



COMMANDER 114B

A CORPORATE SINGLE

Filling niches old and new

BY THOMAS B. HAINES

IN this era of a declining pilot population, airframe marketers have begun to look outside the traditional marketplace for new customers. One of the most aggressive in this approach is Commander Aircraft Company. Advertisements for the Commander 114B four-place, single-engine airplane routinely appear in such publications as *The Wall Street Journal*, *Forbes*, and *Fortune*. Commander Chairman Wirt D. Walker III believes that small- to medium-sized companies in small- and medium-sized cities with poor or no airline service are a prime market for the 114B. In fact, the company's complete marketing program is built around that theme, including its slick brochures that outline Commander's "Aircraft Ownership Program." Dubbed "a unique cost-effective transportation program designed to enhance productivity," the blueprint shows how the 114B can effectively compete with the airlines when flying to and from cities

PHOTOGRAPHY BY MIKE FIZER

with "nonhub" airline service.

An example is a company located in Peoria, Illinois, with meetings scheduled in Decatur and Chicago. Round robin travel time on the Commander is 2.5 hours versus 4.8 hours, including a stop in St. Louis, on the airlines.

Based on an operating cost of \$68 per hour, the Commander makes the trip for \$170. Such a low operating cost is valid only for a new airplane when most or all maintenance costs are covered by warranty and when no funds are being set aside for future overhauls. But even at a higher rate, the Commander does well when compared to the airline cost.

The lowest coach airline fare available in November 1993, when the study was done, totaled \$888. Commander is quick to point out that the 114B's costs remain at \$170 or thereabouts, whether one or four company employees make the trip. Four travelers on the airlines would drive the ticket prices to \$3,552.

Not included in Commander's operating costs, of course, are initial acquisition and finance charges. Even then, though, the company makes an interesting case in favor of owning an airplane. The detailed cash flow analysis assumes a company would sell the airplane after seven years, the point at which it would be fully depreciated. Based on that and assuming a resale at 60 percent of the purchase price, which is reasonable, a very nicely equipped \$335,000 airplane can be used for seven years for a total outlay of about \$132,000, or about \$20,000 a year.

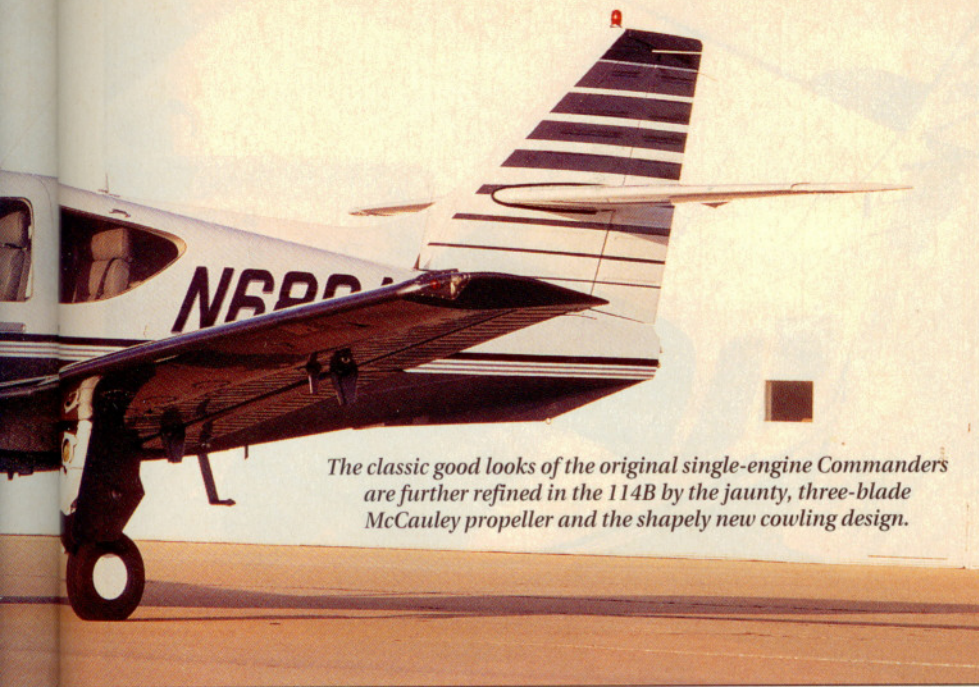
In the time since the analysis was conducted, Commander has raised the 114B's base price from \$285,000 to \$298,000, but spread over seven years the \$13,000 difference has little effect on the annual outlay. Typical of sales to buyers of complex airplanes, though, the base price is merely the starting point. Average Commander buyers opt for another \$60,000 in extra avionics, meaning most 114Bs roll out the doors of the Bethany, Oklahoma, plant with a sticker price of about \$360,000. The base price includes a pair of nav/coms (one with glide-slope), transponder, audio panel, fuel totalizer, and four-place stereo intercom with clearance recorder.

Most airplanes, though, end up with a three-axis autopilot, Stormscope, electronic engine analyzer, horizontal situation indicator, GPS,



Two doors ease entry and egress into and out of the Commander 114B's wide cabin. The carefully contoured leather trim on the door panels is evidence of Commander's attention to interior detail.





The classic good looks of the original single-engine Commanders are further refined in the 114B by the jaunty, three-blade McCauley propeller and the shapely new cowling design.



leather interior, wing-mounted recognition lights, and even some standby flight instruments on the right side of the panel.

It's a lot of money, for sure, but about on par with other new airplanes in the class and a bit easier to justify when you can have the government help pay for it through depreciation and tax deductions.

For the money, though, the 114B buyer gets a lot of airplane, both figuratively and literally.

Sitting on the ramp, the Commander is an impressive looking airplane. All but the tallest pilots can walk under the cruciform tail. The tall and stout trailing link main landing gear, complete with taxi lights, look as if they might have come off a twin turboprop or business jet. With its three-blade McCauley propeller, tightly cowled engine, and sloped windshield, the 114B appears ready to leap off the ramp.

On the outside, the 114B looks much like its 114A and 114 cousins built in the mid- to late 1970s by Rockwell International. In fact, only the practiced eye can tell the difference between the 200- and 210-horsepower 112s and 112TCs of the '70s and the equivalent-era 260-hp 114s. The similar 260-hp Lycoming IO-540 in today's Commander 114B, though, is tucked into a more shapely and tightly cowled nose section.

The cowling redesign is one of Commander Aircraft's many efforts to squeeze more speed out of the airframe design it purchased from Gulfstream Aerospace in 1988. Gulfstream had bought the design and other light airplane type certificates from Rockwell in 1981, after production of the singles had stopped.

After buying the rights to the 114, Commander located its production facilities in Bethany, just down the ramp from where Rockwell had originally produced the airplanes.

The new Commander company received a type certificate for the 114B in 1992 and since has produced 92 airplanes, according to Gene Criss, Commander's president. Nine of the airplanes are still owned by Commander and 11 are owned by Commander International Limited, a sister company that markets the airplanes in the Middle East. Many of the 114Bs have found homes in the Middle East, at least partly because an investment

company called KuwAm Corporation owns 80 percent of Commander. Much of KuwAm is controlled by the Kuwaitis. The remaining 20 percent of Commander is publicly traded.

Though the company has not seen sales skyrocket over the last few years, Walker asserts that it is in the business to stay. "We're prepared to see it through," he says, noting that KuwAm has billions of dollars behind it. "We're on a crusade to bring the benefits of aircraft ownership to the small-to medium-sized business owner. You don't have to be a pilot. You don't have to have a flight department. We provide a turnkey operation," he preaches, referring to Commander's "Aircraft Ownership Program."

The program offers prospective customers everything necessary to buy and fly a 114B, including cost/benefit assessments, financing, and insurance. The company can also help arrange hangar and tiedown space, maintenance services, and fuel. And, if the buyer is not a pilot, Commander will arrange for a professional pilot to fly the airplane and a flight instructor to teach the new owner to fly, if desired.

Many of the after-sale arrangements are handled by one of Commander's 100 authorized sales and service representatives around the world. The ASSRs do not actually sell airplanes (that is handled by factory representatives), but they are authorized and trained by Commander to provide warranty and other services to 114B owners. Besides the fuel, hangar, maintenance, and flight training business from the 114B owners, the ASSRs may also earn five percent from any sales they refer to the manufacturer.

Commander has had limited success so far in selling the 114Bs to small companies with no previous aviation experience. Most of its customers are from the more traditional general aviation marketplace—pilots moving up from lighter airplanes or pilots making their first airplane purchase. Using FAA aircraft registration data, we contacted some 114B owners.

William H. Flores of Sugar Land, Texas, for example, learned to fly in 1972 but never really put his certificate into action until 1993, when he started flying again and eventually bought a 114B company demonstrator. Since then he has put 225 hours on the airplane and raves about the comfort



From the inside looking out or vice versa, the sporty Commander 114B doesn't look like a 20-something-year-old design. The standard airplane is IFR capable, but most customers opt for substantially more equipment, as evidenced by the panel below.





and attention to detail inside. "It's like buying a Lexus or Corvette," he says. He routinely loads the airplane with two adults and two kids and lots of luggage for vacation trips and long weekends. He is able to use it occasionally on business trips for the offshore drilling company he works for. He has been pleased with the airplane's reliability and performance. There have been a couple of minor squawks in the nearly 18 months he's owned the 114B (a broken door latch, shoulder belt retractor, and beacon).

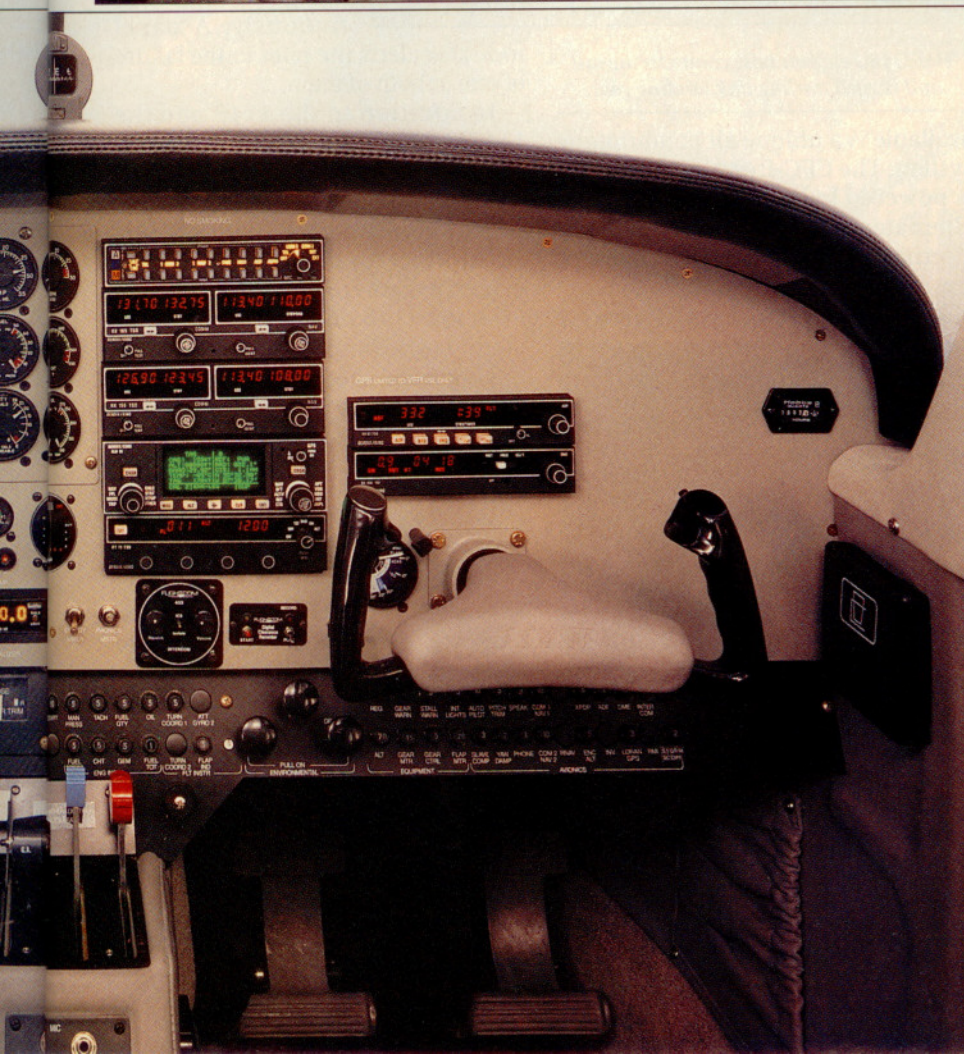
Flores flight-plans 150 knots, but usually sees a bit better performance than that. Commander claims a 75-percent cruise of 160 knots, about 10 knots faster than the original 114s would fly. On our demonstration flight, we saw 154 knots true airspeed at 3,500 feet.

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The wide Commander 114B offers an elegant compromise between comfort and performance.

Likewise, Daniel and Bonnie Williams, owners of a 1994 114B, flight-plan about 150 KTAS on 65-percent power and about 12 gph. The couple, both VFR pilots, previously owned an Aerospatiale TB-10 Tobago but were looking for more performance. However, they didn't want to give up the two doors and wide cabin they had enjoyed on the Tobago.

The couple often uses the 114B for long cross-country flights from their base at Accomack County (Virginia) Airport on the Delmarva Peninsula. Frequent destinations are in Florida, Oklahoma, and Texas. To make it a true two-pilot airplane, Daniel had a heading indicator, altimeter, and turn coordinator installed on the right panel. He says he usually gets to fly left seat, but "only because I hide the keys." He estimates about 10 to 15 percent of his flying is for his business, Altair Turbine Services, a turbine engine overhaul facility. Like other owners we spoke with, Daniel is enamored of the 114B. "I'd be hard pressed to say anything negative about the airplane."



Indeed, the 114B is an elegant compromise between comfort and performance. The wide cabin and plush leather seats swaddle the passengers and pilot in comfort. Headroom is excellent and the view through the expansive windows is unsurpassed. Because the seats sit high and the cowling slopes away, over-the-nose visibility is very good in the climb. Rear seat passengers have a comfortably wide cabin, but legroom is a bit tight if the front seaters are long legged. A large baggage door on the left side makes it easy to load up the commodious stowage space behind the two back seats.

The modern-looking metal panel provides plenty of space for avionics—which, as noted earlier, most customers take advantage of.

The tradeoff for the wide cabin is a slower cruise speed than most other airplanes in the competition. The Bonanzas, Mooney TLSs or Ovations, Bellancas, and even Piper Saratogas of the world will beat the Commander by anywhere from five to 55 knots. Of course, the other airplanes are also using anywhere from 10 to 40 more horsepower to get that speed.

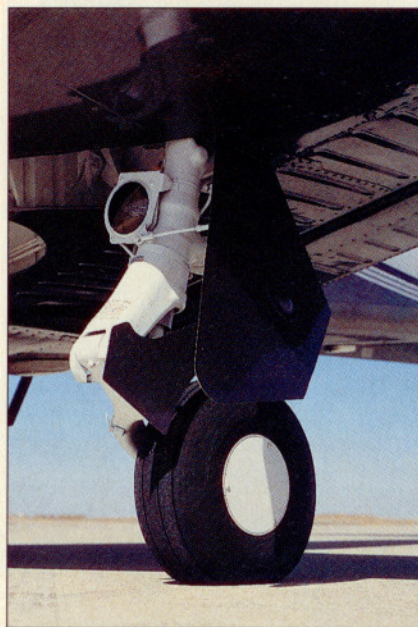
To at least somewhat mitigate the performance difference, Commander is scheduled to certify a turbocharged variant of the 114B, called the 114TC, by mid-May. In the 114TC, the Lycoming TIO-540 engine will put out 270 hp and will provide a cruise of 180 knots, Criss claims. It will be certified to 25,000 feet with a critical altitude of 22,000 feet. The turbo airplane will carry a total of 90 gallons of fuel, 20 more than the normally aspirated version. In addition, the 114TC will have a gross weight increase that will offset the heavier turbo installation and provide a full fuel payload about on par with the 114B. Expect to pay about \$50,000 extra for the turbo option.

Another improvement already



The 114B's elegant nose contrasts the tall and rugged trailing link landing gear.

available is a unique air conditioning system. The CFC-free air conditioner is powered by a dedicated 130-amp alternator. In normal use, the second alternator is isolated from the rest of the electrics and drives only the a/c. However, if the primary alternator



fails, the pilot can bring the secondary alternator on line to power the avionics, instruments, and lights. In addition, the a/c can be run on the ramp with a ground power unit. According to Criss, the system was designed with Middle Eastern customers in mind and will effectively cool the 114B, even on a 125-degree day. You'll pay to be cool, though. List price for the a/c option is \$15,750; deduct 98 pounds from the useful load.

Besides the second alternator on the a/c-equipped airplanes, the 114B comes standard with another nice redundancy: dual vacuum pumps. The two engine-driven pumps run continuously. A panel

indicator alerts the pilot to the failure of one or both of them.

In addition to the 114B and the 114TC, Commander also offers the 114AT. The advanced trainer version, introduced in mid-1994, is designed as a complex trainer for flight schools and for foreign militaries seeking a primary trainer. The 114AT differs from the 114B only in that it comes standard with instruments on the right side and sheepskin seat covers to provide extra life to the fabrics in the training environment. At press time, Commander had sold none of the ATs, but, according to Criss and Walker, a number of U.S. and foreign flight schools were evaluating the aircraft.

The Commander's handling characteristics would make it an excellent trainer for pilots intent on moving into turbine airplanes. Because the cruciform tail is high enough to be out of the propwash, the Commander shares some handling characteristics with jets. For example, it requires a definite rotation to get the nose up for takeoff; in fact, most newcomers to the Commander will tend to overrotate. In flight, flap deployment causes almost no pitch change. On landing, the



Commander should be brought in rather flat, with just a slight flare to keep the nosewheel from touching down first. The trailing link mains smooth out even the best efforts at dropping the 114B onto the runway.

The electro-hydraulic gear system actuates only one main gear at a time, causing a definite yawing motion when only one of the big struts and tires is hanging in



the breeze.

With its big-airplane systems and feel, the Commander 114B is beginning to command the attention of buyers in the traditional general aviation market and, thanks to the company's aggressive promotions, in less-traditional markets, as well. For potential aircraft owners in either market who are in search of a fresh face, Commander is a welcome contender. □

Commander 114B
Base price: \$295,000
Price as tested: \$360,000

Specifications

Powerplant	Lycoming IO-540-T4B5, 260 hp @ 2,700 rpm
Recommended TBO	2,000 hr
Propeller	McCaughey, three-blade, 77-in diameter
Length	24 ft 11 in
Height	8 ft 5 in
Wingspan	32 ft 9 in
Wing area	152 sq ft
Wing loading	21.4 lb/sq ft
Power loading	12.5 lb/hp
Seats	4
Cabin length	6 ft 3 in
Cabin width	3 ft 11 in
Cabin height	4 ft 1 in
Standard empty weight	2,044 lb

Max gross weight	3,250 lb
Useful load	1,216 lb
Payload w/full fuel	808 lb
Max takeoff weight	3,250 lb
Fuel capacity	70 gal (68 gal usable)
	420 lb (408 lb usable)

Oil capacity	12 qt
Baggage capacity	200 lb

Performance

Takeoff distance, ground roll	1,040 ft
Takeoff distance over 50-ft obstacle	2,000 ft
Rate of climb, sea level	1,070 fpm
Max level speed	164 kt
Cruise speed/endurance w/45-min rsv, std fuel (fuel consumption)	160 kt/4.0 hr (86 pph/14.3 gph)
@ 75% power,	155 kt/4.6 hr (75.6 pph/12.6 gph)
@ 65% power,	
Service ceiling	16,800 ft
Landing distance over 50-ft obstacle	1,200 ft

Landing distance, ground roll	720 ft
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Limiting and Recommended Airspeeds

V _X (best angle of climb)	75 KIAS
V _Y (best rate of climb)	100 KIAS
V _A (design maneuvering)	118 KIAS
V _{FE} (max flap extended)	111 KIAS
V _{LE} (max gear extended)	187 KIAS
V _{LO} (max gear operating)	130 KIAS
V _{NO} (max structural cruising)	148 KIAS
V _{NE} (never exceed)	187 KIAS
V _{SI} (stall, clean)	61 KIAS
V _{SO} (stall, in landing configuration)	56 KIAS

For more information, contact Commander Aircraft Company, Wiley Post Airport, 7200 N.W. Sixty-third Street, Bethany, Oklahoma 73008; 405/495-8080, fax 405/495-8383.

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.