



## IT BEGAN WITH A PHOTOGRAPH.

A GRAINY BLACK AND WHITE IMAGE, CAPTURING A PERIOD SCENE OF A FLY-IN AT THE ATLANTA AIRPORT, A COUPLE OF OLD BIPLANES, SOME HANGARS, AND PEOPLE ENJOYING THEIR ASSOCIATION WITH THESE STRANGE NEW AERIAL MACHINES. SCRAWLED IN THE MARGIN OF THE PHOTO IS THE CRYPTIC REFERENCE "1930."





*Having only black and white photographs to go by, Mike wasn't sure what the original color of the Stearman was until a 96-year-old friend told him he remembered the airplane from his days as a young mechanic.*

**"WHO WOULD HAVE THOUGHT** I would have a picture of my Stearman before I ever bought it," said Mike Williams, a thin man seemingly much taller than he really is, with a ready smile always present on his face. I stare at the yellowing photograph and marvel at how history can come alive as Mike rolls his plane into the sun on its narrow high-pressure tires.

This, however, is not the aircraft the "Stearman" name brings forth in many people's minds. No blue and yellow fuselage or military markings grace the sides of NC6496. This aircraft is of a much earlier heritage. Born of a time when only the bravest of passengers took to the skies and airlines mostly flew their routes with nothing more than a few thin sacks of mail in their cargo holds.

Mike's Stearman C3MB was delivered new to Continental Airlines in 1928 to fly the mail on Contract Air Mail Route 16 (CAM 16). Later it flew CAM 30 from Atlanta to Chicago, and through a succession of mergers, it finished its air mail days with American Airways. In six short years the Stearman logged 2,800 hours flying U.S. mail.

With a soft-spoken drawl as thick as his Georgia roots, Mike tells the story. "Dad and I both flew for Delta, and I got interested in researchin' the history of the Delta dusters. I had the N numbers and was contacting the owners off the FAA registry. I tried the fella that owned this one, but he never updated his address with the FAA. I never was able to get a hold of him."

Then one day he picked up a *Trade-A-Plane*, and there it was for sale. "Like most airline pilots, I had more money than sense and decided that I needed to own a biplane," Mike said. "I didn't even

know about it flyin' the mail. I was just interested in it because of the crop dustin' in Texas for Delta. Kinda funny, the guy I bought it from kept it up in Freedom, Ohio. After its whole life dusting in the south, it ended right back on the mail route that it flew when it was new."

Mike and a mechanic traveled to Ohio to take a look. The mechanic wasn't impressed, but Mike decided to buy the plane anyway. He bought the Stearman in fall and flew it a few times in Ohio over the winter to get checked out. "Man, it sure was cold flying an open cockpit in the winter," he said. Then in the summer of 2003 he brought the plane to Atlanta.

"It was needing an annual, and we found a lot of problems with the Continental 220 engine it had on it then," Mike said. "We found metal in the oil screen and a 2-inch crack in the prop hub. I'm lucky it didn't throw a blade on the way home from Ohio. Instead of fixin' all the problems, I decided to just restore it."

The C3MB was a mail plane variant of the much more widely produced C3B. Only 14 C3MBs were built with the two-person front



## AIR MAIL

Mail was flown by Post Office aircraft and pilots in the early years of air mail service. The first air mail route was from Washington, D.C., to New York City with an intermediate stop in Philadelphia. The service operated one round trip, six days a week. Within two years a transcontinental route from New York to San Francisco was being flown with 13 intermediate stops along the path. At first, aircraft flew only during the day, and the mail was put on a train at night. In 1924, however, the first day and night service was inaugurated, transporting a letter from coast to coast in a scheduled 34 hours, 46 minutes westbound and 32 hours 3 minutes eastbound.

Commercial air mail service by private contractors began after 1925 with the passage of the Kelly Act authorizing the postmaster general to contract with commercial air carriers for domestic air mail service. The Kelly Act also authorized feeder routes to the transcontinental network, and private aeronautical corporations were formed to bid on postal contracts.

The Post Office and Department of Commerce wanted to encourage the development of larger, more substantial airlines that weren't solely dependent on air mail revenue. They favored such airlines in the bidding process, which led to many mergers of the smaller, one-route carriers. A carrier could bid up to \$3 dollars a pound to transport air mail, but even at this princely sum, the empty mail sacks often foretold only slow starvation for the smaller carriers.



**Top Left:** The Stearman's new instrument panel. Finding the original Pioneer instruments was the most difficult part of the project.

**Top Right:** Mike Williams in his element.

**Below:** When Mike bought the Stearman it had a World War II Stearman tailwheel installed, so Kent and Mike rebuilt the original tail skid.





Mike Williams and his beautifully restored Stearman C3MB.



seat removed and a 33-cubic-foot mail compartment installed in its place. A hinged metal cover protected the mail from the elements.

Mike approached Kent McMakin, who had restored two other C3Bs in Brodhead, Wisconsin, but Kent had work lined up and didn't want to take on the project. "I'd already done two, and that was enough," Kent said. "But Mike kept buggin' me about it. He said he wanted to go back stock with it, make it original, and I thought that would be the only thing that would interest me because the others I'd done weren't. I had to do 'em the way the owner wanted 'em."

Kent said Mike had a flying disaster on his hands. Out of the 12 wing struts, nine of them had been spliced, and three of them had been spliced twice. It had main gear shock struts that looked like they'd been lift cylinders off a Caterpillar tractor, and it had been rebuilt with a lot of parts from a World War II Stearman. "It took me two weeks with a torch just to cut all that off the frame," Kent said.

The airplane was pretty complete except for the engine and the prop. "We didn't have to go out and find much," Kent said. "We just took stuff off. Someone had put a WWII Stearman tail wheel on it so we went back to an oil and bungee main gear and rebuilt the original tailskid. There's a tail wheel on it now at the end of the skid. When we started you could see it was tail heavy just lookin' at it. To get it into CG, it had 50 pounds of lead attached to the engine mount. The airplane came in to the shop with an empty weight of 2,200 pounds. When we were done it was at 1,850 pounds, just like it left the factory, and that's with a heavier engine."

The Stearman C3s mostly came from the factory with a Wright J-5 Whirlwind powerplant. Wright quit making the J-5 in 1929 and production of the C3B ceased. When Mike bought the airplane it had been re-engined with a Continental 220. He had found someone knowledgeable to restore the airframe, but he needed a Wright J-5.

While Kent worked on the Stearman airframe, Mike followed one of Kent's leads and tracked down a Wright J-5 in Williamson, Georgia, owned by Jack Barbary. "I remember seeing this engine in Jack's shop. I told Mike, a whole lot of people have tried to buy that engine and he's not lettin' it go, but you're both airline guys from the south. You speak the same language. Get yourself over there and you might just be the guy he sells it to," Kent said.

Thousands of dollars later, Mike said, he had an engine despite Jack's reputation of never selling anything. The engine had come off a Stinson Detroiter 65 years earlier and had sat unused ever since. Mike took it to Mike Connors to be overhauled where it

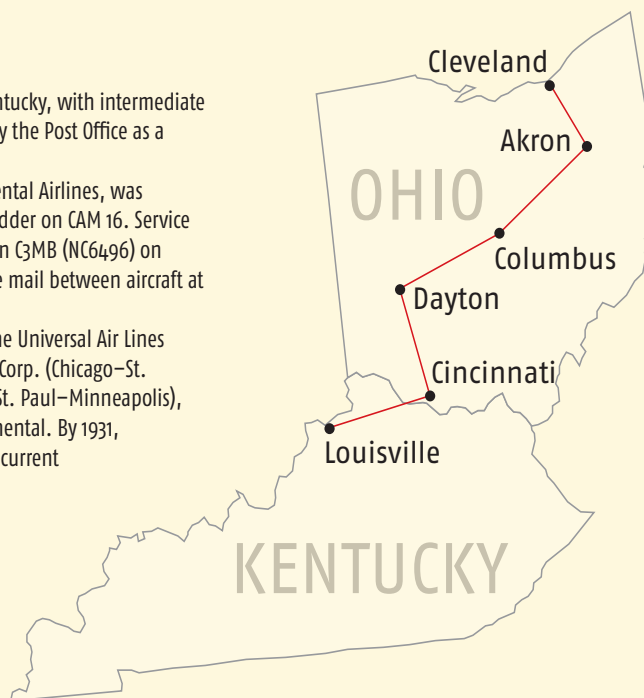
## ROUTING

CAM 16 (Contract Air Mail Route 16) extended from Cleveland, Ohio, to Louisville, Kentucky, with intermediate stops in Akron, Columbus, Dayton, and Cincinnati. The route was opened for bids by the Post Office as a feeder route to the New York to San Francisco transcontinental air mail route.

On October 10, 1927, Continental Air Lines Inc., no relation to the current Continental Airlines, was organized by a group of businessmen in Cincinnati, Ohio, and was the successful bidder on CAM 16. Service was inaugurated over the route with three Travel Air 4000 aircraft and one Stearman 3MB (NC6496) on August 1, 1928. Continental's pilots would fly segments of the route, transferring the mail between aircraft at intermediate stops.

Within six weeks Continental Air Lines and its CAM 16 contract became part of the Universal Air Lines System headquartered in Chicago, Illinois. Universal consisted of Robertson Aircraft Corp. (Chicago–St. Louis–Kansas City), Universal Air Lines Inc. (Cleveland–Toledo–Chicago–Rochester–St. Paul–Minneapolis), Northern Airlines (St. Paul–Minneapolis–Alexandria–Wahpeton–Fargo), and Continental. By 1931, Universal (Continental) was part of the American Airways system predecessor of the current American Airlines.

Charles Lindbergh was chief pilot for Robertson Aircraft Corp., Continental's Midwestern partner in the Universal Air Lines System, prior to his famed trans-Atlantic flight. The Universal Air Lines System offered passenger service on some of its routes. In 1929 a round-trip ticket between Cleveland and Kansas City cost \$190 and had a 25-minute connection in Chicago, not a lot different than today.



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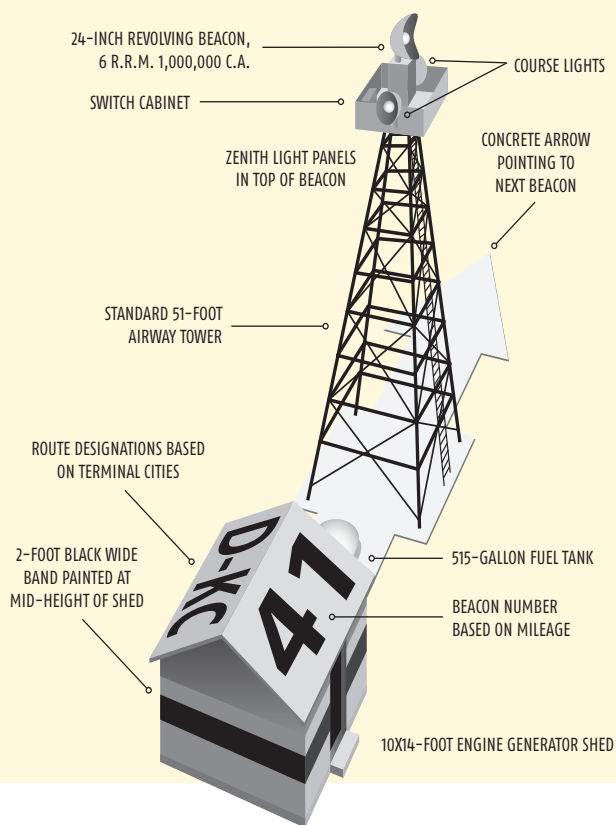
## LIGHTING THE NIGHT

Originally, mail planes only flew during daylight hours for the safety of the pilots and the reliability of the system. The mail was placed on trains overnight, providing coast-to-coast service in 72 hours, but the fastest trains of the day could transport a piece of mail coast-to-coast in 100 hours. To achieve the real benefit of overnight air mail service, the air mail routes had to be flown at night. To accomplish this, lighted air mail routes were created by the Post Office to guide the pilots to their destination.

In 1923, the first lighted airway was created from Cheyenne, Wyoming, to Chicago, Illinois. This particular route was chosen with the thought that a morning departure from either the East or West Coast along the main transcontinental route would encounter nightfall by the start of the lighted airway. Approximately every 10 miles, a 1-million-candlepower rotating beacon would rotate at six revolutions per minute and mark the route. The beacons were placed atop a standard 51-foot tall tower and were visible to pilots up to 40 miles away. The path along the main transcontinental route from New York to San Francisco was lit by 616 of these beacons.

Also atop these towers were two 100,000 candlepower course lights pointing up and down the airway. These course lights were color-coded with green signifying an adjacent airfield and red meaning no airfield. The course lights flashed a Morse code letter identifier signifying the beacon's sequence along a particular 100-mile segment.

Emergency airfields were created every 15 to 20 miles along the route; these were commonly on privately owned property where a farmer was paid to keep a portion of his land clear for such purpose.



turned out to be in not much better shape than the airframe, but eventually Mike had a freshly overhauled Wright J-5 for his Stearman mail plane.

"When we got it all back together, we had no idea what the paint job should be," Mike said. "But then I found a picture of a sister ship of the Stearman when it flew for American Airways in 1931. It was a good shot of the side of the airplane showing the logo with all the airlines, Continental, American, and Universal, and it had CAM 16 on the side. Only problem was it was in black and white. We didn't know what colors were on the airplane."

But Mike remembered an old photo in his collection of his airplane when it was flying CAM 30 in Atlanta. He showed the picture to a friend of his, Bish Simpson, 96 years old, who worked as a mechanic for Pitcairn Aviation at the Atlanta airport in the 1920s. Working on Pitcairn Mailwings at the time, Bish would cross the field at lunch to look at the Stearmans. He told Mike he remembered the airplane. "Not only do I remember it, I can tell you what color it was. It was International Orange and Black," Bish said.

Mike had never even flown a biplane before he bought the Stearman. He'd flown taildraggers and he owns an L-4, but never anything like the Stearman. "The insurance company told me to go and get checked out in a WWII Stearman, which I did, but the WWII Stearmans don't fly anything like this one," he said. "They have balanced ailerons and are real responsive."

Joseph Juptner in his *U.S. Civil Aircraft* series, the bible of old aircraft designs, describes the Stearman's handling qualities as follows: "They were a complete charm to fly, with spirit and crisp determination, yet well-behaved and extremely sure-footed." Mike's take on it? "It's the worst flying airplane I've ever flown. You gotta remember, when this airplane was built, pilots didn't land on runways; they landed on air fields. A pilot always landed right into the wind. It's really heavy on the ailerons and doesn't handle crosswinds very well. Just about the time you get it into a three-point attitude, you run out of aileron control. The WWII Stearmans are real easy to fly; this one feels like you're herding cats. I have a lot of respect for this airplane."

Mike now spends his summers flying the C3MB in Brodhead, Wisconsin, where he owns a hangar right next to the man who restored it. "A fella told me that with a Wright J-5, you can only fly between airports that have J-5 parts. With all the J-5 parts Kent McMakin and his father, Don, have, I can't ever leave Brodhead!"

After its air mail days the Stearman had a long career as a duster, which is how it made its way to Delta Air Lines from '43 to '45. "Until the PT Stearman trainers became available after WWII, they were using these older Stearmans for dusting." That history as a crop duster is how this Stearman attracted the interest of a retired Delta pilot. After more than half a century, one of Delta's dusters has found its way home. *EAA*



**Jeff Skiles**, EAA 336120, is co-chairman of the EAA Young Eagles program. He owns and flies a 1935 Waco YOC Cabin biplane that he keeps in Brodhead, Wisconsin. He has been a pilot for 35 years and has almost 21,000 hours logged. To see more photos of Mike's Stearman visit [www.SportAviation.org](http://www.SportAviation.org).