

THE PLANE WITH A FUTURE'

Everyman's airplane turns 30.

BY WILLIAM L. GRUBER

or those of us who grew up in the era of all-metal airplanes, the Cherokee is as synonymous with Piper Aircraft Corporation as the Cub. But when the first PA-28 rolled off the brand-new assembly line at Vero Beach, Florida, 30 years ago, it was a significant departure from the tried-and-true tube-and-fabric designs made famous by Piper in Lock Haven,

PHOTOGRAPHY BY MIKE FIZER

On January 8, 1961, the eightieth birthday of William T. Piper, Sr., the company officially dedicated its new Vero Beach plant. An estimated 5,000 well-wishers attended, arriving in 250 airplanes. Dignitaries present included Florida Governor Farris Bryant, television star Arthur Godfrey, and the Reverend Billy Graham.

Cherokee production began slowly but, by late summer, was up to about five airplanes a day. Cost for the standard model was \$9,995, although many optional accessories were available at added cost. Soon, higher powered models were available, as were ski- and float-equipped versions. In early 1962, Piper delivered its 500th Cherokee—only three months after delivering the 250th. The 1,000th was delivered in the spring of 1963.

The rest, as they say, is history. Cherokee's direct offspring included various models of the Warrior, Archer, Arrow, Dakota, Pathfinder, and Cadet. Among later refinements to the basic Cherokee design were tapered wings, bigger powerplants, larger fuselages, retractable landing gear, and turbocharging. The lessons learned and theories proved in the Cherokee's development, production, and success were reflected in the entire line of Piper models to follow.

"Along with the [Cessna] 172, I would say the Cherokee is one of the two most influential aircraft of all times," opines Terry Lee Rogers, executive director of the Tampa, Florida-based Cherokee Pi-

lots Association. Rogers, who owns a 1968 Cherokee 140, describes the Cherokee as "a good, reliable, inexpensive aircraft. My feeling is that it is the finest aircraft that was ever made available to a large number of private pilots."

Three decades after they rolled off the assembly line, the early Cherokees still are serving well as entry-level airplanes for new pilots. A good example is Robert A. Howells, who keeps his 160-hp PA-28 at Greene County Airport (I19) in Xenia, Ohio, just outside Dayton. A 130-hour private pilot, Howells passed his check ride on March 15—about two months after he bought the Cherokee. "It's really a delightful airplane," he says. "It's really very easy to fly."

A psychologist and part-time college professor, Howells wanted an airplane he could use to finish his flight instruction and to take his wife and three kids for rides. He also wanted an airplane that wouldn't break the bank. The PA–28 seemed to fit the bill.

But his isn't just any Cherokee. It is N5001W: the second of all production PA–28s. The first production Cherokees were numbered in sequence. N5000W was the first, Howells' airplane was second, N5002W the third, and so on. Although N5000W still exists, it currently is in storage and is not flown. It belongs to Robert Bynum of Georgia, who was unavailable to be interviewed for this story. Howells now owns the oldest production Cherokee still flying.

The late Max Conrad, a noted aviation record-holder, posed with the new Cherokee for the cover of the June 1961 AOPA Pilot.



"This is a piece of history here. It's something I take very seriously," says Howells. "We're going to take really good care of this airplane."

His stewardship is starting out on the right track; Howells purchased the aircraft from previous owner Michael Robinson in excellent condition. It is not entirely original. Robinson added nonstandard wing tips and gap seals on the ailerons and flaps, which improved lateral stability and lowered the stall speed slightly. The new interior is of red velour. The panel includes modern touches like a Terra TXN nav/com with glideslope and loran. But the directional gyro and attitude indicator are original, as is the baseball-size turn-and-bank indicator. Engine gauges are original, with the grainy radiumpainted dials beginning to fade a bit. Howells says he's happy with the panel, except that all the instruments are illuminated by an overhead light for night flying, and you can't see the exhaust gas temperature gauge or the handles for mixture and throttle in the dark.

Howells has the original wing tips and all the old avionics. He lugged out the bulky Narco Superhomer and some other mysterious black boxes during our visit.

Howells' airplane retains some basic quirks that identify it as an early Cherokee. Trim is operated via an overhead crank, rather than the vertical trim wheel familiar in later aircraft (there also is a rudder trim knob beneath the panel). And there





When Piper dedicated its new Vero Beach, Florida, plant on the eightieth birthday of William T. Piper, Sr., in January 1961, visitors arrived in 250 airplanes.

are no toe brakes. Both brakes are operated simultaneously with a small handle under the panel, which is similar in size and operation to the parking brake handle on a modern PA–28. The fuel tank selector handle is on the left side panel. And the yokes are narrow in diameter, semicircular, and metal—identical to those in Tri-Pacers and Colts.

The few common problems in Cherokees include cabin leaks and hard starts. Howells involuntarily demonstrated the latter during our visit, but after a quick battery charge, the airplane started right up, and he and I prepared for a short familiarization flight.

Earlier in the day, Howells had flown with Senior Editor Tom Haines on the photo mission for the pictures that accompany this story, and as we taxied, he made much of the "perfect" landing Haines had performed in N5001W. "It's windier now," I said, preparing an advance excuse, though we hadn't yet left the ground. "It's a lot bumpier now."

As we neared the Piper Saratoga ahead of us on the run-up pad, I reached



for the hand brake and pulled, expecting to pump gently and slow our taxi a bit. But nothing happened. I yanked back five times with the handle hitting the stop before brake pressure came up, and by then, I had angled away from the Saratoga and toward the turf, with the ugly image of my crashing the oldest flying Cherokee-without leaving the ground-flashing before my eyes. But the brakes soon pumped up well and held during the runup, so we decided to continue. (They worked fine after that, and a mechanic later attributed the momentary brake loss to "a stuck O-ring.") Still, I remained suspicious of the hand brake from then on.

Takeoff roll was not what one would call blistering, but we were off the 3,947-

foot runway with lots of room to spare and climbed gradually up and out of the pattern. It was indeed bumpy, but the airplane handled very well as I experimented with various power settings. We tried some steep turns and dutch rolls. Cockpit visibility was excellent in the turns. The Cherokee was docile in both power-on and power-off stalls, with no pronounced break and a simple recovery.

We headed back to the airport and lined up on final in a crosswind that was stronger than I expected. I carried power on the approach and touched down gently but a little left of the centerline. After that touch and go, I wanted to try some landings without a crosswind, so we flew over to nearby Dayton General Airport South, where the wind was blowing right down the runway.



Piper delivered the 1,000th Cherokee in 1963. Walter Bergmann of Chicago (second from right) accepted the aircraft from three Piper managers in Vero Beach.

We lined up on final at Dayton General and seemed to have it nailed, so I decided to impress Howells with my incredible power-off landing technique. I don't know why I thought I was flying a Warrior—surely those stubby little wings out there should have tipped me off—but as I pulled the power back, the Cherokee suddenly assumed the aerodynamics of a refrigerator, and our "elevator—going down" arrival pointed out the error of my ways. Howells' "everyone does that" didn't make me feel much better. Future landings were much less traumatic.

The Cherokee cruises at about 120 miles per hour (104 knots) with 75-percent power at sea level. Top of the green arc is 140 mph (122 knots), with a maneuvering speed of 129 mph (112 knots) and a Vne of 171 mph (149 knots). The Lycoming

O-320 was certified for 91/96-octane avgas, but due to its unavailability, Howells burns 100LL. Gross weight is 2,200 pounds, the dimensions diminutive: 23.3 feet long, with a 30-foot wingspan (5 less than a Warrior).

Speaking of wings, the one major blemish on the career of the PA-28 came in May 1987, when the FAA issued Emergency Airworthiness Directive 87-08-08 calling for an inspection of the main wing spar caps on all PA-28 Cherokees (except the Dakota) and Arrows and PA-32 Cherokee Sixes with at least 5,000 hours in service. The AD followed a fatal wing separation in a PA-28-181. Spar cracks later were found in two other airplanes. In November 1987, the AD was revoked and replaced by a service bulletin requiring periodic inspections in high-time or hard-used aircraft. By then, about 800 aircraft had been inspected with no problems discovered. The three with cracked spars



Trim on the original Cherokees is operated via an overhead crank.

had been well-used aircraft, a pipeline patroller and two Alaska bushplanes.

Overall, years of use have proved the Cherokees to be good, basic, dependable airplanes—just what the design team set out to build in the late 1950s.

"I don't think it was the times as much

as it was the culture of the company," says Bergey of the project's success. "We were on our own, away from Lock Haven, in a new facility designed to build the new aircraft. There was almost no paperwork." William T. Piper, Sr., ran the company by instinct with the help of his sons, William, Jr.; Thomas (Tony); and Pug. They knew enough to assemble a skilled production team and pretty much leave it alone to do its job. The nearly 130,000 small airplanes built by the company are testimony to the efficacy of that approach.

The financial decline of Piper Aircraft is "almost a tragedy," says Bergey. "It's a first-class line of airplanes, and there is no reason in the world why it shouldn't be able to maintain itself, even in these

troubled economic times."

As for Bergey, he eventually sold his Vagabond. Now he flies an Arrow. "I wouldn't feel comfortable buying a Cessna, now would I?"

HEROKEE SPREE

Cherokee 5490W was brand-new in May 1962, about the 500th off the line at Vero Beach, Florida. It was sold to a dealer in Hillsboro, Oregon-the retail price was \$13,700—and I thought it a fine and fun idea to deliver the airplane. Ninety Whiskey had a Narco Superhomer—a very basic transceiver and VOR-plus a Piper AutoNav low-frequency homing device, so the trip would be a 3,000-mile (we used statute then) VFR ride. I initially planned on three 10-hour days, allowing for the usual headwind when flying in that direction. Being an optimist, I wrote on a calendar where each night would be spent. The first RON would be in Tulsa and the second in Salt Lake City. I'd deliver the airplane the third evening.

It was my first trip through the northern branch of the Rockies, so I was looking forward to having a look at that new territory.

I made Tulsa the first night, 35 minutes ahead of plan. It took 9 hours 25 minutes, with stops in Dothan, Alabama, and Little Rock, Arkansas. The weather briefing the next morning told of a closed low aloft over the Rockies. The good news was a tailwind at lower altitudes; the bad news was deteriorating weather along the way. Someone else was flying this day-Scott Carpenter did three orbits in Aurora 7. He apparently had a tailwind too, as the landing zone was overshot by 250 miles. Listening to all this excitement on the AutoNav made the time pass faster as I flew over Kansas.

The groundspeed made it up to 155 mph on this leg. The plan had changed from Salt Lake City because of that closed low. Like all pilots are wont to do, I was putting off entering the mountains, as if I could go around the north end of them. Someone in Oregon later told me that he fully expected a ferry pilot to someday call from the North Pole, having kept the mountains off to the left all the way.

During a stop at Sheridan, Wyoming, I got a local pilot to look at the weather for me. He allowed that it would be okay to go VFR as far as Billings, Montana, and then take another look. He gave me a strong lecture on reported weather at airports having little to do with weather enroute. What you see is what you get, and be sure to stay where you can see. Taking it mile by mile and following rivers and highways (with no tunnels), I finally managed to make Helena, Montana, that evening. It was a definite moral victory even though I wasn't in the planned location, Salt Lake City. I missed that by 400 miles, but the Cherokee was closer than planned to Oregon, and the day's work had been done in 8.5 hours' flying—a full hour and a half less than had been anticipated to fly a shorter distance. The scenery had been spectacular despite

clouds and showers. I was having a ball.

They were still using silver dollars instead of bills in Helena at the time, and when I took off the next morning, the airplane was a little on the heavy side. It was 10:30 before one of the passes to the west opened up, and I flew through it with only 500 feet of ceiling but with unlimited visibility. It was a short hop to Missoula, Montana, a mandatory stop because the pass west of there was closed. A local pilot, though, suggested a northern route, by Thompson Falls, Montana. There was a river to follow and a valley wide enough all the way to do a one-eighty in the TBM Borate bomber this pilot normally flew. There were also places to land in the valley. His advice got me to Pasco, Washington.

The next mountains would be at The Dalles, Oregon, where the Columbia River Gorge begins. When I got there, it looked impossible—it was like looking down a hallway-but the FSS person said airplanes had been going through all day. Not being used to flying with rocks on each side, I had a memorable ride.

The Cherokee was delivered right on schedule. Railroad tracks, highways, rivers, \$89.11 worth of fuel, and a satchel full of 25cents-each sectionals had gotten me from one corner of the country to the other in only 23 hours 10 minutes of flying. It was a highly enjoyable trip, and the Cherokee a friendly airplane. The vibration level was a little high-Piper later used a better engine mount-but otherwise, the airplane was comfortable. It performed exactly as they said, too. I always liked those old fat-wing Cherokees, so much so that, a few years later, I bought a Cherokee Six and flew it for sev--Richard L. Collins eral years.