



SUPREME COMMANDER

*If big is better,
the Commander 112s
ought to be the best.*

BY THOMAS B. HAINES

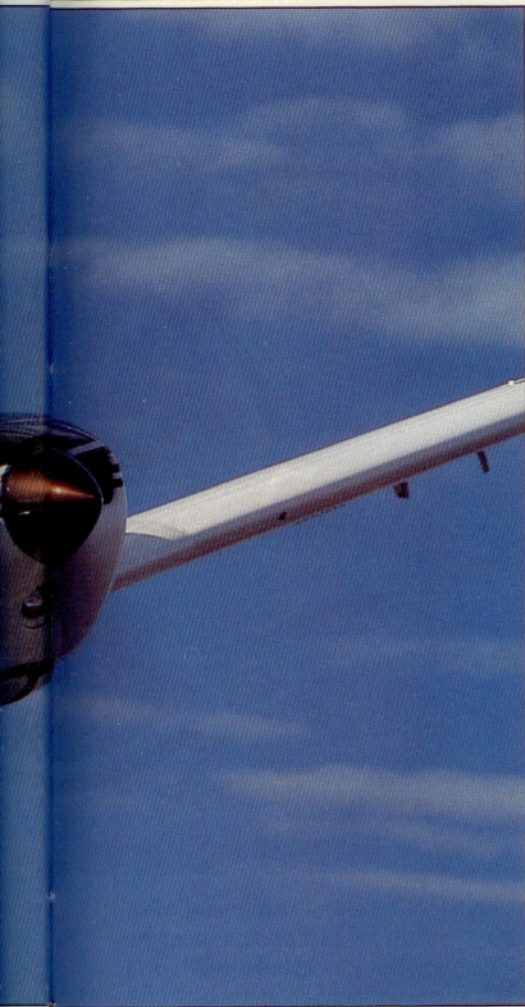
THE Commander singles look like airplanes ought to look. Even sitting on the ramp, they appear to be going fast. Granted, in the air they aren't all that speedy, but looks are worth something. Commanders are rare enough—there are fewer than 700 of them on the Federal Aviation Administration registry these days and a few hundred in Europe—that they might turn heads no matter how homely. But the big windows, cruciform tail, and all-around rakish good looks combined with their relatively small number make them somewhat of a mainstream curiosity, if you'll pardon

PHOTOGRAPHY BY MIKE FIZER



One of the strengths of the Commander 112 is basic good looks. Ample panel space and a roomy cockpit make the Commander a solid cross-country machine, even if its speed isn't quite blistering.





the oxymoron.

Designed in the late 1960s by North American Rockwell, later Rockwell International, the 200-horsepower Lycoming IO-360-powered Commander 112 was meant to be the springboard for a whole line of singles and even a light twin to take on the Piper Cherokee line. Rockwell actually built and certified Commander 111 and 111A fixed-gear, 180-hp airplanes but later deemed them too expensive to produce. The plan was to produce the 111; the 112; a six-place, 300-hp single to be called the 114; and the Model 400 twin. The twin never materialized, and the 114 later entered production as a four-place, 260-hp airplane. But in the beginning, the 112 was an only child.

As is often the case in such households, the 112 received lots of attention over the years, and by the time production stopped in 1979, the 112 and its follow-ons—the 112A, 112B, 112TC, and 112TCA—were fine and refined.

The 112's cabin is comfortable and nearly 6 inches wider than an Arrow's. Visibility is excellent out the large windows. The view from the back seats, which sit higher than the front ones, is exceptional. The 112 has two cabin doors, compared to one on the Arrow.

The Arrow cockpit and design stems from the early 1960s, whereas the ink first flowed on the 112 design in 1969. The 112 cabin design reflects a more modern layout. Shoulder harnesses pass conveniently through the seat back. The step for the wing has a courtesy light. Touch the button above the step, and the light stays on for a few minutes.

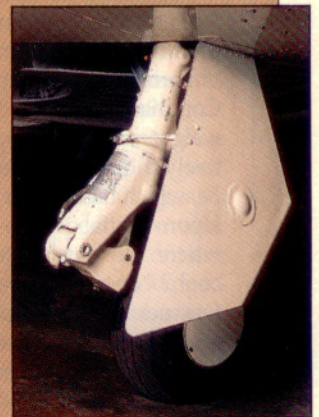
For a number of reasons, the Commanders never caught on. All in all, about 1,135 were produced between 1972 and 1979. During that period, Piper churned out 4,246 Arrows, according to General Aviation Manufacturers Association figures. Some say the Commanders were priced too high compared to the competition, but the "average equipped" price of a 112A in 1975 was \$41,900, according to the *Aircraft Bluebook-Price Digest*. A new Arrow II of the day went for \$40,195, hardly a sales-busting difference. The 112s were well-equipped, too. Even an autopilot was standard in later years, but it was in those later years that the Commander prices did get out of line with the compe-

tion, mostly as a result of high-ticket avionics packages.

Among the reasons the 112 never achieved the sales success of others in its class are speed and payload. It's been widely written and told that the Commander is no speeding bullet, but at least according to the book speeds, the 112A is only about 4 knots slower at 75-percent power than the Arrow II. The Commander will cruise at 139 knots versus a book speed of 143 for the Arrow II. After a three-hour trip, the Arrow pilot would have only five minutes to tie down his airplane before the Commander pilot taxis by.

Last fall, four AOPA Pilot editors and a fifth passenger flew a pair of Command-

The stout, trailing-link landing gear makes even a slightly misjudged landing look pretty good.



ers—a 112TC and a 112TCA—from Cuba, Missouri, near St. Louis, to Palm Springs, California. The 112TC and 112TCA are turbocharged, 210-hp models. One of the airplanes was near TBO. The engine in the other was mid-time. Neither airframe was exceptionally clean, but each airplane averaged 141 to 144 knots true airspeed at about 75-percent power at 8,500 feet. The performance manual said we should have been getting 148 knots.

More recently, in a 112A, we saw a cruise of 138 knots TAS at 75 percent, about on par with the book.

The other area where the 112 lacks is in payload. A 1975 112A carrying the standard 48 gallons of fuel will have a payload of 659 pounds. The comparable Arrow II with the same 48-gallon capacity can carry 839 pounds—a difference of 180 pounds or about one standard FAA humanoid. If you fill the 112's optional tanks, totaling 68 gallons, you'll end up with a payload of just 539 pounds but still enough for three people and 28 pounds of luggage.

Besides the cabin size, visibility, and cabin niceties already mentioned, the series has other good points. It is easy to open up the engine cowling. A few turns of four screws and the top cowling can be lifted off, making easy access to the top of the powerplant. Thicker windows and better insulation on later models make them relatively quiet inside.

Handling is conventional. The only surprise will be a pleasant one on landing. The stout trailing beam landing gear, which looks like it might have come off of a Rockwell Sabreliner jet, seems to absorb even the most persistent attempt to drop it in. My first landing in the 112TCA was in Santa Fe, New Mexico. My approach was too hot and too high. Attempts to bleed off speed finally kicked in—all at once and about 3 feet over the runway. Despite the plummet, the gear made me look good.

Throughout the trip, we had the turbo Commanders operating at near gross weight, sometimes operating from relatively high altitudes such as from Santa Fe, which has an elevation of 6,344 feet. Upon initial climb-out from Cuba, where the outside temperature was a cool 37 degrees Fahrenheit, we saw 600 feet per minute while maintaining 95 knots IAS for good over-the-nose visibility. The airplanes were less willing as we climbed to 12,500 feet to top the mountains as we approached Santa Fe from the east. About 300 fpm was all they would manage at the higher altitudes. The airplanes consistently burned 11 gallons per hour, well below the 12.5 gph that is proposed by the book.

Though there was some occasional grumbling about climb and cruise performance, we were enamored of the airplanes, particularly the visibility and cabin comfort. Had we encountered much in the way of headwinds, we might have yearned for a little more speed, but the weather gods smiled on us with light winds and severe clear conditions. As a result, we were mostly content to tool along in the Commanders' spacious cabins at speeds in the low 140s while enjoying the views of the Plains and Southwest.

One of the amenities of the Commander we sometimes failed to take advantage of was the pilot's cabin door. Used to flying Pipers, we more than once crawled over the right seat to exit, forgetting the easier egress from the left.

Our impressions, based on the trip, were that the good things about the Commander 112s balanced out any lin-

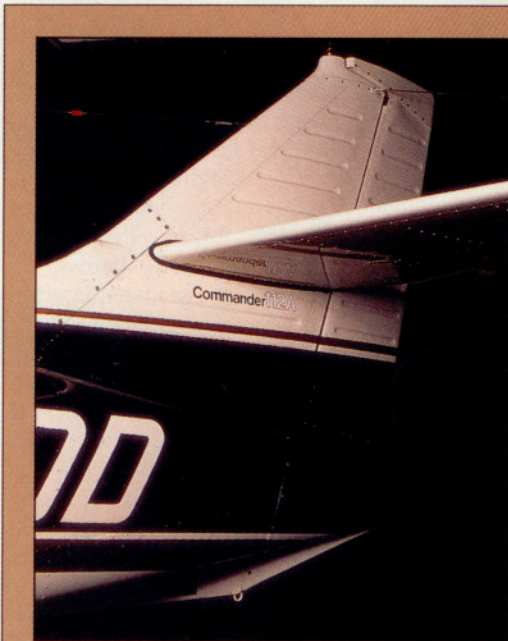


gering negatives.

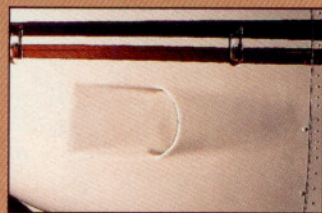
One reason the airplane might not have caught the fancy of pilots was marketing. Rockwell was used to building and selling big airplanes. The Sabreliner and the Commander jets and twin piston and turboprop airplanes were reasonably successful, but Rockwell never seemed to get the building and selling of light airplanes quite right. The airplanes

cost Rockwell plenty to build, and with such a small production number, the company never was able to gear up to reach any economy of scale.

Another reason for buyer reluctance in the beginning was quality control. About the first 100 airplanes were recalled to fix numerous small and some big problems. One of the biggest was with the fiberglass doors. Rockwell



The Commander's cruciform tail and big windows are distinguishing characteristics most helpful in identifying the relatively unusual craft on the ramp. A few twists on four screws, and the top cowling comes off for easy inspection of the powerplant. A 210-hp Lycoming TO-360 powers the turbocharged 112TC. Gross weight is 2,900 pounds.





never could get the doors to seal properly, and finally in 1974, two years after the 112 debuted, the company announced the 112A. The most pronounced differences between the two were in the doors. The 112A used metal doors that solved the air leak and resulting noise problem caused by the fiberglass ones. The new designation also carried a 100-pound gross weight in-

crease to 2,650 pounds and an improved ventilation system.

Rockwell used a 34-inch-longer wing beginning in 1976 to increase payload on two new models. The 112B, of which only 47 were built, retains the same engine as the 112A but uses the longer wing and six-ply tires (instead of four-ply) to increase gross weight to 2,800 pounds, but it costs cruise speed, which

decreases 7 knots to 132.

Also using the longer wing is the turbocharged 112TC. The TC is powered by a carbureted 210-hp Lycoming TO-360, which increases book cruise speed to 161 knots at 20,000 feet. Gross weight on the 112TC goes up 250 pounds over the 112A to 2,900 pounds.

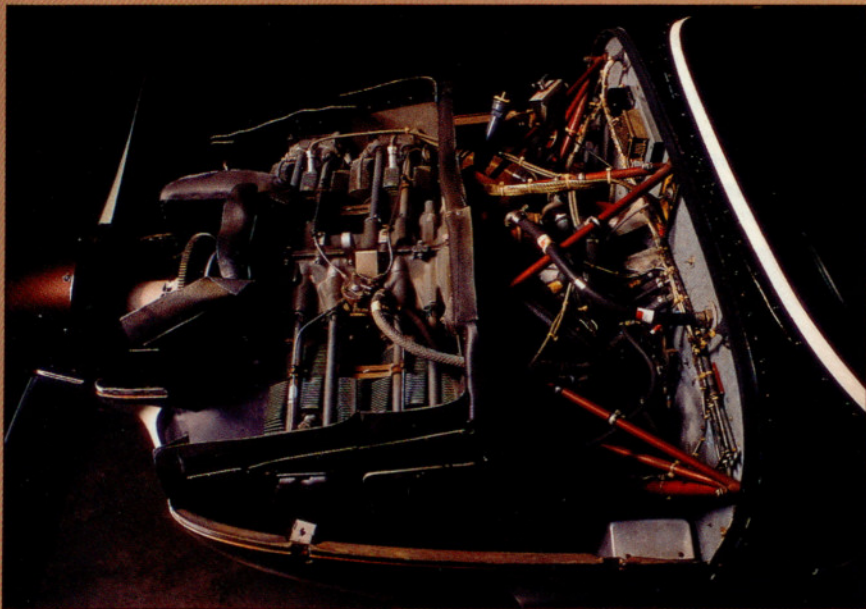
Still not seeing significant market response, Rockwell in 1977 brought out the 112TCA, which carries a 50-pound increase in gross weight and additional standard avionics and amenities.

Rockwell apparently thought the route to the buyer's heart was through the panel, and in 1979, it made one last-ditch effort to capture market share. The effort is called the Alpine, a 112TCA with an extensive King Silver Crown avionics package. Standard equipment includes a three-axis autopilot and leather seats. Unfortunately, all those goodies demanded an appropriate ransom. The standard price of the 1979 Alpine was \$91,900, \$35,000 higher than the standard 112TCA price of the year before and more than \$12,000 greater than the average-equipped price of a 1978 112TCA. You could fly out of Vero Beach, Florida, in a nicely equipped Turbo Arrow IV for \$71,000 that year.

1978 was the modern-day pinnacle for general aviation deliveries, and when the bottom fell out of the market in 1979, Rockwell cut its losses and stopped Commander production. Gulfstream American, later Gulfstream Aerospace, bought the type certificates, along with those of numerous other Rockwell designs, in 1981. The tooling stayed in storage until 1988 when a new entity, Commander Aircraft Company, purchased the manufacturing, marketing, and product support rights of the 112 and 114 from Gulfstream.

The new company, based in Bethany, Oklahoma, down the field from the old Commander production site, is busy building an improved 114B. Commander Aircraft had hoped to debut its new airplane in 1990, but vendor and financial problems have delayed the timetable. The plan now is to fly the first 114B late this year.

Besides building new airplanes, Commander Aircraft is making some fixes to problems that have shown up on Rockwell-built airplanes. Under a settlement reached as a result of a lawsuit filed by the Commander Flying Association and others against Gulfstream and Rockwell, the new company is installing a strengthened wing spar modification on



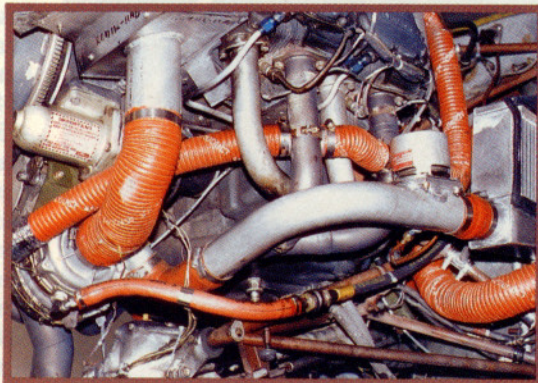


112s and 114s after some have developed cracks. Another fix under way involves the front-seat shoulder harness system. The original harness attached to the seat hinge. When the seat broke loose during an accident, the pilot or passenger went with it. Under the new design, the harness still passes through the seat back but attaches overhead in the fuselage. Some owners are opting to strengthen the elevator attach points as well. Those, too, have sometimes cracked. Owners pay a maximum of \$2,000 for the fixes. Gulfstream picks up the tab for the balance.

Knowing that Commander Aircraft has no plans to bring back an improved version of the 112, some owners have taken it upon themselves to investigate ways to increase performance. Early this year, RCM Normalizing of Big Piney, Wyoming, received a supplemental type certificate to install an intercooler and turbocharger on the Lycomings powering 112s, 112As, and 112Bs. Robin C. Miley, owner of the company, says his "Hot Shot Turbo-Intercooler" system and flap and aileron gap seals allow the 112s to

cruise at 151 to 153 knots TAS at 12,000 feet, using 2,500 rpm and 24 inches of manifold pressure (75 percent) and 12 gph. The turbocharged 112s will climb to 16,000 feet in 24 minutes, compared to the 50 minutes it would take the normally aspirated 112, according to Miley. Cost of the kit is \$12,800. Those who place deposits by June will receive a 5-percent discount, or Miley will install the kit for \$500. His normal installation charge is \$1,500. Field installation should range from 60 to 80 hours, de-

The "Hot Shot" turbocharger and intercooler are on the left side of the engine. The turbo is between the starter and alternator, aft of both.



pending on the shop's experience with the kit, Miley said. The gap seal kit, which sells for \$393, is available separately for all Commander 112s and 114s.

Commander 112 prices these days are stable and quite attractive. And the tables have been turned on the Arrow. Average retail prices of 112s vary from \$26,000 for a 1972 112A to \$46,000 for a 1979 Alpine, according to the *Aircraft Bluebook*. Arrows average \$4,500 to \$5,000 more.

Though they once commanded a supreme price, today the Commander 112s can be had and flown for a reasonable sum. For that, they deliver roominess unsurpassed in four-place singles, decent performance in an easy-to-maintain package, and good looks. That's not such a bad combination. □

For more information, contact Commander Flying Association, 899 West Foothill Boulevard, Suite E, Monrovia, California 91016-1938; 818/359-1040, or Commander Aircraft Company, 7200 N.W. 63rd Street, Bethany, Oklahoma 73008; 405/495-8080. For the turbocharged Commander 112, RCM Normalizing, Post Office Box 628, Big Piney, Wyoming 83113; 307/276-3386.