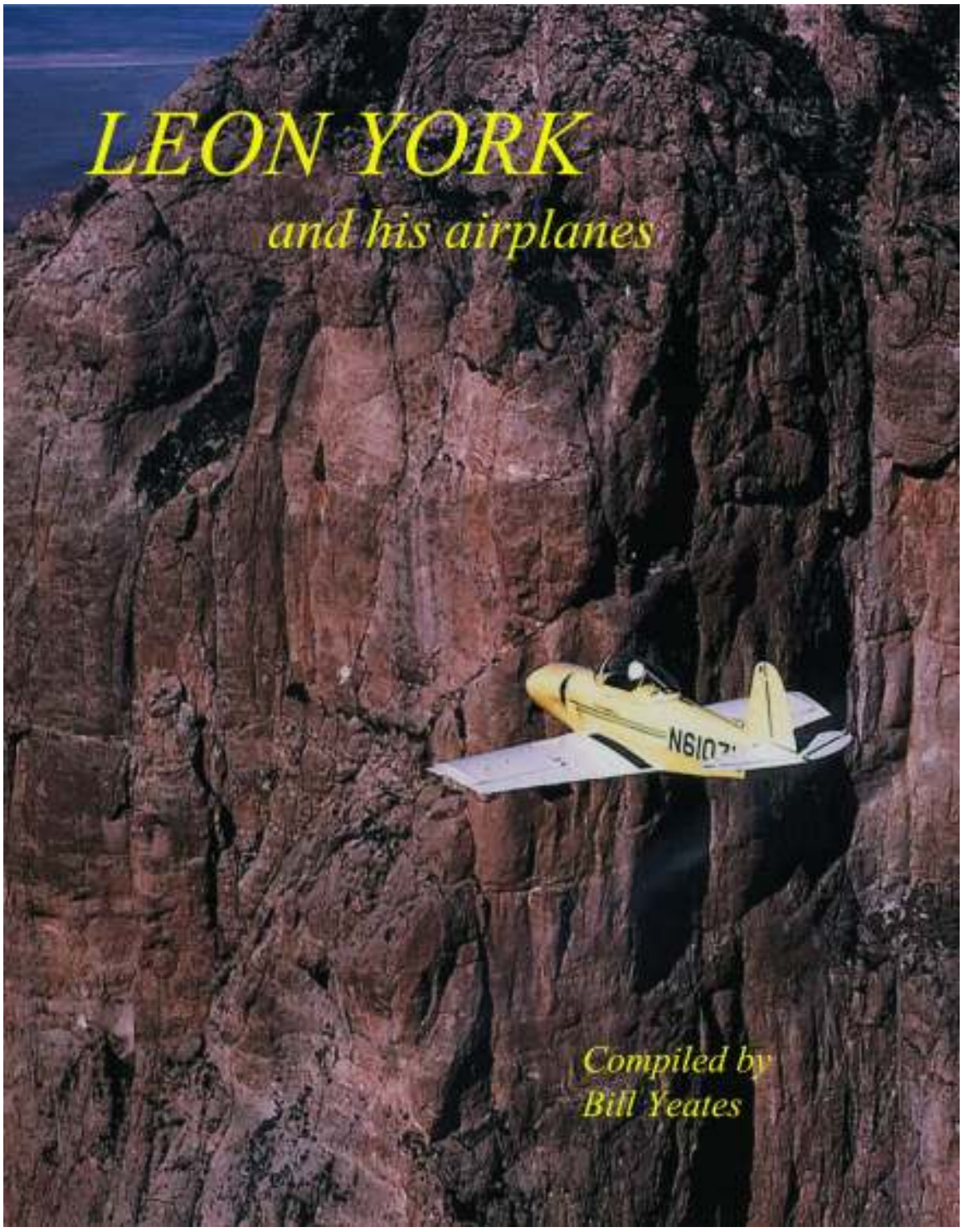
LEON YORK
and his airplanes
Compiled by
Bill Yeates

**LEON YORK AND HIS AIRPLANES**

Leon grew up in Midland, Texas. Interest in aviation began early, when he and his brother would ride their bicycles whenever they saw an airplane landing at Sloan airfield (later Midland AAF and then Midland-International). However, it was not until the early 1940's that he actually began taking lessons in Piper Cubs and Porterfields.

His flight training was interrupted by WW2. When he tried to enlist, there were no openings in the Army or Navy, so he went into the Coast Guard in Houston. After a school in New York, he was assigned to the largest ship the Coast Guard had. He had a trip to France via Gibraltar. Later, he went to the Pacific and went through the Panama Canal several times. He managed to get some flying with his Commanding Officer who had a plane.

After the war, he resumed his training and got his Private Pilots License in 1946. This was followed by Commercial Pilots License in 1948, Instrument in 1958, Multi-engine in 1959, Glider in 1973, and finally, a Commercial Glider rating.

In 1949, Leon became interested in building an airplane. What he went through in building the Y1 and Y2 is told in his own words in the following two articles he wrote for TO FLY magazine. Later, in the early 1990's he built the Longster. Leon is a longtime member of the Experimental Aircraft Association (EAA) with membership number 57.

He became an aircraft dealer, buying airplanes in the East and selling them in the West. As a result, he flew over 60 different types of aircraft. Once he bought a surplus Stearman for $700 and flew it from Ft. Worth back to Midland in the winter. When he landed, he was so cold, he had to be helped from the open cockpit.

His logbooks show flights to Arizona, Florida, Oshkosh (several times), Mexico, and Panama City, totaling almost 7000 hours. In all that time, he had only one accident – a belly landing at Midland.

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## THE WAY IT WAS

by Leon York, SAA 2492

My interest in airplanes started when I was a very young boy. We lived in Midland, Texas, and when an airplane flew over low and headed west, my brother and I knew it was headed for Sloan Field (later Midland Army Air Field, MAF, and now Midland International). We also knew that if we started immediately on our bikes, we just might get there before it took off again and continued on west. It was eight miles. Many times we made it in time. The Army had a sergeant stationed there that refueled the Army planes that passed through, so we got to see all the latest types. Most were open biplanes at that time. This interest got us started building model airplanes.

I started flying lessons in 1942 in Porterfields and Piper Cub trainers, but this was interrupted for a few years during WWII, and I finally soloed in 1946. About this time, I began to think of building my own airplane. Homebuilt airplanes were illegal in every state but Oregon, so I decided to build one anyway and just fly it around the ranch in New Mexico where I lived at the time. No kits and only very rudimentary plans for rather old basic designs were available. The plans left a lot to your imagination, and I wanted more than something that would just fly. I wanted a small plane that would be fast for its horsepower and be aerobatic as well. I wrote a letter to Steve Whittman and asked for his help, describing what I expected to build. He referred me to Curtis Pitts. I wrote to Mr. Pitts but got no answer.

Of course I was discouraged but not enough to stop me. My only experience in designing was that of free flight and control line model airplanes, but I set out to design my airplane. It was to be a small single seat, low wing, tail wheel type powered by a 65 hp engine. The year was 1949. The basic design work took about two years, and during this time, I began looking for any part I could get CHEAP. A friend of mine who was a mechanic for Cutter Aviation in Albuquerque learned of my plans and gave me an airplane if I would haul it off. It was a Taylor Cub (later Piper Cub) that had blown over in a windstorm. They had removed the engine, instruments, wheels, etc and drug it off to the bone yard. I rushed to Albuquerque before he changed his mind and hauled it to the ranch. Next, I heard of a Taylorcraft L2 in Santa Fe that was for sale. It needed to be completely rebuilt, overhauled, and recovered, so I decided to use it for parts. I paid $250 for it. At that time, you could buy a good flying L2 for $400, so it was not worth rebuilding. Besides, it was not what I wanted anyway. I needed a special rack for my pickup to haul the wings of the L2 home, but I did not know how to weld. I went to the airport at Las Vegas, NM and got a very good A&E, Gilbert C. de Baca, to teach me how to weld with a torch. The rack would have been welded up fairly quickly by arc welding, but I needed to learn and practice torch welding in order to build my airplane. The rack

completed, I hauled and towed the L2 to the ranch. With the wings on the rack and the tail tied in the back of the truck, I towed it backwards right down the highway.

By this time the design was just about finalized. In order to calculate the weight and balance, I calculated the weight of every piece of tubing that was to go into the fuselage and tail and everything that was to be attached to them. This was before computers, so all was done with paper and pencil. One important thing I was not sure of was the stress analysis. I decided that I would have to go to the CAA (now FAA) and tell them of my plans to build an airplane, hoping to get an X license for it. To my surprise, they were very receptive to my idea. I told them that I needed help on the stress analysis, and they said there was no one there to help me, but they would see what they could do. About two weeks later, I received a call from a CAA engineer in Los Angeles. He knew of my plans to build an airplane, and said he would come to Las Vegas, NM and go over my plans. I met him at the local hotel with my plans in hand, and he proceeded to take out his slide rule and do a stress analysis. I was completely flabbergasted. He had several reference books he used also. We spent all day working on it. He was not only an engineer but also an enthusiast and was very interested in my project. He made a few changes in tubing sizes and pronounced it a sound design. I was elated to say the least. Can you imagine the FAA doing something like that today? The year was 1952.

Construction was started and proceeded rather slowly, it seemed to me. I cut a lot of tubing from the L2 fuselage for cross members and only had to buy new tubing for the longerons and one cross member. I used many items from the L2 such as the landing gear, wheels, pilot seat, magneto switch, instruments, control pulleys, cables fuel tank, engine, and propeller. Some tubing (1020 steel) from the wrecked Taylor Cub was used as well. Building the wings would be the most work by far. I planned to use the NACA 4412 airfoil section and build the ribs from spruce strips and plywood gussets. The accepted glue at that time was the old casine glue. After building a few ribs, testing one to destruction, and getting a very sore thumb from trying to drive those tiny nails, I decided there must be a better way. The project was shelved for a while.

I had been flying for a few oil companies and charter since I got my commercial ticket in 1948, so I was on many airports where I started hunting for wings. In Midland, I found a damaged Luscome left wing that had good spars and bought it for $15. A right wing was found in need of major repairs which I bought for $5! While the airfoil section was not the same as the one I had chosen, it was very close and parts for the wings were available. The wings were completely disassembled, five feet was cut from the root end of each end of each one, new ribs replaced all the damaged ones, new leading edges installed as well as new tips, and the ailerons were reskinned. These wings were the old style two strut and fabric covered type. I found a used, bent Luscombe engine mount that could be repaired, and I modified the front end of the fuselage to accept it.

By the summer of 1954, the project was nearing completion. I had joined the EAA in 1953 and learned that the FAA had come up with a set of regulations for homebuilt aircraft. At that time, my brother and I owned a clipped wing Cub powered by a Franklin 90 hp engine. The EAA annual convention of 1954 was to be held at Curtis-Wright airport in Milwaukee, WI. So I cranked the trusty?? Franklin and took off for my first EAA fly-in. Believe you me, this was quite an adventurous trip. With a very thirsty

engine, a 12 gallon tank, no electrical system, and no radio, I made a lot of stops and met a lot of people, but attending the fly-in encouraged me to complete the project.

My idea was to get it flying as soon as possible and do the clean up and performance enhancement at my leisure. By October 1954, it was completed, and I contacted Harold C. Darling, the FAA GADO man that had inspected the project

periodically, and let him know I was ready to fly.

The inspection was made in late October, and Mr. Darling stayed to witness the first flight. I thought I was nervous, but this man was a complete wreck.

About a month before the day of the first test flight, my wife and I had moved back to Midland from the ranch near Las Vegas leaving the airplane there. It was just too near finished to tear down for the trailer. I had to go back to Las Vegas and complete it, at least to the point of making the first test flight.

Mr. Darling specified the maneuvers to be performed on this first flight which consisted of a straight climb out, shallow turns to both right and left, a normal glide approach, and landing. I suppose it all looked alright from the ground. He gave me a temporary airworthiness certificate. I did not tell him, but the airplane had a very pronounced pitch instability problem. While climbing, I had to hold forward pressure on the stick, and when gliding, I had to hold a lot of back pressure. Subsequent tests showed that during a climb, with the stick released, the nose wanted to pitch upward until it stalled. In a glide, with the stick released, the nose wanted to drop, I suppose until it was in a vertical dive. I never let it go that far. After flying only 2.5 hours, I applied for a ferry permit to take it to Midland. I think Mr. Darling was so relieved to get this thing out of his territory, that he signed the permit. The total cost to date was only $450. The flight was uneventful except for getting very cold. This was early December and Las Vegas has a field elevation of 6874 feet. This was not a very desirable situation for open cockpit flying.

Later, while on a business trip to California, I visited with Ray Stitts about the stability problem. He immediately knew that it was tail heavy. My experience designing free flight model airplanes taught me to have the CG or balance point under the center of

lift of the wing which was always a high wing design, and this worked fine, but herein lies the problem. This airplane was a low wing design which requires a more forward center of gravity for pitch stability!

I named the airplane the June Bug, with apologies to Glenn Curtiss. It was named for my wife whose middle name is June. The cruise speed at 2150 rpm was 85 mph. The rate of climb was good; it would climb at a very steep angle, and it would get off the ground and land shorter than any airplane I had ever seen, even a Super Cub I compared it with one day. One time to settle a bet, I landed it on runway 27 at Midland Airpark crossways! During test flights, I had discovered that I could apply full brakes at touch down and due to the wheels being so far forward and the tail heavy situation, the tail would stay on the ground. It had no tendency to nose over at all. I flew it quite a bit the next year with only one major change to the structure. I made a new engine mount and cowling moving the engine forward 8.5 inches! This moved the CG forward 2.5 inches which worked out just right. The finish was aluminum dope with maroon trim.

One evening I got a call from Ray Hegy, who was working for an aerial survey company, stating that he would be working out of Midland for quite a while. We got to be friends, and he was very interested in helping me improve the June Bug. Ray was originally from Wisconsin, knew Steve Whittman, and knew of many of Steve's speed techniques. So we went to work. We removed the high drag landing gear and wheels and replaced them with a spring gear that we made from truck spring blanks, tapering them with a hacksaw! Believe me, Ray had to be a very good friend to work as hard as we did tapering those gear legs. We used dozens of saw blades. We bent it to shape, drilled the necessary holes, and had it heat-treated. I made the axles and welded plates on the end to bolt onto the legs. Ray modified Piper Cub wheels by cutting three inches out of the center of each one and welding them back together. They would accept 5:00x4 tires. I modified the fuselage to mount the gear. I made an enclosed canopy from one quarter inch steel tubing, fabric covered on top and Plexiglass sides and windshield. It folded to the side for entry and faired in with the existing head fairing when closed. It was now convertible back to open cockpit in about 15 minutes. With all of the drag reduction, a new prop was now called for. These and other refinements increased the cruise speed to 124 mph at 2150 rpm with the same 65 hp engine!

It had a very good rate of roll and looped well also. The controls were sensitive

but predictable, and it was easy to fly for anyone who was not too ham fisted. I repainted it bright yellow with blue trim.

My friend Van White wanted to play with it for a while, so I let him take it to Lubbock. Several people flew it while it was there. Most enjoyed it once they got used to the sensitive controls.

Ray Hegy wanted to use it for a flight to Wisconsin to visit his mother and attend the 1958 EAA convention. He stopped to visit a friend who was a farmer, and landed in his field. The field was much too soft to attempt a takeoff. So with the help of some neighbors, they loaded the June Bug on a flat bed truck, took it to town and parked it on the hotel parking lot where Ray was staying. The next morning they took it to a country road, unloaded it, and Ray continued his flight! Very light airplanes do have an advantage sometimes. Dick Van Grusven (Van's Aircraft) told me that the first time he saw the June Bug was in 1958 at Steve Whittman's farm at Oshkosh while Steve and Ray were doing some work on it before Ray started back to Midland.

I actually owned the June Bug twice. It was sold to Joe Mueller of Albuquerque about 1960. He sold it to someone in Greenville, TX and about 1963, I bought it back. I sold it again about 1967 after completing my second homebuilt airplane. All in all, the June Bug in its final form, was a delightful little airplane to fly, didn't cost much to build or fly, and was fast enough to enjoy long cross country flights. And that's the way it was in the early days of amateur aircraft building.

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## BUILDING AND FLYING THE AEROBATIC Y2

by Leon York SAA 2492

While attending the All American Air Maneuvers in Miami, Florida in January 1949, I was impressed with the performance of Beverly "Bevo" Howard. The National Championship Aerobatic Contest was held there as well as the Goodyear, now Formula One, races. Bevo's Bucker Jungmiester was down with mechanical problems, and being one of the top pilots in the country, he was determined to enter the aerobatic contest. He was able to borrow a Piper J3 clipped wing Cub powered with a Continental C85 engine. The competition was fierce. The Cole brothers, Marion, Lester, and Duane were there with their Pratt and Whitney R985 powered Stearmans as well as many other of the best aerobatic pilots in the country. But when it came down to the wire, Bevo Howard was crowned the national champion. From this I learned that those fire breathing monsters were great for airshow work but not necessarily the best for contest aerobatics. This is what inspired me to build the June Bug even though it was not expected to be contest aerobatic caliber.

It seems that airplane pilots are never satisfied. They always want more. More speed, faster climb, better economy, and faster roll rate. After flying the June Bug for several years I fell right into that same scenario. I wanted a better sport aerobatic type, and as I had done in the past, I decided to design and build it myself. There were several reasons for this decision, one being my size. At 6'4" there just were not designs available that would accommodate a man my size plus a parachute.

One light plane designer that I greatly admired was E.O. Tips of Belgian Avions Fairey, a division of Fairey Aircraft of England. During the great depression of the 1930's, when Fairey aircraft were not selling well, Mr. Tips designed a beautiful little sport plane named the Tipsy S. It was an excellent design, light weight, cantilever wing, all wood, single seater that, even though powered by a low power, somewhat recalcitrant engine, was capable of mild aerobatics. It was its lines that caught my eye. I thought the semi-elliptical wing and tail surfaces were beautiful and the overall proportions were just right. The design evolved into the two seat Tipsey Trainer powered by the magnificent Walter Mikron of 62 hp. Ira Culver must have admired Tips' designs also as his Culver Cadet seems to have borrowed many features from them.

My design would also use some of these features, including the internal wing bracing, but it would be stronger and heavier using steel for the fuselage, tail, ailerons, and internal wing bracing. The primary wing structure would be built of wooden I-beam spars, plywood leading edges, and wing walks with fabric covering. The internal wing bracing would also brace the main spar from the torsional loads imposed by the land gear which would be mounted on the front of the spar.

The landing gear presented somewhat of a challenge. I could not find an oleo strut that would work on my design, and building it would call for a lot of machine work. While on a trip to California, I visited my friend Larry Huberger who designed and built

the Doodle Bug, telling him of my dilemma over the landing gear. He said, "I have just what you need!" Larry gave me two oleo type struts that were used on the Vultee BT13 tail wheel. I found that by turning them upside down, I could build a yoke and axle that would screw onto the end of the piston part of the strut, and a bracket that would clamp onto the end of the cylinder part of the strut and bolt onto the spar.

*The single place Y2 under construction in late 1965. Note the simple fuselage structure and solid plywood ribs with routed spruce cap strips of the internally braced cantilever wing.*

This arrangement worked fine except that the struts were susceptible to leaking fluid and air. Coil springs were installed inside to keep them from bottoming out when low on air or fluid, and eventually I didn't bother to add air as the springs worked just fine.

For lack of a better name, I started calling by airplane the Y2 and it stuck.

Designing and building an elliptical wing seemed to me to be more work than I wanted to put into the airplane, so the decision was made to build a straight taper wing with Hoerner type tips. The airfoils used were the NACA 23015 at the root and the NACA 4412 at the tip. Since the Reynolds number was so much smaller at the tip, I gave it a 2 degrees wash out to prevent the likelihood of a tip stall. These airfoils were chosen after studying the book National Advisory Committee for Aeronautics, Report no. 824, "Summary of Airfoil Data." dated 1945. This combination of airfoils was also used on Al Meyers delightful Meyers 145 and 200.


*The Y2 as it appeared when making its first flight in September 1966 with open cockpit and exposed engine cylinders. Power was a Lycoming O-145 mounting a Mooney Mite prop.*

Due to the plan to use the Y2 for sport aerobatics, I built the wing flat from tip to tip, so the only dihedral effect came from the taper in thickness from the root to the tip. This gave the airplane neutral roll stability. It simply stayed where you put it, ideal for aerobatics and not bad for cross country flying. Figuring how to plot the rib shapes between the root rib and the tip rib caused a lot of lost sleep. I do some of my best thinking late at night, and one night it suddenly came to me how to do it. I am sure there is computer software that can do that in only minutes, but this was over 40 years ago.

In the fall of 1960, when Mooney came out with their all metal Mooney Mark 21 (Mark 208 actually) I became a Mooney dealer. While going through the factory in Kerrville, I saw something that just about put me into a state of shock. They had large stacks of aircraft plywood left over when the Mark 20 and 20A were discontinued. The company was expanding their office space and carpenters were making doors out of that

plywood! I could not stand to see it put to that use, so I bought a stack of it and took it home. There were thicknesses of 1/16", 3/32", and 1/8" X 4' X 8' with a face grain of 45 degrees. I used the 1/8" for the ribs and 1/16" for the leading edge covering. I sold some of it and gave some to fellow airplane builders. The last of it forms the turtle deck on my present project.

My choice of engines from the start was the Lycoming O190G which was used to run a generator on a ground power unit for military aircraft. It produced 96 hp at 2200 rpm and could be converted to an O290D of 125 hp. When the time came to mount the engine, I could not find an O290G near west Texas. However, my brother located a Lycoming O145, 65 hp that had been removed from Piper Vagabond for higher hp. It had reasonably low time since new, was not too far from home, and the price was right. Although it would be only half the power of the O290G, it would do to test my design, and I could convert to the larger engine later.

I decided to finish the airplane just as light as I could – open cockpit, no canopy, no electrical system, and one 16 gallon fuel tank.


*The Y2 flew most of its aerobatic contests in this configuration. Picture taken at Schlemeyer Field in Odessa in 1967. The canopy had just been installed, and the aircraft was now powered with a Lycoming O-190 G/D engine which provided improved aerobatic capability. A homemade prop was carved by Leon and proved very efficient.*

About this time, a friend, Dr. Dave Conoley, became very interested in the project, so I sold him one half interest, and he was to help complete it. Dave was a dentist and very good at working in close places, so he got the job of installing the instruments, fuel tank, plumbing, etc. We covered it with grade A fabric and finished it with Butyrate dope.

The method of rib stitching the wing was learned from Bart Denight who built the Denight Special racer. Thin (1/16") balsa strips were glued to the top and bottom of each rib, and notches were filed across these strips at each stitch location, so the cord did not

make a hump on the rib, the fabric and reinforcing tape being pulled down into the notch. The seine knot was hidden so the surface was left smooth.

I located a Mooney Mite prop for the O145 and the project was soon ready to move to the airport. The length was 18' and the span was 19'. I had designed it to be built and fully assembled in my two-car garage, so I really didn't want to have to disassemble it just to move it to the airport. The chief of police was a friend of mine, so I asked for a permit to tow it to the airport behind my car. He not only agreed but furnished a police escort! It's nice to have friends in high places. Something happened that neither Chief Wallace nor I had expected. We picked up quite a few curious people along the way, and it seemed to me to look like a funeral procession creeping along the streets and the airport road. I hated to disappoint them, but the Y2 was not quite ready for flight. The finishing touches were completed while waiting for the FAA inspector.

The inspections came off without a hitch, and the first taxi test began. This was September 1966 just two years since the construction began. The high-speed taxi test went well with no tendency to ground loop. On one run down the runway, I lifted off about 3 or 4 feet and landed three point. On the next run I made two takeoffs and landings, and with some runway left I made the third takeoff, this time climbing to 8 or 10 feet to feel the aileron response. When I looked up, horrors, the end of the runway was right there! The decision of what to do next was a no-brainer. It was – fly,man,fly! Sometimes airplanes can be SO exciting. The orbit around the field and landing was uneventful, and in the following weeks, Dave and I hardly let the engine cool down. We flew it to the Southwest Regional Fly-in and on several other short cross country flights. The airplane was easy to fly and handled well but, as expected, was underpowered. The hunt for an O290G was intensified. It wasn't too long before on was found and conversion completed.

I had moved the Y2 to Schlemeyer Field in Odessa and was sharing a hangar with Steve Fenton. Steve had built a beautiful Smith Miniplane and had made his own free-blown canopy for it. I had openly admired it saying, "I wish I had one for the Y2". Unbeknownst to me, my wife had contacted Steve and asked him to make one for me. He had taken the measurements of the Y2 cockpit and fuselage top, and about the time Dave and I were finishing the engine conversion, Steve presented us with a beautiful free-blown canopy! Wow! We immediately started building the steel frame. The rails were salvaged Cessna seat rails, and the rollers were Cessna seat rollers that I welded to the frame. Two bows of 5/89" heavy wall square tubing were made, one for the windshield, and the other for the front of the sliding part of the canopy. The Plexiglass canopy was then carefully trimmed to fit and was bolted to the frame. At this stage, the Plexiglass canopy was cut in two, dividing the windshield and the sliding part of the canopy. Positive locks were made to keep it locked closed, open 1", 3", and fully open. This was a great addition to the Y2, and it never gave us any trouble. The optics were perfect.

With the engine conversion done and the canopy finished, there was just one more little obstacle keeping us from flying again. We didn't have a propeller! From the very start of this project, money was always a concern. I salvaged used parts from all over like the Cessna seat tracks and rollers, but a lot of them came from wrecked airplanes stored in the "bone yard" behind a hangar at the local airport. The owners of the flying service once told me they were going to start weighing me in and weighing me out and charge me by the pound! Unfortunately, no props were available that would fit the

O290G with the right pitch for the Y2, so I decided to make a stab at building one myself. It seemed that nothing was available in print on propeller design. At least I could not find anything, so I started by making the calculations for the pitch at each station along the radius using the expected maximum speed and the red line rpm. One prerequisite for a good aerobatic airplane is a good rate of climb. This called for a prop pitched for best climb. Since I wanted a climb prop, I did not make any allowance for the "slippage" (the added pitch needed for the proper angle of attack of the blade). This seemed to work out just fine. That is a good thing, since at that time, I didn't know how to calculate that angle anyway. One thing I did know was that the max rpm red line on the tachometer simply could not stand the strain of aerobatic flying and sometime would simply fall right out of the instrument! Aerobatic pilots, in the heat of competition are the worst throttle benders. The wood was mahogany, another experiment, as I did not know of this wood being used before for props. The blades, about 6" in from the tips, were covered with fiberglass. I believe I can safely say that mahogany is a satisfactory wood for propellers as this one was used for over 300 hours, fully one third of that time doing aerobatics, and more than once I saw 3000 rpm on the tach.


*The Y2 undergoes further mods with a fully enclosed engine, spinner, and wheel pants that not only added to its attractive good looks, but increased speed and range as well. Photo taken over west Texas enroute to an Arizona aerobatic contest.*

The modifications to the Y2, including the non-certified engine and prop, called for a new period of test flying to include all the aerobatic maneuvers for which it would be approved. Now this presented somewhat of a problem, as my partner was not an aerobatic pilot, and all I knew were the basic maneuvers. I had taught myself aerobatics in a Stearman, a Howard DGA-15P, and my June Bug. I would have to ease into this period of test. An eight gallon tank with a flop tube was installed behind the cockpit. I

read every book I could get my hands on and got some very good "ground" instruction from one of the best aerobatic pilots in the business, Frank Price. Frank and I became very good friends, and he often gave me pointers on haw to improve my aerobatic flying. There was room in the Y2 cockpit for me an a thin backpack parachute, and I always wore it when flying aerobatics. I got an excellent flyer, Walt Pierce, to critique my maneuvers; also Marcus Bates who had a Pitts Special. We would critique each other. My intentions were to enter the Sportsman category of the contests around the mid section of the country, so when the new test time was completed, I felt as though the Y2 and I were ready.

*Leon in the Y2 doing a roll alongside the Guadalupe Mountains*

I don't recall the first contest I entered. The Aerobatic Club of America conducted all the contests at that time. I flew in two contests at Pappy Spinks field in Ft. Worth. About that time the International Aerobatic Club was organized by the EAA, and I joined that club. I flew in a meet at Dacy airport in Harvard, IL. The Y2 flew very well but could not compete with the 150 and 180 hp Pitts and other very good aerobatic airplanes available at the time. The Sportsman category had gotten very competitive, and this category was no longer a "poor man's" game. In most of these contests, the Y2 came in around the middle of its class. The very worst that it did was in the first IAC meet at Fond du Lac. I had sold my interest in the Y2 to my partner about a year before and had not flown any aerobatics during that time. Dave flew the Y2 to Oshkosh that year and talked me into entering the contest against my better judgment. This was a very serious mistake on my part. As I recall, the routine called for two or three high G maneuvers in succession, and as I was part way through the last one I blacked out! If you have never blacked out in an airplane, let me tell you that it it a very frightening experience when you are only 1600 or 1700 feet above the ground and headed straight down. I continued pulling back pressure on the stick until it sounded like the airplane was flying level. My sight came back in only a few seconds, but by then I had flown out

of the aerobatic box. I made a 180 degree turn and re-entered the box to do the last required maneuver.

All kinds of emotions were going through my head, hate, fright, shame, and thankfulness. I hated myself for even making the flight with no recent experience and not being in the best physical condition. I felt fright because I very well could have flown right into the ground. I felt shame for flying such a pitifully poor routine, and I felt thankful that God saved the Y2 and me from disaster. The Y2's best showing was at Marion Cole's meet at Monroe, LA where it was able to get fourth place. I was thrilled to do that well with so many young pilots competing. I decided at that meet that I was "over the hill" when it came to aerobatics. The only reason that I did as well as I did was that I had practiced about two hours every day for about two weeks before the meet, and it was taking its toll on me and my work. My favorite maneuver, even though it was never in the Sportsman routine, was the rolling 360 degree turn which the Y2 did very well.

The Y2 was eventually sold to Waco Air in Waco, TX, and it passed through several owners over the years. Somewhere along the way it acquired a Lycoming 0320 and two of the owners told me that the change really improved its aerobatic capabilities. Sometimes I wish I had it back again.



Y2 in its final configuration

Y2 flying past Guadalupe Peak

***Leon York in his Y-2 over Guadalupe Mts.***

Longster after first flight at Ducote Airpark

Leon and the Y5, the Longster

Leon carved this prop for his RV


Leon had just sold the yellow RV and bought the white one

Y3 unfinished project

Y4 unfinished project


Leon climbing out of Ducote on a fall morning

Gone West !