

# THE GOLDEN AGE OF LOCAL AIR RACING

BY

**Norman W. Granger**



## THE GRANGER FAMILY

James (Jim), Clema, James Jr., Harry, Norman

1930

**TO MY MUCH LOVED FAMILY MEMBERS AND VALUED FRIENDS.**

Many of you have heard my brothers and me tell about the early days of flying and racing but never before have any of us attempted to put these stories in perspective to our lives or the times between 1924 and 1934. This booklet is such an effort.

The following stories have been kept as factual as I can keep them, none have been elaborated upon for the purpose of commercial value. The manuscript has been copyrighted, not to protect its value, but to prevent its contents from being distorted by those who might use it for value. I have written these pages for the Granger Family record, the family of Jim and Clema Granger.

Pictures herein are taken from the collections of Harry and Norman Granger and can be reproduced inexpensively upon request.

The following preface has been included for “family” about the man who made it possible for my mother, my brother, and me to attend and participate in the events of those places and times and to be of service to the people involved.

I hope you enjoy the stories.

Norm Granger  
October 1990  
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Clover Field Airport, Santa Monica, California approx. 1930. The three hangars were operated by, from R to L, Jim Granger's Pacific School of Aviation, Mutual Aircraft, headed by George Hague who piloted the Rider "Bumble Bee" to many victories, and Douglas Aircraft who used the hanger to house completed airplanes from their factory at the west end of the field. Note Santa Monica Bay in the background and the Clover Field Golf Course south of the airport. Clover Field was 60 acres blacktop, very modern for its day.

## **PREFACE**

### **A LEGACY OF ACTION**

In 1910, with the self-confidence and courage that comes with a twenty year old, my father, James “Jim” E. Granger, left his home in Massachusetts to make his way in the West in Southern California. He brought with him a knowledge of steel conduit, as used in electrical applications before it was known in this new area. Edison Company hired Dad to supervise much of the conversion from gas to electric lights in their service. One of his biggest jobs was to convert the Huntington Hotel in Pasadena to electric lights.

By 1910, my father had met and married Clema Baxter when she was sixteen. He soon quit his job with Edison to open a Brush automobile agency in Long Beach, only to have Brush sell out and cancel further production in 1913. By now, Jim Jr. had been born and Dad bought an old bootlegger’s barn in Spadra on the old “Valley” route between Whittier and Pomona, which he turned into a garage and gas station. The business prospered and he soon took on a Ford agency too. Dad was popular with the other dealers in Pomona and became Secretary/Manager of the Citrus Belt Auto Dealers Association, which soon promoted the first auto shows at the Los Angeles county Fair. He later became President of that organization and merged it into the statewide Auto Trade Association headquartered in Los Angeles. Still later, he merged that association into the Southern California Auto Club. He left the Club and entered the airplane business in 1924.

This man loved action as evidenced by his presence at the Corona auto races to see Barney Oldfield race the day I was born in 1917. I have heard my mother was furious with him about that!

By the time his flying business was off the ground, I was old enough to know what was happening and I tried not to miss any of it. Our area had exclusivity to it, it was convenient to so many interesting and interested people.

This story is part of what I remember about the period in aviation history from 1924 to 1934, it’s planes and it’s people at Clover Field.

## **THE GOLDEN AGE OF LOCAL AIR RACING**

Aviation story tellers will never tire of describing every detail of the Golden Age of National Air Racing, but there remain many untold stories of local air shows and racing which, if not equal in importance to the development of aviation in general, surely were equal in developing an enthusiastic clientele for the fixed base operators/dealers throughout the country. This is part of that story.

Many places in the world enjoyed the experience of local air shows and racing. Nowhere was it more popular than in Southern California, in particular, at Santa Monica, which was a small seashore community, a half hour drive from Los Angeles. Santa Monica was the take off airport for several National Air Derbies and that was not accidental. Clover Field was often chosen for such events because it was convenient to many movie studios where prosperity abounded, and the people loved anything photo or newsreel worthy. Photographing action was their business.

I had been born about seven years before local air racing got off the ground and along with my older brothers, James and Harry, for the next ten years we were privileged to spend our “out of school” time at Clover Field where my father James E Granger, “Jim” became a fixed base operator in 1926. By 1929, he had a large new hangar in which he housed his own Pacific School of Aviation and a Swallow airplane distributorship, plus several celebrities’ planes including Hoot Gibson’s (western star), Ruth Elder’s (actress pilot), Edgar Rice Burroughs’ (Tarzan author), and a few others. The accumulation of famous movie stunt pilots, celebrities, and equipment created a particularly interesting aeronautical environment. You can bet we didn’t miss much that happened.

Local air racing and shows started in the mid twenties when a brand new Jenny still in its world war one crate could be bought for less than five hundred dollars. This market continued for several years and might account for the synonym “crates” as it applies to old airplanes. Farsighted people like Waldo Waterman had hangars full of Jennies for sale, which quickly populated places like Clover Field. My father bought one and was given the registration number C.F. 22. The C.F. identified its home base as Clover Field and the 22 separated his plane from the twenty-one others already there. There was no government certification prior to 1929 so C.F. numbers simply agreed upon and painted

on the side of the fuselage. No one wanted the number of a “downed” plane so the numbers got bigger and bigger.

Local air shows and racing followed closely behind barnstorming after the “fixed base operator” came into being. These adventurous pilots became responsible enough to enter into long-term hangar leases or construction jobs sometimes including underground gas storage and pumps. At Clover Field there were ten or twelve such “operators” plus Bach and Douglas manufacturers assembly hangars plus a sprinkling of “T” hangers. Most flying was confined to within about twenty miles of the airport since the planes there did not lend themselves well to cross country flying; there were practically no support facilities for such flying until later, not even well defined airports!

The barnstorming influence was still in everyone’s mind, and when the opportunity presented itself, a younger pilot sometimes felt compelled to demonstrate the superiority of his Jenny over another by simply “picking a race”; the challenged pilot, usually of sounder mind, could simply turn away and ignore the challenge, which was usually the case. But not always!

### “Jenny Scramble”

When a challenge to race was recognized, a real exhibition could ensue with each pilot trying to “out dare” the other, a sort of duel. On occasion a second or third Jenny would join the foray and “Jenny Scrambling” came into being. These unscheduled scrambles were not over a designated course but where the leader led them and where “guts” had a lot to do with winning. Even an occasional mid air entanglement of cabane struts and wires with wing skids did not dampen their enthusiasm sufficiently to stop the encounter. On at least one occasion Jennies were landed at Clover Field entangled; I did not know if a “fist fight” followed but I suspect it did. Victory at Jenny Scrambling was usually declared by diving at the field, up wind or down, made no difference, with a couple of Jennies in hot pursuit.

Winning at Jenny Scrambling could get you prestige, but you could hardly call it racing. There were no starters, no courses or trophies until the more matured pilots added

these things in an effort to commercialize what they felt was a hobby. They called themselves the “race committee”. Jenny Scrambling was becoming “respectable”.

Aviation was struggling for recognition in spite of these few bright spots. In 1926 and 1927 a few attempts at scheduled air shows and racing took place around the southwest and brought out a few manufacturers with their latest offerings; but the competition of the “crates” still stood tall in the market place and made it tough on the manufacturers to sign up dealers or build a foundation for their businesses. Not until the crates were sold and gone did things improve much. But something even more important happened about then.

### “Raymond Orteig Prize”

Charles A. Lindbergh flew across the Atlantic Ocean solo in May 1927 winning the Raymond Orteig prize of twenty five thousand dollars. He had won the greatest air race of all time, and he hadn’t even qualified as an entrant! His accomplishment rocketed flying into the air, literally. It was just what the flying industry needed, it provided “customer confidence”. People came to Clover Field in droves just to see what was going on. At least ten fixed base operators were there to oblige.

The motion picture industry, also stimulated by the “Lindbergh Flight” was playing an important role. They needed stunts to sell their newsreels and airplanes flying in their pictures to capture the flying mania; and they had money, a somewhat scarce commodity among many of the airplane owners and pilots. The movie people were adventurous and loved excitement; such illustrious pilots as Frank Clarke, Al Johnson, Art Goebel, Roscoe Turner, and many others including my father participated in this era of “movie flying”. Jenny Scrambles decided many movie contracts for their winners on the basis of “good performance”. Many scenes were shot “of” and “from” the Jennies in competition to be filed away for future use; to be used as news reel material, to be part of a story line, or more often than not, all three!

## “O.X.5 Scrambles”

Jenny Scrambling enjoyed popularity until about the time of the Lindbergh Flight when occasionally some “foreigner” would slip into a race with a Hisso (Hispano Suiza) Jenny and steal all the glory. You would have to see a 150 H.P. Hisso versus a 90 H.P. O.X.5 Jenny in competition, to believe the difference. It was like a cheeta after a deer! As a result the time had come to eliminate the Hisso Jennies and at the same time introduce the new O.X.5 powered planes being offered by Swallow, Travel Air, Stearman, Waco and others by changing the title of the races from “Jenny Scramble” to “O.X.5 Scramble”. Most of the new planes were being offered with or without engines and propeller, and most were fully capable of accepting any engine from the 90 H.P. O.X.5 to the new 220 H.P. Wright J-5 made famous by the Lindbergh flight. A buyer could save the original price of his Jenny by removing its engine and prop and installing it on his new airplane; a very good idea because all Jennies were to be grounded soon since they did not meet the 1928 Department of Commerce Airworthiness Certificate requirements, though their engines and propellers did, even the somewhat scarce “Hisso”.

In 1929 the O.X.5 Scrambles were pretty well organized and getting some “outside” sponsorship in several communities. Prizes were modest but as in the Jenny Scrambles, the victor still won the spoils. In my father’s case this meant “business”! Dad believed women could fly just as competitively as the male pilots and that therein was a whole new market for airplanes, the lady buyers. He encouraged Clema Granger (my mother, Melba “Gorby Beard, Ruth Elder, Edith “Dick” Clark, Ruth Stewart (his cousin and office manager) and many others to get into racing, in his planes of course. The ladies proved him right; they won many events and that helped business.

## “Horse Power Racing”

By the turn of the decade the O.X.5 Scramble was being succeeded by the “Horse Power” race. The popularity, superior performance and reliability of the new air cooled in-line and radial engines such as Kinner, Warner, Gyhpsy, Cirrus, LeBlond, Lambert, Curtiss, and Wright with an occasional Axelson or Hallett could no longer be ignored.

The last O.X.5 engines were built by Curtiss in 1917 and many were still in service in 1929 though they were no longer competitive in racing nor did they dominate the new airplane power plant market as they once had. Before I abandon the engine altogether, I note in their favor that these engines probably competed in and won more air races and trained more pilots in more different air frames over a longer period of time than any engine ever built. Not in their favor was the fact that the engine required daily maintenance consuming about thirty minutes before it was safe to fly. I have run the routine many times, it went like this: Grease the overhead rocker arm assembly or fill the Miller overhead oilers, if so equipped, free up the Berling magneto pencil, drain all four carburetor sumps, drain the “in-line” fuel sump, check the water pump and all inter cylinder water hose connections and radiator for leaks and water level, check the oil level and check the fuel tank with a stick. No hesitated flying behind on O.X.5 after it had been properly checked out. It was the kind of engine you could love and hate at the same time; running good it could turn 1500 RPM but was flyable at 1400 RPM.

With the O.X5 popularity at an end, horse power racing gained command and divided itself into two classes, 100 HP or less and 250 HP or less. The stock market crash of October 1929 all but stopped racing because of lack of prize money, but even in the gloom of depression new forms of racing were evolving in the interest of economy and keeping what show could be promoted as close to the audience as possible: the one thousand feet and back race, the “slow” race, and the one hour cross country “handicap” race. The 1000 feet and back race was started race horse style, with all planes to reach a pilot plane already over the field at 1000 feet, then nose over into a dive to reach a touchdown, no landing required. The slow race was a drag race in reverse starting with two or more planes at 500 feet altitude over the down wind end of the field ending at the up wind end, without touching down.

These were exciting events because they were executed right in front of the audience. The one hour cross country “handicap” race could be exciting because every plane and pilot had as good a chance to win as the fastest plane and the most experienced pilot. The race was held to approximately one hour, again, to keep the audience interested. Each plane was started according to its manufacturer’s rated top speed, and flagged takeoffs were timed so that all planes should return to the start/finish line at the same moment,

about one hour after the first plane was flagged off. The finish could become a dogfight! Manufacturers began building planes with racing in mind; the Waco “taperwing”, Travel Air and Laird speedwings, Thunderbird, Monocoupe, and others. These planes showed up to race when the prize money warranted their appearance. Bill Clark, grandson of Senator Wm. A. Clark and namesake of Clarkdale, Arizona, offered prizes totaling \$1,000 for a weekend of racing, stunt flying, and parachute demonstrations at Clarkdale; at least en worthy competitors flew in, not only to compete but to hop passengers between events. One thousand dollars was big money in the early thirties. Bakersfield, San Diego, Long Beach, and Dycer at Los Angeles and Santa Monica held “air meets”, as they were called in those days, with some regularity and prize money slowly improved as the shock of the stock market crash subsided. These races may seem pretty tame and unimportant now, but at the time they were very important because they demonstrated newly developed pilot skills as well as product superiority. The contestants nor the spectators had any other way to evaluate quality or performance except thru these races and shows.

#### “Customization and Modification Era”

September 8<sup>th</sup> through 16<sup>th</sup>, 1928, the first National Air Races and Aeronautical Exposition had been held at Los Angeles Municipal Airport, a new field on Six hundred acres south of Los Angeles with new hangars, new administration building, a 200,000 square foot display building, a 10,000 car parking lot, 20,000 bleacher seats and all grounds dust controlled. It had all the facilities of a small city and it was architecturally balanced in a Spanish theme. The show was a weeklong extravaganza offering one hundred twenty five thousand dollars in prize money, twice what had ever been offered before. Interest was intense. For people all over the United States, this was the climax of the “Lindbergh Binge”! My brothers and I were privileged again to roam most of the area with exhibitor’s badges since my father was showing two Swallows in the display building and another on the flying field.

On the flight line, Ed Heath had arrived with his “Baby Bullet”, a diminutive thirty two horse power, one purpose race plane, the first most pilots had seen. In competition Heath lapped other planes in his class twice in an efficiency contest by averaging one hundred forty two miles per hour. That translates into about one hundred sixty in the straight aways! Many things happened at the show but the most remembered was the “baby bullet” and its phenomenal performance. Most pilots went home with a new sense of values in airplane design and performance, that being “streamlining”! The manufacturers too were impressed, and this was evidenced by the appearance of the new taperwing and speedwings in 1929.

By 1929, airplanes could be ordered with accessories to make them go faster, and the same accessories were available as “add on’s” for existing planes. If an owner could not afford a new faster plane he could modify the one he had, sometimes with considerable success. There was no criticism of modifying a plane or its engine; competitors simply felt that anything that was “go” with the new Department of Commerce regulations was O.K. with them. To come up with innovative modifications and to win, was heroic and would be promptly copied by all who could afford the changes.

My father’s J-5 Swallow came to him a very docile three place 1928 commercial work horse type airplane. It was used for sales promotion, advanced student training, charter and passenger flights, movie stunts and scenes, and racing. For the next five years we were constantly modifying the plane to increase its already fine performance; and before it was washed out in September 1933 it was a thing of beauty, as fast as it was beautiful. It was now high sheen black and white, all struts and wires were chrome plated, it had a full N.A.C.A. cowling over its 220 HP Wright J-5 engine with a Hamilton Standard movable pitch steel propeller, thin pants over its original high pressure wheels and tires, a quick change front cockpit cover to windshield set up, a reduced size rear windshield and cockpit cut out with a streamlined head rest, and a full racing tail skid. All gas and oil caps and other surface protruding items were smoothed over with aluminum fairings. This airplane was a classic example of what “customization” could do for early airplanes. It had a manufacturer’s rated top speed of 124 MPH but could now easily top 150 MPH.

No wonder it did so well in the “handicaps”! In addition to its fine qualifications as a race plane, it carried its usual work load at my father’s flying school.

Modifications came in all sizes and types. Another in our hangar was a 90 HP Cirrus powered British Avro Avian, a lovely little two place trainer bearing close resemblance to a Gypsy Moth. It belonged to Douglas Shearer, production director at M.G.M. Studios and brother to Norma Shearer. Doug used his little gem to commute to and from his ranch in San Diego County, but the little Cirrus struggled to lift him off his tiny airport at the ranch; so he installed a brand new Menasco Pirate with a full race cowling, the first we had seen of both the engine and the beautiful cowling. It turned out this was no ordinary Pirate. Shearer was part owner of Menasco, the engine was a prototype of a new racing engine. The Avro was to provide a test platform for the new engine. We should have guessed as much when we saw the new propeller because it was considerably larger and had more pitch than the original, but nevertheless the engine was rated at 100 HP so therefore it qualified for the 100 HP class when racing. My mother flew this little jewel in many ladies races and Waldo Waterman flew it in the men’s division; neither pilot was ever bested in the 100 HP class in this plane! Mother even beat out Gladys O’Donnell, of National Air Race fame, flying a Lamber Monocoupe. Gladys just shook her head in disbelief. Waldo entered the Avro in several 250 HP class races and did very well, in the money!

Shearer never “pylon” raced his Avro himself, maybe he didn’t like the traffic in there, but he loved to watch it raced. What he did do with exceptional skill was “slow” race his little beauty, and he never failed to win, ever! He would simply pull the nose up, open the throttle and sit there until the finish line went by. On the ground we could hear the Menasco screaming and the Handley Page wing slots banging in and out while the Avro practically stopped in mid air; at the same time everyone else in the race trying to soar their way with just enough throttle to stay airborne. This little airplane never lost a race in its class. Wherever this docile looking little silver bi-plane participated it became the star of the show, changing from pussy cat to tiger right before your eyes!

The most spectacular 1000 feet and back race I remember boiled down to my father, George Hague, a friend of my father’s and race pilot of the famed “Bumble Bee”, and Doug Shearer in his Avro. George was out to show the superiority of his J-5 Stearman

over my father's Swallow, a tough assignment of anyone. In addition to Jim, George and Doug, Hoot Gibson entered his Butler, and a couple of rental Fleets entered also. Doug was competing with the fleets in the 100 HP class while the others were competing in the 250 HP class. The two races were flown concurrently, under the same flagman, so it was possible for a 100 HP plane to win both divisions if it could get up to 1000 ft and back down ahead of the more powerful planes. When the flag went down on this race all six entrants opened up and the little Avro was first off Jim, George and Hoot in hot pursuit. The Fleets were bringing up the rear. The Avro climbed almost as fast as the bigger planes so the four leaders arrived at the thousand foot level close together and nosed over into dives towards the down wind end of the field almost in formation. Dough and Hoot soon backed off their throttles when they realized how much speed they were developing, but Dad and George came down "full bore" all the way through the final turn. The Swallow had a small lead but both were really storming and neither man was able to slow down enough to chance a touchdown. Hoot, too, came in very fast and was unwilling to touch down at such a high speed. The three men turned and raced around the field for another try, not knowing if another plane had touched down or not. Meanwhile, Doug feeling very secure in first place in the 100 HP division closed his throttle, dissipated his speed very nicely and floated in for lovely three point landing without the slightest idea he had won first place in both divisions! Doug could not have been more surprised or more delighted when he taxied up to the line to be greeted by a barrage of people bearing congratulations. Incidentally, my father never objected to being bested by customers like Doug Shearer or Hoot Gibson, but he'd be damned if he would let George Hague do it!!

One cross-country handicap race I was particularly interested in was one in which my seventeen year old brother, Jim Jr., was to fly his first race. The race started at Clover Field, then proceeded over the Santa Monica Mountains to Metropolitan Airport at Van Nuys, hence back over the mountains to Willards Tower five miles east of Clover Field, then straight down the runway to the start/finish line. The competition in the race was very distinguished and included Dave Elmendorf, George Hague, Ruth Elder, Clema Granger and Hoot Gibson, all of whom had National Air Race experience and flying in 250 HP class planes. In addition, there were three less known pilots entered, one in a Monocoupe, one in a Fleet, and my brother Jim Jr. in one of Dad's O.X.5. Swallow T.P's

by far the slowest airplane in the race. The morning of the race my mother took Jim Jr. out in her Stinson to show him the quickest route over the mountains and where the passes were in case of mountain fog at race time. She felt he might be able to beat out the Fleet with this information. Later in the day, Jim Jr. was flagged off first, followed as handicaps required, the Fleet, the Monocoupe, Mom' Stinson, Hoot's Butler, Dave and George in their Stearmans, and last Ruth Elder, favored to win in Dad's Swallow. Thirty minutes in the race Mom came smoking back straight into a landing dead stick; her Lycoming engine had swallowed a valve (valve poppet burns off the valve stem and is pounded thru the piston in the crankcase). She had shut down the engine on her approach and landed and rolled to the end of the field to be out of the heavy traffic. We went down to get her and to retrieve the plane. Zero hour, the moment when all planes should return had come and gone when Jim Jr. came galloping along at about 90 MPH and fifty feet high to win first place! Just minutes later Ruth came storming out of a shallow dive at about 170 MPH to clinch second place, a few minutes later George and Dave came dueling in, in their Stearmans trying to keep the Monocoupe from sacking them both. Dave, being youngest and bravest, dove to about five feet high and got third. I believe the Monocoupe got fourth. As it turned out, due to fog in the mountains all contestants except Jim Jr. had lost considerable time getting thru, then back thru, the mountains; While Jim Jr. had followed his mother's instructions perfectly and had flown within five minutes of a "best possible time" flight. I have never seen my parents so proud, not only of Jim Jr. but the old Swallow too. Even in defeat, Ruth Elder was pleased for Jim Jr. and gave him a big kiss! Ruth was like that, east to like. Little if any attention was given my mother for her beautiful execution in escaping from danger, but we all knew she was fully capable of handling such an emergency.

Clover Field enjoyed the luxury of a golf course down its south side with a fairway paralleling its length. Golfers would occasionally slice their balls onto the runway and then casually stroll out to get them in spite of several signs forbidding them to do so. Such an effrontery could bring a swarm of irate pilots and their planes down upon the golfers for invading this private sanctuary. While on his final approach, if a pilot was lucky enough to catch a golfer out there he could open his throttle, dive, and buzz hell out of the guy! As the pilots saw it, the golfer was fair game, wasn't he? If this invasion of

privacy occurred during an air show or race, it was sheer ecstasy for the pilots, audience, and the master of ceremonies who would make a star out of the golfer by describing the predicament he was in and the cooperation he could expect from the pilots to help him hasten his departure- all this over a 1,000 watt public address system! If it happened during a race every flyer in the race could take a pass at the guy as they lapped past the start/finish line. It was great fun for everyone but the golfers. Did the golfers ever get irate about this form of recreation? Absolutely, and that's an understatement!

Parachuting had not yet reached a high degree of acceptance by the mid twenties. Jumping amounted to a few expert stunt people and an occasional amateur who was often equipped with a homemade parachute and committed to about the same life span as that of a snake charmer. To wear a chute as a pilot was to demonstrate a lack of confidence in one's ability and equipment; so parachute development had to wait for the "jumpers" to prove its effectiveness. There were two popular types of chute packs in use at the time; one, the "exhibition pack" as attached to the jump plane's wing struts and wires with the chute tied into the pack until jump time. The jumper would wing walk out to the pack, put on the harness, untie the chute and jump. The chute would emerge as the jumper descended. The other pack, the "free fall", was worn on the jumper's back and was used in the "pull off" and "free fall" jumps. The "pull off" was executed by wing walking out to the struts, then working back to the trailing edge of the wing and pulling the ripcord. The parachute did the rest, it opened and pulled the jumper off the wing and immediately supported him with its "open" capability; this made the 'pull off' very popular with beginners. Free fall packs were also used by more experienced jumpers just as its name implies. On summer weekends, it was common to see parachute jumps, wing walking, and an occasional plane change at Clover Field – sometimes only a few hundred feet above the airport. Freddy Osborn and his wife Jackie were king and queen of the movie stunt people at Clover Field. When Jackie first got into jumping she once forgot to untie her "exhibition" pack and proceeded to put on her harness and jump; the shroud lines released from the pack but the chute envelope did not – leaving Jackie dangling twenty feet below the plane like a fresh caught trout! Freddy immediately summoned Bob Lloyd and his Hisso Standard to make a rescue, and within minutes Bob pulled up beside the Jenny; Freddy was already out at the cabane rigging on the top wing ready to make a

plane change, which he did on the first pass. Fred worked across the wing over the fuselage, out the other wing, and untied Jackie's chute pack to permit her a safe descent. But the crisis itself had created a new problem. The Jenny, with an inexperienced pilot, simply could not handle the weight and wind drag on one wing and was fast approaching a fatal spin. Freddy, being a pilot himself, read the situation perfectly; he literally ran back to the fuselage, over the top and placed himself on the other wing waving to the pilot to get the nose down! Dive! He did! Freddy never gave a thought to failure of his mission, nor did he ever wear a parachute unless he intended to jump! The glory of the rescue, which was considerable, soon faded into history because Fred repeatedly demonstrated such daring skills.

In the early days parachute spot landing contests were popular, and contestants were free to use a chute pack of their choice. Al Johnson, a true professional, decided a "pull off" at about a hundred fifty feet high could put him astraddle the finish line! As his jump plane came down the field, Al was ready and pulled the ripcord as the line on the ground rapidly approached, he realized the line was coming on too quickly; in his excitement, he jumped before the chute had full opened! Fortunately, the jump plane's speed was sufficient that Al's descent was somewhat horizontal; about one hundred fifty feet beyond the line the chute had billowed out barely enough to keep Al alive for another try. Al did not walk away but he escaped serious injury and was back a month later to try again and win the contest.

The young man who most likely made parachutes popular with pilots everywhere was a barnstormer who made only seventeen jumps in all, including his first which had been a double jump; that is, to open one chute then cut it loose and fall free to open another! This young man went on to become an accomplished pilot and flew mail during 1925 and 1926. He was forced to make four emergency jumps, three at night in bad weather and one in daylight due to an unrecoverable spin. This same young man went on to fly Air Force precision formation aerobatics at the 1928 National Air Races at Los Angeles wearing a parachute! Pilots everywhere were impressed. His name was Charles A. Lindbergh!

Fixed base operators helped promote and looked upon "air shows" as revenue producing opportunities and nearly all hoped passengers between events if they had the

right airplane and someone to sell tickets; airport management usually allowed this privilege to out of town contestants. In addition, it was common for operators to rent planes to their students who wished to compete in the shows once they had reached the necessary proficiency. One trip to Bakersfield, I remember well; Dad had rented a Kinner Swallow T.P. to Mary Charles, one of his lady students, and Dad rode in his J-5 Swallow as an instructor for another student while Mom carried two passengers and me in her Stinson SM8A. Being an eager fourteen year old at the time, I grabbed the right hand front seat, hoping I might be allowed to fly part way. Sure enough, Mom let me fly and proceeded to give me a lesson in navigation by pointing out her headings and check points on the map before she sat back and started visiting with the passengers. I flew all the way to Bakersfield, once there; she took the controls and landed. That night Dad told me Mom had said I did very well, but also that the passengers gave her hell for allowing a “boy” to fly them to Bakersfield. He said they were scared to death. Well, I’m sorry about that, but Mom and I had a wonderful time.

We all had a part in local air racing and shows, and we loved every minute of it. I was usually on the flight line with my brothers and some of our school’s students swinging props, getting planes out and putting them away, gassing them up, checking oil and water, warming up engines, etc. Along with our huge new hangar we had a chain fence down the flight line that disappeared into the ground when not needed, so we would pull up the posts and string out the chain to control the audiences. There were always dignitaries flying in or visiting so Dad had put up steps to the roof where chairs for our “guests” were arranged along with the speakers stand. We boys would get out Dad’s Charles Nungesser Clerget (kler-Zhay) powered Hanriot, a World War I fighter, and run it up on the flight line. The noise of the rotary engine, with no exhaust collector system, was deafening and the smell of castor oil would permeate the area for hours. As we blimped the switch on and off the little fighter would gyrate away from the rotation of the engine and literally dance. The engine had no throttle system, only full open or switch off. A true fire hazard!

Another job we all did was to change Dad’s Swallow from a passenger carrier to a race plane in about fifteen minutes. We would remove the front seat cushions, secure the seat belts, and install the cockpit cover. As soon as the race was over we were to reverse

the procedure and make the plane ready to carry passengers again. All this time we had to watch the stuff closely; audiences were not only welcome guests, they were also souvenir collectors!

### “A Day at the Races”

I think all pilots of the period had a little “barnstormer” in them that wanted out. The races were a perfect time and place to let such emotions surface, let it all hang out so to speak, and they did!! Lloyd Downs raced a J-5 Eaglerock and always finished with a flourish though seldom in front. He would take the last pylon high then dive for the finish line and go right into an Immelmann turn from about ten feet high! It was spectacular. Dave Elmendorf could take off in the rear seat of his J-5 Stearman only to come around for the first lap in the front cockpit, and maybe back to the rear cockpit on the next lap. The announcer had fun with the audience speculating on which cockpit Dave would be in next time around. This, at less than one hundred feet high! Milo Burcham would sometimes barely become airborne when a wheel would fall off his Bird; Milo would fly on, making it appear he knew nothing about the wheel. Milo’s prop man would retrieve the wheel and run around the field holding it up, apparently trying to warn Milo of his terrible plight. Again the master of ceremonies would stir up the crowd by pleading for Milo’s safety. You can guess what would happen; Milo would finish his event and then set his Bird down so gently, he wouldn’t even scratch the spindle. Milo developed that act even further; he developed an inverted flight aerobatic show, less one wheel, and even set an endurance record for inverted flight. Actually, Milo and his plane were upside down but the engine was right side up and ran like a sewing machine; It had been installed upside down months before along with the necessary fuel and oil tanks and systems. Milo had trained himself to withstand the “inversion” by hanging upside down in his hangar at Long Beach in a parachute harness, and the airplane could fly inverted indefinitely. Milo’s biggest worry was in takeoffs and landings because he had learned long before; the engine was not very dependable upside down. Waldo Waterman sometimes demonstrated one of his latest creations for which he was well known. One was a rather large low wing four-seat monoplane with hydraulic shock absorbers on each

wing strut system between the wings and fuselage. These hydraulic struts could be pumped up or down at will from the pilot's seat creating maximum stability with the wings up or maximum speed with the wings down. Throttled back, Waldo would make a very slow pass upwind with wings up then turn around and do a full throttle fast pass with wings down. It was pretty strange to see an airplane change appearance and flight characteristics in mid air. Another of Waldo's planes was dubbed the "Whatzit", a prototype of his "Arrowbile" which never reached production. The Whatzit was a low wing, Kinneer powered pusher flying wing with rudders at the wing tips and a temporary canard elevator assembly sticking way out front on a boom to insure for and aft stability during early testing. Also on the boom were three ten pound lead ingots wired there with bailing wire throughout the early testing and demonstration period. Waldo was a respected engineer, he was also very resourceful! Dead stick landings were a popular event at shows because they demonstrated safety. The idea of the event was to turn off the engine on the down wind leg of the field, glide out to a one hundred and eighty degree turn into the wind to land and roll up to a line on the ground using wheels of the plane as the measuring point. Braking could get you disqualified, it had to be "ala natural". My mother used a Swallow T.P. for the event, which had no brakes, it was perfect for the job. She would land a little short of normal then raise the tail skid off the ground with the T.P.'s huge elevators and roll up near the line and haul the stick back to jam the tail skid into the ground to stop on the line! Mom won the contest against men and women many times and on weekend afternoons she would practice 'dead sticking' to demonstrate to the spectators how safe airplanes could be. She took her expertise to the National Air Races in 1931 and flying Dad's J-5 Swallow instead of her favorite T.P. she won first place "without brakes" and third place "with brakes" against some pretty classy competition; and this on a strange field without her favorite airplane.

In early 1933, Hoot Gibson challenged Ken Maynard, another western movie star, to a match race. Ken liked the idea; both actors fame was diminishing and the race could help their box office appeal. Dad suggested they ask Cliff Henderson for a spot on the program at the National Air Races at Los Angeles in September. Cliff was delighted with the idea, so the race was on. Ken had a J6-7 Stearman and my father had doubts that Hoot's Butler could best Ken's plane so he offered Hoot the loan of his J-5 Swallow.

Hoot was ecstatic, this assured him of a win. We shined, tuned, and cajoled our Swallow getting it ready; we knew we had a winner! Race day came and the two cowboys lined up for the flag before 20,000 people. The flag dropped, Hoot was first airborne just as we expected. He was first around the scatter pylon and came really storming down the first straightaway with a strong lead; Hoot was smothering Ken, our baby was purring like a kitten. He took a commanding lead on the second straightaway, pulling up high into a steep turn on the third pylon and dove the airplane until it hit the ground a glancing blow that tore the airplane to shreds! Hoot would live to fly another day. The Swallow was tough enough to barely save his life. There were three chrome moly tubes welded across the fuselage ahead of the instrument panel that were bent into a half circle by Hoot's body weight. Dad cut them out of the wreckage and gave them to Hoot while he was still in the hospital to show him what he had survived. This was the first accident our family or any of our customers experienced while participating in any kind of show; in fact it was the only accident I remember in all the local air racing I ever saw.

If, in telling these stories, I have given you the idea that pilots of this era were reckless or irresponsible I am sorry. The opposite was true. My father and his "fixed base operator" friends were solid business people for the most part. They lost many races and contests to help their "customers" win! Dad considered it bad business to win over anyone who was spending money with his business except when another dealer to show the superiority of his equipment another's. He dwelt in family, customer, and employee safety and would not allow his own three sons to own bicycles because he thought they were too dangerous; yet he taught each of us to fly at age sixteen. I never dreamt I would see the day any of our customers or our family would be hurt in an airplane accident until the Hoot Gibson accident.

In early 1934, my father became interested in the Rider R3 project for the Mac Robertson Trophy Race from London to Melbourne, Australia. He formed an organization of Keith Rider, Edith B. Clark and himself to complete the airplane and enter the race, which was never to happen for him. On October 4<sup>th</sup>, 1934, just thirteen months after the loss of his beautiful Swallow, he was killed on about the eighth test flight of the R3. It was an "unnecessary accident" as he would have called it, a moment of inattention to what he was doing; steering the plane with its brakes in the early part of

the takeoff. He simply got on them too hard. He could have been having a bad day and responded to slowly to a minor error, or he could have had a complete brake lockup; We'll never know. The plane nosed over pinning him under the wreckage; the accident led to his death, due to head injuries twenty-four hours later.

In that short span of ten years, my father experienced air showmanship from the “Jenny Scramble” to the development of the R3 unlimited race plane, later ably flown by Earl Ortman to a distinguished racing record. 1924 to 1934 was truly the “Golden Age of Local Air Racing”, from open field to airport, from 90 MPH to 290 MPH, from Barnstormers to Proprietors. We saw it all at Clover Field.

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THE END