



The AMA History Project Presents: History of the MILWAUKEE MODEL AERO CLUB



Written by JN (04/1989), transcribed by JS (10/2011)

The following two-part article, "Milwaukee Model Aero Club," was written by Jim Noonan and printed in the April and May 1989 issues of Model Aviation magazine.

Model airplane clubs have been around for just about as long as model airplanes. Then, as now, clubs have made our activity more enjoyable through fellowship, and advanced the state of the art through shared knowledge. Part 1.

At age 10 in 1927, I became an "aeronaut." Lindy flew to Paris, visited my adopted hometown of Milwaukee on his national tour following the flight, and before you knew it the skies began to fill with planes. Among them was Milwaukee's own Hamilton Metaplane. Eventually I discovered model airplanes through books in the public library and quickly found out that model building was already much older than I was.

My first model building attempt was a twin pusher from kite sticks and bent wood props; the best it would do was a poor power glide. My grandfather, who had farmed with oxen in his youth, observed my efforts without comprehension; he could not understand a boy who wanted to fly! Despite this early failure, I kept at it, using the helpful but often inadequate books available.

My interest in aviation grew. Some of the books listed model clubs, but they were rarely still extant. Most had disbanded after the end of World War I. Among the clubs listed in one book was the Milwaukee Model Aero Club. It had long since broken up, and being just a kid I couldn't hope to follow up on its history. At least, not then.

The next year, model plane building was taught in the schools, and of course I was there. The balsa, tissue, Ambroid, banana oil, and wire were provided, as well as needed tools. The Airplane Model League of America, sponsored by *American Boy* magazine supplied the basic guidance. (See Frank Zaic's book, *Model Airplanes and the American Boy*.) So I learned to build and fly in a whole new era, but my desire to know the history of modeling in Milwaukee never quite left me.

My search for the club's history began at the Milwaukee Public Museum. I was somewhat disappointed, though, as the museum was devoid of any reference to aviation except for a small display honoring Quentin Roosevelt—Teddy Roosevelt's youngest son, who was shot down in France in 1918. It included a photo of his grave and a model of a Nieuport Monoplane (framework only), superbly detailed, donated by Lynn Davies.

Discovery of the aviation section in the science room of the public library led to countless trips with a notebook, since these books could not be borrowed. (The books were

gradually lost or discarded and only a few remained by the end of World War II.) In 1936 I found the book, *Milwaukee Model Aero Club*, published in 1917 by the same Lynn Davies. It was nicely done with many photos and drawing of models, as well as the complete story of the club. It was probably written while Lynn was doing graduate work at Armour Institute in Chicago. It also appeared that a very limited number were published. Every club member had one, but by the time I tracked down four surviving members in 1968, their copies, as well as the library's, had vanished.

The last surviving club members. In Milwaukee, we hold annual reunions for the old modelers. As a part of the program, we usually have a flysheet filled with many things of the past to hand out. It was my job to write the flysheet on one occasion, and I mentioned the Milwaukee Model Aero Club, which had ceased to exist before many of us had been born.

Apparently these sheets circulated well; not long afterward, I received a note in the mail from Walter Loehndorf of nearby Waukesha. In his letter, Walter stated that he was the former field director and publicity man for the Milwaukee Model Aero Club. He went on to tell me that Lynn Davies had been the leader of the club and that there were 19 members.

Naturally, Walter and I quickly struck up a fast friendship. Together, we soon visited Gilbert Counsell, another ex-club-member. Gilbert had a stack of old photos which I copied for my files, and Walter and Gil helped me compile a list of former members.

Thus began my search in earnest for this pioneering group. It led me to discover a marvelously talented group of boys, who in the pre-balsa era had equaled the best modelers in the country. A bit of work with names in the phone book led to a meeting with Lee Eiring, the son of ex-club-member Ervin Eiring. Lee was to become an invalid shortly thereafter, but not before we had many sessions sharing our mutual interest in music, model flying, and history. He loaned me his father's box of propellers, silver trophies, and 1915 model catalogs.

The phone book also led me to another club member, Alfred Hayden, whom I met only once. He gave me a batch of clippings from the Milwaukee Journal and regretted that his box of propellers has been used to amuse his grandchildren. Though he died soon after, I will always appreciate his kind assistance.

Yet another ex-member was found living in retirement in Florida. Ken Sedgwick vividly remembered the club's building techniques and contests. His statement sums up the intensity of the club members' love of aviation: "We were so utterly serious about our hobby. It was the all-compelling force in our lives and had a great deal to do with shaping our adult lives."

These four men were the only surviving club members by the late 1960s. Both Lynn Davies and Ervin Eiring passed away in 1961. By 1975, the last of the Milwaukee Model Aero Club members was gone.

Models and contests. Apparently the Milwaukee Model Aero Club began early in 1914. Lynn Davies had already built many models and was adept at instructing others in the art of building and finding the proper materials. It took several weeks to make a good-flying model. Hobby shops were 20 years in the future. The club eventually outgrew its initial flying site located on the present-day University of Wisconsin-Milwaukee campus.

For their time, the MMAC members were very advanced builders. Models were constructed with refinement. All parts were carefully streamlined, sanded, and doped with banana oil. Props were designed and carved to true pitch (X layout). Rubber, purchased by the club from Percy Pierce in Philadelphia, was divided among the members. It was black, “pure para,” $\frac{1}{32}$ -inches thick, and came in $\frac{1}{8}$ -inch and $\frac{1}{4}$ -inch widths. Talc was the usual lubricant, although some members used liquid soap. Motors were made with an S-hook on each end held in shape with rubber bands at the hooks, which were also covered with small rubber tubing. Thus, a motor could be easily used or interchanged on the flying field.

In general, all models were “flying sticks” with exposed motors. The most common type was the twin pusher with occasionally a twin tractor or single tractor. (Good flying models with the rubber enclosed in a fuselage were not to appear until the late 1920s, 10 years later.) Ambroid was the glue generally used; many joints were bound with fine silk thread.

Almost every component of a model built in 1914 was made by the builder. Besides rubber, the only material not locally available was goldbeater’s skin (like doped white tissue), which was purchased from supply houses in the East. All other materials could be found right in Milwaukee. Tissue used was lens tissue from the drugstore. Piano wire was sold in hardware stores. Wood shops sawed sticks and prop blanks from pine and basswood. A bamboo blind from a curtain store provided fine bamboo for splitting as needed. Lynn often purchased group supplies, but the other members provided a lot on their own as well.

As time went on each member had stacks of models, the parts of which were often interchanged. Building and flying was a continual process; each model was a bit more advanced, lighter in weight, cleaner in design.

Flight was a matter of launching into the wind and letting the model take its own direction—some had a natural circle, others went in a straight line. Glide was never a prime factor for duration. Since the original aim was distance, straight flight was to be desired. Besides the twin pushers at which they excelled, the club was possibly the most advanced in the country in design and flying of single tractors. Contrary to some contemporary writings, the Milwaukee tractor was a smooth-flying model with a good transition from power flight to glide. It flew so slowly that a builder could trot alongside the model as it gently glided in for a landing. Generally wheels or floats were fitted to models only for ROG and ROW flying. Hand-launched models had no landing gear. A twin tractor with wheels, held by Ervin Eiring, can be seen in the photo. [See article for photo.]

The Milwaukee Model Airplane Club was an enterprising forerunner of today's clubs. Next month we will wrap up the history of this early, innovative group.

Milwaukee Model Aero Club—Part II

We continue our glimpse of what modeling in America was like in the teens of 1900. WW I brought changes that broke up the group. Part 2 of 2.

It was only logical that my interest in this pioneering club and newly acquired knowledge of club members' building methods and model designs led me to build replicas of their models. Most were fine fliers despite the fact they were built of basswood, pine, spruce, and a lot of bamboo. It was the rubber they were forced to use that really told the tale. Their best time by a twin pusher (132 seconds) was easily beaten on November 1, 1970 with a 181-second flight that had no help from thermals. That was real testimony to the superiority of good Pirelli. The model climbed very high among the RC planes on the field—to the surprise of the RC guys who would not believe we had carved the pine props ourselves.

The club built Scale models, but no flight results are known. The models were exhibited each year at the public library with a view to attracting new club members. The idea of Indoor flying had yet not occurred to anyone. (True Indoor flying began in Chicago in about 1919.) Evidence of a primordial form of Indoor flying is a model of 8-in. span with floats of folded note paper, varnished, which would take off from a meat platter filled with water. It was a novelty for club meetings and useful to impress company at home.

Thermals were unknown both to model fliers and aviators. When flights became longer it was assumed the reason was a better glide. None of the surviving club members could remember a model ever being carried out of sight upward in a thermal. Of course models were lost, but not in the sky!

History of the club. Ken Sedgwick built a twin pusher in 1914 and was trying to fly it in the driveway next to his home when Ervin Eiring stopped to observe. He invited Ken to attend a club meeting that evening at the home of the club leader, Lynn Davies. Ken and Ervin were in high school. Lynn was already in college. Ken was shown models that then were the state of the art, with paper-thin basswood props and superb wings covered with goldbeater's skin. Ken learned quickly and proved to be very original in model designing. Thus he and Ervin became building buddies.

The club held regular formal business meetings and kept minutes. Club activities were written up for and published by the *Milwaukee Journal* as well as the national *Aerial Age Weekly*. The governing body for model aviation at the time was the Aero Science Club of New York, the AMA of its day, to which the MMAC became affiliated.

In early 1915, the Aero Club of America announced the National Model Competition for various types of flying models. The ACA Nationals was to be held each year for three years. The club with highest point score was to be awarded the Villard Trophy.

Here's how it worked: On a given day, each club held a meet for a stated type of model. Flights were witnessed by two adults, and the results were sent to the Aero Club in New York. Each modeler had three flights, the results being averaged. Finally, individual club member averages were totaled for a club average, and this was translated into competition points.

Aerial Age and *Flying* magazines promoted the contest and, later, published the results.

The Milwaukee Model Aero Club entered and sent the following results, August 30, 1915: Lynn Davies, 1,100 ft.; Gilbert Counsell, 492 ft.; Ervin Eiring, 438 ft.; Ken Sedgwick, 601 ft. The club average was 672 feet, to earn fourth place. This was the only year the Milwaukee club entered. Chicago's Illinois Model Aero Club entered all events each year (1915, 1916, and 1919) and won the Villard Trophy. It reposes today in Don Lockwood's attic along with many other IMAA trophies and mementos.

The prime event of 1915 was the first intercity meet between Milwaukee and Chicago clubs. Each club selected a team with backup members and chose rise-off-ground (ROG) duration and distance as the event. The photo of the MMAC with the school building in the background (today's University of Wisconsin—Milwaukee) shows their models equipped with ROG gear. Numbers on the wings are for flying order. The picture was taken at a practice session when team members were chosen. It was snapped by Clarence Bates, whose model can be seen on the ground to the lower left. [See article for photograph.]

The long-ago members recalled the trip to Chicago. Instead of the train, Lynn chose a lake steamer with side paddle wheels. Being totally inexperienced in lake travel, he chose a cabin next to paddlewheel housing, resulting in a noisy, sleepless night for all concerned. Upon arrival in Chicago the club members were guests of the IMAC at a special meeting honoring them, and then they were guests at a theater party given by the IMAC sponsors. Next day they enjoyed a sightseeing tour of Chicago, followed by the contest on Sunday, August 15, 1915.

Results were mixed. Milwaukee won best average duration, 72 sec. to Chicago's 71.1 sec. Chicago won distance, 747.3 ft. to Milwaukee's 691.4. Combined points, thus, gave the meet to the IMAC, 198.7 to Milwaukee's 193.5. The clubs were quite evenly matched, and the contest resulted in life-long friendships.

Milwaukee learned about "cans" at the meet. These were short lengths of tubing made from tin cans to keep the rubber in place next to the motor stick. MMAC members improved upon the idea by making cans of bent bamboo rings. (By my time we made them of piano wire.)

The Milwaukee club also indulged in some fun events. Ken Sedgwick fitted a tiny camera to his model. It snapped good pictures in flight using a firecracker fuse to release a rubber band which tripped the shutter. The same device also released parachutes, and this came to be an event at their contests.

The year 1916 began with a club report of a review of the events of 1915 and plans to enter the National Meet (but they failed to do this). Flying began on June 16. However, the club's field was then found to be too small. Models overflew it repeatedly and were lost. Much activity continued, new officers were elected, and more plans were made to enter the Nationals (which again failed to materialize). Lynn left to attend Armour Institute in Chicago for graduate study not available in Milwaukee.

The club continued without him for another year, but lacking Lynn's guidance, no club reports were published. Meanwhile, Lynn was invited to join the IMAC and competed with their team in the 1916 National Contest.

By 1917 other members were leaving; the World War draft had begun. Ken Sedgwick left to get an engineering degree at Armour. In general the grand time was over; members experienced more and more demands on their time. Ken thought that the last club activity occurred in 1919.

List of known members (19 members as of 1915): Clarence Bates, Gilbert M. Counsell, Milo C. Counsell, Lynn Davies, Thomas Dunlop, Ervin Eiring, Alfred Hayden, Walter Loehndorf, Ray Maas, Charles Rollins, James Rollins, Ken Sedgwick, and Ted Sedgwick. All are deceased.

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