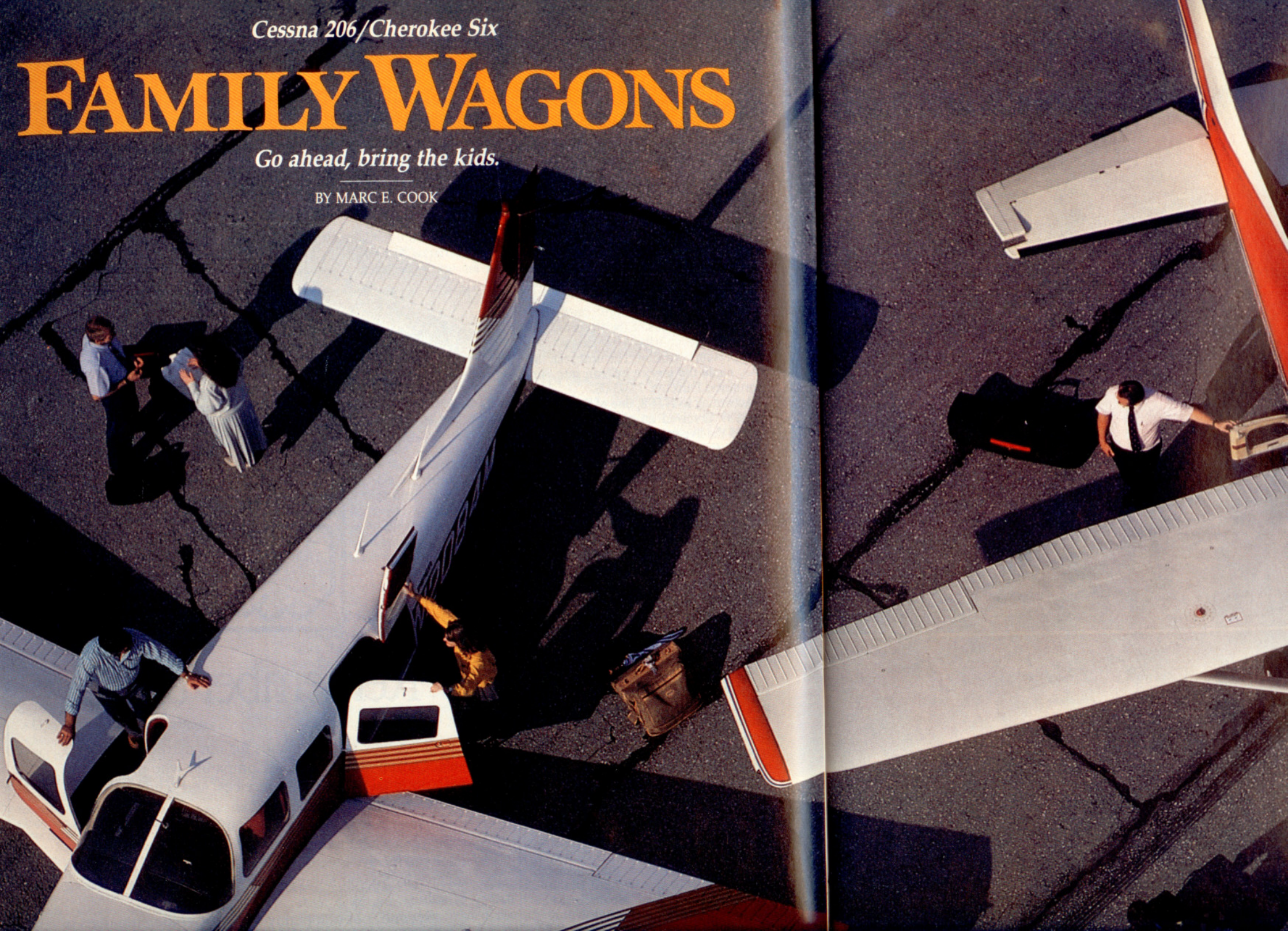


Cessna 206/Cherokee Six

FAMILY WAGONS

Go ahead, bring the kids.

BY MARC E. COOK



If you watch automotive sales trends, you've surely noticed that minivans are hot properties these days. In the early 1980s, Chrysler's minivan twins, the Caravan and Voyager, cleaved open this market niche like a spoon through frozen yogurt. Since then, nearly every domestic and foreign manufacturer has joined the fray. These vehicles can be found hauling grinning cub scouts, delivering sushi, or carting bags of sod for Chip and Muffy's petunia bed. For burgeoning families, the minivan is the perfect up-sized alternative to a sedan. Besides, Chip would never allow Muffy to carry peat moss in the trunk of his Mercedes.

For a change, Wichita and Lock Haven, Pennsylvania, beat Detroit and Tokyo to the punch. You see, we've had aerial versions of the minivan at our fingertips since the mid-1960s. They are the six- or seven-place singles, far roomier than the four-seaters from which they evolved, and we know them as the Piper PA-32 and Cessna 206. In their 25 years of existence, the big Piper and Cessna have performed many of the same tasks that make minivans indispensable today.

What makes the Six/206 essential is their ability to be packed as tight as a subway car with people and possessions and whisk them off in reasonable comfort at modest expense. Both the Six and 206 are basically simple aircraft, with rugged, proven systems. That both have survived decades of utility work—check hauling, charter flights—speaks well for the durability of the basic designs. Today, a used example of either would fit the bill for an expanding family—or a family with expanding possessions.

Of the two, the 206 debuted first, in 1963. Actually, it was called a 205 at its 1962 introduction and was essentially a fixed-gear version of the 210 that entered Cessna's line in 1960; the 205 shared the 210's 260-horsepower Continental IO-470 engine. In 1964, the 206 arrived: 205 airframe, 15 additional horsepower thanks to the 285-hp IO-520, once again paralleling changes made to the 210. In 1966, the 206 received a turbocharged engine option, in line with improvements made to the Centurion. Horsepower grew during the 22-year production run, too: In 1968, the nonturbo 206's rating increased to 300 hp, and the turbo gained 35 takeoff horsepower in 1977. Increases in gross weight came with the power infusions.

While in many ways similar to the





210, the 205 and 206 had more room for the third row of seats because they lacked the notch taken out of the cabin floor to accommodate the 210's retracted gear. Unlike most high-wing Cessnas, though, the 206 had just one door up front (on the pilot's side) and a double door between the second and third rows of seats on the right side of the fuselage. This was a change from the 205, which had three doors: two for the front row and a smaller door serving the second and third rows.

Entry to the Cessna's rear seats is not as convenient as on Cherokee Sixes with club rear seating. (Cessna began offering the club arrangement in 1978, but most 206s have all forward-facing seats.) The Stationair's fifth and sixth seats are small, better suited to kids or baggage. Similarly, fitting four into the rear of the Cherokee can be a tight squeeze because feet and knees need to be arranged carefully so everyone has room. Like the 206, the Cherokee has just one crew door; the Cessna pilot gets his own door, while the Cherokee captain must clamber over the copilot's seat from the right-side door.

Both airplanes have generous weight and balance limitations, and generally, filling the seats will not require an hour's worth of calculator time to keep the airplane in the envelope. Here the 206 shines: It combines a payload of 1,500 to 1,700 pounds with a generous CG range. Although payload varies depending on model year, equipment, and fuel capacity (ranging from 61 to 84 gallons), many 206s are full-seats, full-tanks airplanes. Even the well-equipped (read heavy) 206 requires only a modicum of fuel/cabin-load tradeoff. Baggage in the 206 goes behind the rear seats; Cherokee Sixes have one 100-pound-capacity baggage compartment between the cockpit and the engine and another behind the rear seats. Payload numbers for the Six are very close to the Cessna's.

Compared to the 206, the Cherokee Six's lineage is convoluted. Introduced in 1965 as a longer and wider variation on the PA-28 airframe, the Six was more than four feet longer and seven inches wider than its Cherokee cousins. In the nose that year was a 260-hp Lycoming O-540. The next model year, a fuel-injected 300-hp engine was an option and soon became the preferred powerplant. The 260-hp model continued in production through 1978; that year, Piper built just eight, against more than 200 of the 300-hp Six.

FAMILY WAGONS

A used example of the Six/206 would fit the bill for an expanding family—or a family with expanding possessions.





Piper also made the Six a retractable in 1976, calling it the Lance. Two years later, the Lance would sport a T-tail—which contributed to comparatively lackluster runway performance—and plummeting sales numbers.

By 1980, the whole widebody Cherokee line became Saratogas, a change accompanied by a new, tapered wing similar to the one introduced on the Warrior in 1974 and spread through the PA-28 line in the ensuing years. With the Saratoga—in all permutations of fixed-gear, retractable, turbo, and normally aspirated versions—Piper brought the stabilator back down to fuselage level and fitted the new wing. The Saratogas continue in production today.

The new airfoil provided better climb and cruise performance than the earlier, constant-chord models and, thanks to Frise-type ailerons, crisper roll response. The ailerons do not extend to the wing tips on the Saratogas; their efficiency and authority make that unnecessary. (These ailerons were included in the original Warrior wing but were replaced with conventional piano-hinged controls for reasons of cost.)

Pilots transitioning from the PA-28 models will find the Six a large but manageable step up. At first, the cabin appears huge, the rearmost seats far enough back to be out of field-goal range. The panel is wide enough to house a full complement of avionics and still look half empty. But most Cherokee traits remain, including the multiengine-

style throttle quadrant and the gauges for propeller rpm and manifold pressure/fuel flow directly over the pilot's right knee. Some pilots dislike this arrangement, but those with some Cherokee time will feel right at home.

Two of the Six's traits require acclimatization for PA-28-bred pilots. One is heft. The airframe alone is substantially larger and heavier than the other Cherokees', and it can be loaded to a point that would make an Archer's bones creak. The other consideration for transitioning pilots: Especially in the older, Hershey-bar-wing airplanes, maintaining approach speed is essential. The airplane will sink rapidly with the power pulled back and will slam through ground ef-

fect if the speed is allowed to decay. This, and the fact that the long snout obscures much of the forward view in the landing flare, makes the first few arrivals challenging. But as the saying goes, time (as in type) heals all wounds.

Pitch effort is greater in the Six than in the lighter PA-28s, and the leg-strengthening nosewheel steering reminds you that there is a generous portion of engine hung out there. The Six's heft and stability make it an excellent instrument platform, though. Its long fuselage also improves its yaw stability compared to the short-body Cherokees.

Moving into the 206 from one of Cessna's smaller airplanes is easier. If you've been flying a 182, the cockpit





and control layout will be immediately familiar. It should—the two airplanes are nearly identical in this respect. Like the Skylane, the 206 is heavy in pitch and considerably lighter in roll. To make room for larger flaps (they continue outward past the wing's taper point, unlike those on other single-engine Cessnas), the 206 employs Frise ailerons that are smaller than the simple piano-hinge affairs on the 182.

Even given the 206's large flaps, generous horsepower allotment, and pitch authority, its short-field performance is amazing. At maximum takeoff weight, most 206s will get off in less than 1,000 feet; early (hence lighter) airplanes will be flying in 700 feet. Equally impressive

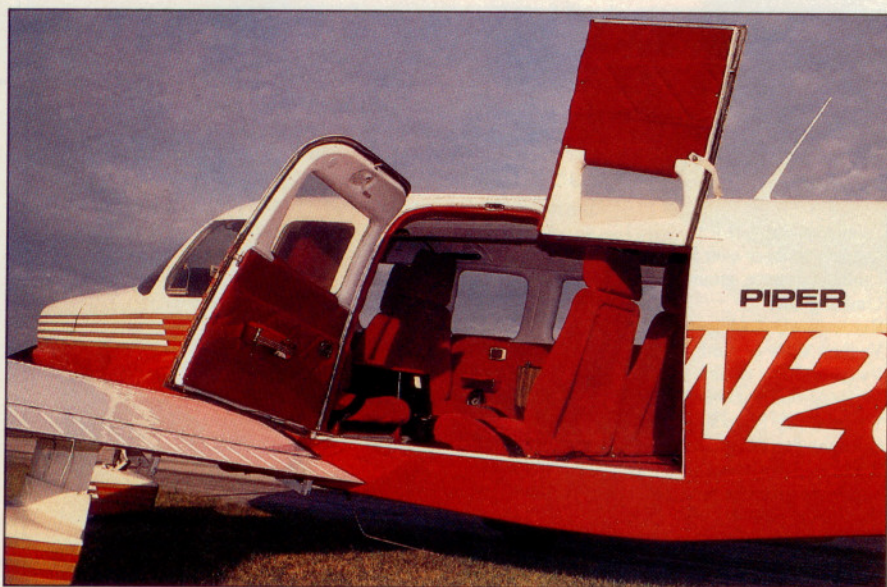
is the 206's ability to put down on short strips. According to Cessna's figures, a landing over a 50-foot obstacle consumes about 1,500 feet. Cessna's formula of large wing and flap area and low approach speed helps here. Moreover, the 206 will tolerate unimproved landing strips without complaint. Credit the spring-steel main landing gear for that; the 206 was the last Cessna to use this rugged gear system.

Neither the 206 nor the Cherokee Six provides sizzling cruise numbers. For the 206, expect 130 to 145 knots, depending on model year and horsepower. A 300-hp, nonturbo 206 is capable of 146-knot cruise at 75-percent power, burning 15.8 gallons an hour. A turbo

206 turns in 148 knots at 10,000 feet and 163 knots at 20,000 feet, burning about 16.5 gph at either altitude. Most pilots opt for less speed (about 130 knots) and about 3 gph lower fuel flow. With the long-range, 84-gallon tanks, the 206 can stay aloft for four hours with an hour's reserve; an additional hour of endurance is available at 65 percent.

The Cherokee Six and the Saratoga turn in similar performance numbers. The 260-hp versions top out at 135 to 140 knots on 14 gph, while the slicker Saratoga (with 300 hp) is capable of 148 knots at 75-percent power on 16 gph. Throttling back to 65 percent, the Saratoga is good for 144 knots at 13.8 gph. Early Cherokee Sixes had 84-gallon tanks—although the specification sheet says 50-gallon tanks were standard, none were built. The later Saratogas came with a 107-gallon supply.

As different as the Six and 206 appear, their performance numbers and load-hauling abilities are so close that, on paper at least, you might think you're looking at the same airplane. Where they differ is in creature comforts. Richard Norton, who owns the red, white, and blue 206 pictured here, had a Cherokee Six before he bought the Cessna. He describes the Piper as a passenger's airplane, with plenty of move-about room and a lower noise level. The Cessna, he says, is more of a pilot's airplane, with somewhat better runway performance and a useful load he can't seem to bust. He likes both and can't





imagine switching to an airplane without the room or payload.

The 206 and Cherokee Six look similar on paper in another way: price. According to the *Aircraft Bluebook-Price Digest*, first-year efforts of both are getting \$25,000 on the used market. Moving ahead to 1979 models, the Piper has a slight resale edge: A 300-hp PA-32 fetches \$54,000 compared to \$50,000 for a 206. Cessna's turbo models are worth about 10 percent more than the nonturbo versions. The big jump in price comes with the Saratoga models. For a 1980 model, expect to pay about \$73,000, a cool \$17,000 more than the same vintage 206, and \$9,000 more than a Six just one year older. The tapered wing apparently is highly valued in the PA-32s, with commensurate resale value. The Pipers carry one potential financial advantage. With the exception of the turbo Saratoga models, the PA-32s' Lycomings have 2,000-hour TBOs. The Cessnas' Continentals have TBOs of 1,700 hours in nonturbo and 1,400 hours in turbo form.

The trick in buying a good used 206 or PA-32 is finding one that hasn't been through the check-hauling/cargo-toting ringer. Both airplanes have been immensely popular in those roles, the Cessna perhaps more so, and finding a relatively low-time example might entail some footwork.

But if you absolutely, positively have a load to haul, that effort will be rewarded. Few models combine the simplicity and utility found in these airplanes. The worst thing they give up for their abilities is speed; Cessna 210s and 36-series Bonanzas are considerably faster but at considerably greater expense and complexity. Besides, Chip would never let Muffy haul peat moss in his Bonanza. □

	1978 Cessna Stationair 6	1978 Piper Cherokee Six-300
New base price	\$56,990	\$47,910
Current market value	\$54,000	\$52,000
Specifications		
Powerplant	Continental IO-520-F, 285 hp @ 2,700 rpm (max continuous power)	Lycoming IO-540-K1G5D, 300 hp @ 2,700 rpm
Recommended TBO	1,700 hr	2,000 hr
Propeller	McCauley, three-blade, constant-speed, 80-in diameter	Hartzell, two-blade, constant-speed, 80-in diameter
Length	28.3 ft	27.7 ft
Height	9.6 ft	8.2 ft
Wingspan	36 ft	32.8 ft
Wing area	174 sq ft	174 sq ft
Wing loading	20.7 lb/sq ft	11.3 lb/sq ft
Power loading	12.0 lb/hp	11.3 lb/hp
Seats	6	6-7
Cabin length	12.0 ft	10.4 ft
Cabin width	3.7 ft	4.1 ft
Cabin height	4.1 ft	4.1 ft
Empty weight	1,977 lb	1,846 lb
Gross weight	3,600 lb	3,400 lb
Useful load	1,623 lb	1,554 lb
Payload w/full fuel	1,269 lb (1,095 lb)	1,050 lb
Fuel capacity, std	61 gal (59 gal usable)	84 gal (83.6 gal usable)
	366 lb (354 lb usable)	504 lb (502 lb usable)
	92 gal (88 gal usable)	
Fuel capacity, w/opt tanks	552 lb (528 lb usable)	
Oil capacity	12 qt	12 qt
Baggage capacity	180 lb	200 lb, 25.3 cu ft
Performance		
Takeoff distance, ground roll	900 ft	900 ft
Takeoff distance over 50-ft obstacle	1,780 ft	1,350 ft
Rate of climb, sea level	920 fpm	1,050 fpm
Max level speed, sea level	156 kt	156 kt
Cruise speed/endurance w/45-min rsv, std fuel (fuel consumption)		
@ 75% power, best economy	146 kt/2.9 hr	146 kt/4.1 hr
6,000 ft	(94.8 pph/15.8 gph)	(103.2 pph/17.2 gph)
@ 65% power, best economy	137 kt/3.6 hr	142 kt/5.3 hr
6,000 ft	(82.2 pph/13.7 gph)	(82.8 pph/13.8 gph)
Service ceiling	14,800 ft	16,250 ft
Landing distance over 50-ft obstacle	1,395 ft	1,000 ft
Landing distance, ground roll	735 ft	630 ft
Limiting and Recommended Airspeeds		
Vx (best angle of climb)	66 KIAS	80 KIAS
Vy (best rate of climb)	84 KIAS	91 KIAS
Va (design maneuvering)	120 KIAS	134 KIAS
Vfe (max flap extended)		109 KIAS
Vfe (max flap extended, to 10°)	140 KIAS	
Vfe (max flap extended, 10°-40°)	100 KIAS	
Vno (max structural cruising)	149 KIAS	154 KIAS
Vne (never exceed)	183 KIAS	197 KIAS
Vs1 (stall, clean)	55 KIAS	62 KIAS
Vso (stall, in landing configuration)	46 KIAS	55 KIAS

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, sea level, gross weight conditions unless otherwise noted.