

Remembering DC-3s, a Dream Come True, and Ron Alexander



By Denny Caldwell

Ron Alexander's Douglas DC-3A, N28AA, c/n 2239, once part of Trans-Texas Airways' fleet. (All photos by the author)

My first flight in a commercial airliner was a family excursion from Detroit Metropolitan Airport to Asheville, N.C., 400 miles south as the crow flies, but considerably farther on this “milk run” route in the late 1950s. As I recall, we left Detroit on a springtime morning in a 4-engine Delta DC-7, landed in Columbus or Cincinnati (or both), then changed to a smaller plane for the next legs to Lexington and Knoxville. Arriving behind schedule at Knoxville, our flight was met by an agent assigned to help our family hustle to a distant gate to board a DC-3 for our final leg to Asheville. Entering through its rear door and walking uphill to our seats felt strange to me after riding in newer tricycle-gear planes that sat on the ground with the floor level inside.

I looked outside the windows the whole time and enjoyed every part of the journey: the early morning departure, rising above the wisps of ground fog into the clear sky, watching the terrain change from flatland to hills as we flew southward, and later in the day, cruising through the scattered bumpy cumulus clouds. Turbulence and clouds were difficult to avoid in the unpressurized DC-3 flying at the lower altitudes.

Another series of flights taking us home a few days later finished long after dark. I recall the hypnotic sight of blue engine exhaust flames, the image fixed in my memory along with the sound and vibration of propellers and the firing of dozens of cylinders: RPM, manifold pressures and mixtures set just right by the crew.

Not long after the family trip, I read the classic aviation book written by Ernest K. Gann, *Fate is the Hunter*; it became

my favorite book about aviation. One of the airplanes Gann wrote about was the DC-3, and ever since reading the book and watching them fly daily over my childhood home near Willow Run Airport, I developed a great fondness for the elegant, radial-engined DC-3 and its military sibling, the C-47. I admired DC-3s from afar and up close at airshows and museums, and I could identify them by ear without even seeing the plane. After the family adventure, the next (and last) time I flew in a DC-3 was in July 1967 from Houston Hobby when Trans-Texas Airways (a.k.a. “Tree-Top Airlines”) delivered me to Fort Polk, La., for army basic training.

Through 50 years of my aviation career, I had a fantasy that someday I might actually fly a DC-3 with its tailwheel and two big radial engines. But, only after my retirement from airline flying did I take the opportunity to fly a tailwheel airplane, and I had never operated a radial engine in my life. I was beginning to think I’d never have a chance to fly one at this late stage of my career, yet my wife Deborah arranged two days of flying lessons in a DC -3 for my birthday, and I was able to fulfill my dream in mid-November 2016.

Deb and I flew from Boston to Atlanta on a Thursday in mid-November, drove a rental car to Falcon Field (KFFC) where training would take place and checked into a nearby hotel. Reminiscent of my airline training experiences, I spent much of Friday in a strange hotel room reviewing training materials and trying to commit to memory some essential information on the airplane. I made up a stack of 3x5 flash cards containing limitations, emergency procedure memory items, and other

information. In the "I.T." age, a stack of self-written 3x5 cards remains a useful learning tool with the approach of check rides and training sessions.

Saturday we drove to Falcon Field and met up with a fellow student from Mississippi (a former Air Force pilot) and our instructor, Ron Alexander. I had never met Ron before but felt an instant affinity and liking for this quiet, poised, down-to-earth pilot who was about my age. Ron instantly made Deb and I feel welcome with his soft-spoken and friendly greeting. He invited and encouraged Deb to go with us, and ensured she was comfortable in the DC-3 cabin. But Ron and I spoke little of our respective past histories, for there was business to take care of and training to be done.

After completing initial paperwork, we started ground school, with Ron delivering a stand-up lecture on DC-3 systems, limitations and procedures. Afterward we went to the airplane on the ramp to receive instruction on the walk around inspection. Working with Ron and fulfilling several roles (flight mechanic, flight attendant, and knowledgeable sidekick) was 20-year-old Max Maiden from the Atlanta area but who recently has been spending his summer's banner-towing around Cape Cod. Max made sure the airplane was clean, engine oil and hydraulic reservoirs serviced, wheel chocks pulled, entry door closed and was a third set of eyes in the busy airspace south of Atlanta. Max, who is a student at Embry-Riddle and also flies the DC-3, is one of the many young people who Ron has mentored toward a flying career.

As it turns out, it is possible I have encountered this airplane before. This airplane (an "A" model, s/n 2239) was one of a fleet operated by Trans-Texas Airways at the time I rode that DC-3 from Houston to Fort Polk. This one? It is impossible to know. Later, this airplane was operated by Provincetown-Boston Airlines, serving Cape Cod in the summertime, and Naples in the winter. I recall seeing PBA many times in Florida and Boston during the 1980s; perhaps this one.

Engine start involved several steps and switches, counting of propeller blades to make sure the engine would not experience hydraulic lock, ignition switches then mixture lever, but not really difficult to start on this day. While we waited for the oil temperatures to come up, the GPS was initialized with La Grange set as the destination where we would do some approaches, landings and takeoffs.

Each student flew a total of three hours: about an hour and a half each day, right seat the first day and left seat the following day. Part of that time required taxiing, and taxiing the DC-3 smoothly is very much a learned art. Unlike most tricycle gear airplanes with nose wheel steering, this conventional-gear airplane is steered using *very slight* differential braking of the main wheels, since the tailwheel is not steerable and the brakes are extremely sensitive. Primary flight controls are direct cable/pulley connections. In flight, the rudder is very effective, elevator control seemed easy and ailerons required a lot of control wheel rotation (and patience while waiting for the result). Cruise is about 140 knots, and on the average, the airplane burns nearly 100 gallons of avgas per hour. I really liked the way the DC-3 flew, and especially enjoyed steep turns and the way the airplane responded in hand-flown instrument



The nose of the DC-3A, with baggage door clearly visible.

approaches, a variety of ILS and WAAS GPS procedures, using raw data at 90 knots. The DC-3 is landed by the "wheel landing" technique on the main gear first, followed by the tail wheel -- and we were reminded more than once *not* to use brakes on landing. As a learning tool, Ron had shown us an old photo of a DC-3 sitting on its crushed nose, tail high, with bent propeller tips, the result of a pilot's sudden over-use of brakes on landing.

Raising and lowering the landing gear in a DC-3 involves two levers (one on the floor, the other to the left of the copilot seat) that must be handled in the proper sequence, four items to check, followed by several verbal confirmations. To complicate matters, the flap lever is also located to the left of the copilot's seat, as well as a fourth lever attached to the hydraulic system hand pump. The DC-3 demands that the pilot raising the flaps after landing must be *very* careful as to which lever is raised.

The viewpoint from the pilot's seats was interesting; the windshield little more than a foot from my nose, with the instrument panel below and farther away than the windshield. The sliding window to the pilot's left would open slightly during taxi. The equipment in this cockpit was mostly vintage, still functional, with some upgrades such as a voice-activated intercom, a Garmin 396 and Garmin 430. Emanating from various places was a unique blend of airplane odors: aluminum, copper, insulation, hydraulic fluid, engine oil, old upholstery, radios, rubber, paint and whatever substances had become trapped in inaccessible places over the past 76 years. This airplane left the Douglas Aircraft Co. plant in Santa Monica, Calif., on June 23, 1940. Aft of the cockpit, radio rack and mail /baggage compartment, the passenger compartment was roomy, nicely upholstered, with comfortable seats.

The weekend we flew, smoke from the forest fires in the mountains to the north was visible, sometimes reaching Atlanta and southward, but otherwise, under high clouds, visibility was great, the air was smooth and cool with less than 10 knots of

DC-3 WINDY DAY TAXIING

By John Hazlet

One of the things we don't see much today is the amount of physical *work* that was involved in handling the old piston-powered airliners in strong gusty wind – on the ground and close to it. The DC-3 was pretty small compared to the later DC-4, DC-6, and DC-7 airplanes in the Douglas family, and none of them had power-assisted flight controls. But, since it was a “tail dragger” it offered special challenges during taxiing, takeoff, and landing that the tricycle gear airplanes didn't.

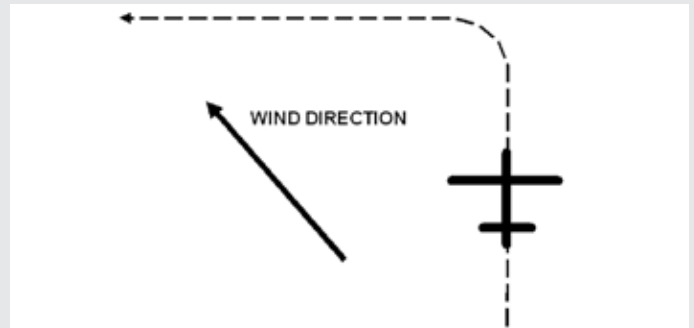
Handling the “Douglas Racer” (DC-3 nickname coined by late aviation columnist Torch Lewis in honor of its sedate, 140-kt-indicated cruising speed) involved dealing with 54 square feet of rudder and 46 feet of ailerons by hand, with rudder pedals that moved back and forth a couple of feet, and a control yoke that rotated 360 degrees and swung through a two-foot-plus arc fore and aft. Strong wind catching the flight controls while taxiing could handily snap your wrist or ankle if you got careless – or even worse – damage the control surface itself. Most of our crews wore leather gloves when we flew, to minimize the possibility of sweaty hands slipping on the yoke.

Coming down final approach in a strong gusty crosswind, the pilot was as cool as a cucumber 1,000 feet off the ground, and drenched in perspiration from heaving on the controls by the time he got to the gate. It was common practice to ask the non-flying pilot to help maintain control pressure when things really got active.

A big – and unique – challenge was taxiing. We used to evaluate copilots in this area on a large square concrete ramp at a military base we frequented. We'd pick a day when there was a 25-30 knot wind blowing. The task was to taxi around the perimeter of the ramp (about a mile total) *smoothly*, without letting the flight controls snap from stop to stop, without losing directional control, without annoying blasts of power, and without excessive use of, or perceptible lurching from, the DC-3's sensitive and fade-prone Hayes expander-tube power brakes.

Taxiing in a straight line wasn't too tough. You locked the tailwheel (it wasn't steerable – you either locked it straight ahead, or unlocked it to free-castering mode with a lever under the throttle stand), pulled the downwind engine's throttle to idle, and used just enough power on the upwind engine to keep going straight at the desired speed. You also had to follow the rules regarding flight control position: If the wind was from ahead, you wrapped your forearm around the front of the yoke and held it against your chest. Wind from behind (and blowing faster than you were taxiing), hold the yoke all the way forward. Crosswind from ahead, roll the yoke full travel into the wind; quartering tailwind, do the opposite. And someone had to firmly *hold* the controls there, so they wouldn't blow around and hurt a pilot or themselves!

Making the 90-degree turn at each corner of the ramp was where we separated the men from the boys (no female DC-3 pilots at our company in those days). Suppose you were heading north with a 30-kt quartering tailwind from the right. As you approached the turn, the left engine was idled,



the right engine at 1,000 RPM or so, the yoke full forward and rotated full left (elevator and right aileron down), rudder full left (the wind would be holding it there anyway and it wasn't very effective in a tailwind), tailwheel locked, and *not riding the brakes* (riding the brakes was a mortal sin in DC-3s with Hayes brakes; they'd soon get hot, fade out, and you wouldn't be able to stop).

Just before you start the turn, you'd enlist the other pilot's help to heave the rudder over to the *right*, against the wind, and hold it there with heavy pressure (keep off the brake!). With both hands firmly gripping the yoke, reverse the ailerons to full *right*. This is so the controls won't snap violently to the opposite stops as you turn the tail across the wind, causing broken bones or sprains to the pilots, damage to the flight controls themselves, and often, a painfully obvious loss of directional control.

Then you'd feel the tailwheel lock. If it was bound by crosswind pressure on the airplane, either adjust the upwind throttle a little, or lightly touch the brake to relieve the binding, unlock it, and apply a little right throttle to start the airplane turning left. As soon you had some momentum in the turn, idle the *right* engine and smoothly feed throttle to the *left* engine.

If you did it right, the airplane smoothly stopped its turn heading west, you dropped in the tailwheel lock, gently adjusted power on the left engine to keep going straight, and allowed yourself a discreet hint of a smile because you were such a cool DC-3 driver. Smooth as glass, no jerking on the brakes, no lifting the tailwheel off the ground, no slamming the controls against their stops, no drama. Minimal disturbance for the passengers.

If you did it **WRONG**, the airplane would swiftly ground loop all the way around, 225 degrees to the left until you were headed into the wind (southeast in this case) off the taxiway, or you'd jam on the brakes in an attempt to get the old bitch under control and lift the tailwheel, or the flight controls would reverse and break something, or an engine would backfire with a thunderous blast and gout of flame from the air intake because you shoved a throttle forward too fast, you'd scare the [expletive deleted] out of the passengers, or maybe you'd achieve a unique combination of the above.

If you were the captain, you'd be deeply embarrassed. If you're the copilot, you might get a memorable dose of old fashioned Cockpit Resource Management from the captain!

Those were the good old days. . . .

wind at the surface: slight crosswind for landings; good for our experience.

On Sunday, we flew with Ray Fowler, a flight instructor whom Ron entrusted to instruct in the DC-3 training program. Ray flies many vintage airplanes including most of the WWII era fighters and bombers, as well as being an F-16 driver and pilot for Delta. Flying with him was a great experience and under Ray's instruction, I think I improved my taxiing technique, especially when he compared taxiing a DC-3 to hovering a helicopter: use very minor control pressure (in this case, slight brake pedal pressure) in response to minor excursions in attitude (in this case, to prevent excursions from the taxiway). He said that after a while, you hardly even think about it, you just know how to do it. Having a few thousand hours of helicopter time, I can understand that, but I have many miles yet to taxi a DC-3 before I acquire the finesse with little thought of technique.

Flying Saturday under Ron Alexander's expertise and instruction was one of the most enjoyable aspects of this experience and I wanted to know more about him. From Ron's online biography, I later learned of his many accomplishments, although he was a humble and quiet man. He was, like me, from the Midwest, and had also flown in Vietnam. He was a highly decorated air force pilot flying C-7 Caribous, while I flew in Vietnam as an army helicopter pilot two years later. He became a pilot for Delta Airlines, while I stayed in general aviation for several years before moving on to airlines.

Our paths may very well have crossed close to each other, and I like to think they did since we had much in common. Several of the airlines for whom I flew passed through Atlanta, and I had been inside the Delta pilot training center with another airline; we surely had mutual friends or acquaintances that I knew from Eastern Airlines and Kiwi International Airlines, both of which used Atlanta as a hub. Ron Alexander has been heavily involved with the Experimental Aircraft Association's Vintage Aircraft Association and a member of its board of directors and as well as a renowned expert in antique airplane restoration. He established the Candler Field Museum, a re-creation of the old Atlanta airport from the 1920s and 30s, located south of Atlanta at the Peach State Aerodrome (GA2) near Williamson, Georgia. At Ron's urging, following our Sunday flight, Deb and I made the half-hour drive from Falcon Field down to the museum. It is a neat, well-kept facility with grass runway, busy restaurant, and museum hangar that houses various aviation artifacts including Ron's beautiful, blue JN-4 *Jenny* biplane that he regularly flew after his own meticulous restoration.

My experience of being Ron's student, even if for only a few hours, has left me with a wonderful memory that I will always treasure. With a laid-back but meticulous manner, he smiled, laughed, and in spite of my unrefined control touch, seemed to very much enjoy sharing his beloved DC-3 and helping us make our dreams come true. He invited us to return for more flying and even offered me a 'discount' off the hefty price of



Ron Alexander's Curtiss JN-4 Jenny.

flying this wonderful DC-3; a price well worth every penny and, as Ron quietly mentioned, only covers his maintenance and fuel costs. (An engine overhaul alone costs around \$75,000!) When Deb and I said goodbye to Ron on November 13 we envisioned returning some day for more flying with Ron in the DC-3; perhaps meeting up with the DC-3, Ron, Ray and Max at Oshkosh -- and maybe even driving our RV to his museum to volunteer with restorations and events some summer. As we parted we shook hands and exchanged happy good-byes. Deb and I turned and left the terminal building, while Ron headed back out to his DC-3 with his camera to take new photos for the DC-3 training manual.

AFTERWARD

Four days later, Ron was killed in the crash of his beloved Curtiss *Jenny* at Peach State Aerodrome. Reports indicate the aircraft caught fire immediately after takeoff. There is no doubt in my mind that if the airplane was flyable and if anyone on earth *could* have landed that flaming *Jenny*, Ron was the one who could. Also losing his life was Larry D. Enlow of Orlando, Fla., himself a very experienced aviator and an FAA official.

This shocked and saddened both Deb and I. Suddenly losing this new friend, who was such a superb person and a pilot's pilot. But for us, in a sense this has become a recurrent training event: a reminder of the suddenness of loss; the importance of having our lives in order and doing the things we love when we have the opportunity; treasure experiences and each other, and don't wait until 'someday' to do what you love. ➔

About the Author

Denny Caldwell is a historian, pilot and writer. Born and raised in southeastern Michigan, he was an Army helicopter pilot in Vietnam, flew powerline patrol, has flown charter, corporate and flew for several airlines (a few of them, twice) before retiring as a Boeing 737 captain from Continental Airlines in 2006. Denny is a ground and flight instructor and writes about some of the things he has seen and done. He lives in Hancock, N.H., with his wife Deborah.