



The AMA History Project Presents: Biography of L. GLEN SIGAFOOSE

Modeler since the 1920s



Transcribed & Edited by SS (03/2003), Updated by JS (10/2008), Reformatted by JS (02/2010)

Career:

- As a high school student developed and sold model airplanes
- Started Sig Manufacturing from his basement in 1951 to supply balsa wood by mail order
- By 1978 Sig Manufacturing had grown to an 80,000-square-foot building with 118 employees producing thousands of model products and kits shipped worldwide
- Glen designed, engineered, modified or built most of the machinery used by Sig Manufacturing
- Sold over 250,000 Delta Darts to the AMA at below cost
- Provided awards for the Nationals and sold materials to the Nationals hobby shop at cost
- Supported AMA FAI teams
- Sponsored contests at his own field in the late 1970s

Honors:

- 1968: AMA Distinguished Service Award
 - 1979: Model Aviation Hall of Fame
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The following information comes from a Model Aviation Hall of Fame application submitted by James D. Clark on behalf of Glen in December 1978. Glen was inducted into the Hall of Fame in 1979.

Glen Sigafoose during his youth was a builder and flyer of model airplanes. In his high school days, he developed several model planes, which he sold through small ads in model magazines. After his high school graduation in 1935 Glen devoted his time to learning mechanics, welding and other related trades. In 1937 he joined the staff of the North English Record in North English, Iowa, as an apprentice printer. He learned linotype operation and maintenance, presswork and general printing.

In 1951, Glen found that balsa wood sheets and sticks could not be purchased by mail. Glen, knowing that many modelers did not have a local hobby shop and having the shop equipment in his basement to produce sheets and sticks, bought 120 board feet of balsa logs and placed a classified ad in Model Airplane News magazine. This was the birth of Sig Manufacturing Company.

Today (1978) Sig Manufacturing is 80,000 square feet in buildings on two city blocks manufacturing the balsa, butyrate dope, modeling adhesives, epoxies, hardware, model fittings and model kits produced and packaged under the Sig label. Nylon and plastic parts are molded, metal parts machined and the kit drawings and instructions, labels and boxes and catalogs are

printed in-house. The Sig catalog with its large number of color pages and covers is a fine example of the color printers' talents. Different products for sale to the modeler number in the thousands and are shipped worldwide.

Much of the machinery in the Sig plant has been designed, engineered, modified, or built by or under the direction of Glen Sigafoose. Glen's knowledge of modeling, mechanics, engineering and the printing trade help enforce his policy of producing and selling at the lowest price to the customer.

Glen employs very competent model designers, builder, and flyers to develop his line of kits. He also kits winning and popular designs of models done by individual modelers.

Glen's support of the AMA includes over 250,000 Delta Dart kits (sold to the AMA below cost) for the junior programs. Glen has continued to support this program now administered by the HIAA by paying all the shipping costs. In addition to the above, Glen provides awards for the Nationals, materials for the Nationals hobby shop at cost and for many years has supported the AMA teams in FAI competition.

Over the years, it would be safe to say that Glen has donated prizes to thousands of sanctioned contests and continues to support contest nationwide with donations.

In recent years Sigs has sponsored Control Line and Radio Control (RC) Formula I contests at their field in Montezuma, Iowa. Next year (1979) will be the fifth annual International Miniature Aerobatic Club contests sponsored by the Sigs at their field. This contest is becoming one of the major aerobatic contests featuring models of full-scale aerobatic bi-planes and monoplanes.

The popularity of Sig RC kits has become so great that the Council Bluffs (Iowa) RC club, with the support of the Sigs, annually holds an AMA-sanctioned contest with entries limited to aircraft built from Sig kits.

Through the years, Glen has been unselfish in helping the small manufacturers of model kits in getting started by sharing his knowledge with them.

Time permitting, it would be possible to obtain thousands of testimonials of the support, encouragement and help Glen has provided to modelers over the years.

The contributions to the modeler, the hobby industry, the Academy of Model Aeronautics and to the world of modeling by Glen Sigafoose are indeed a grand total.

The following article about Glen and his wife Hazel ran in RC Sportsman magazine in February 1977.

Recently RCS has an opportunity to sit down with Glen and Hazel Sigafoose, the owner/operators of the famous Sig Manufacturing Company of Montezuma, Iowa.

Sig Manufacturing has been in business since 1951. Originally, as a distributor of balsa wood only and some retail sales, Glen has been a modeler since the 1920s, making his models then of bamboo and tissue. He did not see his first balsa until the 1930s. In those days, his interest was in rubber-power and Free Flight. During the 1930s and 1940s, he got into some Control Line. To say the very least, Glen has been a modeler most of his life.

Even in those early days, he realized the need for balsa distribution in the U.S. but it was not until the early 1950s that opportunity came knocking. Glen has not always lived in Montezuma; prior to his move to Iowa, he was a linotype operator for a small printing plant that produced a weekly newspaper in Montezuma. Hazel came to work at the printing plant and Glen taught her the linotype business. Glen and Hazel were married in 1942 and a few years later started to import and distribute balsa out of the family basement. RCS [RC Sportsman magazine] asked some questions and Glen and Hazel answered.

RCS: You said you have always been supplied by International Balsa Corporation; what was your first method of reselling balsa?

Glen: Initially we used classified advertising in any magazine that we felt the hobbyist would read. After a while, we expanded our advertising and our product line. The first kit we had was from the old Berkeley line. It was a Control Line AT-6 scale model from around 1962 or 1963. We also had a line of dopes and finishing materials. Then we added some hardware and soon we began to handle everyone's products.

RCS: While on the subject of kits, how much time does it take to develop one?

Glen: Well, about one year from prototype to product. It really is a very long process. Remember, it has to be right the first time it goes on the market; so we take a lot of care in what we do. The instructions, of course, are critical; they are written and rewritten over and over again. We send out about a half dozen kit samples to modelers and ask for their comments. This also helps us with the instruction and to further update the kit.

RCS: What kind of investment are you looking at with a new kit?

Glen: To get a new kit on the market can run as high as \$30,000 to \$50,000 *before* the first kit is sold. That means you must sell a lot of kits before it becomes profitable.

RCS: How big do you believe the model industry is today?

Glen: No figures really exist, but if you take the AMA figure of 60,000 as a base, I would say there are at least three or four times that many and even as high as perhaps one million when you include Free Flight, Control Line and Radio Control modelers we don't know of.

RCS: What do you think of business today; do you see any trends?

Glen: Well, new faces are appearing all the time, especially in RC, but Free Flight and Control Line seem to be somewhat static. I think Free Flight may be even on the decline because of lack of suitable flying sites. Many Free Flighters are turning to Radio Control. I also feel that today's newcomer is all new, meaning he has little or no past modeling experience. One dealer reported that maybe 50% of his business comes from modelers who have seen RC for the first time and then buys the whole thing – kit, radio, engine, and accessories. This kind of a trend is the reason for the exactness of Sig plans, kits, and instructions. We feel the new modeler can avoid that first time crash with better instructions. We want to put emphasis on the quality balsa kit and not on plastic ready-to-use products for the beginner. When we look at trends, however, the real growth is with the adult RC'er and we feel the Sig Kadet is ideal for beginners. The age of the new RC modeler seems to be in the 30s, but, of course, all ages are represented.

RCS: What will be next for Sig?

Glen: We have taken a hard look at the future; we will put less emphasis on scale and more on the sport aircraft. Scale kits are 50% more expensive to produce and that much more expensive to sell retail. We will also probably go to more hardware and maybe even wheels in our kits.

RCS: Do you ship products all over the world?

Glen: Oh, yes, but of course, the U.S. and Canada are where the bulk is sent.

RCS: Do you think you will ever become identified with a special radio or engine manufacturer?

Glen: No, it is not likely; we have no plans to do anything like that.

RCS: How did Hazel get involved with models?

Glen: She has always been interested in models, of course, but the business came first. Then about three years ago, she started in RC with the help of Maxey Hester and me. And this year, 1976, she flew in the Canadian Nationals.

Hazel: It was not as easy as it sounds, especially with both Maxey and Glen giving instructions; Maxey was yelling "up" and Glen was yelling "right" and then "left" and sure enough, I crashed, so I gave it up. Then later Maxey put together a Kadet for me and he and I went out alone. We finally got together, thumb to thumb so to speak – I learned how it was done. A few days later I soloed and three weeks after I started flying I entered my first contest.

RCS: Hazel, do you think full-scale flying is related to model flying?

Hazel: At first no way; the feel is entirely different. Going from models to full-scale is much easier than the other way around. It was not until I could sit on my toolbox and fly my RC plane that I felt I could associate the two. I have 5,000 to 6,000 hours in full-scale aircraft and I have an instructor's license, so I know the difference.

RCS: When did you start flying full-scale aircraft?

Hazel: Both Glen and I started flying full-scale planes in 1957 and now we have a 3,000-foot mowed grass strip that is lighted with 11 planes based there. We have a Bonanza E-33A and together we have to single-seat Pitts, my Cub, and an EAA Bipe. Maxey has his Cessna 206 and a Pitts and Hank Polhmann has a Skyhawk, also, based there. The color of my Cub is another story. The Cub is a total rebuilt job. Maxey did all the work and when it was ready to be painted, I wanted yellow and white, Sig wanted red and white and Maxey wanted blue and white. Maxey did the painting.

RCS: Glen, how much of the finished product comes from your own shop?

Glen: We do everything at Montezuma, except for the screws, nuts and washers; we do all of the die cutting, injection modeling of plastics, vacuum molding, metal work and wire forming. We even print our own catalog and, of course, we print our own plans. We have four offset presses and four letterpresses, plus our own typesetting and a silkscreen plant for decals. So, you see, we are pretty much self-sufficient. We get most of our designs from our staff. Jeff Foley has just joined us and, of course, Claude McCullough, who works as an RC designer along with advertising, Mike Gretz is an RC and Control Line flyer and also a mold maker.

RCS: With your latest expansion, how many employees do you have now?

Glen: We now employ 118 people in 80,000 square feet of plant and office space.

RCS: One last question, do you get many visitors to Montezuma?

Glen and Hazel: We sure do and we love it. During the summer, we have an average of eight tours of the plant a day and the modelers are always welcome. Come see us any time, we are just eight miles off I-80. Next time you are in the area, stop in and say hello.

The following article was published in the October 1980 issue of Model Aviation magazine.

Air Show Crash Claims Glen Sigafoose, 62

He loved life and he enjoyed it thoroughly, giving of himself all the way. Glen Sigafoose was the best proof of the philosophy that casting your bread upon the waters will return the investment a thousand-fold. He always ploughed back the surplus from his labors and saw the name Sig become world famous and his company multiply its growth over and over.

Just a few months earlier, he was recognized at Toledo by induction into AMA's Model Aviation Hall of Fame – a most popular choice. He accepted the accolade with his typical quiet and shy manner, in deceptive contrast to his dynamic achievements.

We told the basics of Glen's story just a short while ago, in the Hall of Fame report, July 1980 issue of *Model Aviation* magazine. But the report was too brief to do Glen justice- it could only skim the surface. Like a legend, the stories about Glen Sigafoose will be heard for many years to come. His contributions, his efforts, his effect on so many people in the model aviation world will linger in memories that cannot fade easily.

The 'old timers' at AMA Headquarters will remember the lean days of "dump the deficit" campaigns when AMA annual budgets were often in the red. Frank Ehling knew that he could count on Glen to help with funds, supplies, and encouragement when some others in the industry were critical rather than helpful. The name Sig was always to be found listed among Academy Nats sponsors, advertisers, and supporters. Furthermore, no one had more to do with the success of AMA's Delta Dart program for youngsters than Glen. He made AMA Cub kits by the hundreds of thousands, at no profit (more likely a loss) to his company.

AMA's teams to world championships were particular beneficiaries of Sig generosity. He supported teams of all categories and more team shirts have sported the name Sig than any other; not because he asked for the recognition, but because the team members were proud to acknowledge the source of support. It is fitting, therefore, that among the family of Sig employees, several are former world championships team members.

To work for Sig means joining the Sig family. To Glen and Hazel, the people who worked for them were more than names on an employee payroll. First names were used more often than last names, like with sons and daughters.

Glen loved to fly, so he left us doing what he enjoyed most. But he also loved to be on the ground tinkering with machines and gadgets in the Sig plant. He was a super machinist, technician, engineer, toolmaker, designer, etc.

Mostly, however, he was a problem solver. He got tremendous satisfaction from making something work that nobody else had. One of his many successful production machines that he liked to demonstrate was one that automatically counted straight pins for packaging, brilliantly simple and ingenious.

He's left his mark all through the huge sprawling Sig plant. When everyone else quit for the day, Glen could often be found in a far corner of one of the many buildings, tinkering with some idea, process, or machine; trying to do something better, cheaper, or simpler.

If ever there was a monument to free enterprise, the Sig Manufacturing Company is it. All the great virtues, such as perseverance and hard work, were ever-present in the Sig history. Glen believed and lived the golden rule of 'do unto others as you would have them do unto you.' As a result, those who will carry on the Sig name are determined that it will live on in the tradition that Glen Sigafoose established.

To Hazel, Maxey, Claude, Hank, Paul, Mike, and all the others in the Sig family who have accepted the challenge to keep things going whole Glen is away, the rest of the model aviation

world has extended best wishes and encouragements. There is also a movement underway to promote a Glen Sigafosse Memorial Fund for scholarships to young modelers. Details are being developed and will be announced shortly, but many donations have already been made.

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