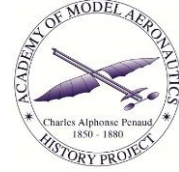




The AMA History Project Presents: Autobiography of JESSE F. SHEPHERD, SR.



June 10, 1921 – June 14, 2018 Started modeling in 1932

AMA #4257

Written & Submitted by JFS (12/1999); Transcribed & Edited by SS (8/2002), Reformatted by JS (01/2010); Updated by JS (09/2015, 06/2018)

Career:

- Participated in his first local contest in 1936; won first place in the Most Original Design category with a flying wing
- Was active in model clubs starting in high school
- Attended Dallas Aviation School to work for a mechanic's license
- Received a Civil Service Appointment in 1942 as a model builder for the National Advisory Committee for Aeronautics (NACA) Research Center in Hampton, Virginia
- Assigned to the NACA Pilotless Aircraft Design Engineering Group in 1948
- Worked as a design engineer for Convair/General Dynamics from 1951 to 1970
- Taught model building classes at G.D. and city recreation centers for many years
- Charter member of the Galveston Gulls and the NACA Brainbusters model clubs
- Designed rubber and gas-powered Free Flight models and flew at Gulf Coast and East Coast contests; designed and flew pioneer Radio Control models on the East Coast
- In 1949 and in 1951 was known as the first to fly Radio Control in the Fort Worth, Texas, area
- Built only three kits models; all others were original designs and were copied by others; was known as an innovative designer, not as a "contest hound"
- In 1951 established Control Products to sell handmade Radio Control receivers, transmitters and equipment through hobby shops and mail order
- Was a contest board member for AMA District VIII for three terms in the 1950s
- Director of indoor events for the 1952, 1956, 1960 and 1965 AMA Nationals (Nats)
- Director of many outdoor events of the Texas and other Nats through the years
- Was an alternate to the U.S. Nordic FAI International Team for three programs
- Active as a competitor in indoor contests from the 1940s to the present (2002)
- Ran non-AMA contests for the Convair/General Dynamics Recreation Club
- Ran four to seven AMA-sanctioned local indoor contests a year for approximately 20 years
- Between 1979 and 1981 presented 36 flight demonstrations and lectures to elementary schools in Richardson, Texas, reaching 3,000 children; published article "Show and Tell" in the AMA's Model Aviation magazine to encourage others to do the same
- Manufactured starter level model kits under the name of Aero-Crafted Models from 1990 to 1995; one of the designs, Charger, won first and second places in the Junior Catapult Glider category at the 1991 Nats
- Life member and one of the founders of the still active Fort Worth Planesmen model club
- Member of the Dallas Aircraft Flyers; in 1976 founded the still active the Bedford Indoor Flyers (home of over 30 AMA Cat I records)

Honors:

- 1989 and 1996: AMA Distinguished Service Award

- 1997: AMA Fellow
- 1998: AMA Pioneer Award at the Celebration of Eagles
- 2015: AMA Model Aviation Hall of Fame Inductee

The following was written by Jesse in December 1999.

A Modeler's Avocational/Vocational Biography

I was born in Galveston, Texas, on June 10, 1921. My first interest in model aircraft started in 1927 when I saw a paper airplane fly away in a thermal! No, I did not know what a thermal was, I just knew then that I would find out about the miracle that I had just witnessed!

In 1932, an old Model T Ford driven by a drunk driver crushed me against an iron fence. During my four-month stay in the hospital, being rebuilt by the best doctors in the south, someone brought me a wire-frame Japanese model airplane. I flew it across the hospital ward a few times and soon discovered the art of patch and repair, so necessary for successful model aircraft flying! Slick lunch napkin paper for re-covering, twisted tongue depressor for a new prop, etc. At age 10, I was hooked!

I struggled through the next few years not knowing any modelers or anything about models except some pine box profiles that somewhat resembled airplanes I saw flying by. Then my sister Ollie met a guy, Charles Bullock, who knew all about models and introduced me to strip and sheet balsa wood that he sold out of his home. Later I found wood, tissue, rubber, etc. in a hardware store in town. Eureka! I was now in business! I didn't get much help from Charlie, as he was more interested in my sister than my modeling efforts, except to keep saying each time I showed him my latest, "Too heavy!" (It was really the best critique I could have been given!) I kept trying with ever increasing success, until by 1935 I was building nice light models, but could only fly them on a calm day (very rare on Galveston Island).

In 1936, our local newspaper announced that they were sponsoring a model aircraft contest to be held at our local airport. That was to be my first contest as I had never seen any other models or even heard of contests before! I prepared a new model, entered the contest and won first place in the Most Original Design category with a good flying wing model that actual flew. The model had "push and pull" props, with over and under the motor stick rubber motors. The wing was mounted on wire mounts over the motor stick causing the model to loop, but with each half loop, the model would roll and continue on upward until the power slowed and the model would glide down to the ground. I still have the newspaper clipping of that contest.

From then on, after seeing the other designs and finding other modelers in my high school, I learned quickly and even learned to put the thrust line above the wing to stabilize a tailless model. I became quite active with the local flyers, building many stick and cabin models, including a 29-cent Burd Korda, my only rubber-powered kit model.

In 1938, Robert Osburn became our club mentor. He had just graduated from A&M and was the city engineer of Texas City. He would buy our kits and modeling things for us and we would pay him back at 50 cents a week. I chose as my first gas-powered kit model a Comet Clipper with a used Gold Seal Ohlsson engine. The Clipper was my only kit from that point on as I have built and flown my own designs since then.

A note about the Clipper: After a year or so, when I knocked the nose off, as eventually happens to most models, I cut off the damage even with the wing leading edge, added a new firewall and half balsa stab engine cowl blocks. To balance the new rig, I moved the coil and battery from its long tray to the firewall and replaced the Ohlsson with a \$10 Brown D. The new arrangement was more stable and with the L.G. at the L.E., it took off smoother. The Gold Seal was known for leakage around the clamp-on exhaust/intake manifold, and I had been losing flight time cutting gaskets from tissue to prevent the leak (too loose and the leak caused erratic running; too tight and the clamping would bind the cylinder and the motor wouldn't run). The Brown gave me many more flights than I had ever made before. I was given a new Ohlsson 19 by my sister Ollie and I lost no time in designing a new ship incorporating a short nose and other ideas that I thought would help. These models started a list of designs too boring for my readers and too long for me to remember.

In 1941, I was signed-up to go to Texas A&M, but when my bank loan fell through, I decided to enter Dallas Aviation School instead to get a mechanic's license. While at Dallas, the attack on Pearl Harbor was announced on December 7. That year was a good learning experience, but I wanted to get into the war effort. I knew that I was not eligible for the military, but I had heard that the government was hiring model builders to work in the secret aero-research labs as wind-tunnel model builders, so I applied for this wartime Civil Service job.

In 1942, the National Advisory Committee accepted me for Aeronautics (NACA) as a model builder at their aeronautical research center in Hampton, Virginia to work in their Structural Research Laboratory as a sheet metal model maker. Our task was to build full-size structural sections of wings, bodies, etc., to test for stress and fatigue failure. All this and not a piece of balsa in sight! After a six-year apprenticeship, I was asked to join engineering in the Pilotless Aircraft Design Groupe, a group of model designers who were designing rocket-powered research models used to explore supersonic phenomena. Some of the models were basic research models while others were scale configurations of research aircraft. Using huge rocket boosters, these models were launched over a test range off the eastern shore of Virginia. The performance data from the onboard instrumentation was "telemetered" to a ground-based recorder for future study and analysis. This group was the nucleus of what later became known as NASA, the space program, which absorbed the old NACA research responsibilities in the 1960s.

Due to technical and academic classes while an apprentice, college courses from the University of Virginia Evening College and my four years as a rocket model designer, Convair Aircraft Company of Fort Worth, Texas, asked me to help in their rocket and wind tunnel model design group. They needed experience in the design of their rocket-powered B-58 Supersonic Bomber model that was to be launched by the NACA Lab where I had been, so I accepted. I worked for six years in that group designing and testing rocket models for NACA tests and wind-tunnel facilities around the U.S. I later worked as a design engineer on other design programs such as the ejection seat for the B-58, the bomb bay door system that "snuggled" an F-84 into the "belly" of the B-36 and designs for secondary controls for the F-111. In 1970, when the F-111 design effort phased-out, I and 4,000 designers and engineers were phased-out, too. I continued my electro mechanical design career in other corporations in the area until my retirement in 1990.

While at Convair/General Dynamics, I was a leader in their model club and for years, I taught model classes every Tuesday night in their recreation center and some classes at the Fort Worth

R.D. Evans and Dan Dansciger Community Centers. Most of the techniques that I taught I had learned from my 10 years at the research center. I worked, learned, and flew with some of the most talented and creative model designers of that “Golden Era” of modeling! Some of these greats were Sal Taibi, Joe Dodson, Paul Marschal, Frank Parmenter, Benny Cleveland, Charles Folk, Dick Everitt, Dick Sladek, Bill Poythress, John Worth, and my engineering mentor, C.C. Johnson. Many others came and went during that period. Since I was more of a concept and innovative model designer than a contest hound, I didn’t become famous like many of these guys, but was well known for my new concepts and ideas. I was a charter member of the Brainbusters Model Club of that area and in 1992 my son, Jesse, Jr., and I attended the 50th anniversary of that still active club.

In 1949, I became very active in Radio Control with one of my best friends, John Worth. Individually and collectively, we worked up many control concepts and flew many successful Radio Control systems. We flew in many of the East Coast pioneer Radio Control contests where it was quite a feat just to get your model back to the field. All of this was in the early development stages of Radio Control flying. John Worth had started Control Research Co. working with Ed Lorenz of New York. We became very busy building receivers and transmitters, testing and flying prototypes of Ed’s ideas, while packing and shipping out receiver/transmitter kits to eager Radio Control neophytes around the U.S. When Ed designed the first 27.255 Mc. Citizens band Radio Control equipment to qualify for the FCC, he sent the data to us and we built the second and third systems to meet the new FCC frequency.

In 1949, I designed and flew Southwind, a 60-inch span, Ohlsson 23-powered ship that handled well and served as a test bed for many dozen of flights using the new receiver designs.

Just before leaving for the new job in Texas, John and I designed two separate shoulder-wing Bubble canopy models. He flew his in 1950, but I didn’t fly mine until 1951 in Fort Worth where it got the name of Bubbledancer. When I arrived in the Fort Worth area around 1951, I began flying my old trusty, but oil-soaked Southwind Radio Control job and started a stir as the first Radio Control job in the local flying sites. Many of the modelers wanted units like mine to install in their old Bucaneers, etc., so I would build receiver and transmitter sets so they could fly. Before long, I was kind of forced into starting Control Products in order to legalize my efforts. Since I was working 10 to 12 hour days at Convair, I stayed very busy. I had obtained some sources for hard-to-get items and before long, I was shipping tiny components and relays to Radio Control guys all over. Wind tunnel test trips for Convair sometimes lasted three months, which meant that orders stacked up back home while I was out of town. One over-anxious customer, who didn’t realize that I was just trying to help, threatened the postal authorities on me, so I quit cold! I stopped all of my shipping to those outside of my own area, but continued on as best I could locally until the middle 1960s. Along with all of my Radio Control fun, I stayed with my first love, Free Flight. I was active in all phases – Wakefield, Nordic and all classes of gas. I was contest board member of District VIII for three terms in the early 1950s when only two board members took care of all AMA categories. I went to contests throughout my district as their AMA representative. My district was from western New Mexico to eastern Arkansas/Louisiana and from south Texas to north Oklahoma! Many hundreds of miles in any direction, but of course, I was just about in the middle of it all. I was director of the indoor events at the Nationals (Nats) in 1952, 1956 and 1960 in Texas and was Nordic, Wakefield, Payload and Rise-off-Water (ROW) event director in most of the Texas Nats. I was a member of the volunteers who risked their necks aboard the Navy Shuttle of event directors for the 1965 Nats in

Philadelphia. Somewhere in the middle of all this, I managed to be runner-up three times to Herb Kothe, the Nordic winner from this area to go to the Internationals. (The dates have been long forgotten.)

Due to a heatstroke while chasing a Nordic in the late 1950s, I stopped all Free Flight except fun flying, club events and to help my son during his Free Flight competitions in the 1960s. I have been active in indoor events as a competitor, contest director since 1964, and ran some non-AMA events for Convair. I now run about four to seven AMA-sanctioned indoor contests each year with occasional help from others at the nationally known Boys' Ranch Gym in Bedford, Texas, the home of over 25 Cat I records.

From 1979 through 1981, I presented 36 flight demonstrations and lectures to the elementary schools of Richardson, Texas as a part of the "World of Wonder" program. Over 9,000 kids were exposed to models from the simple to the complex with emphasis on the U.S. entries in the international competitions as compared to the Sport Olympics. This story was published in the January 1982 issue of Model Aviation magazine.

As a retirement project from 1990 to 1995, I manufactured starter level model kits under the name of Aero-Crafted Models with limited production runs of 1,500 units for only 13 hobby shop outlets and mail order sales. This kept me busy, but not over-run. Skooter, a 16-inch span all-balsa Rise-off-Ground (ROG) model was all fun. Charger, a catapult glider of 12-inch span won first and second in the junior category at the 1991 Nats in Johnson City, Tennessee and Sky Guy and Little Guy, as beginner gliders for the school market, completed the listing. A limited run was made of 100 Skoots, a 24-inch span, 6-1/2 ounce, two-channel, .010/.020 Cox-powered Radio Control job that sold out in a few months due to nice plugs written in some of the magazines. Flying in contests since then has kept me selling the plans at many of the Small Steps fun-flies.

I sold my business and tooling due to a balsa dust induced asthma problem. I am now in good health, even though I sleep with oxygen. I am still active in flying Radio Control electric-powered models, but I do keep them small and low-key, such as Electro-Skoots models of the Skoots design and a 48-inch span electric glider.

I am a charter and life member of the Fort Worth Planesmen, a member of the Dallas Electric Aircraft Flyers and the group called the Bedford Indoor Flyers. Even though I had received a Superior Service AMA award earlier, in 1989 my peers nominated me for and I was presented with an AMA Distinguished Service Plaque that was inscribed with the following:

*"In Recognition Of His Dedicated Help
Of Beginners Of All Ages,
And Continued Support for All Phases
Of Aeromodeling."*

I do not think that I could have accepted it had it been labeled differently as that had been the heart of my efforts through the years. In 1996, I was honored with another Distinguished Service award and in 1997 was awarded an AMA Fellowship. Only my peers know why I have been "honored" by these awards as I have only done what seemed to me the thing to do whenever it was needed to be done. In 1998 at the AMA Celebration of Eagles II in Muncie, Indiana, I was

honored by being one of the many old timers who received the AMA Pioneers' plaque; it completed my Wall of Honors Plaque display.

Through all of this, I am proud to have had the most supportive and patient wife and family a modeler could have. My wife and two daughters quietly put up with most of our vacations being trips to the Nats, while my son built and flew my designs when he would have rather built the snazzy designs in the magazines. My wife, Jenny, was my chief helper in most of the classes that I taught and even though she was not a modeler, she was very good in instructing and communicating.

One of the highest honors through the years was seeing many of those that I had taught, both in my engineering work and in modeling, pass me by and become more successful than I had been! Those that I have instructed have made me proud. My son, to whom I taught modeling, is a better craftsman than I am and two of the "right-out-of-college" men assigned to me to break-in to the engineering world later became engineering supervisors.

I still design and fly indoor electric-powered models, some scale and some strictly endurance. If my health holds out, my wife and I will be going one more time to the Indoor Championship in Johnson, Tennessee. My plan is to continue until my mind no longer thinks of new designs, new concepts, and new ideas. I have been blessed with a creative and artistic spirit that has kept me curious and young. At one time, I was active in oil painting and in original ceramic creations, but I found that I couldn't work 10 to 12 hours at work and have time for modeling, family, and ceramics, so the ceramics were the first to go!

May the creative urges spring forth from our youth like never before and keep them busy and productive!

May my tombstone read: "He was a good husband, a good father and a good modeler – in that order!"

*(signed) Jesse F. Shepherd, Sr.
December 13, 1999*

The following article about Jesse ran in the April 1981 issue of Letter of Recognition, a publication for the employees of Recognition Equipment Incorporated.

That Magnificent Man and His Flying Machines: Focus on Jesse Shepherd

Hundreds of eager children sit cross-legged on the shiny wooden floor of the Lida Hoe Elementary School gymnasium. They watch closely as the gray-haired man in the brown suit approaches their group. In his hands, he grasps an oddly shaped, pale-colored object that in some way resembles a paper airplane.

After a brief prologue which all of the children hear, but only some care about, the gray-haired visitor attaches a metal cylinder-like thing to one end of the filmy apparatus and begins turning a small crank on the cylinder. With each additional turn, anticipation rises among the children.

At last, he stops cranking and separates the cylinder from his device. The gymnasium is hushed as the man carefully raises his apparatus and, gripping it with two fingers ever so lightly, he releases it – and it flies!

The students applaud, laugh and point skywards as the slowly hovering thing dips, glides, rises, floats and circles above them in a wide and graceful arc.

“What keeps it up?” some kids shout.

“It’s going too slow!” exclaim others.

“Look – it’s going to hit the wall!”

“It bounced right off!”

“How long will it go?!”

The students are joyously fascinated as the strange-looking craft collides with walls and ceiling, but remains in flight – flying, flying, flying for a prolonged two-minute span that seems to stretch for hours.

Suddenly the object’s propeller stops rotating and the queer bird falls to the floor in a remote corner of the gymnasium. As the gray-haired man moves to retrieve his flying machine, the delighted youngsters clap hundreds of small hands spontaneously out of purest delight and sincere appreciation.

“I made my first model aircraft in 1932,” says Jesse Shepherd, senior design specialist in Recognition’s postal engineering group. “Since that time, modeling has represented a fulfilling, creative outlet for me – a way to use engineering efforts to answer engineering challenges.”

Jesse has designed and built nearly all of the models he has flown over the past half century. Almost all of his modeling skills have been applied to Free Flight craft: those that fly by themselves, are self-stabilizing, and use only rubber band power. He finds these Free Flight flyers more challenging than the more popular, technologically sophisticated machine-powered and Radio Controlled types.

“I always emphasize ease of construction and simplicity in my models,” explains Jesse. “They are built primarily of extremely lightweight balsa wood, which comes from rain forests of Ecuador. The wings are made from film of acetate solution. Most of these models weigh far less than a single penny and (with proper engineering) can stay airborne for many minutes by means of rubber band energy.”

Since 1936, Jesse has been flying many of his models competitively. His efforts have won many awards including second and third place honors in national competitions. From 1955 to 1957, he was an alternate member of the U.S.A. glider team for international tournaments. In the 1975 Houston Championship competition, one of his craft stayed up for 20 minutes. This particular model had a 26-inch wingspan and a 22-inch propeller that turned at a rate of less than one rotation per second.

Jesse is presently a leader member of and authorized contest director for the 80,000-member Academy of Model Aeronautics. Locally, he participates with the Fort Worth Planesmen Model Club.

Prior to coming to Recognition, Jesse had applied his aerodynamic interests professionally for many years. In 1941, he was hired as a wind tunnel aircraft testing model builder by the federal government. Later, he worked in one of the government's engineering areas as a designer and builder of rocket-powered models. Then, for 20 years, he was a senior design engineer in wind tunnel model design for General Dynamics.

"I really find model aircraft endlessly fascinating," says Jesse. "I hope eventually to publish some articles on model aircraft construction and applications. I also hope to expand my many different endeavors in this hobby after retirement."

Despite his enjoyment of competitive modeling, Jesse finds his presentations at local schools the most rewarding aspect of his avocation. During the past three years, he has given his model aircraft presentations at nearly 36 schools throughout the Richardson area north of Dallas as part of that community's "World of Wonder" series sponsored by the schools' library department. These presentations last for about 45 minutes, during which Jesse explains very simplified rules of aerodynamics while showing and flying five or six models.

He explains, "At my presentations, I try to destroy many of the myths schoolchildren have about model aircraft. I want to expose the students to some of the many beautiful realities of flying without the roar of engines, and I try to show them some ways that they can achieve success while having fun and learning at the same time. Offering these programs is extremely satisfying."

His recent visit to Recognition's "adopted" school, Lida Hooe Elementary in Oak Cliff, was his first venture into the Dallas school district. He found this opportunity especially rewarding.

"I was greatly impressed by the interest and behavior of the Lida Hooe pupils," Jesse says. "Mr. Ross, the principal, is obviously eager to expand his students' horizons, and it was easy to see why his efforts have been so consistently successful. His incentive system works well, and I was glad to participate in Recognition's community service program to help support this exceptionally fine school."

Jesse Shepherd submitted the photographs appearing on the next few pages.

GALVESTON, TX.
"DAILY NEWS"

WINNERS IN RECENT AIR PLANE MODEL CONTEST AUG. 11, 1936



—Photo by Verkin.
Winners and officials in the recent airplane model contest sponsored by the Junior Commercial Association are shown above. Standing left to right are: A. C. Becker Jr., Bill Sievert, Clarence Stoneburner, Charles Newding, Dr. W. E. Huddleston, Gus A. Andersen Jr., Maj. L. M. Fields, Charles Bullock, R. B. Lancaster and Lawrence Giuliani. Kneeling are: Wade Hoecker, Eddie Shields, Carl Phoenix, Jesse Shepherd and unidentified. Little Miss Maria Tom Squires is standing in front of Dr. Huddleston.



Original Class "A"
1941



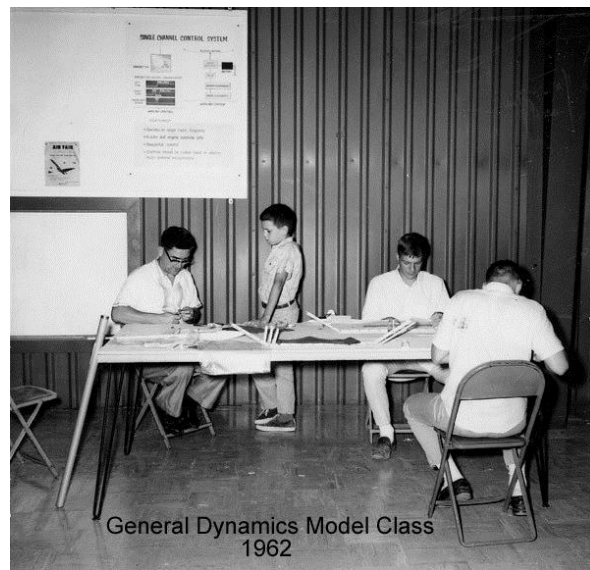
"Southwind" First R/C Job
1949-50



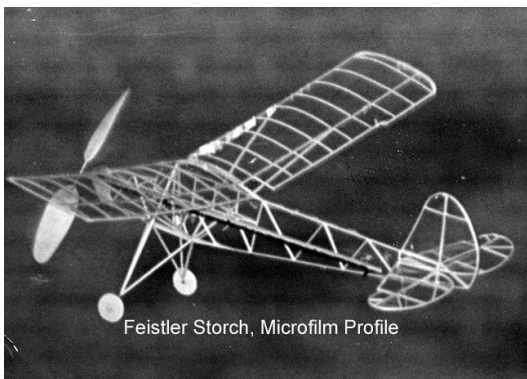
"Bubble Dancer" 2cnd Ever Built
1950



"Skrambler" Dallas, Texas
1953



General Dynamics Model Class
1962



Feistler Storch, Microfilm Profile



Johnson City, TN. Championships
1989



Model Airplane Lecture and Demo
1980



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