Northern Washington where on June 1st Parmelee was killed, breaking up a very short-lived partnership. On July 6 Mr. Turpin announced he was giving up flying for good.

In September, 1912, he joined the Sales Dept. of the Bartholomew Motor Car Co., makers of the GLIDE automobile. An Early Bird, he is now living at Barnstable, Cape Cod, Mass. His name appears on the Wright Memorial Plaque near Dayton, Ohio, along with the others who learned to fly on those historic grounds.

OSCAR A. BRINDLEY (-- 1918)

Oscar A. Brindley came from Columbus, Ohio. He learned to fly at the Wright School, Simms Station, Dayton, Ohio. He started instructions March 11, 1911 and soloed May 15. The instructors at that time were: Turpin, Coffyn and Welsh. He flew for his license, No. 46, at Simms Field on August 3, 1911.

After completing his training, Brindley was made a member of the Wright Exhibition Team and flew at several places that summer, including the famed Chicago Meet August 12 - 20, where his brilliant flying was one of the main contributions to the success of the event. For a new pilot he gained immediate recognition and finished second place in the total time flown during the meet, of 24 hr. 21 min. There he specialized in altitude and duration flying and while he did not establish any new records, his daily efforts were well up among the leaders.

In September, 1911, Brindley left the Wright Co. and joined the American Aviation Co. of Memphis, Tennessee, which was owned by Louie Mitchell and Eugene Heth, an exhibition outfit. All three were Wright pilots and used Burgess-Wright planes. That fall and winter they were busy filling engagements throughout the South. They were ill at an air meet at Montgomery, Alabama, March 4 - 9, 1912 and in Birmingham, April 15 - 20, and again on May 4. They were still hooking in late June and were at Louisville, Kentucky, July 4 - 8 and Cincinnati, Ohio, July 11 - 15, 1912.

Late in July, Brindley joined the Mercurial Aeroplane Co. owned by Wm. "Jim" Gabriel of St. Louis, who also booked exhibition engagements. In October, 1912, he joined the Columbia Aeroplane Co. of Washington, D. C. as test pilot and exhibition flyer. He flew at Staunton, Pennsylvania October 26. On November 2d he was at Bluefield, West Virginia, flying a Gyro motored Columbia monoplane. He was at the factory in Washington, D. C. and at College Park, Maryland for a time in late November, 1912, testing new and rebuilt planes.

In February, 1913, Brindley was sent to the Army School at Augusta, Georgia to test some new Wright planes and demonstrate the "Wright Speed Scout" for the Wright Co. In May, 1913, he became instructor at the Wright School, Dayton, as it opened for spring training, and also did some of the preliminary test flying on the new Model E single propeller machine. By June 6 he was at College Park for tests, and on June 7th announced that he had made arrangements to continue exhibition flying that summer for Wm. Gabriel,

of St. Louis, when he was not teaching and demonstrating for the Wright Co. In June his students at Simms were: Bernard Whelan, Maurice Priest, John Bixler, Augustus Bressman, Maurice Schermerhorn, W. E. Bowersox and Roderick M. Wright, with more coming. In September he was teaching Lindop E. Brown, A. B. Gaines, Howard M. Rinehart and C. J. Peterson.

In December, 1913, Brindley was sent to North Island Army Field, San Diego, California, by the Wright Co. to instruct military flyers on Wright machines and to take charge of the training at the post at their request over the winter months. He was still there in August, 1914, in the interest of the Government and the Wright Co. In late August, he demonstrated a new special Wright plane having an armoured pilot seat and fitted with a foreign made Austro-Damlier engine. On September 25, Brindley and Lt. Carberry made a 300 mile cross country flight in the special armoured Wright plane, flying from San Diego to Los Angeles and on the return from Los Angeles to the Mexican border and back to North Island at altitudes of 3500 to 5000 feet. While at North Island he trained many flight officers who later became Air Corps notables, including Kilmer, Harnes, Jones, Fitzgerald, MacDill, Martin, Gorrall, Christie, Curry, Dargue and others. He won the Curtiss Marine Trophy October 27, 1915, flying a Martin Army 90 H.P. (Curtiss OX) Tractor Hydro a distance of 559 miles. He was a commissioned flight instructor during World War I and his flight test experience was used to evaluate the fitness of new experimental airplanes for service requirements.

During one of these flights at South Field, Dayton Ohio, he was killed on May 2, 1918, flying an experimental DH-4 with Liberty engine. With him, and also killed, was Col. Damm. Brindley was married. He was an expert pilot with a tremendous amount of flying time and had trained scores of pilots. He was a large pleasant man, highly respected and well liked. Orville Wright had high regard for his judgment and flying ability and called for his counsel many times during his flying career.

The name of Oscar A. Brindley appears on the Wright Memorial Plaque at Dayton, Ohio.

HOWARD M. RINEHART (1885-1949)

Howard M. Rinehart was born March 16, 1885, at Eaton Ohio, a few miles west of Dayton. A graduate of Eaton High School and the Naval Electrical College, Washington, D. C., he was with International Telephone & Telegraph Co., and The Amazon Wireless Co. as a wireless construction engineer in Brazil from 1905 to 1911 when he returned to the States.

Through his home ties, Rinehart heard of the Wrights and their aviation activities. This interested him and he visited them, joined the School the latter part of August, 1913, and started instructions about September 1st. He was taught to fly by Oscar Brindley, but Orville Wright soon took a liking to him and also gave him special attention. On September 22d he flew for his license, No. 266, on a Wright at Simms Station.

He continued his practice there for a time and then joined J. S. Berger, exhibition flying promoter, and toured the South that fall and winter flying exhibitions. He was a natural born flyer and was soon a very successful and skillful pilot. When the Wright School opened in the spring of 1914 he was

made an instructor with a class starting about May 1st. That summer he also took several notable visitors for rides and flew some exhibitions for the Company in southwestern Ohio. In the late fall he again toured the south, flying exhibitions for Berger.

In March, 1915, Rinehart and Berger left for Mexico where they had contracted to deliver some planes and supply pilots for Villa in the Mexican fiasco. Rinehart and Eugene Heth were to do the flying. There he had many a hair-raising experience, being shot at in the air by both sides.

When the Wright School opened at Simms in the spring of 1915 he was again instructor, later going to Mineola, Long Island, with the School after the Wright interests were sold to an eastern group. He was now beginning to do a considerable amount of experimental test flying of new aeroplanes for various companies. In 1916 he became associated with E. A. Deeds and Chas. F. Kettering when they started a private aviation enterprise on a site which later became McCook Field. There he trained a number of students, including many Canadians sent there under contract with the U. S. Government.

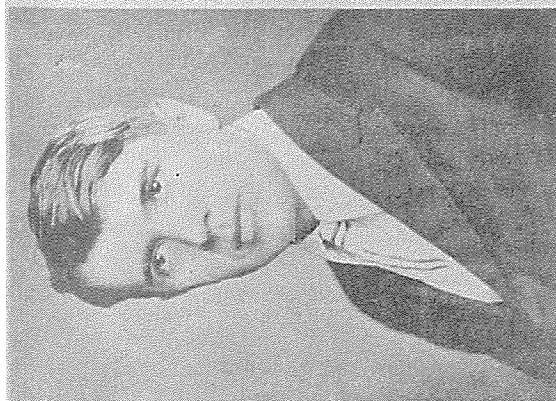
When the Dayton-Wright Co. was formed in April, 1917, Rinehart was made an experimental test pilot and put in charge of the flight staff. Most of this test flying was done at South Field, privately owned flying grounds near the Deeds and Kettering residences. There, in late summer of 1917, he flew the "first" U. S. built DH-4 with Liberty engine, an all hand-made plane built at South Field by a small group of select mechanics, many of whom had been with Orville in the old Wright Co. He did a lot of test flying in that No. 1 plane during the fall and winter, laying the ground work for the several thousand of these planes which were later made in production. That No. 1 DH-4 was later assigned to the National Air Museum where it is today. During World War I he continued as test pilot and advisor to both the Dayton-Wright Co. and the Government concerning new aeroplanes and equipment.

In 1920 Rinehart flew a specially built Gordon-Bennet Race plane in France for the Company, but the effort was not successful due to insufficient time to properly test the plane before the race. Following World War I the Dayton-Wright Co. designed and built several different experimental planes and he continued as test pilot and development engineer for them until 1923 when the company was absorbed by General Motors.

At this time he went with the Wright-Martin Corp. and was sent to Europe to supervise construction and testing of an early all-metal plane at the Dornier Co. This deal did not work out and he returned to Dayton where he and one of his earlier colleagues, Benny Whelan, formed a company known as the Rinehart-Whelan Co. to carry passengers, do cross country flying and run a school. The "bug" for new aeroplanes bit them and they brought a new plane or two which were not successful.

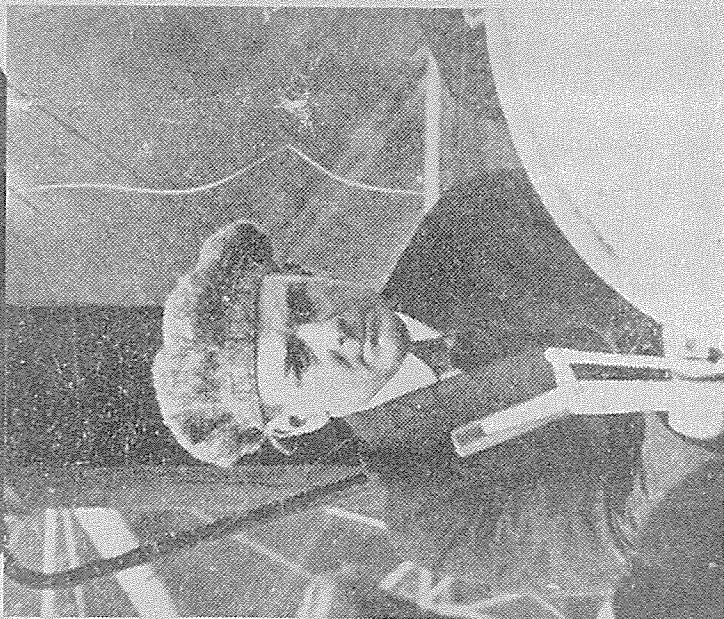
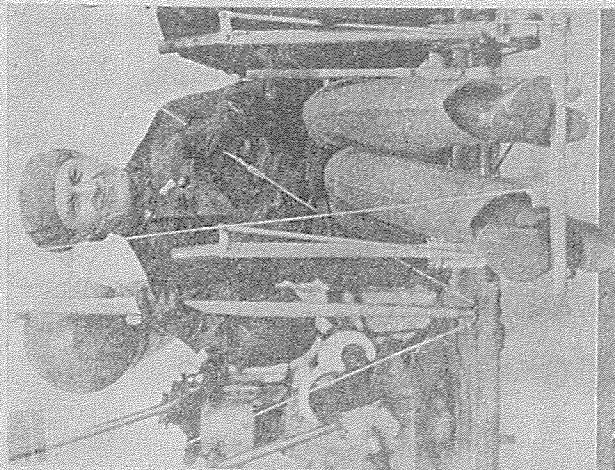
This partnership was dissolved in 1928, but Rinehart continued alone until 1932. He did some barnstorming and odd test flying jobs until 1941 when he tried unsuccessfully to launch a Government sponsored flying school in the south. Discouraged, he gave up flying and again made several trips to South America for a Rubber Company. Following one of these trips, while living in the south, he died suddenly on July 29, 1949 at Hattiesburg, Mississippi, at

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"THE FLYING PIONEERS OF AVIATION"

Upper- 1. to r., Lillie, Rodgers,
and Pinehart
Lower - Drew, Brindley, Turpin



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age 64 years. His body was returned to Dayton, Ohio, where he was buried in Memorial Park Cemetery between Dayton and Troy, Ohio. He was married in 1914 but later divorced and never remarried. There were no children.

During his flying career, Howard Rinehart was indeed one of the most colorful pilots of his time. His ability to judge the flying characteristics of a new airplane, analyze test performance data, and report accurately on the necessary corrections, made him extremely valuable as a test pilot. His colorful demonstrations of some of the early planes are still vivid remembrances to all who ever saw him fly. An expert pilot and truly one of the real pioneers of the early days, his courage and active interest in aviation will ever remain an inspiration for others to follow. He loved to fly and had very few accidents.

His name appears on the Wright Memorial Plaque at Dayton with the other pioneers who learned to fly there.

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