

The AMA History Project Presents: Biography of PETER B. MOHR



Born July 7, 1935 Started modeling in 1942 AMA #145026

Submitted by PM (05/2002); Transcribed and written by SS (06/2002), Reformatted by JS (10/2009)

Career

- Became a charter member of the (Las Vegas) Nevada Aveites in 1946 at age 11
- First competed in 1947 at the Nevada Aveites spring invitational
- In June 1950, he placed well in the local Plymouth Motors eliminations and went on to the state eliminations and then the Plymouth Internationals in Detroit, Michigan
- Was a junior leader of the Nevada Aveites from 1947 to 1949
- Experimented with making model helicopters during high school from 1948 to 1951
- Held offices with the San Leandro Channel Master and the Livermore Electrons
- Owned a hobby shop, Hobby Arena, in Point Arena, California from 1993 to 2000
- Occasionally conferred with manufacturers such as Bill Cannon and Jerry Nelson
- Earned his full scale pilot license in 1960
- Worked for 36 years in nuclear power, propulsion and weapons at the Lawrence Livermore National Laboratory

The following was written by Peter B. Mohr and submitted to the AMA History Project (at the time called the AMA History Program) in May of 2002.

The Beginning

Peter B. Mohr began modeling at age seven. His uncle, George L. Raymond, built models and worked in 1940 for Piper and then in 1941 for Curtiss Wright. This connection sparked Peter's interest, especially when his uncle flew CG4-A troop gliders in World War II then helped him get his first model engine in 1946.

1946 was also the year that Peter joined the (Las Vegas) Nevada Aveites as a charter member. The club had a clubhouse and flying field in the Sunrise Acres area of Las Vegas. He remained a member until 1952 when he went away to college for six years.

Four years before he joined the Nevada Aveites, 7-year-old Peter built his first airplane, a Piper Cub, which was probably a Comet stick and tissue kit that had approximately a 13-inch wingspan. The kit was a 10-cent wartime kit that had hardwood parts. Peter built it alone by following the directions. He also had the benefit of having watched his uncle build some planes a few years earlier. He was impressed when the plane went together as the instructions described.

One problem with building was that Peter's family lived in the "piney" woods area of south New Jersey and modeling supplies were not available. He doesn't remember where he got the model glue from, but he does remember his adventures with painting that first model. Peter didn't know what dope was. Someone told him it was paint, so he decided to use the only paint his family had – floor varnish. After varnishing the plane, Peter tried to fly the heavy model out of the second floor of his family's house, but it dropped like a rock and crashed to the ground.

In 1943, Peter built his second model, a Vought Corsair. This time he built two left wings, but was too stubborn to take the plane apart and correct the problem. By this time, his family started moving a lot, so Peter switched to solid models. The family finally settled in Las Vegas in 1945. It was that next year that his uncle sent him \$20 to buy his first engine and model. He ended up with a GHQ and G Line Shark.

Competition

Peter began competing in 1947 when the Nevada Aveites held their first invitational during the spring. He tried flying a Cliff's Trainer with a Vivel 35 and doesn't remember whether he succeeded.

Peter's first successful competition was in June 1950 when he was 14-years-old. He competed at the Plymouth Motors eliminations flying stunt, scale, and speed. In stunt, he flew a Veco Chief with Atwood 60 and in speed, he flew a hand-me-down Meteor with someone else's engine. He won a ride in a Lockheed T-33 and a trip to the state eliminations in Reno, Nevada. The trip to Reno was courtesy of (funded by) Danny Thomas (the comedian and later TV star) who at the time was a modeler and resident (neighbor) at Las Vegas. Danny chartered a 40-passenger bus and took the whole club on a 24-hour, 930-mile roundtrip to Reno. Unfortunately, the Korean War started the day Peter was supposed to take his ride, so it was canceled.

Another big competition for Peter was the Plymouth Internationals in Detroit, Michigan in 1950. He was barely 15-years-old, but entered stunt, scale, speed and Free Flight. Though he didn't place in any category, it was still quite a feat to have flown in an international competition so young.

It was this competition that got Peter first involved with the AMA. He joined the AMA in order to compete during 1950, but later dropped his membership because the cost was more than a pint of fuel. Later in life, Peter would rejoin.

As an Experimenter

From 1948 to 1951, when Peter was in high school, he was fascinated with the possibility of a model helicopter. He built many rubber-powered experiments, most with dual geared rotors and flexible shafting. In 1952, Peter experimented with channel wing U-Control models and with Free Flight models that would fly forward or backward. He also experimented with reversible airfoils.

As a Leader

Peter's model aviation leadership began early. From 1947 to 1949, he was a junior leader in the Nevada Aveites. During the 1950s, he held various offices in the San Leandro Channel Masters. In the 1980s, he held offices in the Livermore Electrons.

Industry Involvement

Peter's involvement in the hobby industry has been both indirect and direct. Indirectly he was involved as a mechanical and nuclear engineer who sometimes consulted for manufacturers.

Directly, he began a hobby shop in Point Arena, California in 1992, moving to Gualala in 1993. His store, Hobby Arena, stayed open until 2000.

Though he was not employed by the hobby manufacturing industry, he did sometimes confer with manufacturers such as Bill Cannon, Jerry Nelson and knew John Brobeck, both Junior and Senior, from his Plymouth experience. Peter was also fortunate to know many of the old timers such as Eddie Morgan, "Shorty" Wright, George Niebauer and "Babe" Dunning (of the Orange Crates).

Model Aviation Education

Teaching model aviation is something that Peter did in the past and continues to do. He has helped newcomers at the Nevada Aveites in the 1940s, at Livermore, California in the 1960s, at Oak Ridge, Tennessee in the 1970s, at his hobby shop in the 1990s and presently at his local Art Center.

Most of what Peter taught was construction, model aerodynamics, power systems and electronics (control).

Other Accomplishments

In 1959, Peter took up full scale flying and earning his pilot's license in 1960. He received an engineering degree from the University of Nevada at Reno in 1957. Peter also spent 36 years in nuclear power, propulsion, and weapons at the Lawrence Livermore National Laboratory. Peter recalled: "My first boss at Lawrence Livermore National Laboratory (then the University of California Radiation Laboratory) in the nuclear ramjet or Pluto program was Bob Meuser, sometimes (in the 1980s) Model Aviation magazine correspondent and of Great Paper Airplane and Lost Hills Free Flight fame."

(signed) Peter B. Mohr May 23, 2002

The following was published in the Las Vegas Review-Journal on August 16, 1950 with a photograph.

Model Plane Contestants

Peter Mohr, 14, and Vaughn Brewer, 13, both of Las Vegas, are shown above as they left by train Friday for Detroit, Michigan, where they are now competing against international model plane enthusiasts around the globe. The Last Vegas pair won their chances for the big meet by taking top honors in Nevada state contests over the past several months. The Detroit competition will run for seven days and both boys promised to return here with honors equal to their Nevada state championships. Plymouth Motors sponsors the contest.

The following ran in the Independent Coast Observer on April 30, 1993 with a photograph.

In a small shop crammed to the ceiling with balsa wood, paper model kits, engines, paints, kites and a myriad of other gadgets and gizmos, Peter Mohr plies his trade. Mohr is the proprietor of Hobby Arena, a hobby and craft store that opened in Point Arena earlier this year.

Hobby Arena sells everything from balloons and kites to model aircraft and Radio Controlled boats. Hobby Arena also offers repair and "fix-it" services, but the real emphasis is on modeling.

"I don't offer completed products," says Mohr. "I offer things that people use to make something to enhance their own time, with which they can be creative."

For Mohr, hobbies like modeling are a discipline, a practice, something that benefits the body, mind, and soul. He takes his work, and his business, seriously, operating within his own ethical framework. Mohr says he will not sell toys in his shop, nor will he sell someone a model that he believes will be too complex for them.

Mohr seems as much a guide as a retailer. He says his aim is to get people to "use their own creativeness" and likes to encourage the use of simple materials.

Mohr specializes in model aircraft – not the cheap plastic sort, but amazingly detailed balsa wood and paper replicas, many of which will actually fly.

"I grew up with model airplanes," Mohr explains.

Mohr says that early interest in aeronautics may have been the first step in his fascinating career as a mechanical and nuclear engineer with the Lawrence Livermore National Laboratory.

"I was an engineer at Livermore for nearly 40 years," says Mohr. "I went first to Livermore to work on the nuclear-powered ramjet program, the so-called 'Project Pluto,' back in the early 1950s. Fortunately, we didn't build it."

After Project Pluto was canceled, Mohr worked in the fields of nuclear power and propulsion for space exploration, and later in fusion power. During his years at the lab, Mohr authored more than 30 technical publications.

After retiring, Mohr moved to Point Arena, opening Hobby Arena. He hopes to move soon from his relatively cramped quarters off Main Street. Anyone interested in aeronautics, modeling or nuclear science would not regret a visit with Mohr.

The following is a letter that Peter wrote to Harold deBolt in 1995 about building a Radio Control system from a Berkeley kit in 1950 at the age of 15.

Peter B. Mohr 30151 So. Hwy. Point Arena, CA 95468 251 Danbury Rd. Wilton, CT 06897

Dear Hal:

You asked for it!

In 1950, I returned from the Plymouth Internationals having seen my first RC airplane (and lawnmower – both) courtesy of Jim Walker. I was hooked; and sent off my \$19.95 to Berkeley for the only RC kit I knew, the original Aerotrol. I was 15, beginning my junior year in (a Las Vegas) high school. I was impressed with my newfound knowledge of electrons, Volts, Amps and Ohms. (I wasn't supposed to learn of these things until the following year, but my chemistry instructor, who would also be my physics instructor, jumped the gun a little.)

I wasn't quite prepared for the contents of the kit when it arrived: this was supposed to be a radio control system! The receiver portion was the most believable; at least, it had a circuit board, relay, tube, and tuning capacitor. The transmitter wasn't quite as credible; a tube, capacitor, a couple of resistors, and some thin mahogany ply from which to build a box. The escapement was even worse: three thin folded pieces of brass, a (rubber band) prop shaft and what looked like a nail head and some wire. A Heathkit it wasn't!

I built the transmitter first. It didn't look like much. I asked a neighbor who was a technician ("engineer") for a local radio station and a "Ham" how I would know if it would work. When he learned that it was intended to work on (his) the 6-meter ham band, he choked, saying, "Where is the crystal, the filters?" "What crystal? What's a crystal," say I. To make a long story shorter, he showed me how to solder electronics style and gave me an old 16-inch transcription record (complete with recording) to make a "proper" (shielded) case. When I was done, I called him on the phone and told him I was ready to test it. Would he turn on his communications receiver and try to receive me? I had gone to the carpet store to beg two 10-foot bamboo poles to make a support for the 10-foot dipole antenna. Fortunately, my bedroom was a converted (20-foot long) garage. When I connected the transmitter, I could hear my ham friend's scream (from two blocks away) without the telephone. "Turn that *@#\$ thing off," he shouted. "It's wandering all over the place, blanking out the entire band!" The transmitter was "tuned" by squeezing the tank coil and jiggering the ceramic tuning capacitor. He kept saying, "I can't believe it; you're not going to use that thing are you?" For \$19.95 [equivalent to 200 bottles of dope], you bet I was.

At age 15, not much is daunting. I considered it a great success; he received me! Next, I built the receiver, which used a gas tube (XFG-I, I think). I wasn't about to involve my ham friend again. I fired up the offending transmitter and then the receiver and lo and behold, when I squeezed the tank coil of the receiver just so, the relay pulled in. Fat dumb luck!

The hardest job was making all those scraps of brass and wire jump together into a thing called an escapement – but I managed.

Meanwhile, I had settled on a Jasco Floater with a (OK) Cub .09 in the nose as the test bed. My reason for the choice was twofold. First, I couldn't afford lightweight "hearing aid" batteries for

receiver power. Second, I figured it would be slow enough that I would have time to correct my mistakes.

The escapement would hardly handle the rudder (trim tab) with push rods, etc., so I mounted it in the tail. I got it to repeat commands on the bench in a semi consistent manner and decided it was time for the first flight.

I took the whole mess (yes, 10-foot poles and all) to our flying field rather late one spring day. I used a Control Line pylon as support for the antenna, fired up the Cub and launched the plane away from where I was and ran back to the transmitter dangling from the dipole. When I gave a command, the tail would skid a little, but the nose would drop. I didn't have enough altitude for a complete turn, but it was rapidly getting away from me. I held it in a turn and it started coming around, but slewed into the ground some distance from me. As I ran toward it, I saw a bright light coming from the cabin where the receiver was. Somehow, the plate (B+) battery had shorted to the filament. Just before I got to it, the bright light went out – the tube had burned out. When I wrote to Berkeley for a replacement, they were out of stock. That ended my RC career until I was out of college and built a Lorenz MOPA transmitter and sent to Polk for a Wavemaster kit to put in my Livewire Champ. Some people never learn.

As a footnote, I was a charter member of the original Nevada Aveites with people like Carl Reid, A.W. "Shorty" Wright, Dick Enos, Eddy Morgan and George Niebauer (with whom I still correspond). There was never a better beginning into model aeronautics. Thanks for your good example and many years of leadership for the rest of us.

Sincerely,

Peter B. Mohr (Nuclear Power, Propulsion and Weapons Engineer, Retired)

The following is a letter that Peter wrote to Don Mathews about CG4-As, GHQ engines and the Nevada Aveites in 2002.

Peter B. Mohr (Engineer – retired) 30151 Hwy 1, P.O. Box 181 Point Arena, CA 95468

May 6, 2002

Dear Don:

Thanks for the article (June Model Aeronautics) on the CG4-A. I have an understandably fond spot for the only man-carrying aircraft built by coffin makers. I've built two or three of the ½-inch scale versions in my modeling career. I'm sure you'll get a lot of background contributions as a result of the article (I look forward to the sequel), so here is mine:

My late uncle (George L. Raymond) flew CG4-As and spent the entire war freezing his fanny off in Quonset huts in southern England, waiting for one (near disastrous) mission into Germany in

1944. He (uncle "Bud") had worked for Piper at Lochhaven out of high school (in 1940) and switched to Curtiss Wright Electric Propeller Division at Caldwell, New Jersey, as the war clouds gathered in 1941. In early 1942, he volunteered for pilot training (he already had his private pilot license) in the Air Corps. He was assigned to the new Bell A (or P?) – 23 Aircuda (?) (the twin pusher) which was considered by them to be another suicide assignment. Sometime in 1942, I think, I recall a feature in Life magazine titled "Big Washout in _____, Texas," when the whole group contrived to flunk bombardier training.

They were punished by being assigned to glider (CG4-A) pilot training. Uncle told of numerous stories of CG4-As being torn apart (and pilots killed) on pickup by hot-rodding P-38 pilots and landing in the midst of endless herds of cattle (there was no "going around") on the west Texas plains. He also considered the CG4-A to be a giant lightning rod.

After his only combat mission into Germany, in which German machine gunners raked the CG4-As from barn roofs, he went on with the infantry he had aboard because there was no provision for recovering the glider pilots after landing (crashing). He had stolen a side arm from a sleeping officer on the night of the mission – pilots were unarmed and expected to walk their way back through enemy lines.

When the war ended, he had essentially no "combat points" and was assigned to a year of occupation duty. He managed to fall down a manhole in Birchesgarten (Hitler's liar); breaking his leg and earning a ticket back home in 1946. He was rewarded with a "commercial" glider pilot's rating on his pilot's license.

Again, thanks for the article and the opportunity to share a bit of aviation lore. By the way, it was during his hospitalization in Germany that my uncle sent me a money order for \$20 (wow) to buy my first model engine (a GHQ – gasp!) and a G Line Shark (double gasp!). I finally made it with a Vivell in a Cliff's Trainer, as a member of the original (Las Vegas) Nevada Aveites with lots of help from George Niebauer.

Sincerely, Peter Mohr

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