# The Piper Comanche Story

The Piper Aircraft Corporation, out of its Lock Haven, Pennsylvania, factory, manufactured its Comanche line of piston singles (designated PA-24s) and twins (designated as PA-30s or PA-39s) between 1958 and 1972. These airplanes turned out to be some of the more popular models ever built by Piper or any other general aviation manufacturer. With a total of some 4,834 single-engine sales and 2,155 sales of Twin Comanches, the Comanche line looked invincible throughout general aviation's heady years of the 1960s.

The Comanches brought Piper into the modern era, and the decision to manufacture them probably helped save the company from obsolescence and financial difficulty. Having built its reputation as a builder of primarily tube-and-fabric singles, the late 1950s were an opportune time to redefine Piper as a company more geared to high-performance, sleeker-looking airplanes. Although its Cubs, Cruisers, Super Cruisers, Family Cruisers, Clippers, Pacers, and Tri-Pacers had won terrific followings and were classic airplanes in their own time, they reeked of the past. They evoked warm and fuzzy feelings and had cuddly names, but they were also slow and dowdy looking compared to competing designs from Cessna, Beech, and others. Next to Beech's popular Bonanza, North American's Navion, and Mooney's M20s, Piper's products looked like warmed-over relics from pre-World War II - which they were.

The same held true for Piper's only twin-engine offering in the 1950s, the Apache. Cessna's 310 and Beech's Twin Bonanza, Barons, and Travel Air flew rings around the underpowered Apache and, frankly, looked sexier, too. Piper's Aztec, introduced in 1960, was an attempt to counter the competition's higher performance piston twins. But what really had Piper worried was the Beech Travel Air, a classy-looking, entry-level light twin with 180-hp engines and the potential to take over the twin-trainer market.

So Piper's marching orders were clear. By 1957, it clearly saw an opportunity for sales of a high-performance, all-metal design with advanced airfoils that would: (a) offer a modern look; (b) have cruise speeds and useful loads comparable to the competition; (c) have interior designs with more comfort features than ever before offered in a Piper; and (d) sell for less than the competition. The result was the Comanche single.

The Comanche's laminar-flow airfoil and all-flying stabilator were viewed as something akin to technical marvels at the time, and these features in particular generated a fair amount of publicity in the press and considerable customer draw.

Buyers in 1958 had a choice between two Comanche singles - one powered by a 180 hp engine, and one with a 250 hp power plant. The 180 hp version, typically equipped, sold for $17,850 and could cruise at 139 knots (159 mph) - a really good buy for the money, even in those days, when Cessna 182s with 230 hp engines, 141 knot (162 mph) cruise speeds, and $20,200 price tags were the closest competition - and they had fixed gear.

The 250 hp Comanche, the biggest seller of the line, offered even more bang for the buck. Aimed directly at the Bonanza, the 1958 PA24-250 Comanche went for an average equipped price of just $21,250 and cruised at an honest 157 knots (180 mph). The 1958 J35 Bonanza typically came with a $28,890 bill of sale and cruised at 174 knots (200 mph).

Both were powered by 250 hp engines, both had 1,000 lb useful loads, yet the Comanche cost $8,000 less. True, the Bonanza cruised 17 knots (20 mph) faster. But for more than 2,500 customers, the price/performance trade-off was an acceptable one.

In subsequent years, the Comanche single line was expanded. The 260 series brought two more rear windows, six seats, a sleek looking cowl, more power from its 260 hp engine, and optional

turbocharging. There were never any "fuselage plugs" or stretch of the fuselage aft of the firewall on any model Comanche, twin or single. The Comanche 400 came with a huge eight-cylinder engine and 400 hp. With the boosts in power came greater true airspeeds and performance and useful loads that equaled or exceeded the competition, and yet Comanche singles were nearly always priced lower.

Almost immediately, the Comanche singles were labeled the "poor man's Bonanza." To use an automotive analogy of those days, if the Bonanza was the Cadillac Fleetwood, the Comanche was the Chevrolet Impala. Distinctive, yet less prestigious than the Bonanza, the Comanche spoke to those who wanted to go fast as well as save a little money, and have an airplane with ramp appeal in the bargain.

Thus was born the Comanche-as-bargain-hunter's-delight concept. Buyers saw the Comanche as a way of flying with style and without too much regret.

The same might be said of the PA-30 Twin Comanche, which sold for $41,190 in 1963 (the year of its debut), and cruised at 169 knots (194 mph). Average-equipped Beech Travel Airs of that vintage went for $66,800 and cruised at 174 knots (200 mph). Faced with a whopping $24,000 price differential for a speed advantage of a mere 6-mph, the market leapt on the Twin Comanche-and for good reason. Its 160 hp engines sipped fuel (fuel flows at high-speed cruise of 14 gph - for both engines - are not uncommon in earlier Twin Comanches), and the Travel Air's 180 hp power plants routinely ran at some 20 gph fuel flows at high cruise power settings. Piper eagerly touted the Twin Comanche for its economy, a marketing strategy intended to win over the twin-trainer and single-engine step-up markets. It worked. Many flight schools purchased Twin Comanches as multiengine trainers.

By the early 1970s, Comanches and Twin Comanches had lost some of their luster in the new marketplace. A long, humbling series of major airworthiness directives (ADs) had hurt the Comanche singles. Once considered examples of advanced design, critics turned to calling Comanches just the opposite, claiming bad workmanship and a piecemeal, bandage approach to ADs.

Safety issues also became major concerns. In its early years, Comanches suffered a number of in-flight airframe failures and many landing accidents, a good number of which were overshoots. The Comanche's laminar flow wing makes for a slippery airplane. This means that airspeed can get out of hand during descents and unusual attitudes, and that the airplane can float during landings. The answer is for the pilot to think ahead of the airplane and practice proper airspeed and configuration control. This is something that all pilots of high-performance, complex singles should learn, and the Comanche is no exception.

The Twin Comanche came under special scrutiny because of a number of fatal low-altitude stalls and rollovers. These typically occurred on training flights and were blamed on Vmc demonstrations and engine-out maneuvers gone bad. Prior to 1967, multiengine flight instructors and FAA examiners routinely asked students to perform single-engine stalls and other hair-raising maneuvers with an engine out. Given these circumstances, the AOPA Air Safety Foundation believes that the disproportionate involvement of Twin Comanches in fatal Vmc and engine-out accidents in those days is more representative of unsafe training practices and the numbers of Twin Comanches in the training fleet than it is of any deficiencies in the airplane per se.

But false ideas sometimes take on lives of their own and, given enough time, become legend. Today, many pilots retain the notion that the Twin Comanche is somehow still inherently dangerous.

Other pressures also helped force the Comanche and Twin Comanche out of production. These airplanes were very labor intensive, had high parts counts, and were just plain expensive to build. Plans were in the works to do away with the Comanche and Twin Comanche well before Hurricane Agnes flooded the Susquehanna River and inundated the Lock Haven plant in June 1972. Piper said that production of any more Comanches and Twin Comanches wouldn't be feasible, because the tooling and dies for the Comanche and Twin Comanche were destroyed in the flood.

A convenient excuse, perhaps, but in any event, Comanche production ceased with the flood, and its place was taken by the PA-28 Arrow and PA-32 Cherokee Six, Cherokee Lance, and Saratoga single engine models, all of which are built in Piper's Vero Beach, Florida, manufacturing site. These airplanes were simpler and less expensive to build. Piper didn't build another light twin for production until 1979, when it rolled out the PA-44 Seminole - which is essentially a twin-engine Arrow.

Today, the Comanche and Twin Comanche line is supported by a dedicated group of enthusiasts, most of whom belong to the International Comanche Society (ICS). The ICS's staff and its official publication, 'The Comanche Flyer," can be considered the world's preeminent source of information regarding Comanche and Twin Comanche maintenance issues, as well as parts supplies and modifications. As for initial and recurrent training, several training organizations offer type-specific flight training geared to Comanches and Twin Comanches.

Links to Comanche Model information on the ICS website

PA24-180 PA24-250 PA24-260 PA24-400 PA30 and PA39