

FORWARD in FLIGHT

Volume 20, Issue 2

Quarterly Magazine of The Wisconsin Aviation Hall of Fame, Inc



Early History of Waukesha Airport

2022 WAHF Inductees

2022 WAHF Scholarship Recipients



KELCH AVIATION MUSEUM
Home of the Wisconsin Aviation Hall of Fame

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on the cover

1929 Stearman C3-B



The Stearman C3B series of airplanes were built from 1927-29, designed by Lloyd Stearman and manufactured by the Stearman Aircraft Co of Wichita, KS. Lloyd Stearman, who had previously been a designer at Swallow and Travelair Aircraft Companies, went out on his own in 1926 to form his own company. Powered by the Wright J-5 Whirlwind engine of 220 h.p., about 240 C3 variants were made.

The C3 was a well built and popular aircraft and was intended for the wealthier pilots and businesses. Several were used for flying early airmail. Later on into the thirties, many were converted to agricultural aircraft for crop dusting and spraying; most surviving C3s are former agriculture airplanes.

This Stearman C3B spent most of its life as an agricultural aircraft, dusting and spraying crops in California.

Al Kelch purchased N8811 in the late 1970s; over a twenty year period, it was completely restored by several craftsmen. In Brodhead WI in 1995, our Stearman C3-B finally returned to its original 1929 configuration.

This aircraft is one of 19 currently located at the Kelch Museum located at N2463 Airport Rd, Brodhead, WI

Open Wed - Sunday, 10am to 4pm. Admission is free.

The Kelch Museum is the home of the
Wisconsin Aviation Hall of Fame

EDITOR WANTED

WAHF is seeking an Editor and Contributing Editors for future additions of *Forward in Flight*.

CALL FOR PAPERS

Do you have a historical aviation story to tell & share in *Forward in Flight*? WAHF is always seeking articles for publication in future issues of FIF.

Should you have an interest, Please contact
WAHF President Tom Thomas
tthomas@wisconsinaviationhalloffame.org

WAHF MEMBERSHIP

Time to Renew your WAHF Membership?

See inside back cover for more information

PRESIDENT'S MESSAGE

By Tom Thomas

Top Gun



Many of us who have spent flying time in various aircraft and over the years, have helped make part of the history of Wisconsin's role in Aviation History over the years. I've been fortunate to be able to have served in both the US Air Force and Wisconsin Air National Guard Unit at General Mitchell Field in Milwaukee and Dane County Airport in Madison.

While flying with the MKE ANG, our unit was asked to participate in the 1970s flight testing and fly off competition between the YF-16 and YF-17 at Edwards Air Force Base in southern California.

Wow, that was some 48 years ago and is now "history". Many of us have been tasked to participate in similar 'flying opportunities' and by doing so, we become part of aviation history over the years.

The Air Force and Navy were working somewhat jointly with the Edwards AFB Flight Test Program on developing light weight fighters to basically replace the F-4 Phantom and F-14 Tomcat. Long story short, the final products were the YF-16 Fighting Falcon and the YF-17 Cobra. The single engine YF-16 won most of the competition and was less expensive, but the YF-17 had two engines. Many other factors were considered and after some modifications to the YF-17, it became the F-18 Cobra and became the Navy's choice. One of the modifications was building a stronger nose and main gear for the eventual F-

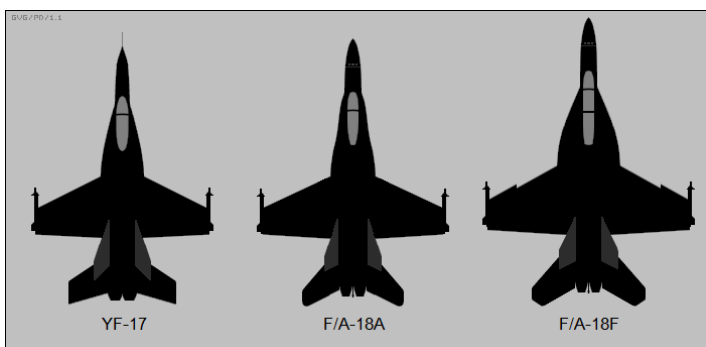
As a means to speed up the flight testing, tankers were needed to refuel the competing YF-16 & YF-17 aircraft. That way, many systems and testing elements could be completed without having to land to refuel. The Air Force Strategic Air Command and the Air National Guard were the only two sources of viable inflight refueling. There were several Air National Guard Units across the country that were flying the KC-97L inflight refueling tankers. The Strategic Air Command (SAC) was the only active duty inflight refueling aircraft, the KC-135As. After the Vietnam War, both the Navy and Air Force wanted to develop the next generation of fighters that would be smaller, more maneuverable and included a digital fly-by-wire control system.

When the Flight Test facility requested refuelers, SAC provided one tanker KC-135 and the Wisconsin ANG provided one KC-97L. The National Guard Bureau asked the states flying tankers if they were interested in participating in the fly-off evaluations. Texas ANG was the first state selected to participate followed by Wisconsin's MKE ANG KC-97L was the second. I was selected to fly our WI tanker out to Edwards AFB and it was an outstanding exercise. Our crew was made up of two pilots, a navigator, flight engineer and a Boom Operator. We flew every day for two weeks in beautiful weather.

On landing at Edwards, we were greeted at our aircraft when we parked on the ramp and given a car for our crew of 5 to get around on base. Since we were done flying for the day, they took us into operations and briefed us on the profiles we'd be flying. It was amazingly simple for us as we were given a scheduled take-off time and were assigned a local dry lake bed to orbit over, a designated altitude, and UHF frequency along with our scheduled receiver's call sign.

We'd never flown in that area before and there were numerous dry lake beds and they all had their own characterizes that distinguished one from another. We flew every day we were there and everything went smoothly. We'd take off in the morning and fly to our assigned lakebed at FL180 and enter in a race track with lots left turns. We'd hear the test aircraft take off and proceed to their testing area. About 25-30 minutes after they took off, the fighter would call us up. All of their systems were linked with computers recording their 'profiles' and they'd fly them till they got low of fuel. Again, visibility was very good and they'd get an initial vector to us from their ground control and normally saw us right away.

When they'd rendezvous with us, they get in-trail behind us and would talk to the boom operator who would clear them into the fueling position. The bomber communicated with the fighter during to refueling and clearing them to the contact position.



Images L to R: Northrop YF-17, McDonald Douglas FA-18 and Boeing F/A-18EF Super Hornet. The improved F/A 18, now going by the name Super Hornet was bigger (by 4Ft) overall length, had 25% more wing area, and added 30% fuel capacity - resulting in 40% longer flight/mission times. These improvements were a result of redesigned surfaces, air intakes greatly improving aerodynamics, handling and fuel efficiency.

18 for carrier landings.

Both Commands were in a hurry to develop the fighter aircraft they would use to take them into the 20th Century.

Continued on Pg. 20 - President's Message

Wisconsin Aviation Hall of Fame is delighted to announce our 2022 scholarship recipients, who were selected based on academic excellence, instructor recommendations, aviation goals, and contributions to school and the community. A key segment of Wisconsin Aviation Hall of Fame's mission is promotion of aviation / aerospace education. WAHF achieved this goal in 2002 with its' first scholarship award. Today, four scholarships funds are available annually to Wisconsin students in an aviation or aerospace program.

COLE BARTON

Thiessen Field Scholarship



Cole Barton is from Westfield, Wisconsin, attending Westfield Area High School. He has been interested in aviation since he was eight and received "wings" from a pilot on a family trip to Florida. Since then, he has become part of the Wisconsin Fun Flying Club and the EAA Young Eagles Club. He is pursuing his Private Pilot rating at Take Flight Aviation. He plans to attend the University of Dubuque in their Flight Operations program. He hopes to

become a pilot for a major airline or a charter company.

JOSIE BOELTER

Jeff Baum Aviation Business & Jim Quinn Flight School Scholarship and Thiessen Field Scholarship



Josie Boelter plans to attend Southern Illinois University, Carbondale, IL, majoring in Aviation Management. Her goal is to become an airline pilot and to also acquire other aviation related skills, becoming a well-rounded industry professional. Her flight instructor at Dodge County Airport notes that, "... in 52 years, she is by far and away one of my best students." She also works there as a wing tech and customer service rep. While holding down this and

another part time job, and being active in her community, she has acquired an enviable record at Mayville High School.

HUGH HANIG

Thiessen Field Scholarship



Hugh Hanig had completed a degree in Criminal Justice, when a flight lesson at the Merrill Airport redirected his plans for his future. He is now enrolled at Minnesota State University Mankato in Professional Flight/Aviation. He is currently working on his Commercial rating. He has been accepted into the Delta Propel Program with the goal of becoming a Captain with that airline. Meanwhile, he hopes to be-

come an instructor as a means to help bring others into aviation. His instructors, both at Merrill and Mankato, rate him as hard working, passionate, focused, and an exceptional student.

VALARIE MEYER

WAHF Carl Guell Memorial Scholarship and Thiessen Field Scholarship



Valarie Meyer is attending Southern Illinois University in Carbondale, IL, working toward a degree in Aviation Flight and Management. She has earned her Private Pilot certificate, Tail Wheel endorsement, and has worked on assembling three aircraft. She belongs to several aviation organizations, has received numerous academic honors, and has written an article for AviNation Magazine. Her plan is to be-

come a corporate pilot, working in business aviation with the travel opportunities that would afford. Once established in her career, she wants to offer reduced cost flight instruction to further opportunities for others.

ELIJAH PAGEL

Thiessen Field Scholarship



Elijah Pagel is from Wausau. He has had a deep interest in aviation, dating from his first flight when he was twelve. He has accomplished an Aviation 101 on line program, which included simulator time as well as aviation basics. He is pursuing his Private Pilot rating at Wausau, where his instructor indicates his future in aviation is unlimited. He has been accepted by Minnesota State University, Mankato in their

Aviation program. He hopes to graduate with his advanced ratings and go on to become a captain for a major airline.

MADELINE POOLE

Thiessen Field Scholarship



Madeline Poole has been accepted at Embry-Riddle Aeronautical University, Daytona Beach, FL, in their Aeronautical Science program. She is from Weston and attended D. C. Everest High School through which she has been enrolled in Aviation 101 virtual course. Her instructor says she is a natural in stick and rudder skills and is always prepared for each lesson. She is continuing on to receive her Private Pilot

rating prior to attending Embry-Riddle. She is holding down two part time jobs and is planning to be involved in a work-study program in college to facilitate her goal of becoming a commercial pilot.

2022 WAHF SCHOLARSHIPS - Continued**HANNAH SHNOWSKE***Robert Payzer Memorial / EAA Chapter 640 Scholarship*

Hannah Shnowske is from Mosinee, WI. She was the first student from Mosinee High School to complete their newly offered Private Pilot Ground School course. She has passed her FAA written and is involved in flight training. Her instructor says she has all the characteristics for success and is a pleasure to work with. She plans to attend the University of North Dakota, Grand Forks, majoring in Commercial Aviation with the goal of working for the commercial airlines or in the corporate world.

GRACE TLACHAC*Thiessen Field Scholarship*

Grace Tlachac attended Luxemburg-Casco High School while living in Algoma, WI. Her interest in aviation started with family outings to the EAA Air Venture in Oshkosh, when she was very young. She was a part of the Young Eagles program, where she was able to share her love of aviation with other young dreamers. She shares a love of mathematics with her U.S. Air Force brother, who is an officer in the Air Force Aviation program. She plans to attend Iowa State University, Ames, IA, majoring in Aerospace Engineering with the goal of aiding in groundbreaking discoveries, while creating reliable and safe aircraft.

ABOUT WAHF SCHOLARSHIP PROGRAMS

Launched in 2002, WAHF's scholarship program is another step toward the organization fulfilling its mission. The WAHF Carl Guell Memorial Scholarship is named in honor of WAHF's founder and was our first. The award goes to a continuing student who meets the required academic standards and is active in both community and extracurricular activities.

Today, three additional scholarships are offered annually to students enrolled in an aviation/aerospace program in a technical college or college/university. These include: The Thiessen Field Scholarship, the Jeff Baum Aviation Business & Jim Quinn Flight School Scholarship, and the Robert Payzer Memorial / EAA Chapter 640 Scholarship.

Scholarship information and applications are available online at the Community Foundation of North Central Wisconsin website where our scholarship funds are managed. For more information visit: www.CFONCW.org.

Completed scholarship applications must be received by March 1st of each year.

**DEATH OF WILBUR WRIGHT****Age 45 on 30 MAY 1912, 110 YEARS AGO**

Pioneer Aviator, Inventor. Wilbur Wright was the older of the two Wright brothers, who would invent the prototype to the modern airplane, starting the aeronautical age. The brothers' interest in flying was encouraged by their father, Milton, a well-educated bishop in the Church of The United Brethren in Christ, who traveled away from home frequently. The brothers inherited their mother Susan's mechanical ability, as she made small appliances and toys. She even made toys that would fly. Wilbur had planned to attend

Yale University but a serious ice hockey accident in the winter of 1886 caused him to become depressed while recuperating, thus he left high school but was self-taught reading books.

Their mother died in 1889 from tuberculosis. Orville, his younger brother, left high school in his senior year. At this point, the brothers started a printing business producing two newspapers in their hometown of Dayton, which soon expanded to a bicycle shop. They became interested in inventing a device that would not only fly but take off and land. Starting with a kite, then gliders, they finally added a propeller and an engine and the "Wright Flyer" was created. They tested their invention on the sand dunes of Kitty Hawk, North Carolina in December 17, 1903, which resulted in the first sustained self-propelled flight in history, and the airplane was born.

An extraordinary achievement, Wilbur flew the plane for 59 seconds over a distance of 852 feet. After their successful four Kitty Hawk flights, they returned to Dayton and continued their experiments at Huffman Prairie. They were awarded a patent in 1906 and started trying to attract potential customers with demonstration flights in Europe and elsewhere. They were welcomed in Europe by heads of states and royals. With orders in hand including a contract to build planes for the United States Army, the brothers started the Wright Company and began filling orders, however upon the sudden death from typhoid fever of Wilbur in May of 1912, Orville became discouraged and sold the business the same year, and retired. He outlived his brother Wilbur by 36 years.

The two brothers had been very close, lived at home and never married. Today the "Wright Flyer" is on display at the Smithsonian National Air and Space Museum in Washington D.C., along with the stopwatch used to time the first flights. The brothers were nominated for the Nobel Prize in Physics nine times but never received the coveted award.



Wisconsin Aviation Hall of Fame Inductees Announced for 2022 Annual Induction

The Wisconsin Aviation Hall of Fame, Inc. (WAHF) is the result of an idea by Carl Guell. While employed by the Wisconsin Aero-nautics Commission (now the WI Department of Transportation, Bureau of Aeronautics), Guell began collecting the state's aviation history. Encouraged by the wealth of information that he discovered through interviews and research, Guell incorporated the WAHF in 1985.

The organization inducted its first class of three Wisconsin aviation notables less than a year later. Since then, over 150 individuals have been honored for their contributions to Wisconsin aviation history. WAHF President Tom Thomas, on behalf of the WAHF Board of Directors, is proud to announce the following individuals as this year's class of inductees.

Please join us in celebrating the 2022 Wisconsin Aviation Hall of Fame inductees during our 36th induction event on Saturday, October 22, 2022, in the Experimental Aircraft Association Museum in Oshkosh, WI.

PETER BUNCE



In April 2005, Peter (Pete) Bunce became President and CEO of General Aviation Manufacturers Association (GAMA), which has North American headquarters in Washington, D.C. and European/Middle East headquarters in Belgium. He and the GAMA staff travel worldwide engaging regulators, policymakers, and elected officials to promote general aviation and advance the interests of GAMA's global membership of more than 100 airframe, avionics, engine,

and component manufacturers, as well as the world's leading business aviation maintenance, repair, and overhaul companies. A Wisconsin native, Pete learned to fly as a teenager in the skies over southern Wisconsin. He entered the Air Force in 1979 as an honor graduate of the United States Air Force Academy. He received his master's degree in International Affairs from Troy University in 1988 and was an International Affairs Fellow at Harvard University in 1996-97.

JOHN DORCEY



John is an aircraft pilot, flight instructor, aviation historian and aircraft mechanic. John took his first airplane ride in the summer of 1958 in a Cessna 172 off the Janesville City Airport. He was smitten with aviation from that day. He read everything on aviation and the fledgling space program he could find. He flew U-control airplanes and built model rockets. He watched airplanes fly over his home in the pattern at the Rock County

Airport or pedal his bike there to get a closer view. John served on the Board of Directors for the Wisconsin Aviation Hall of Fame (WAHF) for 24 years, serving as its secretary, treasurer, and maintained the WAHF website.

ROSE DORCEY



Rose Dorcey, a private pilot with instrument rating from Wisconsin Rapids, Wisconsin, is the longest serving president of the Wisconsin Aviation Hall of Fame. She joined the WAHF Board of Directors in 2001 and became president in 2004. Rose's volunteer efforts are varied and filled with passion. She has given dozens of Wisconsin aviation history

presentations throughout the state. She has given EAA Young Eagles flights and introductions to flight to family and friends. She has staffed booths at many statewide events sharing the joy of flight and aviation history of Wisconsin.

WOODROW P. SWANCUTT JR.



Woodrow (Woddie) was born in Edgar, WI on July 4, 1915. He graduated from La Crosse High School in 1922 and joined the Civilian Conservation Corp (CCC). He became a bomber pilot flying the B-29 in the Pacific campaign. On June 5, 1944, the day after D Day, he led a 47 aircraft formation of B-29s on the first bombing raid on mainland Japan since Jimmy Doolittle's raid in the spring of 1942. He completed the

war as a pilot flying 49 bombing missions and was subsequently selected to be the command pilot of the first airplane to drop an atom bomb in peace time. This was on the Bikini Atoll, July 1, 1946. Woodie was a Major at the time and went on to serve a long and distinguished career in the Army Air Corps, then in the Air Force which was established in 1947. He retired with the rank of Major General in 1967 as the Vice Commander of Second Air Force at Barksdale Air Force Base, LA having logged more than 8,000 flying hours.

See: Page 19 - **INVESTITURE 2022** for more information on the WAHF Annual banquet.

MILWAUKEE NATIVE, CAPTAIN AMY BAUERNSCHMIDT HAS MADE HISTORY BY BECOMING THE FIRST WOMAN TO COMMAND A DEPLOYED AIRCRAFT CARRIER, AFTER THE USS ABRAHAM LINCOLN SET OUT TO SEA

On January 3, 2022 Capt. Bauernschmidt assumed command of the *Nimitz*-class aircraft carrier in August 2021. Prior to this assignment, she'd commanded the *San Antonio*-class amphibious transport dock *USS San Diego* (LPD-22) and the Helicopter Maritime Strike Squadron (HSM) 70. Upon assuming command of the vessel in August, she said, *"There is no more humbling*



sense of responsibility than to know you are entrusted with the care of the people who have chosen to protect our nation."

The *USS Abraham Lincoln* departed from San Diego for a regularly scheduled deployment, in support of global maritime security operations.

It set off alongside Destroyer Squadron 21 (DESRON 21), a

group of guided-missile destroyers consisting of the *USS Fitzgerald* (DDG62), *Spruance* (DDG-111), *Gridley* (DDG-101) and *Sampson* (DDG-102), as well as the guided-missile cruiser, the *USS Mobile Bay* (CG-53).

The group also includes Carrier Air Wing (CVW) 9, dubbed "the most advanced air wing in the Navy." It includes three squadrons of F/A-18E Super Hornets and EA-17 Growlers, among other aircraft, as well as the Marine Fighter Attack Squadron 314 (VMFA-314), the first Marine Corps squadron of F-35C fighter jets.

This is the second carrier deployment for the F-35C fighter jets, as Navy squadrons accompanied the *USS Carl Vinson* (CVN-70) in August 2021.

Capt. Bauernschmidt graduated from the US Naval Academy in 1994 with a Bachelor's Degree in Ocean Engineering, a notable achievement, as it was the first graduating class in which women were allowed to serve aboard combatant aircraft and ships. She later earned her Master's Degree at the US Naval War College, and was designated a Naval Aviator in 1996.

Capt. Bauernschmidt has made history once before. In August 2016, she became the first woman to serve as the Executive Officer (XO) of an aircraft carrier. The Executive Officer is a ship's second-in-command and is in charge of managing its day-to-day operations.

The *USS Abraham Lincoln* was commissioned in November 1989. Its last deployment was in 2019, when it entered European waters before travelling to the Middle East, where it served in the Gulf of Oman and the Arabian Sea.

Bauernschmidt advocates for all of her Sailors, encourages women to take advantage of the opportunities the Navy provides and not worry about their gender as a factor in their performance or opportunity. Bauernschmidt serves as inspiration and mentor to many, believes her mentors have been both senior and junior, and advises her Sailors to listen to everyone and take in what they have to say. *"It's really about listening to your Sailors and getting their perspective. In each tour I've had, mentors, both senior and junior, that have helped shaped me into the leader I am today."*



USS Abraham Lincoln

FORWARD in FLIGHT

the only magazine dedicated exclusively to Wisconsin aviation history and today's aviation events

Chris Campbell, Editor

The Wisconsin Aviation Hall of Fame is a non-profit membership organization with a mission to collect and preserve the history of aviation in Wisconsin, recognize those who made that history, inform others of it, and promote aviation education for future generations.
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FLY BACK IN TIME



EDUCATION - LIVING HISTORY - EVENTS

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EARLY AVIATION IN WAUKESHA COUNTY - Part 1

In 1956, Warren O'Brien wrote a book about the *History of Aviation in Waukesha County*. It was part of the celebration of the 25th anniversary of the Waukesha Aviation Club. Much credit goes to Warren O'Brien for collecting and saving information on this fascinating aspect of aviation history. Some of these early events in aviation eventually resulted in the construction of the Waukesha County Airport. This is Part 1 - To be continued in *Forward in Flight* Fall Issue v20.3, Part 2

WRIGHT BROTHERS

It is generally acknowledged that the first powered flight of a heavier than air, pilot controlled air machine was made by Orville and Wilbur Wright in December of 1903.

According to Wikipedia: "Wilbur won a coin toss and made a three-second flight attempt on December 14, 1903, stalling after takeoff and causing minor damage to the flyer. ... Following repairs, the Wrights finally took to the air on December 17, 1903, making two flights each from level ground into a freezing headwind gusting to 27 miles per hour. ... The first flight, by Orville at 10:35 am, of 120 feet in 12 seconds, at a speed of only 6.8 miles per hour over the ground, was recorded in a famous photograph. The next two flights covered approximately 175 and 200 feet, by Wilbur and Orville respectively. Their altitude was about 10 feet above the ground."

The plane was severely damaged later that day and never flew again. It was shipped home, and years later Orville restored it. After being displayed in several different locations, in 1948 the famous plane was finally installed in the Smithsonian Institution in Washington, D.C. I saw the plane there on a trip to D.C. a few years ago and was amazed to read about the theory of wing warping that led to the practical flight. It was said that the brothers discovered wing-warping when Wilbur idly twisted a long inner-tube box at the bicycle shop.

In an article in the Dec. 31, 1903 Freeman. "C.E. Willis, a representative of the inventors of the new Wright air ship, which is said to have made twenty miles an hour against a moderate wind on a trial trip to Kitty Hawk, N. C. is in Washington to begin negotiations for the sale of patents to the government."

According to Willis: "Reports that have been sent out from Kitty Hawk have not been exaggerated. The air ship is of the box-kite type and is fitted with a powerful gasoline engine which drives it by means of a large propeller at a high rate of speed through the air. When the engine is stopped the air ship settles down quietly on the ground. The machine is started from a set of springs similar to those used by Professor Langley."

"So far a dozen tests have been made by the inventors and all of them have proved successful. The box-kite air ship has come to stay. We can say positively that it is a success."

This report seems very optimistic when one reads the history of the machine. It took a few more years for the brothers to perfect their air ship and for the nation and the world to believe that the brothers had achieved flight. The brothers actually shied away from a lot of press coverage, so it was difficult to find any more mention of them in the Freeman.

In the preface to his book, O'Brien extolled the virtues and shortcomings of the Waukesha aviation pioneers:

"For more than a quarter of a century I have observed hundreds of these boys (and girls) grow up to be leaders with high moral character and become responsible, dependable citizens. But, I have also found characteristic of this group, including dissidence. an independent and uncooperative attitude, and some downright orneriness. The same was said about the Wright Brothers. They were introverts - reticent and shy. However, nonconformity and reticence can be commendable attributes."

There seems to have been a great rivalry between airships (dirigibles) and airplanes. The airplanes gradually won the battle, but the rivalry between European and American inventors was heated.

The July 16, 1908 Freeman carried an interesting story about an airship called "Milwaukee Number One." This ship was built at State Fair Park over a period of two years. The builder/inventor was Dr. A. Rudolph Silverton, an Austrian doctor and engineer. The doctor and his family were staying at the Fountain Inn in Waukesha. I think this story reflects the huge aviation craze that was sweeping the nation. Silverton's ship consisted of a huge aluminum cylinder, 30 feet long, that was lined with aluminum and steel ribs. A giant propeller was attached to the interior of the cylinder, which had the front cut away. Two great pairs of wings, sixty-five ft. in length were attached to the ship. They were lined with Japanese silk. A platform for passengers and steering controls were suspended from the cylinder. The entire great ship was mounted on three bicycle wheels. Silverton hoped that by drawing great quantities of air into the cylinder, it would rise. He planned to test his machine in Washington D.C. in August when the Wright brothers and others hoped to win a government contract. I found no further reference to Silverton's ship.

The Freeman reported that Orville Wright sailed his airship for an hour and 15 minutes at the testing grounds in Washington D.C. in September of 1908. The Wrights successfully secured a contract with the U. S. Government that autumn.

In the meantime, the aviation craze hit Europe, and the French were especially innovative and interested. On July 29, 1909 the Freeman carried a story about French pilot Louis Bleriot's successful flight across the English Channel. He made the crossing in about 30 minutes, landing in a field in England.

After Blerot's flight, he made a speaking tour of England. A few days after the historic flight, Blerot spoke at a school in Launceston, England. Sitting in the crowd of school children was a young boy named Edward T. Soper. Soper eventually made his way to Pewaukee, where he served as minister of the Pewaukee Methodist Church.

On the 25th anniversary of the Waukesha Aviation Club in 1956, Soper told of seeing the famous flier and hearing him speak. Bleriot used the few English words he knew. Members of the club were fascinated to hear from someone who had seen the famous Bleriot in person.



Rev. E. T. Soper (right) told Waukesha Aviation Club Pres. Carl G. Whitman (left) about meeting famous pilot Louis Bleriot after his flight over the English Channel July 25, 1909. Photo from *The History of Aviation in Waukesha County*.

O'Brien wrote: "Aviation club president, Carl Whitman stated, after Soper's talk - 'It is remarkable that we have just heard a man, not so old, give an eye witness account of one of the very first demonstrations of the flying machine.' and then he added, 'Just think, in the lifetime of some of us here aviation has advanced from

such meager beginnings to what we know it is today.'"

WAUKESHA AVIATION PIONEERS

In his book, O'Brien profiled some early Waukesha County aviation pioneers. One of them was Roy Ralph Zorn. Zorn grew up on West Third Street in Dayton, Ohio - two doors away from the Wright Brothers Cycle Company. Before 1909, Zorn was building his own airplane. O'Brien mentioned that he was not sure how much influence the brothers had on Zorn, but he was certain that they had some. O'Brien knew Zorn personally and mentioned that he was shy and reluctant to talk about his aviation experiences. Zorn found himself in Waukesha as an expert in woodworking and factory management. He married a local girl, Joyce Randall. The couple left Waukesha during the economic depression of the 1930s. Roy died in 1935.

O'Brien solicited a letter from Zorn's sister about his aviation experience: "Roy began from scratch. He made his glider and he and Dad took it to Tate's Hill in Oakwood, Dayton - there he experimented with it. The next step was building a biplane. The Wright Brothers made biplanes with chains from



Louis Bleriot

the engine to the propellers. Roy was the first, I think, to fit the propeller directly to the engine. After it was completed, Philip O. Parmalee, chief pilot for Wright, went with Roy and Dad when they took it to Tate's Hill to test it. Mr. Parmalee took it off, flew around a little and landed, seeming satisfied. He suggested Roy try it." "Well, Roy had done little actual flying. But, man, he climbed in and strapped himself to the seat - carefully and slowly started going alright and just thought he would put on a little more speed since he thought he was only a few feet off the ground. The extra speed shot the plane almost straight up. He knew he must get the nose down, which he finally accomplished - coming down much faster than planned, striking the ground on the wheels then veering to the left smashing the left wing completely."

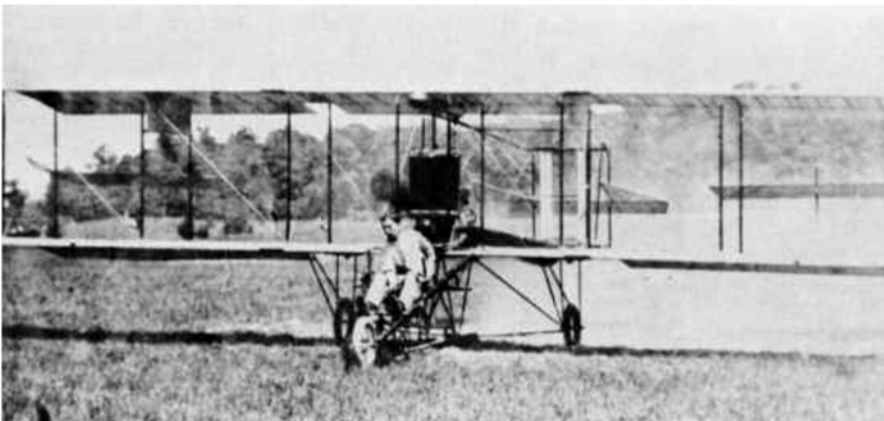
"Only a cloud of dust could be seen and Dad and Mr. Parmalee ran to the scene, found Roy calmly walking around surveying the damage. Roy built a number of planes but the disastrous flood of 1913 at Dayton flooded the shop to the ceiling. Later, an engine was found two blocks away."

Zorn built De Havelin airplanes during World War I. He was commissioned as a captain and was about to leave for France when the war ended.

JOHN G. KAMINSKI

Billed as "The Youngest Licensed Aviator in the World," John G. Kaminski learned to fly in San Diego CA. early in 1912. He purchased a Curtiss Pusher type airplane for \$5,000 and had it shipped to Milwaukee and then to North Lake in Waukesha County.

Kaminski was given license #121 by the Federation Aeronautical International on May 8, 1912. On May 30 and 31, he flew in Milwaukee's first aviation "meet." Bad luck plagued him on both days. On the first day, Kaminski struck the grandstand on a take-off and was



Roy Zorn is shown at the controls of his first pusher-type airplane after making a successful landing at Far - Hills, Dayton, Ohio, July 2, 1909.. photo from: *The History of Aviation in Waukesha County*

thrown against a fence and had a forced landing because of engine failure. The next day, a down-draft caused him to strike a fence in landing. He was thrown into a pool of water. He was not injured and not discouraged. When he was 18, Kaminski joined the Curtiss Exhibition Co. of Hammond, N. Y. Because he looked younger, he was billed as 16 years old. Kaminski gained fame - he toured the country barnstorming at \$500 to \$700 per exhibition. Newspapers and handbills spread his fame, but this did not faze him.

On May 18, 1913 Kaminski flew over Akron, Ohio. There were difficulties. Many people had never seen an airplane and did not realize he needed a field to land on. They thought he would come straight down and take-off, like the present day helicopter.

In later life, Kaminski received a gold certificate as a member of The Early Birds - those who flew airplanes before 1916.



A restored snapshot from 1912 showed John Kaminski, the first licensed pilot in the State of Wisconsin. Dr. Ross Daggett, Waukesha, took the picture on the Thomas Knight farm located about two miles north of North Lake. It was a genuine Curtiss pusher. The plane sold for \$5,000 in 1912. Curtiss built and flew his first airplane in 1908. photo from: The History of Aviation in Waukesha

RODNEY WILLIAMS

Rodney Williams was born in Delafield, Wis. He enlisted a few days after World War I was declared, leaving Carroll College in May of 1917. Williams volunteered to take aviation training in Canada. After a few months of training he was transferred to the 17th Aero Squadron, United States Air Service.

Lt. Williams' first victory, in which he shot down a German plane, was also the first for his squadron.

He returned to an auxiliary field from his second victory with gasoline squirting from his gas tank and a wound in his leg. An incendiary bullet was found in the tank which had failed to ignite. Thirteen other bullet holes were found in his plane.

Williams was president of the Waukesha Aviation Club for three terms - 1932, 1935 and 1936. He devoted much time and effort to develop the club and promote an airport for Waukesha. After the Waukesha County Board voted to estab-

lish an airport in 1933, the club voted him as an honorary life member.

ROBERT HUGGINS

Robert Huggins started out very much like his prototypes, the Wright brothers of Dayton. He did most of his early building quietly and alone, on his father's farm at Honey Creek, about ten miles south of Waukesha County. He built a glider and soloed it in 1919. In the next decade he built five airplanes. One couldn't build airplanes in a small village without attracting a great deal of interest. His most eager helpers in the neighborhood were Dean and Dale Crites (twins), Russell Wilson, John Miller, and Bob's younger brother, Ralph Huggins. All six gravitated to Waukesha in the early 1930s where they made names for themselves in aviation.

When the Waukesha Aviation Club was being formed in 1930 Bob Huggins and the Crites brothers came to Waukesha. Huggins held an Airplane and Engine Mechanic license and a Transport Pilot license. The new aviation club needed his services. Bob realized the importance of promoting all branches of aviation and the aviation industry.

Throughout the Depression and after, Bob gave generously of time and skill with little monetary compensation, he helped select airport sites, performed at circuses, and was a reliable and dependable person.

WALTER LOEHNDORF

Walter Loehndorf had a lifelong interest in aviation. He helped organize the Milwaukee Model Plane Club in 1914 and, when he moved to Waukesha, he continued advising young people in that hobby.

But Loehndorf was also a witness to history. Loehndorf gave a talk to the Waukesha Aviation Club about his experiences in the Navy and especially as a crew member of the famous Curtiss NC-4. The NC-4 was a seaplane built by the US Navy which had a wingspread of 138

feet, four Liberty engines, and carried a crew of six.

In May 1919 it was the first plane to cross the Atlantic. It did so in 19 days by starting in New York State, making stops in Massachusetts, Nova Scotia, Newfoundland, and twice in the Azores Islands. This included time for stops of repairs and for crewmen's rest.

Loehndorf and several other crewmen were sent ahead to Lisbon, Portugal, to meet the NC-4 when it arrived. He and another crewman were left aboard while the tired crew rested in town. Their job was to fend off the crowd of souvenir hunters. They did so by flourishing a revolver.

Later a fire started in the forward section of the plane and there was a chance that the highly combustible airship would be destroyed before the final leg of the trip to Plymouth, England. Loehndorf found a fire extinguisher but was further delayed by his companion who was determined to jump into the ocean, even though he could not swim.

Loehndorf managed to scavenge a souvenir after the

flight - a pair of goggles worn by the Lt. Commander Albert C. Read. He held onto them until 1948, when the Navy demanded that he return them.

Today the goggles reside in the Smithsonian Institute, Washington, D. C., with a notation that they were donated by Walter Loehndorf.



Walter Loehndorf as a mechanic on the US Navy NC-4. photo from: *The History of Aviation in Waukesha County*

HONEY CREEK - THE CRITES BROTHERS

It seems that the hub of aviation in the early days was not centered in Waukesha County, but just to the south in Honey Creek. That is where Robert Huggins and George Gerber built a glider and an airplane. There were newspaper stories or radio broadcasts of local activity, but the word soon spread north into Waukesha County.

Young people made their way down to watch the aircraft being built, to talk, and to learn. Some of the names mentioned by O'Brien were George Graham

and Charlie Perrin from Waukesha, Harold Kippers from Mukwonago, Ed Hedeem from Racine, Al Loveland from Milwaukee, as well as other local boys - Russell Wilson, Harvey Colbo, John Miller and the Crites twins, Dean and Dale.

The Crites brothers were born on a 200 acre farm in 1907. They became interested in flying 20 years later when Bob Huggins buzzed their farm in his open-cockpit airplane.

Dean recalled in a 1985 Freeman article "I went out and took a ride with him and that settled it. I knew I was going to take up flying."

After an informal apprenticeship with Huggins, the brothers decided to build their own plane. It was made mostly from World War I surplus parts. "We'd make runs up and down the field," Dean said; "We'd come up over the farmhouse. I can still see the chickens running in the yard."

The Freeman article continued: "Once they became proficient, the Crites boys began barnstorming - they took passengers on joyrides from farmers' fields or at county fairs."

"In the Depression, we'd fly people for a dollar a day or a penny a pound," Dale said.

Dean added, "We'd get enough money to pay for gas and keep flying." The Crites brothers also did stunt flying. One

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of their favorite tricks was to pick up a handkerchief with the tip of the airplane wing.

"In the 1920s there was more airplane building going on than actual flying. The construction of an airplane usually took more than a year. Most boys had farm work to do and there always was a shortage of money and materials. Then

there were those trial hops, and taxiing around the field, that usually resulted in damage - taking months to repair."

The Crites brothers continued their work in Honey Creek. They became charter members of the W. A. C. but did not move to Waukesha until about 1934. Dale was experimenting with methods of controlling airflow over lifting surfaces. With the help of Huggins, Perrin and Graham, he built an airplane with slotted wings (for air-boundary control) of his own design.

An interesting tale about Dean Crites. The brothers flew a Curtiss Jenny in 1929 and 1930.

"When a fellow wanted to buy the Jenny, he asked Dean to prove to him that it would come out of a tail-spin. Dean, full of confidence, but in a big hurry that morning, took it up, "rolled it," then spun it - into the ground. The airplane had failed to recover from the spin. Luckily, Dean was able to walk away from the wreck. He was rushed into the air in another plane. His friends were taking no chances that the accident might cause him to give up flying - they had no doubts about Dean but were carrying out a custom of the times."

The W. A. C. rented a field that served at the county's first landing strip. Prior to that the planes landed in farm fields. In 1931, the brothers organized the Spring City Flying Service which was a flight school. The service later operated the Waukesha County Airport and also had a government approved pilot training school.

Dean was employed by the federal government as a flight inspector during WW II. He later operated the Manitowoc airport after selling his interest in the Spring City operation. Dale sold the Spring City Flying Service in 1959. The brothers remained active in aviation circles. Dale built a couple of replicas of a 1911 Curtiss Pusher biplane, which is in the EAA museum.

In 1980, the Waukesha County Airport was renamed in their honor. In 1985, the brothers received the Billy Mitchell Award from the local chapter of the Air Force Association. Dale Crites died in 1991 and Dean in 2005.



Dean Crites (left) and Dale Crites (right). in 1956. photo from: *The History of Aviation in Waukesha County*

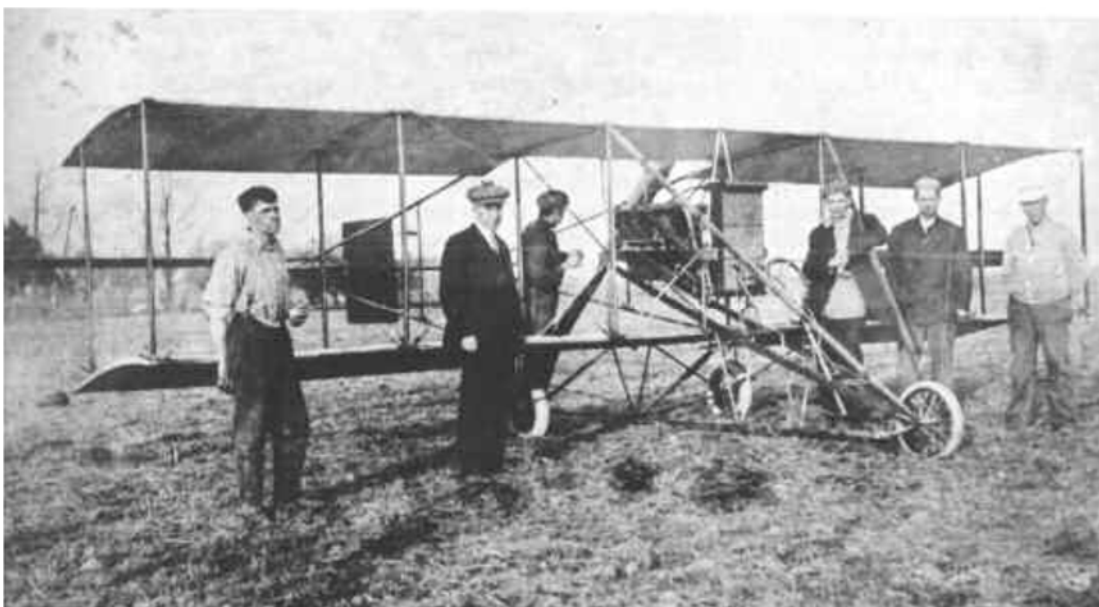
FARNUM FISH

A special May 12, 1912 edition of the Milwaukee Journal was delivered in Waukesha County. A 16 year old Milwaukee boy, Farnum Fish made the first delivery of newspapers by air in the United States. Young Fish was hired by the Milwaukee Journal. The papers were dropped on the Carroll College campus, where a large crowd was thrilled by the exploit.

Fish continued his flight and also dropped papers at Oconomowoc and Watertown. He stayed overnight in Watertown. On his return trip the next day, he carried a passenger. This trip, carrying a passenger from Watertown, to Milwaukee, was the longest flight of its kind in the state up to that time.

Farnum was guided on his flight by the interurban tracks and electric power lines. The Oconomowoc Enterprise of May 31, 1912 described his method of flight as "warping planes," in which the planes are tilted by the aviator to preserve his balance.

The aviator is like a man on a bicycle. He must twist his body and machine to adapt himself to every little tilt. ... he must constantly anticipate the freaks of the wind. He must develop what flyers call 'aviator's second sight.



The first airplane to land in Waukesha County, taken in August of 1912 on the Thomas Knight farm at Stone Bank. Left to right, Dick Knight, Burton M. Smith and John "Jack" Knight, all of Stone Bank, John Kaminski, Milwaukee, one of the youngest pilots in the world and holder of the first license in the State of Wisconsin. The other two cannot be identified with certainty. The man on the end may possibly be Ed. Scherer, a Waukesha grocer. Ross Dagget photo from: The History of Aviation in Waukesha County

FIRST AIRPLANE LANDS IN WAUKESHA COUNTY - 1912

The honor of landing the first airplane in Waukesha fell to the previously mentioned John G. Kaminski. Kaminski had his plane shipped via railroad to the village of North Lake in Waukesha County shortly after performing at the fairgrounds in Milwaukee on May 30 and 31, 1912. He shipped it to North Lake because it was only a few miles from the Thomas Knight farm, home of his new mechanic.

Many people in the community turned out to see the airplane. Kaminski and Knight had lots of help.

Mrs. E. W. Hoppe, 'Minnie,'... who ran the hotel where many trainmen put-up until the return trip, knew all the men who helped, - Joe Hargrave Sr., conductor, Ed Cummings, engineer, Chas. Graff, Al Gates and Will Jones, firemen, Louis Smith, baggage-man, and the station agent, Ted Torkleson. Little did these men know they were helping usher in a new mode of passenger transportation that was to nearly wipe out their profession in their lifetime.

Dr. Ross Dagget, who just started his veterinary practice at North Lake, photographed the occasion. Others who were at the unloading or who later saw the airplane fly on the Knight farm were; Ed Scherer, grocer, Burton M. Smith, banker, Art Schneider, hardware store, Herman Hanson, mason, Roy Sims, Mrs. Tom Fleming and Gordon Larkey. fire chief.

Larkey told O'Brien in 1956 that he saw many flights by Kaminski in 1912. He especially remembered one where Jack Knight took a ride air standing up directly behind the pilot, Kaminski.

JACK KNIGHT - A WAUKESHA COUNTY AVIATOR

John 'Jack' Barney Knight was born in London, England, of American parents, in August of 1890. He graduated from the University of London at the age of 18, with a degree in electrical engineering.

Jack, his parents and younger brother Dick, returned to their farm in Stone Bank, but farming did appeal to Jack. He attended the Milwaukee School of Aviation in 1911, where he learned to fly at age 21. The next year he met Kaminski who was looking for a mechanic for his new plane. Kaminski then shipped his plane to the Knight farm where they could fly it.

For several years the two did exhibition flying in the East, West and South. The plane was shipped by rail. Knight was a good mechanic as Kaminski never had an accident.

Jack went on to have many more adventures. He

joined General Villa in Mexico, and for a year was chief of th his air force. During World War I, Jack found himself in Rhode Island where he joined the Navy as an instructor.

After the war, he returned to Milwaukee where he worked on the Lawson Air Liner - the first successful airliner in the world. From 1920 through 1927 he was superintendent of an air field in Dayton, Ohio. Later, he held the same position at Wright Field.

Jack died from a stroke in 1940, a few days before his 50th birthday.

FIRST AIRPLANE LANDS IN CITY OF WAUKESHA - 1919 OR DID IT?

According to Warren O'Brien, the first airplane to land in the city of Waukesha was sometime in 1919. The exact date is lost. John Weber, Jr., president of the Waukesha (Moor) Mud Baths, had cut down a tree on his new golf course to oblige the pilot. The pilot, whose name is also lost to history, had made the request a few days before the event.

"Undoubtedly, many boys swimming in the Fox River at the 'Willow Hole,' or the 'Mud Hole,' at the East and West Quarries and Weber's Pond had clear views of this first airplane to fly over part of the city, and land," wrote O'Brien.

John Weber, Jr., called photographer Warren O'Brien to record the event. O'Brien did not record the date and it was not mentioned in the Freeman.

The plane was an early model 'Standard' airplane with a Gnome rotary engine. Identified in the crowd at left of picture was John Weber, Sr., and Colonel Elihu Enos who lived adjacent to the Moor Bath property. Irv Walrabenstein was standing at the strut waving his hat. The man at the extreme right with straw hat was John Weber, Jr., and the smallest boy near the plane is thought to be John Weber III, and the girl, his sister, Mary. But the identification of the children by John Weber III himself was uncertain.

However, when I researched an earlier column about celebrations in Waukesha, I found that at the 1916 Waukesha Homecoming celebration there was an aerial display by Louis Gertson on July 3rd and 4th. The Homecoming celebrations were planned to welcome citizens from all over the country to return to visit Waukesha.

The Freeman reported that "his plane took off at sunset and the people of Waukesha were mesmerized by the spectacle of an airplane in flight, the golden sun reflected on its wings. He performed a series of loops, turned the plane on its side and finally landed at Moor Downs, thoroughly delighting the crowd."

If the newspaper reports are accurate, the first plane that landed in Waukesha was in 1916, not 1919. It is possible

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that the photo was taken in 1916, but that would mean the small boy on the right is not John Weber III, since he was born in 1914 and would have only been 2 at the time.

So the dilemma is that if this photo is of the first plane that landed in Waukesha, it was taken in 1916. If it was truly taken in 1919, then it was not of the first plane to land in Waukesha. John Weber III did recall other planes landing at Moor Downs, so this photo may have been taken of one of those landings.

THE 1920s

Another section of O'Brien's book dealt with aviation personalities who made their mark in the 1920s.

The decade of the "flapper era" saw huge advancements in the science of aviation. Planes became bigger, stronger and more durable. But despite that, as I researched, I found many stories of airplane crashes and tragedies. Flying was still somewhat risky.

And of course, the world was mesmerized by Charles Lindbergh's first solo flight across the Atlantic. The May 21, 1927 Freeman headline for that event was huge - "Lindbergh Sighted," it read.



CLINTON BREESE and FRANK ROBERTS

Clinton Breese and Frank Roberts were both WW I pilots. Breese was an observer with the American Expeditionary Forces over the Argonne Forest in northeastern France when he was shot down on Oct. 29, 1918. It was just two weeks before the Armistice.

On that day, Breese was serving as observer in the French-built Salmon two-seater with twin .30 caliber machine guns. He had obtained the rank of second lieutenant. He also served as the plane's gunner and navigator.

Breese recalled in a 1971 Freeman article by Len Worzalla. "We were flying along and just making a turn when this guy came up under our belly."

The German pilot, in a Fokker class plane, sprayed the underside of Breese's plane with machine gun bullets - knocking out struts and wounding the pilot.

"We were flying at 4,800 feet when this guy hit us," he said, "and we dove to 1,500 before we straightened out."

The plane crash-landed within Allied lines and Breese and the pilot were rescued. Breese later discovered that the German pilot was one of the last remnants of Richtofen's Flying Cir-



First plane to land in Waukesha? Identified in the crowd at left in this photo are John Weber, Sr., and Colonel Elihu Enos. Irv Walrabenstein is standing at the strut waving his hat. The man at the extreme right with straw hat is John Weber, Jr., and the smallest boy near the plane is thought to be John Weber III, and the girl, his sister, Mary. But the identification of the children by John Weber III himself was uncertain. photo from: John Schoenknecht Waukesha Daily Freeman

cus. (Baron Manfred Von Richtofen was the top German air ace of World War I. He was shot down and killed earlier in the war.)

After the war, Breese served as president of the Waukesha Savings and Loan Association. Roberts was a student at Carroll College in 1916 when he enlisted in the Army Air Force.

"It took six months before they called me," he said and then they sent him to the ground school at Cornell University. Roberts took further training at Selfridge Field near Mt. Clemens, Mich. and at Gerstner Field near Lake Charles, La. He took his flight training in the Army's old Flying Jenny, the Curtiss OX5, and was trained as a "pursuit (fighter) pilot.

"We used to shoot at balloons with camera guns, but it was seldom you got the balloon in your sights," he recalled. When the pictures were developed, "All you could see was the sky."

In those days, navigation was done by sighting landmarks. Night flying was in its infancy. Roberts said the never took up a shop at night but "there always was some guy up there practicing every night (at Gerstner Field)."

During his training, Lieutenant Roberts discovered that the absence of sound can be as loud as a cannon shot. He was sleeping one night in his quarters at Gerstner. A plane was flying overhead, but the loud drone of the engine "didn't wake me up" - not until it stopped, suddenly, when the engine failed. "I woke up as if I'd heard a loud noise," the former pilot said.

Roberts worked at many places in Waukesha, including the National Exchange Bank. After he retired, he served on the board of directors of the Waukesha Savings and Loan Association. He was a member of the Waukesha City Council and spent five years on the County Board.

DROP DOWN FROM THE SKY

I also found a few stories that O'Brien was not able to mention in his book. The first was reported in the June 23, 1921 Freeman.

Charles Dickinson of Chicago flew to Waukesha to visit his relative Mrs. Walter Frame. He was the pilot and as the plane approached Waukesha a thunderstorm forced him to land in a hayfield about a mile west of Waukesha on Madison St. He tied the plane to a fence and secured a taxi to take him and his passengers to the Frame residence on Carroll St.

After their visit, they returned to the plane with members of the Frame family. It was surrounded by all the small boys of the neighborhood. The plane had a bit of difficulty taking off in the tall grass, but soon soared overhead for the return trip.

Another incident was reported in June of 1921. A plane landed in the Mukwonago hayfield of Jack McNulty. Soon, a crowd of people gathered around the plane. Ralph Buell was the lucky boy chosen to go up for a free ride.

As reported in the September 30, 1924 Freeman, residents of Hartland were told to expect that they would witness a daring parachute jump. R. G. Conant was doing exhibitions

in the area. No word on who the jumper was or whether it actually took place. After spending two weeks in Hartland, Conant came to Waukesha.

THE SPIRIT OF HONEY CREEK

The September 20, 1927 Freeman reported that two Honey Creek boys, Robert Huggins and George Gerber, built an airplane that they named "The Spirit of Honey Creek," after Lindbergh's famous "Spirit of St. Louis." They flew the plane several times - making it to Elgin, Ill on one occasion. Unfortunately, the Honey Creek plane crashed from a height of 75 ft. Neither of the boys were injured.

THE DOUSMAN PICNIC

In August of 1927, the service clubs of Waukesha (Rotary, Optimist and Kiwanis) gathered for a combined picnic at the Masonic Home in Dousman.

The announced arrival of an airplane was met with great expectation. A landing strip was cleared on the nearby grass. Balloons went up into the sky as the crowd awaited the vehicle.

Suddenly, an automobile, equipped with attached wings and a tail, drove onto the field. It was piloted by Frank Roberts, assisted by his mechanic Russell Oakes (The Wiley Wizard of Waukesha). They were awarded a key to the city by Mayor Morgan Butler for making a non-stop trip from Calhoun to Dousman. Charles Schuetze awarded medals to the fliers amid a flurry of speeches, and Herman Salen presented them with a government cross.

THE AIRDROME

From about 1924 - 1931, flying was conducted from three fields of the Wisconsin School for Boys on Prairie Ave. Tacit approval was given by the superintendent, Harvey Phillips. His son, Don Phillips later made aviation his profession. The field was nicknamed the Airdome.

AERIAL PHOTOGRAPHY

Warren O'Brien was considered to be a pioneer in the aerial photography field. He took movies, stills, and stereoviews from airplanes for more than 36 years.

In the early days he used a bulky and heavy Graflex camera. It was difficult to lean out of the cockpit in the slipstream blast from the propeller. O'Brien solved that problem by walking out on the wing with the camera.

He later took his sisters Evelyn or Vivian along, or his brother, Obie. They sat on his legs as he knelt on the seat.

O'Brien wrote: "Taking pictures from a Curtiss 'Jenny' was somewhat easier as he could straddle the side of the fuselage and, with his back to the propeller blast, could 'shoot' toward the tail of the plane. It was easier breathing that way and the oil from the engine did not hit him in the face."

In 1926 O'Brien flew over the city with a motion picture camera. His movies were then shown at the Park Theater.

RALPH G. CONANT

From 1924 - 1927, Ralph G. Conant, (also known as Rellis and Ronald) helped further interest in aviation in the county.

1925 - WALTER "SODDY" LISKOWITZ OWNED THE FIRST AIRPLANE IN THE CITY OF WAUKESHA

Walter Liskowitz was a popular figure in Waukesha. According to O'Brien, Liskowitz spent his youth on the Frank Fox farm at the Waukesha city limits. By the time he was 30, he was landing his own airplane on this same farm. The Fox Farm was another popular landing spot in Waukesha. It was located in the area near present day Horning Middle School.

The plane was an early model Standard with the Curtiss 8 cylinder, 90 hp, OX-5, water cooled, engine. Using this plane, Liskowitz established Walter's Air Line. It was based in Chicago.

Although Walter had a pilot's license, he did not have a certification to fly passengers. Walter hired pilots to fly for him during the next several years. These included "Cash" Chamberlain, "Red" Boggs, Chris Holterhoff, Stanley La Parle and his brother, Ed. They were all good pilots and never had an accident.

In early 1928, Liskowitz sold the plane to Earl LeMere. On June 22 of that year, LeMere took off from a field south of Waukesha. The tall wet grass dragged him back so much that he lost flying speed and crashed into a tree in the adjacent field. Sam Patrinos was with him. They took a photo of the wreckage the following day. They were not careless or reckless. They were lucky. Earl had a reputation as a careful pilot and an expert mechanic. He was one of Waukesha's pioneer pilots.

Liskowitz accomplished much more in his life. He was Waukesha's first motor cycle officer. He was also a deputy sheriff for 14 years. He then established Walter's Coach Line, which ran to Milwaukee and back. While he was sheriff of Waukesha County from 1935 to 1938, he and the Waukesha police chief established the county and city police radio system. He later ran a popular tavern called "Soddys."

"CASH" CHAMBERLAIN

One of the previously mentioned pilots for Walter's Air Line was Cash Chamberlain. He was a friend of the O'Brien's. Warren and his wife Betty, and brother O'Bie frequently went on flights with Cash.

O'Brien recalled that at one point Cash was recovering from an injury to his left arm. He took Warren up to do aerial photography. Cash had trouble 'holding the stick' and as a result O'Brien, who was out on the wing and wearing tennis shoes, broke through the canvas. Cash laughed it off and simply repaired the wing between

hops.

"He was a handsome man and his few words, said with his magnetic smile, were sufficient to attract one to him. He enjoyed flying - especially when bringing in the 'ship' with the



Warren O'Brien demonstrates how he walked out on the wing of the plane. The slipstream and oil from the engine were at his back. The pilot is D. C. Horton photo from: *The History of Aviation in Waukesha County*. Taken about 1928,

Conant was a lawyer and spent time as the district attorney of Marquette County before WW I. He gained recognition when he took a WW I veteran named Kiser for a spin over Waukesha. Kiser was a tailor at the Veterans Hospital (Resthaven) and had been a captain in the Army Air Corps. Kiser was also deaf. Conant took him up for a ride and then orchestrated a 3,000 foot drop over the city of Waukesha. When it was finished, Kiser regained his hearing.

Conant spent a couple of summers barnstorming around Waukesha. He used the field at the Boys School as his base. Scores of Waukesha citizens took their first airplane ride with Conant. His girlfriend was a student at Carroll College.



Nov. 6, 1924 - WW1 veteran (front) named Kiser, regained his hearing after a sudden drop from an altitude of 3,000 ft. The pilot, (rear) Rellis G. Conant. photo from: *Waukesha County Museum*. Note the canopy over the front seat of the plane.

Conant eventually moved to Westfield, Wis., where he had a law practice. He was killed in a tragic crash when a student at the controls of the plane froze and drove it straight into the ground from 1,000 ft.

wires 'screaming' - to hear them 'sing' was common, " wrote O'Brien.

In 1928, Chamberlain attempted a non-stop flight in a Fairchild monoplane from New York to Milwaukee. In 1929 he made an altitude record for stock model planes at 14,300 ft.

In 1927, Thomas F. Hamilton established the Hamilton Metalplane Co., in Milwaukee. He developed one of the first



*Walter "Soddy" Liskowitz with his airplane - he owned the first plane in the county.
photo from: the Liskowitz family collection*

corrugated aluminum cabin monoplanes. The Hamilton Metalplane was powered by a single Wright Whirlwind engine. Six passengers were able to fit in the cabin. Chamberlain became a test pilot for Hamilton and, when Northwest Airlines purchased nine Hamiltons, Chamberlain became a captain.

Chamberlain was killed in a crash of a Northwest Airlines plane he was piloting near Miles City, Montana. Both motors failed, causing the crash in which three others were also killed.

"RED BOGGS" and CHARLES LINDBERGH

Another of Liskowitz's pilots was 'Red' Boggs. O'Brien described him as an impetuous fellow who was also pleasant. He inspired confidence and made friends easily.

Boggs was a gambler, and he frequently gambled all night and then flew the following day.

O'Brien wrote: "Boggs was a personal friend of Charles A. Lindbergh. When Lindbergh was on his national tour in 1927, Boggs attended the Milwaukee reception and secured an early morning date to see him, personally, at a Milwaukee hotel the next day. Boggs overslept."

Fortunately, Warren O'Brien succeeded in getting Lindbergh to come to Waukesha that day. Lindbergh circled the Five Points three times - coming as low as 500 feet. He waved to the crowd but did not have time to land.

1928 - HAROLD KIPPERS

One last pilot featured by O'Brien was a man named Harold Kippers. He was from Mukwonago and his work sparked interest in aviation in that part of the county. Kippers, was one of the first members of the Waukesha Aviation Club and an original member of the Waukesha Squadron of the Civil Air Patrol.

Kippers spent two years building an airplane. It was powered by a 7 cylinder Gnome Rotary engine. In 1930, Dale Crites took the plane up on a test flight. The ignition system was not completed. Crites crashed the plane.

1930s WAUKESHA FLYING CLUB

As previously explained, the Waukesha Aviation Club was formed early in 1931. The following month (on April 27th) the Waukesha Flying Club No. 1 was incorporated. The membership of Waukesha Flying Club No.1 was: Charles Gittner, president; Warren S. O'Brien, vice president; Kathleen Eder, secretary; Ed Boehmke, Roy Winzenreid, Lee Barney, Joe Rombough, Walter Hauser, Margaret Hauser, and Russell Schuetze.

Transport pilot Robert Huggins, was given a certified check for \$1,000. He was commissioned to buy a good used airplane. Huggins searched each airport he flew

to, but for a long time did not find the required plane. The impatience and disappointment was replaced with joy when one day he arrived with a beautiful silver Waco 10 biplane with aluminum painted wings and blue fuselage. The plane was powered by a Curtiss OX-5, 8 cylinder water cooled 90 hp. engine. It was purchased from West Brothers, Appleton.

Russell Schuetze made his check-out flight in the new plane and soloed in May 1931. He was followed by Lee Barney in June. Walter Hauser soloed in July, 1931.

The membership of the club changed in August of 1931 when Ronald Rohleder bought Schuetze's share. The next year, Robert Lathrop purchased Barney's interest. Warren O'Brien acquired the Boehmke and Rombough shares. There was only one serious accident in all the time it was flown - but no one was hurt.

The club found it expensive to keep up with insurance, repairs, hangar rent (at the Pabst Emergency Field, Oconomowoc), and operating expenses. The country was in the midst of the Great Depression. Keeping the airplane at Oconomowoc was highly inconvenient. In 1933 the plane was sold to Steve Martine and he took it to Racine.

*Part 2 - Early Aviation in Waukesha County
To Be Continued in next issue of Forward in Flight,
Fall 2022 v20.3*

WHEN YOU LAND ON THE WRONG CARRIER! *"Must be Air Force"*

An unofficial US Naval tradition once dictated that when a pilot mistakenly lands on the wrong aircraft carrier... fellow crew members did their absolute best to remain discreet so as not to embarrass the pilot yet have some subtle fun.

Yet it has been rumored that in some extremely rare and unusual circumstances, some sailors took it upon themselves to take advantage of the poor pilot's misfortunate navigational error, and make sure their mistake did not go unnoticed. Imagine the embarrassment and horrors in having to return to your Boat with all the markings of your misadventure on display for all to see.

If unable to return to your own carrier and having to stay over night on the wrong boat, many pilots spent their nights attempting to guard their aircraft.

Eventually those dastardly shipmates would find any means possible in making sure the visiting aircraft was properly branded before any attempted departure. The following pictures taken over many decades speak volumes about their efforts to be discreet, and



"Must Be Air Force" A U.S. Navy McDonnell F2H-2 Banshee (BuNo 125019) of Fighter Squadron 62 (VF-62) "Gladiators" from the aircraft carrier USS Coral Sea (CVB-43) after it had landed aboard USS Wasp (CV-18) in 1952.

the abysmal failure of the pilots in keeping their aircraft safe overnight.

HOW DOES ONE LAND ON AN AIRCRAFT CARRIER?

"It's not magic at all; it's done with mirrors." There is a light that normally mounted on the aircraft's nose gear, that shines toward the ship as the plane approaches. There is also a mirror mounted to the port side of the carrier's flight deck, just outside the normal deck area.

When the pilot sees that light in the mirror, he "calls the ball" (he radios who he is, what he is, and that he has the light in the mirror). He has to tell the ship what type of plane, the actual weight, and load, so carrier crew can set the wire to match his plane. If it is set wrong, it will either stop the plane too hard, and basically 'crash' it, or too soft, and the plane will run off the angle deck. The Landing Ship Officer (LSO) stands near the rear of the flight deck, on the port side, and basically guides him in.

The LSO has the list of who and what is out there, and he will hear the pilot say something like "Tail Spin 1, 300 pounds,



The expression of this F2H-2 Banshee Pilot from VF-34 is worth a thousand words...no question he appreciates the subtle humor at his misfortune

Continued on Pg 21 - **Subtle Humor**

RESOLVING NEIGHBORS COMPLAINTS ABOUT JET NOISE AT A CITY AIRPORT.

Back in the 90's I was working for the Wisconsin Department of Transportation in Airport Operations and was tasked to help a community in northwest Wisconsin resolve a noise complaint having to do with jet operations. It was a business center for the area and the local airport was regularly used by corporate jets serving the numerous business and industries in that area. They weren't the issue.

A business located on Amery Airport with a 4,000' runway imported surplus Russian military training aircraft that were disassembled and crated up for shipment around the world. It was a medium size trainer with tandem seats and not that difficult to fly for pleasure. Although they were capable for acrobatics, they were primarily used for cross country flights and for taking family and friends up for local area flights.

One thing that isn't a factor when designing a training aircraft for the military is sound energy (noise). I prefer to use the term "sound energy". The people in the jet wear helmets and often earplugs in addition to the sound protection of their helmet. And the ground crew that service them wear ear protection devices as well. This is all coordinated at military fields.

In the case at Amery, after the Russian military trainers were assembled, they would be flown locally to make sure everything worked. They'd also advertised their availability and often individuals would express their interest and would come to Amery for a test flight and subsequent flight instruction should they decide to buy one. The price of these aircraft would be normally less expensive than a Cessna Citation or other civilian jets on the market. The trainers were built to be acrobatic which was a plus and also cruised at a pretty good speed and normally at higher altitudes. They only had two seats and could only carry one person at a time.

The Amery airport's 4,000 runway wasn't the best for practice landings and take offs. And its runway was somewhat pointed in the direction of the City and repeated use for practice wasn't a good idea. And, not too far away was a community that had a 5,000' runway with a parallel taxiway. It was only about 15 to 20 miles away and could be reached in less than 5 minutes in the Russian jet trainer. So that's what they did.

Here's where the state got involved. The folks living next to the 5,000' runway had corporate jets flying in and out and weren't a big concern. The south end of the runway was all farm land for a mile or so and landing or taking off never created any issues. On the north end, about a quarter mile off that end of the runway a community was developing with residential housing, so now you can see why noise is becoming an issue.

When the Russian jets stated coming over to practice landing, they would perform what is called a "touch and go" landing.

The pilots would fly the airplane down to the runway and land, but instead of applying their brakes, they would continue rolling down the runway and add power to accelerate and take off. In this case flying over the housing area off that end. This is when the state got involved.

The neighbors in the housing area were quite upset and wanted the jets to go somewhere else. But since the community had been given federal and state funds to build this municipal (public) runway, it was free to use. When these folks found that out, they stated they had no problem before the military jets came. They wanted the noise to stop and prohibiting jet traffic would solve their problem. Sides were taken and the issue was getting heated up.

The time came for the city to call a public hearing to discuss the future of the airport which also included future construction. There were businesses in the city that employed many people and they used their corporate jets regularly. The fight was on.

I'd heard about the jets being built and sold out of Amery's airport and had an operations visit scheduled prior to the issues about the noise at the adjacent airport developed. The day stopped, none of the Russian trainers were flying. They had actually sold all the trainers they'd initially purchased and had ordered more.

When the request for the state to attend their next airport commission meeting, I flew up with the assigned airport engineer and aeronautics real-estate agent. When I was directed to attend with my fellow workers, I expected to answer any operations issues having to do with the new construction being proposed.

It was a good weather day and our flight up was smooth and clear. On landing we went to the municipal building on the airport in the terminal area. Again, I hadn't been told about the noise issue, but that the reason for us attending came down to prohibiting jet aircraft from landing at the municipal airport. They wanted the loud jets stopped! They wanted to prohibit all jet traffic and they could do that, but the city didn't want to because of the businesses in the community who used it regularly for their business.

As we entered the large meeting room, the airport manager showed us where we were to sit which was to the right of the Airport Commission and in front of the people attending the meeting. I was impressed with the number of people coming into the building and noticed a City Policeman walking around and had his pistol strapped to his hip. I'd attended many similar public hearings on airports all over the state and never had an armed officer present.

We were getting settled and the airport manager stopped by and gave us bottle water. We thanked him and I asked about

the need for the armed policeman. He said that at the last airport commission meeting a man from the crowd got into an argument with one of the commission members and went up to where the board was sitting and punched him out. Wow, this was going to be an interesting meeting. The Commission Chairman called for the meeting to begin at 7pm. People sat down and he introduced himself and the other Commission members. After explaining what was to be covered, he said: "Now I'll turn the meeting over to Tom Thomas from the Wisconsin Bureau of Aeronautics."

Surprise – Surprise – Surprise! I stood up and introduced myself and the other two fellow aeronautics staff with me. I gave a brief statement of what are functions were in the process and that we were there to answer questions. And with that, I asked the first individual closest to us to begin. We answered their questions from the first 5 or 6 individuals. The next individual stood up with one of our "Wisconsin Guide to Airport Administration" in his hand with a good number of yellow tabs sticking out the side. He smiled and said "Well Mr. Thomas, I have some questions from Your Book!" The crowd was impressed and then things got real quiet. I was relaxed and smiling inside because I'd help write that book and used it as my "Airport Administrators Bible".

He took the first yellow tab and asked his question. People were listening and waiting to hear the reply. It was an easy one and he was satisfied as so were all others listening. He ended going through the entire booklet and I was able to answer all his questions without referring to any booklets or material we'd brought with us. The questions were good and they all were satisfied with the answers they heard because they made sense. When he finally ran out of questions he sat down and I went to the next person. There weren't to many more questions asked because everything was covered in the book.

It was about the 5th individual's turn and he stood up and said "I don't have any questions because Mr. Thomas has already covered everything we need to know." He then sat down and people chuckled. We continued and it went smoothly with only a few more questions. The crowd was settled and had apparently heard they things they needed to know and it made sense.

The meeting was wrapped up and we were getting ready to preflight out aircraft for the flight home. This is when I'd heard about the anger and frustration with the Russian Military jets doing their touch and go landings and realizing how loud and annoying it would be.

I'd thought about what was going on and the neighbors need to end it. I had served my military career as an Air Force pilot. I flew large airplane tanker and cargo aircraft both in the Air Force and the Wisconsin Air National Guard. My last aircraft that I flew was the A-10 close air support aircraft that only had one seat. From my first flight to my last, they were all solo. I'd flown the single seat fighter jet for over 12 years and never

did a single, not one, touch and go landing. The Air Force had actually prohibited fighter aircraft from shooting touch and go landings. That meant if we were going to get multiple landings, we made a full stop and taxied back and took off for the next landing which was also a full stop. Again, primarily for safety.

After thinking about this option, I proposed it to the airport manager that they consider imposing those criteria for jet traffic at their airport. All cooperate traffic landings were always full stop. This was no problem.

And that's what the Airport Commission did. When a jet lands and has to taxi all the way back to get ready to take off for the next landing, it burns jet fuel that they could be used for flying. Those Russian fighters were not known for their fuel efficiency, so their owners never came back to the airport to land, which they could do. They just had to taxi back to take off again. And the beat goes on. The flight home was good as we had clear skies, smooth air and a strong tailwind.

Tom Thomas



TRANSITION FIFO

April 1993. Aircraft 87-252 was the first (first in - FI) F-16 Fighting Falcon received by the 115th Fighter Wing of Madison's Wisconsin Air National Guard when transitioning from



the A-10 Thunderbolt II. Crewed by SMSgt Duane "DuDu" Peterson during it's entire period in Madison, it is the first (first out - FO) F-16 to leave as the 115th begins its transition to the F-35 Lightning II.

INVESTITURE 2022

The 2022 Wisconsin Aviation Hall of Fame Investiture ceremony will be held Saturday, 22 October at the EAA AirVenture Museum in Oshkosh.

Join us! As we kick off our evening with a gathering of aviation professionals, past and new Inductees, your aviation family and friends at our no host reception starting at 5:00 p.m., banquet dinner at 6:00 p.m. followed by the investiture of our 2022 inductees.

Invitations will be mailed the first week of September.

Additional details on each of our Inductees will appear in the Winter issue of Forward In Flight.



YF-17 Being Refueled by Texas ANG KC-97L

Maverick (Tom Cruise) and the F-18. The ads on television looked interesting and after talking it over within family, some of us went to the theater and we weren't disappointed. I'd seen the original "Top Gun" movie and the new one was well done as a follow-on and had many exciting edge of our seat flying scenes throughout the movie.

After the movie, I went on line and searched for "YF-17". Up came a picture of the YF-17 getting ready to refuel with a KC-97L. In this photo, the '97 was assigned to the Texas ANG who also participated in the flight tests. With having a tanker on hand, all of the data collected on the flights were completed in record time. Flying out of Edwards was smooth and professional. Missions were thoroughly briefed and flown. Our Milwaukee '97 flew great without any write ups! The results of those missions are now history. Seeing the Navy's F-18 Blue Angels is always a crowd

pleaser.

The Top Gun movie showed some of the high-performance capabilities of the F-18 which was the final product of those flight tests back in 1974.

The test pilots had "good hands" and were stable throughout the fuel transfers. Once full, they'd disconnect and go back to their test area and proceed with their profile for the day. We were told we couldn't take pictures of these or other airplanes we refueled because of the security of the entire program. We could take pictures with our eyes and what a beautiful site.

We flew every day we were at Edward AFB and never had any write-ups with our aircraft. It was a good aircraft (all of Milwaukee's were good), and from takeoff from Milwaukee to our return home two weeks later, we only had one write-up on our UHF radio with occasional static.

Standing back and looking at the choices, one can see the F-18 has two engines and the F-16, one. The F-16 is a good jet and has just one engine. If I was flying off a carrier, I'd be more comfortable with two engines which would get me back to the carrier if one quit. All Navy pilots know how to swim, but if your given a Jet to go out and fly around the sky, they expected you to bring it back.

Both the YF-16 and YF-17 had built-in transmitters to relay performance data to computers on the ground for comparative analysis after the missions. With the capability to inflight refuel and completing multiple tests in one mission without having to land and refuel, greatly sped up the evaluation process. The weather each day was clear and "a hundred".

I really hadn't thought much about that 1970s TDY (Temporary Duty) until the new "Top Gun" movie featuring



YF-17 Top, F-16 Bottom

The F-18 flown in the movie Top Gun, was the final product of the YF-17 development program.

Since the YF-17 was accepted after those tests, the Navy has continued improving it and today it's now designated the F-18 Super Hornet.

Your Wisconsin Air National Guard played a role in history and this final product by participating in the testing and development of our nation's top fighter aircraft, the F-18 and the F-16!

UKRAINE AIRPOWER

As the war between Russia and the Ukraine began, Russia had the airpower advantage. According to Globalfirepower.com, this is how the numbers compare to see who has an aerial advantage.

RUSSIA

The Russian Air Force is based in Moscow and is reported to have:

4,173 aircraft & approximately 850,000 personnel.

Ranging from:

- MiG-35, Yak and Sukhoi fighters
- Special purpose and pursuit aircraft
- Ilyushin and Antonov transports
- Tupolev Tu 22M, Tu 95 bombers

Breaking the numbers down, Russia has:

- 739 dedicated attack aircraft
- 445 transports
- 522 trainers
- 132 aircraft designated as special mission
- 1,543 helicopters, of which 544 are designated as attack helicopters

UKRAINE AIR FORCE

When the Soviet Union dissolved in 1991, it departed Ukraine's Poltava Air Base leaving behind what became today's Ukrainian Air Force (UAF).

Soviet-built fighters such as the MiG-21, 25s and 27s, Sukhoi Su-15, 17 interceptors, and Tupolev Tu-160 bombers became the new UAF. The Armed Forces of the Ukraine is Headquartered in the city of Vinnytsia and its Air Force has:

318 aircraft & approximately 200,000 personnel.

Ranging from:

- Ilyushin Il-76 multipurpose four-engine aircraft
- Several Antonov transports
- A small number of MiG-29s and Sukhoi fighters
- Mi-8 helicopters

Breaking the numbers down, the UAF has:

- 69 fighters
- 29 dedicated attack aircraft
- 32 transports
- 71 trainers
- 5 aircraft designated as special mission
- 112 helicopters
- 34 attack helicopters

Over the years, the UAF has replaced the aging Russian and currently is receiving substantial assistance from NATO countries to sustain and bolster its current fleet of combat aircraft.



Continued from Pg. 17 - *Subtle Humor*

ball" and the LSO will reply, "Roooooogerball.", letting the pilot know we are ready for him. ---That's how long it takes to set the gear for that plane. The LSO has a whole 'dashboard' of information in front of him showing the arresting gear settings, the wind speed, and all the rest of whatever he needs.

As long as that ball from your light stays in the middle of the mirror, you are OK. There are lines on the lens that will tell you if you are too high, too low, too left, or right.

Here is the real tricky part: The 'runway' that you must hit is actually only about 5 feet long, and it is moving up, down, left, right, and swaying. You are trying to land on a moving runway, and if you hit too far forward of the wire or too far aft of it, you can't grab the wire. And, if you land too far aft, you crash into the ship. If you are just a little too high (just a few feet), your hook will snag the wire, and actually pull you out of the sky. That is called a "Hard Landing", and it will damage the airframe of the plane, and your landing gear. If you hit the deck in front of the wire or behind the wire, your hook will miss it. If you are too far left, you will slide left on the wire, and over the side of the ship. If you are too far right, you will slide on the wire to the right, and up towards the aircraft parked there. You must grab the wire that is set for your plane, usually the #2 wire.

So, once you are 'on the ball', you must control your descent by using the stick and the throttle to keep the ball in the middle of the mirror.

MORE DATA

If it (data) can be recorded, it can be reported. Today's military is a cultural of training and perfection. Scoring a landing for the purpose of continuous improvement is, well, continuous. Carrier pilots receive grades on their landings. If you made a mistake, it will be noted with all of the other landings for all to see. If your landing is bad, it will be scored accurately and your mistakes will be noted. A perfect landing is graded as an "OK-2" That means you did not crash and you hit the #2-wire. If you're landing is scored as a OK-2, you're landing was perfect.

ATMOSPHERE OF FEAR

What is really scary, is working on the flight deck while waiting for landings on a bad night. The carrier does not use lights on the roof at night. It is dark, and as an aircraft approaches the carrier on a bad night, the carrier can be rolling and tossing or bobbing under you, and from the flight deck you can see that light on the plane going up and down and all over as he closes on the ship.

A pilot may even miss "catching the wire" on the first try, but the fear continues knowing there is absolutely no other place in the vast open sea to land, unless.....there's another carrier near by. What a motivator..... land your plane of face *subtle humor* on another carrier.

OH YA, THOSE AIR FORCE PILOTS

As awesome as naval aviators are at their jobs, just to have the skill of hitting the #2 wire in just a little space they have speaks highly of their piloting skills. This is however a skill set, landing on an aircraft carrier, that Air Force pilots don't have to train for.



WI AIRPORT

PASSPORT PROGRAM

In 2017, the Wisconsin Department of Transportation launched a program called the Fly Wisconsin Airport Passport Program.



Pilots and passengers can register for free. Each registered participant receives their own physical "passport" that contains a blank space for each of Wisconsin's 125 participating airports.

Each participating airport has a unique stamp, which is typically available in the FBO or at the fuel pumps. Visitors simply stamp their passports each time they visit an airport and collect stamps to earn prizes.

If you collect 42 airport stamps, you get the bronze award, a Fly Wisconsin t-shirt. Making 84 stops earns the silver award, a flight bag. And anyone who visits all 125 participating airports is rewarded with the gold prize—a leather jacket or a patch and a \$100 gift card. Participants can also earn points by visiting eight aviation museums scattered across the state.

Prizes are funded by the Wisconsin Airport Management Association, an organization that has tasked itself with promoting safety, economic value, and public benefit at all Wisconsin airports, large and small. In less than five years, the program has attracted roughly 1,900 registered participants who have earned 50 bronze, 29 silver, and 20 gold awards.

LINKS AND REFERENCES

WI DOT: Passport Program Rules

<https://wisconsin.dot.gov/Pages/travel/air/pilot-info/flywi-partair.aspx>



NOTICE OF ANNUAL MEMBERSHIP MEETING

PLEASE JOIN US AT OUR ANNUAL MEMBERSHIP MEETING

Your WAHF Board of Directors will be hosting
Our Annual Membership Meeting

On Saturday, October 22nd, 2022
At 2:00 pm in the EAA Museum
lower level Batten Board Room

If you have an interest in joining the WAHF Board
of Directors, please contact:
hpeterson@wisconsinaviationhalloffame.org

PLEASE JOIN US AT OUR ANNUAL INDUCTION DINNER IN OSHKOSH ON OCTOBER 22ND!

Continued from Page 27 - OXCART

On 30 October 1967, pilot Dennis Sullivan detected radar tracking on his first pass over North Vietnam. Two sites prepared to launch missiles but neither did. During the second pass at least six missiles were fired at the OXCART, each confirmed by missile vapor trails on mission photography. Sullivan witnessed three missile detonations. Post-flight inspection of the aircraft revealed that a piece of metal had penetrated the lower right wing fillet area. The fragment was not a warhead pellet but may have been a part of the debris from one of the missile detonations Sullivan observed.

Between 1 January and 31 March 1968 six missions were flown. Four of these were over North Vietnam and two over North Korea. The first mission over North Korea on 26 January occurred during a very tense period following seizure of the Pueblo on the 23rd. The aim was to discover whether the North Koreans were preparing any large scale hostile move on the heels of this incident. Chinese tracking of the flight was apparent, but no missiles were fired at the plane.



PROGRAM UPDATE

By Olivia Conklin - WI Department of Workforce Development
& Meredith Alt - WI Department of Transportation

As reported in our last issue of *Forward in Flight*, the Wisconsin Department of Transportation (WisDOT) and the Wisconsin Department of Workforce Development (DWD) are jointly organizing Wisconsin's first statewide Youth Apprenticeship programs in aviation for maintenance and Avionics. In addition, WisDOT and DWD has created a new Airport Operations Youth Apprenticeship program.

WisDOT and DWD are committed to helping build Wisconsin's aviation and aerospace workforce. This program is looking for employers who wish to participate.

Through a partnership with the Wisconsin Department of Transportation, Bureau of Aeronautics and statewide aviation and aerospace employers, the Wisconsin Department of Workforce Development – Bureau of Apprenticeship Standards, recently developed four new pathways in aviation. The new pathways are the first of their kind in aviation in Wisconsin and will be available to interested high school students and employers this summer 2022.

The new pathways offer Youth Apprenticeship opportunities



Wisconsin Youth Apprentice with his mentor (his father) at Matt Anderson Helicopter Repair in Janesville, WI

in Aviation Maintenance Fundamentals, Airframe and Powerplant (A&P), Avionics, and Airport Operations and Management. With over 30 years of success, Wisconsin's Youth Apprenticeship program is a work-based learning program that combines work experience and classroom instruction in 11 different occupation areas.

Apprenticeships offer paid, on-the-job learning experience that benefits apprentices and employers in many ways.

Beyond work experience and education, apprentices also gain skills, build relationships with mentors, and get a head start on their careers. Additionally, apprentices may be eligible for college credit by participating in Youth Apprenticeship. The new aviation apprenticeship pathways allow students to explore and gain real-world experience in the aviation industry.

Employers also receive benefits through the Youth Apprenticeship program. Youth Apprenticeship gives employers access to motivated students interested in the aviation industry. Employers' recruitment and development strategies improve as they train the next generation of their workforce. Apprentices bring innovative ideas and a strong desire to learn, which are critical commodities in today's workplace.

YA offers an excellent pipeline for recruiting and retaining loyal, well-trained talent. Employers continually report a high level of satisfaction, and cite these program benefits:

- Increase visibility of employer's industry / business.
- Access to young workers who are eager to learn and have interest in the profession.
- Quality, prescreened youth apprentices who receive ongoing support during their apprenticeship.
- A method to address future hiring needs in a cost-effective and timely manner.
- Opportunity to prepare future workers.
- Opening to help educational personnel develop job-specific proficiencies.
- Chance to become involved with worksite curriculum.
- The chance to shape the skills, expectations and habits of youth apprentices at a young age.

More than 75% of youth apprentices receive permanent job offers at the end of their apprenticeship experience, showing the success Youth Apprenticeship brings.

With a strong need for skilled workers across the aviation industry, Wisconsin is eager to see how Youth Apprenticeship will help build the pipeline into the aviation industry.

Students and employers interested in youth apprenticeships should connect with staff at: ya@dwd.wisconsin.gov or visit www.WisconsinApprenticeship.com

**CALL FOR PAPERS**

Do you have a historical aviation story to tell & would like to share your works in *Forward in Flight*?

WAHF is always seeking co-editors and articles for publication in future issues of *Forward in Flight*.

Should you have an interest, Please contact: magazine@wisconsinaviationhalloffame.org

IN MEMORIAM

Dennis B. Sullivan CALL SIGN: DUTCH 23
September 23, 1927 - December 14, 2020

Inducted WAHF 2011



Dennis B. Sullivan

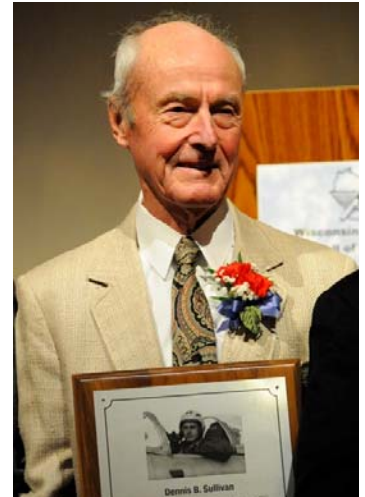
General Sullivan was born in Chippewa Falls, WI. In 1946 he entered the US Naval Academy at Annapolis, Md., graduating in 1950 and then immediately entering the Air Force. After flying many missions in Korea, he went on to fly a variety of fighter jets from F-80's to F-106's

According to Sullivan's official general officer bio, from June 1963 to August 1968, General Sullivan was a special projects officer at Headquarters US Air Force, Washington, DC. In reality, Sullivan had been "sheep-dipped" from the US Air Force to the CIA at Area 51 for the Mach 3 A-12 Project OXCART. Known as Dutch 23, Sullivan first flew the A-12 on 14 April 1963. In 1967, Project OXCART went operational with Sullivan and five other Agency pilots rotating between Area 51 and Kadena, Okinawa, for Operation BLACK SHIELD.

General Sullivan served as director of operations and later vice commander of the 9th Strategic Re-

connaissance Wing at Beale Air Force Base, California, the only Air Force unit flying the SR-71 "Blackbird" strategic reconnaissance aircraft.

In September 1981, Brigadier General Dennis B. Sullivan was a command director in the Cheyenne Mountain Complex for the North American Aerospace Defense Command. He retired from the Air Force in 1985.



Dennis Sullivan - 2011 Induction

DENNIS SULLIVAN'S PARTICIPATION IN THE A-12 PROGRAM The A-12 began produced in 1962 and flew from 1963 to 1968. It was the precursor to the SR-71 Blackbird, a slightly longer aircraft able to carry a heavier fuel and camera load. The A-12 began flying in 1967 and its final mission in May 1968. The a-12 was retired in June 1968 and the program was officially revealed in the mid-1990s.

An impressive OXCART demonstration of capability occurred on 21 December 1966 when Lockheed test pilot Bill Park flew 10,198 statute miles in six hours. The aircraft left the test area in Nevada and flew northward over Yellowstone National Park, thence eastward to Bismarck, North Dakota, and on to Duluth, Minnesota. It then turned south and passed Atlanta en route to Tampa, Florida, then northwest to Portland, Oregon, then southwest to Nevada. Again the flight turned eastward, passing Denver and St. Louis. Turning around at Knoxville, Tennessee, it passed Memphis in the home stretch back to Nevada. This flight established a record unapproachable by any other aircraft.



A-12 OXCART

Operation BLACK SHIELD on 31 May 1967, the unit at Kadena Air Force Base in Okinawa was ready and the moment arrived under heavy rain at Kadena. Since weather over the target area was clear, preparations continued in hopes that the local weather would clear. When the time for take-off approached, the OXCART, which had never operated in heavy rain, taxied and took off while the rain continued.

The first BLACK SHIELD mission followed a route over North Vietnam and one over the Demilitarized Zone. It lasted three hours and 39 minutes, and the cruise legs were flown at Mach 3.1 and 80,000 feet. Results were satisfactory. Seventy of the 190 known SAM sites in North Vietnam were photographed, as were nine other priority targets. There were no radar signals detected, indicating that the first mission had gone completely unnoticed by both Chinese and North Vietnamese.

Between 16 August and 31 December 1967, twenty-six missions were planned with only fifteen flown. On 17 December 1967 one SAM site tracked the plane with radar but was unsuccessful with guidance radar for a missile launch. On 28 October a North Vietnamese SAM site for the first time launched a single, unsuccessful, missile at the OXCART. Photography from this mission documented the event with photographs of missile smoke above the SAM firing site, and with pictures of the missile and of its contrail. Electronic countermeasures equipment appeared to perform well against the missile firing.

Cont. On Page 27 - OXCART

THE FORGOTTEN MECHANIC

When man started his labor in his quest to conquer the sky.
He was designer, mechanic, and pilot,
With his labor he built a machine that would fly.

But somehow the order was twisted,
and then in the public's eye,
the only man that could be seen
was the man who knew how to fly.

Now pilots are highly trained people,
and wings are not easily won.
But without the work of the maintenance man
our pilots would only march with a gun-

So when you see a mighty jet aircraft
as they fly their way through the air,
the greased stained man with a wrench hand
is the crew chief who put him there.

From THE FORGOTTEN MECHANIC

WHY ? DOES AN F-16 NEED 17 HOURS OF MAINTENANCE FOR EVERY HOUR OF FLIGHT?

Some have expressed surprise that an F-16, a modern state of art aircraft takes 17 "man-hours" of maintenance for every hour of flight yet don't recognize that this very complex aircraft that may be flying in a very harsh environments. The 17



F-16 Falcon Engine Removal "Pulling the Pusher"

man-hour figure is an average. To maintain the aircraft's flight readiness and a Fully Mission Capable (FMC) status, basic ground handling, fueling, pilot oxygen bottles charging, engine oil checked (yes, jet engines still require oil) and thorough preflight, thru flight (between flight) and post flight inspections and regularly scheduled inspections of aircraft components and systems.

When there is a significant issue, like needing to remove and replace the engine, trouble shooting an electronics problem, or dealing with a simple tire change, the number of man-hours goes up and pushes the average number of maintenance man-hours for the aircraft to the 17 hour figure.

Today's combat aircraft are indeed complex, expensive and well deserving of the critical maintenance tender care they receive from their dedicated "maintainers" considering the missions they perform.



YOUR WAHF MEMBERSHIP

Typically, WAHF membership is for a calendar year starting January 1st. Membership renewal forms will be included with the early September mailing of our Induction banquet registration materials.

Because of the fantastic support of our members like you, one of the improvements and growth we've experienced in recent years is our aviation scholarship program and our recent partnership with the Kelch Aviation Museum in Broadhead, Wisconsin.

We will continue expand and grow our accomplishments for you, a valued WAHF member.

When you nominate men and women for induction into the Wisconsin Aviation Hall of Fame, invite members of the WAHF Speakers Bureau to your events, recruit new members, purchase WAHF logo merchandise, share your issue of **Forward in Flight**, or simply recommend to your friends to support the Wisconsin Aviation Hall of Fame, you are helping us preserve and share Wisconsin's rich aviation history.

***Thank you for your part in making
Wisconsin Aviation Hall of Fame
become the best it can be!***

Your prompt renewals save the organization time and money so that we can continue to bring great articles about aviation history in Wisconsin and about those who created it. Please renew your membership promptly so you don't miss another issue of our quarterly aviation magazine **Forward in Flight**.

Thank you again for supporting the Wisconsin Aviation Hall of Fame. If your renewal is already on its way, thank you!

For membership or advertising inquiries, please contact:
membership@wisconsinaviationhalloffame.org

Attn: Snowbirds! Please let us know your winter mailing address so we can send your *Forward In Flight* directly to your Snowbird address and avoid any post office forwarding errors.





Any time of year is the right time to give a gift WAHF membership

ANNUAL MEMBERSHIP LEVELS: *Please Check*

| | |
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| ___ Youth (Under 18) | \$10 |
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TAX DEDUCTIBLE CONTRIBUTIONS

Your contributions will help ensure Wisconsin's aviation pioneers and outstanding students in aviation education will continue to be appropriately recognized. Your Contributions, in any amount are greatly appreciated.

WAHF Supporting Contribution \$ _____
(General Operating / Events Programming Fund)

WAHF Scholarship Fund** \$ _____ **

**For scholarship donations, please make a Separate Check payable to:

Community Foundation of North Central Wisconsin
or visit www.CFONCW.org for online donations.

Visit Us At: www.WisconsinAviationHallofFame.org

WAHF is a 501(c)(3) organization.

Mail this form to: Membership, WAHF
416 E. JF Townline Road
Janesville, WI 53545

editor's note | THANKS TOM !

from CHRIS CAMPBELL

It's true, shoes are hard to fill! Having been our *Forward in Flight* editor for the past few years, Tom Eisele championed the production and editing of FIF from his home in Ohio and a residence in Wisconsin. Tom set high standards for FIF, resulting in a publication that maintained a focus on delivering to our a membership organization topics dedicated to preserving the past and fostering the future of flight AND educating all of us of those forgotten moments in Wisconsin's aviation history.

When Tom stepped in as FIF Editor, he quickly connected to the Wisconsin aviation community and will indeed be missed by all! We acknowledge all of his hard work, dedication to providing detailed content on topics of interested to our readers and most importantly, his oversight of the entire editorship of *Forward in Flight*.

Thanks TOM! You and your Editorial Assistant Carolyn A. Eisele will be missed!

May your future be filled with clear skies and strong tail winds!

leading edge | EMAIL BLAST



Initiated in early June, our *Leading Edge* email announcements are being published and distributed to current WAHF members to highlight current aviation events.

While the focus of our *Forward in Flight* (FIF) magazine is on Wisconsin's early aviation history, *Leading Edge* email eBlasts are intended to communicate current "happenings" in the wide world of aviation and serve as a bridge for modern day aviation topics.

Leading Edge is not published on a schedule or on a regular basis. Emails are sent for those events that occur between our publication dates of our quarterly of FIF, or to just inform you of "anything" that might be of interest to you.

Your Email Address is Required! If you **haven't** received a *Leading Edge* email, it's because we **don't** have your current email address.

To be included in future emails, or to check if we have your current and correct email address, simply email: membership@wisconsinaviationhalloffame.org to have your address added to our distribution list OR to be removed.

Get on The List, make sure we have your email address!



MEMBER SPOTLIGHT

2015 WAHF Inductee Darrel W. Gibson started his FBO in Eau Claire in 1961. Known for his hard work and passion for aviation, Darrel mentored many of his employees who later became airline, corporate and military pilots. There's lots of history within Darrel's career. The above photo of Darrel is certainly worth a thousand words and worthy of a future FIF article. So let's start with, Darrel, Where's your car's trunk lid?





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Web Site

Join the Conversation, Follow Us At:
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calendar | AVIATION EVENTS

WAHF EVENTS

October 22 - Wisconsin Aviation Hall of Fame Inductions

EAA Museum, Oshkosh, WI | www.wisconsinaviationhalloffame.org

MIDWEST AVIATION EVENTS OF INTEREST

August 20 - Shawano, WI - Fly-in, Drive-in event 9am-2pm. Rain date 8/21). The event will feature Antiques, Classics, Warbirds, Modern Aircraft, Young Eagles Flights, Introductory Flights, Equipment Displays, and Collector Cars. Info: www.shawanoairport.com.

August 20-21 - US Navy Blue Angels¹ - Chicago, IL - Chicago Air & Water Show, North Ave Beach.

www.chicago.gov/city/en/depts/dca/supp_info/chicago_air_and_watershow.html

September 1 - Waseca, MN - Fly-In/Drive starting at 5:30-7:30pm rain or shine. Info: David Ziegler **507-838-8915** or Andrew Fisher **612-743-2253**.

September 10 - Milwaukee, WI - Spot Landing Contest 10am Lawrence J. Timmerman Airport. Details: 414-461-3222 www.Timmermanairport.com

September 10 - Oshkosh, WI - Whitman Airport FlyIn Breakfast & Airport Expo. Free Airplane rides for kids ages 8-17. Info: <http://youngeaglesday.org>, 920-810-1046, eaa252-gmail.com

September 16-18 - Brainerd, MN - Minnesota Seaplane Pilots Association Safety Seminar at Madden's on Gull Lake. www.mnseaplanes.com

September 17 - Freeport, IL - Northwest Illinois Airshow. Albertus Airport www.nwilairshow.com

September 17 - Oconto, WI - Oconto FlyInCar Show, antique tractors, military displays. Plane & helicopter rides. Info: 920-373-6948 or Air at 920-834-7727. ocontoflyin@gmail.com.

September 23-25 - Angola, IN - Indiana Seaplane Pilots Association Splash-In at Pokagon State Park at Lake James and Potawatomi Inn. Info: randy.strebig@strebigconstruction.com. For accommodations: Potawatomi Inn 877-768-2928.

September 24 - Eden Prairie, MN - Girls In Aviation Day at Flying Cloud Airport. <https://starsofthenorth.org/girls-in-aviation-day>

October 3-5 - Eau Claire, WI - WI Annual Aviation Conference (WAC). Sponsored by WI Airport Management Association (WAMA) Info: <https://wiama.org/events>

November 5 - Brodhead, WI - Chili Lunch Fly-In 11am-2pm. www.eaa431.org

¹Notice: Dates shown are for jet team performances only. Military jet teams may not perform on all days of multi-day events. Check event website for full event schedules.

Having a Conference or Exhibition?: Submit your events to be listed in our Calendar of Events. Email: magazine@wisconsinaviationhalloffame.org



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fostering the future of flight in Wisconsin

Thanks to All WAHF Members and Supporters in 2022

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Will Your Address Change / Attention Snowbirds?

Please inform us of your new address. A timely reminder of your new address is very much appreciated, as it helps to save time - and expense - for our small non-profit organization.



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