The following talk was made by Captain John M. Miller, age 84, at the Dutchess Community College, Poughkeepsie, NY, on Wednesday, November 28, 1990.

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Good evening, everyone. I wonder how many people in the audience are friends of mine here to heckle me. Would you raise your hands, please? [Laughter] Well, how many here are licensed pilots? [Most in the audience of about 175 raised their hands.] Boy, oh boy, I better get things right tonight.

Well, this is supposed to be a story about the history of aviation in Dutchess County (NY) and it seems to me that anyone who's flying should be familiar with the past history of aviation in the county and it really does have a long history. In fact, Glenn Curtiss, who was a bicycle racer and manufacturer in Hammondsport, New York, finally graduated to making airplanes. He competed for a $10,000 prize offered by the "New York World" newspaper for the first aircraft of any type to fly between Albany and New York between sunrise and sunset.

He built an airplane especially for the purpose, about the fourth airplane he had ever built. He not only designed the airplane, with no engineering data to go on but his own, and the engine also -- a six cylinder engine. And he flew from Albany to New York on May 29th, 1910. He landed for refueling where the IBM main plant is now located, down on Route 9, half way between Poughkeepsie and Wappingers (Falls), across the road from my father's farm. I was four and one-half years old. My dad took me to see the airplane. We were too late to see the landing, but we did see them refuel the airplane, draining the gasoline out of an automobile into a pitcher and pouring it into the airplane. I asked my dad why were they putting water into the airplane? I didn't know about gasoline and he explained it to me. We didn't have a car.

Well, I saw his take off and it was such a thrill that I changed my interest from steam locomotives to airplanes on that day, when I was four and one-half and I never changed my direction since then. That was May 29th, 1910. I was four and one-half and I remember it quite vividly, seeing that airplane zoom over the trees and disappear over the Hudson River, at about 100 to 200 feet. Curtiss was the first man to fly across the Hudson River, but he did it lengthwise! [Laughter] That flight was really an historic flight and it was a very big thrill to everybody. It was in all the newspapers, with headlines and so forth, it was quite an exciting thing. Today you would never think anything of it. But, then, airplanes had never been seen here before. That was their very first airplane and many, many people still didn't believe that airplanes were actually a fact. People actually thought they were a fake. In fact, later when I was barnstorming, several people would come to me and say, "I think the whole thing is a fake! You've got some secret method of getting that thing up there." [Laughter] Well, it was secret all right: it was air, which is not visible. I remember distinctly, one day I was carrying passengers in an old Jenny and a man came along, holding a little boy by the hand. Within my hearing, the boy asked his father, "What makes it fly!" He replied, "It's just a fake, they've got some secret trick to get it up there." [Laughter] I actually heard that. [Laughter] Many people at that time thought flying was against God, that man should never fly, or try to fly because it was sacrilegious and I had people come to me and tell me that, when I was flying in those days.

At any rate, before World War I, that was the first airplane to come. Another one came to the fair grounds the next year. The fair grounds at that time were out on Wilber Boulevard, beautiful fair grounds with a one-mile horse race track and paddocks, grandstand, exhibit hall and so forth, all owned by Jacob Rubert. I remember that one plane came in 1911, the next year, and my mother took me out there on the streetcar to see it. I sat on the field all day long to wait for the breeze to die down, because they couldn't fly it if there was a breeze blowing. I was disappointed because my mother had to go home to prepare dinner, so she took me along on the trolley car. During dinner we heard the children starting to yell outside and we heard the engine as the airplane was flying over Poughkeepsie. We were living on South Clinton Street and it made a turn right over the house and returned to the infield of the race track. So that was the second airplane I had seen.

The next time was in 1913, when Kingwood Park was opened as a residential development, and the same pilot who had flown this airplane in 1911 came for that opening. The airplanes, of course, did not fly across country. They came in boxes on a freight car and this airplane was brought in several boxes, about five or six feet square, on the railroad and then came down to Kingwood Park on a streetcar electric flatcar. Then were taken up the hill by horse and wagon, then assembled in a tent. There was a big crowd there, for the opening of Kingwood Park, and it was a very exciting thing. Ninety-nine people out of a hundred had never been near an airplane. Probably one out of 10,000. The plane was assembled in the tent and they charged a dime to see it. Now, a dime at that time, was about two dollars worth today and it was quite a lot of money. So I went in to see it with my father. Then they took it out and flew it in a holding pattern, an oval pattern, about 200 feet over Kingwood Park, and it was a great thrill to see anything like that as he turned under perfect control. Then it went back into the tent . . . and I got another dime to see it again. [Laughter] So, I was pretty

familiar with airplanes by the end of 1913.

That pilot was Beckwith Havens and he came from (nearby) Staats- burg and he was one of Curtiss' earliest pilots -- one of Curtiss' instructors over in Hammondsport. He flew all around the country showing the airplane and I got to know him many years later quite well -- excellent pilot and a very nice man. Well, Glenn Curtiss died of acute appendicitis in 1930 and I never did get to meet him. In 1910 he didn't pay any attention to me. I was only four and one-half. I always wanted to meet him, but never did see him again.

There were no more airplanes around here until World War I. Once in a while a plane would come up here from Miniola, Long Island, which was an Army air field at the time, and land in the infield of the race track to help on the war bond drives. Of course, I would peddle on my bicycle through the dirt roads and wagon trails about six miles to see it. Two of them I know of had accidents, three of them in fact. Of course I saw the result of those. They were minor accidents and busted the airplane a little bit.

Off to the side of the infield of the race track, there was a little tiny pond with a fence around it, about twenty feet square. It was completely out of the way, but seemed to have an attraction for airplanes. Two of them ran into the fence and busted the airplane and had to be taken away in a truck. That was in World War I. Another one had an engine failure and went into the trees on Hooker Avenue. No one hurt in any of the airplanes -- they were all Jennys.

In 1923, after I had seen a few airplanes fly over but not stop, that's five years after World War I, a barnstorming pilot came to Poughkeepsie. He had arranged a little publicity with the newspaper, "The Evening Star", and he landed in a field out on Route 44 which is now occupied by the Alfa-Laval plant. Actually, that was a swamp, with a dry area in the middle of the swamp, sort of a gravel area about 450 or 500 feet long. And it doesn't seem possible today, but he flew out of there with plenty of room to spare. A Jenny would do that. The Jenny had the reputation of taking up the whole field, no matter how large or small it was. But that was a small one. Of course, as soon as I heard about that, I peddled out there on my bicycle every day after school to help him.

In the meantime, before that, my uncle had been a mechanic in World War I. He had given me all his books, and so forth and I still have them, and I studied them very thoroughly, to the great detriment of my Latin and French in high school. They were much more interest- ing than my Latin and French. The pilot, who's name was Seewanee Taylor, was rather impress that I had studied the airplane so thoroughly and knew it so well, all out of a book. I knew more about it than he did, in fact. He wasn't a mechanic at all.

So I became his unpaid mechanic that summer. After vacation started, I got a job in a machine shop, to learn the toolmaker's trade. Every afternoon after work I would go out and help him. Most of his flying was done in the evening. Later on, I was able to buy a motor cycle, with money I made as a toolmakers' apprentice, so I had transportation from then on. This went on during the summer of 1923. Finally, I went back to my last year of high school. I continued to help him until October and he finally took me for a ride. I was really disappointed because it was only about five minutes. I could understand that, though, because the sun had set and it began to get dark.

When we got back on the ground, as I say, I was rather disappointed. As I helped him tie the airplane down, he told me that he was going to stop flying for the year and go down to New York (City) for the winter. In the spring he was going to get another airplane because this airplane was in such atrocious condition. The airplane was absolutely awful. It had been standing out in the weather ever since World War I. There were holes in the fabric big enough for a cat to jump through. He said, "You can have this airplane and I'll get another one in the spring. And if you'll fix this one up with new fabric covering and so forth, I'll come up and teach you how to fly." I was flabbergasted. All of a sudden, the owner of real airplane! I was just starting the fourth year of high school.

Well, it was tied down in a field off Route 55. That was where he was going to keep it for the winter. Well, you give a seventeen year old an airplane -- and I had sense enough not to let my parents know about it [Prolonged laughter] -- and something's going to happen. I started taxiing the airplane around that big field. That big field is still there, a meadow, off of Overlook Road, which goes around two sides of it, just a short distance from Route 55. There was one tree in the middle of it, just one tree -- had to miss that. So I taxied the aircraft around and I had the books on the subject. And one book, a wonder- ful book, written by Captain Horacio Barber of World War I. He was an early bird pilot, in England, and very famous before the War and was in charge of flight training in England during the War. He wrote a book, called "Aerobatics". In fact, he coined the word, "aerobatics". It was a beautifully written book, with illustrations, and I studied every word about it -- primary flying, right through aerobatics.

So I applied the knowledge of that book to the taxiing of the airplane. Now those airplanes did not have brakes on the wheels, it had a tail skid and no brakes. And believe me, you had to know how to handle them on the ground or you would wreck them instantly before you ever got them off the ground. He stress that fact in his book. So I started practicing and doing what he said in that book. I tried to taxi that airplane for a few weeks. Every good day, after school,

I would go out on my motorcycle with a five-gallon can of automobile gas and taxi around. Finally, I got so good I could do what they call "grass cutting".

Now grass cutting . . . I'll go back a few years. After the flight at Kingwood Park, my father took me down, on two or three occasions, to Miniola (Long Island) to see the airport down there, before World War I. I saw them training students in Curtiss airplanes, pushers where you sit down in front, and these airplanes are made out of bamboo and wire and fabric, same as the one he flew down the Hudson River. Very frail kite. And they would taxi across the field, getting it off the ground about a foot high. That was as high as the airplanes could fly because they had the throttle blocked so it could not get enough power to fly any higher than that. That's what we call ground effect. These students had no dual controls and no instructor and they would go back and forth across the field so they could land the airplane successfully. Those airplanes had a fixed nosewheel that would not ground loop, or make a sudden turn by itself.

I'd seen that going on and figured if they could do it maybe I could do it, too. Well, it just happens that a Jenny is an entirely different airplane from the Curtiss pusher. It has a tail skid and two main wheels in front of the center of gravity and, therefore, it does not want to go in a straight line -- it wants to go back the other way all the time. In order to fly it successfully and handle it on the ground, you have to know how, and that involves using the ailerons and not the rudder -- the rudder is ineffective on the ground. You must use the ailerons and this was stressed in Barber's book. So I guessed if I could handle that airplane on the ground, I could take it a foot off the ground and land it without running out of field.

One day, I had been doing this for about a month, I was getting a little tired of it, anxious to go on up and fly it, but I knew I would be in deep trouble. On my eighteenth birthday, December 15th, 1923, I was doing my thing, practicing, on a beautiful day. I was taking these passes across the field, about a foot high, then making a landing without ground looping, without losing control on the ground . . . that was an absolute necessity. I was thinking about how wonderful it would be if I could just go on over the fence and take off. No, I thought I better not because I would really be in trouble because I didn't know how to make a turn yet [Snickers], or approach to landing. [More snickers] So I was doing this a few more times and thought I better wait a couple of days and it would be the twentieth anniversary of the Wright brothers' flight. The Wright brothers made their first flight on December 17th, 1903. I became preoccupied with my thoughts and, before I knew it, that fence was right in front of me. It was either crash into the fence . . . or go over it. It wasn't a high fence, so I decided to go over it. I opened the throttle the rest of the way and went over the fence.

Believe me, I was thoroughly terrified! [Laughter] My mouth was full of cotton. I couldn't swallow. I was just, just terrified, because I knew I was really in trouble. And I really WAS! So I watched the trees go under the wings and I watched those rocker arms on the engine [with arms thrust out ahead and clenched fists, palms down, Miller wiggled his forefingers up and down] up in the front -- I didn't dare look anywhere else. I didn't dare. I just kept flying.

Of course, I was totally lost because I had never been beyond that point, to the east of that field. Remembering this, I had to get down, but in order to get down I had to make a turn, and I had to learn how to make a turn. I remembered Captain Barber's instructions: If you get wind on the right cheek in a left turn, you are skidding, or on the left cheek you are sliding. So you have to adjust the turns so you don't get wind on one cheek of the other, just on the face. What was happening was I was getting plenty of wind on my face, because in the meantime someone had stolen the instrument panel out of the airplane and the wind was going into the front cockpit, coming under the cowling and coming right into my face. It was December 15th . . . it was a nice day, but it wasn't exactly warm. Fortunately, I had my motorcycle helmet, goggles and jacket on.

Anyhow, I went up there practicing turning and it must have been over an hour. I was too busy flying to even look at my wrist watch, but I had plenty of fuel in the tank. I spent plenty of time up there, at least an hour, practicing turns and getting lost in the bargain. I found the Hudson River and followed it to the (Poughkeepsie) bridge and followed Main Street and then recognized the field, but the field went by me so quickly that I didn't have time to turn and land. [Laughter] So, of course, I was taking only shallow turns and I was so low I couldn't see things very far ahead anyway. So I thought I better get up a little higher and I probably went up to two or three hundred feet.

Well, after many attempts, I finally came in over the high trees and bounced . . . and saw that fence . . . and went over it again! [Laughter] I was off again. So I went back and followed the roads, maybe five or six times. I'd come over those high trees, then I'd run out of field before I could get the airplane stopped. I'd bounce and bounce again, then I'd go over the fence and open the throttle and go around. These go-arounds were like ten miles in diameter. [This time, Miller joins his audience in laughter.]

Finally, I decided I wasn't ever going to get in over those trees and I better go to that other field where the Alpha-Laval plant is now, because I remembered it had telephone wires and I could come over the wire, then close the throttle and land. I thought if maybe I could do that I could get down on the ground. I went over and came in over the

wires, closed the throttle and got in on the ground with the first try. But, I remembered that the farmer who owned the field had rented it to Seewanee Taylor and Seewanee Taylor still owed the rent, so I thought I better get it out of there before he grabbed the airplane.

So, off I go again . . . solo number two. I go back to the first field again and made a few more attempts and finally got it on the ground, after only one bounce, without hitting the fence. As I taxied back, a man had stopped in a little Model-T Ford pickup truck. He was a farmer type and he said, "Gee, it shore was purty the way you landed that thing. How much ya charge fer a ride?" [Prolonged laughter] There was a great big sign on the side of the fuselage that said "Five Dollars". I pointed it out and he said, "How much?" I realized then he didn't know how to read, so I said, "Five dollars." He sez, "I ain't got that much." I sez, "How much ya got?" "Dollar-and-a-half." "Get in." [Prolonged laughter] And on my third solo, I became a commercial pilot! [Much more laughter] There weren't any licenses and any regulations, so I was not breaking any law, just the law of common sense. I got him up and got him down successfully, and by the time I got back, there were several other people there. So I continued hopping passengers the rest of that day until it was too dark to fly. I went home with a pocket full of money, because the rest of them paid five bucks apiece. He has the introduction price, at a dollar-and-a- half.

So that's how I got started. Someone was just asking me who taught me to fly, and I said, "Nobody." The next day, I think it was a Sunday, I flew the plane over to where the present airport is located, Dutchess County airport. It was a series of rectangular fields, cut up by barbed- wire fences, with a stone wall along the road. The road had just been built, a concrete road, and, I believe I was told it was the second concrete road in the United States. In those days, it was quite a novelty and the smoothest road around. Most roads around here were dirt roads. I remember when (U.S.) Route 9 was a dirt road when I was a kid. Anyhow, on Saturdays and Sundays, everybody who owned a car in Poughkeepsie would load the family in and go for a ride on the concrete road. It was the smoothest thing they ever saw. I knew if I parked that plane out there in that big field, owned by a man named Tennis, that I could stop the traffic and do some business.

So I flew it over there. Sure enough, before long the whole road was just covered with parked cars, the whole length, because most of the people had never been near an airplane before. They would fly over them, that was all. Well, I was doing a land office business, getting paid $5 for each of my practice landings. A lot of practice. I gave short rides, around the field and back down again. I loaned them my helmet and goggles and they thought that was the greatest show in the world.

One of my passengers turned out to by my father's assistant. Well, he didn't see me, he didn't recognize me when he got in the airplane. I recognized him. Mister Gaber was his name. My dad was Theodore H. Miller and he was general manager of the DeLaval Separator Company. Mister Gaber got out of the airplane and came back to shake hands with me and thank me for the ride, and said, "Hey, aren't you Theodore Miller's son? I didn't know you were an aviator", he said. I said, "Oh yes, I've been flying for quite a while." I had maybe twenty hours. At the time, that was quite a while. "Well, I'll be darned," he said, "I didn't know you were an aviator." And I knew my goose was cooked. The next morning, when he went into my dad's office, he said, "I didn't know your son was an aviator." My dad said, "He isn't. He just wants to be and I wish he would pay more attention to his school work." "Well, that's funny," he said, " because I took a ride with him in an airplane." This was the end of my flying career for a while. But dad didn't get mad at me, he just couldn't get over it. He didn't want me to kill myself and someone else in the bargain. He said if I'd could fix the plane up, he would get somebody to teach me properly.

Between that time and the next summer, I had the airplane complete- ly overhauled and in beautiful condition and while I was waiting for someone to come and teach me how to fly properly, I went ahead and flew it anyway . . . and started barnstorming. That's how I got started. Later on, I got another airplane, which was a wreck, a total wreck, and rebuilt that. This was in 1927 and I sold it in 1929 and taught the purchaser how to fly it, right from scratch, a fellow from Portsmouth, New Hampshire, and I taught him to land that airplane without ground looping it. He never ground looped it in all the years he had it, flew it successfully, put it in a barn and stored it for 25 or 26 years, and finally sold it to a retired TWA captain who now has it flying down in Florida. That's the airplane I sold 61 years ago and rebuilt myself.

In 1927 they decided the City of Poughkeepsie should have an airport. Of course, this was the year that Lindbergh had flown across the Atlantic and, incidently, I was a student in mechanical engineering at Pratt Institute. I had to sell that Jenny I owned, then went to Pratt Institute and graduated in 1927. Just before I graduated, Lindbergh was getting ready for his flight across the Atlantic. I went out to the field in Miniola (Long Island), Curtiss Field, and I saw two or three others take off and go into oblivion and never be heard from again. And I was there to see Lindbergh take off on that rainy, foggy day. I felt sorry for him and said we'll probably never see that poor guy again. But we did, and I sat in a ninth-floor window on Park Avenue (New York) and watched the parade when he came back.

By the way, in the meantime, I entertained Howard Stark, who lived in (nearby) Pawling, who started as a farmer, a

typical backwoods farmer. He was a veteran of World War I, in the Infantry. But he didn't do much walking because he was a chauffeur for a general all during the war. After the war, he decided he'd like to learn to fly. He was much older than I was. He went down to Curtiss Field where they were advertising Curtiss Jenny's for $500, including instruction on how to fly them. So he went down with his $500 that he'd save up. Now $500 in 1921, this was, was a LOT of money. So he went down and bought the airplane. They helped him assemble it and gave him about two hours instruction . . . and he flew it home. He made two or three attempts to land on his father's farm and finally slammed it into a stone wall and wrecked it. After all, he only had two hours of instruction, and how he ever flew that airplane, without a compass and without a map, from Long Island, across the Sound, and all the way up to Pawling without getting lost, I will never know. I would have to have a map and a compass to do it. But, he did it. So he saved up his money and got another one. Now this time it was an airplane advertised down in Philadelphia, for $250. So, he rode down there on his motorcycle, and found it was in very bad condition. Extremely bad condition. But he beat them down in price to $200 and his motorcycle. So he went down with a motorcycle and flew back with an airplane, and he flew from Philadelphia all the way up, across Lower New York Bay, over onto Long Island, and found Curtiss Field. And I don't know how he did that! I wouldn't do it without a map, myself. With the myriad of highways and railroads, I don't know how he possibly could find his way. But, he did.

When he landed, of course he didn't make a good landing, because he hadn't flown in over a year and he had only two hours instruction and only three solo flights. He landed a little hard and the fuselage broke in two at the bottom. Lower longeron separated, because they had a glued joint in there on all the Jenny's. The glue had been washed out by the rain and weather. They separated and allowed the belly of the fuselage to sit on the ground. Well, the fellows on the field helped him repair it with screws and nails and baling wire. When they got through, the lower longerons were a little shorter than they had been before, so the fuselage had a hump in it. [Snickers] What that would do to the longitudinal trim of an airplane shouldn't happen to a dog. [More snickers] But he took it off and flew it back up to Pawling and made two or three attempts to land in that same field and ran into that same stone wall and . . . . [Laughter drowns out speaker] So he was able to assemble one hybrid airplane. One was a Canuck and was a States JN-4D. They were both JN-4's, but one was slightly different; the Canuck was made in Canada. He assembled one airplane out of the two, and what happened was the best fuselage was the one with the hump in it.

Well, he solved the problem of the longitudinal trim by taking a stone out of the stone wall and tying it in the back of the fuselage with a piece of wire, back where the tail skid is located, and that balanced the airplane fairly well. I saw that with my own eyes and he actually took a stone off the wall and put it in the tail. Well, he went barnstorming with that airplane. He would hop from one farm to another, and being a farmer himself, he would talk about farms and about crops and so forth, and be put up in the farmer's house as an honored guest and all the neighbors would pay him $5 apiece for a ride. He made so much money that the summer of 1922, or '23 -- I forget now which it was -- I think it was 1923, that he was able to buy a Waco, which was the most modern airplane in its day -- open cockpit, two seater. He went barnstorming in that, and wound up in Cuba, of all places. Ninety miles across the water with a pre-World War I OX-5 engine. Flew about 90 miles over shark-infested water to Cuba and made a LOT of money there, because they hadn't seen an airplane either. He came back, across the same water, and all the way up to Pawling, flush with money. Then there was another airplane advertised in Chicago, the most modern airplane in the day, a Stinson cabin biplane, a slightly used one, and he bought it. He flew that back . . . then he had a fleet of three airplanes.

Meantime, in 1926, Colonial Airways had a contract to carry the mail between New York and Boston, and they were flying out of Hadley Field, New Jersey, near New Brunswick. They had rather hard luck with the weather in 1925-26 and smashed so many airplanes they were running out of airplanes. The contract required that they have a modern, post-war airplane and engine. Well, they couldn't find any and they knew about Howard, so they contacted him and ask if he would sell them an airplane. He refused, so they asked if he would rent them one and he said, "Okay, if I can be the pilot." So they hired him and his airplane and he started flying the mail from New Brunswick, New Jersey, across New York State, up to Boston.

Well, there's a ridge of mountains, small mountains, a ridge, across the course, along the Connecticut River area. In low weather, that is, low ceiling, in those days we used to fly cross country below 100 foot ceilings. Now that seems impossible, but we did it. We'd have to dodge high trees and go up into the fog, but we'd get across country somehow under extremely low conditions. That's the way they flew the mail. In good weather they would fly in very low altitudes to be familiar with all the high trees and high hills. There weren't any radio towers of any kind in those days. When the weather was very low, low ceiling, they couldn't get past those small mountains; they'd have to turn around and go back. Two pilots were killed trying to get through the mountains. You couldn't go around the south end because that was down in the (Long Island) Sound and the ceiling would be zero over the water.

So he noticed that he had an instrument in this airplane, a very mysterious instrument, called a turn indicator. The turn indicator had been invented by the Sperry Company, with a gyroscope in it.

[A gap in the recording. Here Miller described how Stark learned to use the turn indicator to keep the wings level. He also timed how long it took to climb and descend over the small mountains. The next time the mountains were obscured, he climbed into the clouds, descended on the other side, and flew on to Boston. When he arrived, he found the Boston-New York flight had turned back, so he loaded their mail and returned to New York -- getting paid for an extra trip. Later, he published a pamphlet describing his one-two- three method of flying without outside references. Miller credits Stark with developing the first instrument flight procedure and first to fly "blind" successfully. As the tape resumes, he describes how Lindbergh, in Miller's presence, thanked Stark for publishing his pamphlet.]

. . . and he came over to compliment Howard Stark on his pamphlet and said, "Your one-two-three method is absolutely wonderful and I've been flying with it on the mail." And now he's going to fly across the Atlantic. And the reason that Lindbergh was able to successfully fly across the Atlantic was because he had read Howard Stark's book on how to use the turn indicator. That was exactly the reason he was able to make the flight. The other pilots who made attempts before that did not know how to use it.

Well, I'm getting a little away from the history of aviation in Dutchess County. I said a little a while ago that Mayor Segue in 1927 established an airport in Red Oaks Mill, which is now a residential area, right at the corner of Spackenkill Road and Vassar Road. I took it over and operated that field for several years. At that time there was an 80 by 100 foot hanger and the hanger stood where the bank is now. This is during the depression, 1931-1933 and a terrible depression was going on. It was very hard to make a living in aviation.

Well, nobody had any money except the well-know bootleggers. The bootleggers were using a certain type of airplane, a new standard bi- plane, to carry whisky in from Canada by the ton. They would fly across the border and land in some little hay field this side of the boarder, go back and get another load, two or three times a day. And they were making huge fortunes doing this. Well, they were the only ones who had any money in the whole country. And I'm not kidding. Well, they were constantly bending the airplanes out of shape, and it was enough to keep me busy in that shop -- I had as many as seven men rebuilding airplanes for bootleggers. They all paid with cash.

One day I was standing in there -- I've never had a drink in my life and I never expect to have one -- and I didn't approve of prohibition, I thought it was terrible. Prohibition is what established our present- day organized crime, by the way, that's how it got started.

Well, there were two bootleggers in there, with two guards standing beside them. Everybody had two guns, under each shoulder in a holster. [Miller folds his arms across his chest and puts each hand under an armpit.] Four men, eight guns, and probably a half-million dollars in their pockets. A little lady came in. I don't know her name to this day, but she was quite well known in Poughkeepsie. She was the head of the Women's Christian Temperance Union, which was called the WCTU. We used to call it the "We See To You." Anyway, she came in from the office, the girl in the office said, "Mister Miller is out in the hanger; go out there and look for him." So, she came out and asked, "Is Mister Miller here?" and I said, "I'm Mister Miller." These four men were standing right there, and she said, "I'm from the Women's Christian Temperance Union and would like to know if you would give us a contribution to help preserve the Volstead Act, to keep it from being repealed." [Slight snickering]

Well, of course, the bootleggers didn't want it repealed. The last thing they wanted was the Volstead Act repealed -- that's what kept them in business. So, they looked at me, and I looked at them, and I said, "I think we can help you out," and I spoke to these men and said, "How about giving her a C-note?" A C-note being a hundred dollar bill. Not much difference to those fellows. So they, with a twinkle in their eye, they could hardly keep from laughing, they pulled big wads of bills out of their pockets and peeled off a hundred dollars apiece and gave it to her. Well, she was completely floored. She expected to get, maybe get, five dollars. Well, that lady used to come back every month [Prolonged laughter] . . . sometimes more. In the meantime, the word got around to the bootleggers and they were giving me hundred dollar bills to give to the lady. So she was really making plenty of money, coming out to my field. She just thought it was an airplane factory, and she didn't know what was going on at all. That's a fact. The bootleggers were kept in business until the Volstead Act was repealed and it put them out of business . . . and me, too. So I was left out of business in 1933, and I had to give up the airport and go to work for an airline.

Of course, I did a lot of barnstorming. The airplane I rebuilt from a wreck, and sold in 1929, I built originally with the idea of barnstorming and was going to keep it and made it a five-seater. It was originally a two-seater, with 100 horsepower -- I increased the power to 200 horsepower and was converting it to carry four passengers at a time. This was the same the Gates Flying Circus had done with many airplanes and they were the first flying organization to carry a million passengers, and they did it without killing anyone. And they did it in that type airplane, World War surplus

training plane.

By this time, 1927, there were regulations that had come into effect and an inspector came up and said, "You can't do that, you can't carry more than two people -- it isn't safe." Well, I said, "The Gates Flying Circus carried a million passengers in this type of airplane, four at a time." He said, "I can't help that, it isn't safe, anyhow." So I had to convert it to a three-seater, carried two passengers, in front. Couldn't make any money that way. That's the reason I sold it in 1929.

Well, I got another airplane which was specifically built for barnstorming. It was a new standard biplane and I went barnstorming with that and carried many, many thousands of passengers, a dollar a head, four at a time. It was a real fast operation with a pit crew to unload them and load them at the same time, a real fast operation. And that was all done on hay fields, no airports, nothing to do with fairgrounds or fairs, airports, no where near an airport, always out in the back country. I made quite a lot of money. But I never knew anyone who was as successful at barnstorming as I was. It was a very sharp operation.

In 1923, when I was in high school, I had not learned to fly yet, I told you I didn't learn until December, I read in the paper a man named Juan de la Cierva had made a successful flight in a helicopter at Madrid, Spain, in April, 1923. I was not too surprised because I had read about Cierva. He was an aeronautical engineer and had designed bombers during the war, and I knew he experimented with helicopters. I thought that was really wonderful, that's absolutely fantastic.

So I wrote him a letter, hand written letter. I expected to get an answer in Spanish, and he wrote me in very excellent English. He knew English better than I did, being an Oxford graduate. A very nice letter, hand written, and he explained about the helicopter, what he called an autogiro, the forerunner of the helicopter. It was a rotary-wing aircraft, with the power not driven to the rotor. It had a propeller in front, just like an airplane, and it had a free-wheeling rotor which had no power to it. He explained to me how it works, in 1923, and I think I was about the first man in the whole country to find that out. It was quite a mystery for quite a while. In fact, in those days, it was not respectable for an engineer to dabble around with the idea of a helicopter. But I guess he wasn't very respectable, so he did it.

Well, I kept in touch with him, by letter, and finally he came over to the United States and sold the patent rights to Harold Pitcairn, down in Philadelphia. Pitcairn was a very wealthy man, who inherited a lot of money, and he was building the Pitcairn Mailway Airplane and he established what later because Eastern Airlines. Well, Pitcairn had been experimenting with helicopters, too, so he bought the patent rights for North America and started building experimental helicopters. And I kept in touch with him. I went down and visited him. I was barnstorming around the country at the time. Finally, he went into production with a Pitcairn autogiro, in 1931, and I was the first person to buy one . . . for $15,000, and that was a lot of money in 1931. Equivalent to probably $300,000 today. Close to it, anyway.

That was sale number 12, the eleventh one he sold, he built two or three of them first. I was waiting for the aircraft to be built. One day I read in the newspaper the Amelia Earhart, under the sponsorship of the Beech-Nut Company, was going to get an autogiro to fly across the Continent. Well, I had told Pitcairn I was planning to make the first transcontinental flight with a rotary wing aircraft, an autogiro, and he knew that. But they didn't tell me she had come to do the same thing. Her aircraft was supposed to be sale number 13, after mine. So I got an airplane to fly down there and smelled something was wrong. I had found they had switched the name plates on the two aircraft, so that I had number 13 and she had number 12. Well, the mechanics made me wise to what was happening . . . .

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Unfortunately, the tape recording ended here. Captain Miller described how Earhart was superstitious and afraid of number 13. They each started out across the continent in their new aircraft. Earhart crashed a couple of times and did not complete her plans. Miller did complete his flight and thus became the first to fly a rotary wing aircraft round-trip, coast-to-coast.

Miller described how he negotiated a contract to fly the mail between the Camden, New Jersey airport and the roof of the Philadelphia postoffice. The contract was through Eastern Airline, which he later joined and flew 22,000 hours in DC-2's, DC-3's, DC-4's, DC-7's, Lockheed Constellation's and Electra's. He retired as a DC-8 captain in 1965. He told about his earlier years flying a Boeing 247D, for United Airlines, across the Rockies. And he told many other equally interesting stories. He said he had just returned, with his wife, from a trip to the West Coast in his Turbo Baron. His log shows more than 35,000 hours.

He presented a 9-minute 16mm color film, taken by an Eastern Airline captain in 1939, showing Miller landing his wingless autogiro on the roof of the Philadelphia postoffice. He claims to be the first person to land an aircraft on top of a building.

Once, after making reference to his upcoming 85th birthday, he said, "Aviation is a youth preservative . . . if you live

through it."