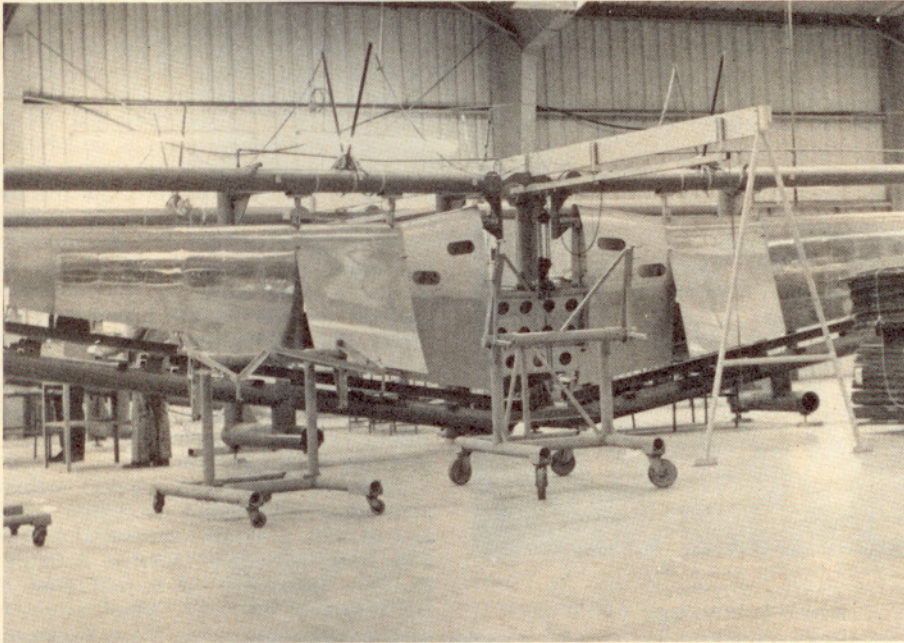


MOONEY:

Rise of a Phoenix

After its longest period of downtime, the Texas plant is building airplanes again—and drawing a bead on the competition

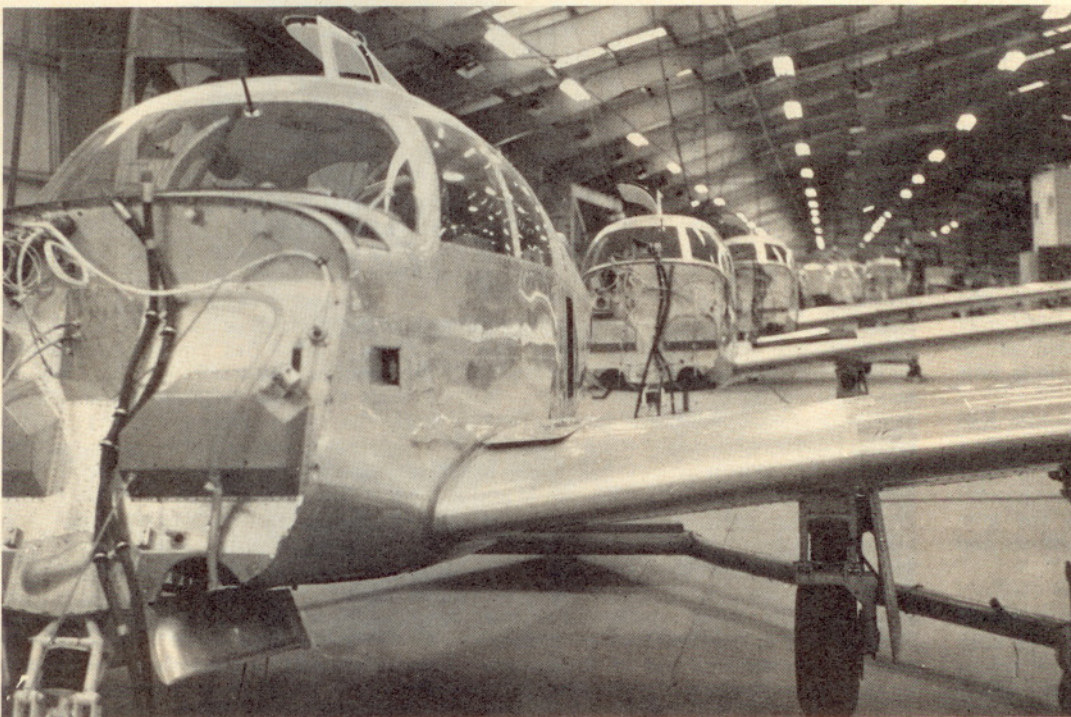
by DEE MOSTELLER / AOPA 461537



■ ■ In every pilot's flying lifetime, there are certain airplanes that stir up fancies that just won't quit.

My own nostalgia bank includes a plane I never flew, except in my imagination—the tiny, mighty Mite from Mooney. I was young as a pilot when I found it tucked under the wing of an old Cessna 195, and not knowing what it was, I climbed eagerly into the narrow seat. The Mite's fuselage fit my 100-pound body like a fine kid glove. I had by that time soloed two or three different airplanes, each time being spoon-fed information on their idiosyncrasies and systems by an instructor who did most of his flying from the right seat. But this airplane had only one seat, which meant it would have to be soloed without a flight checkout—a mind-boggling

The wings on Mooney aircraft are connected, prior to final assembly, by a single spar that runs through the lower portion of the fuselage.



When Mooney ceased production in June 1971, some 25 aircraft were left on the main assembly line. When production resumed last fall, FAA inspection showed that only minimal parts replacement would be required for these planes, 17 of which are to be completed during the first quarter of 1974. Photos by the author.

thought for a 30-hour pilot. Because of the lifelong yen that hangar flight created, I won't soon forget my encounter with a Mooney Mite.

A later Mooney—the slender, wooden-winged M-20—was responsible for another of my flying milestones: my first low-wing, first retractable-gear, first high-performance airplane. It has been many a year since I flew the M-20, but my head still snaps up every time I catch a glimpse of the familiar silhouette.

It is, perhaps, because of such memories that Mooney fanciers like me have watched the aircraft company in Kerrville, Tex., struggle through the years to build airplanes. We've cheered its successes and lamented its failures—for in its 25-year history, Mooney Aircraft Corp. has produced more than 6,000 single-engine airplanes, reaching the peaks of sales success and the depths of bankruptcy. We look with hope each time a new owner takes over with great resolve to put Mooney back into the air. Now we look to the East, to Republic Steel Corp., which has become Mooney's fifth and strongest owner to date, ending the company's longest period of downtime—nearly 2½ years without producing a single airplane.

Mooney represents Republic's first venture into the aviation industry, and one of its first diversifications away from steel-using products. When the purchase of Mooney from Butler Aviation was finalized last October 5, Republic announced that its intentions were "to become a major factor in general aviation and to retain the Mooney image as it was in the past—the fastest, most economical aircraft in its class."

Despite these lofty aims, we Mooney lovers, having become skeptics over the up-and-down years, tended to question Republic's commitment to building airplanes. I decided to talk with the man most responsible for the Mooney acquisition, Bob Cumming (AOPA 328549), who is head of Republic's manufacturing division and president of Mooney Aircraft. From a home base in Youngstown, Ohio, Cumming oversees the operations, and is responsible to Republic for the profitability, of the eight companies (including Mooney) that comprise the Manufacturing Group. He's an active, 4,000-hour, IFR-rated pilot and a long-time Mooney owner, which may account for some of his blatant prejudice in favor of the airplanes he is now manufacturing.

I asked Cumming why Republic had gone into the airplane business with a company that has been in trouble most of its life, and at a time when general aviation is being menaced by the government, the fuel crisis, inflation, and the nonflying public.

The philosophy at Republic vis-à-vis Mooney and general aviation is that both are here to stay, that people will keep flying even if they have to line up at the gas pumps, and that the fuel crisis may make Mooneys even more desirable

on the market because of their relatively high gas mileage. (Cumming, like many other Mooney owners I've talked to, refers to Mooneys as the Volkswagen of the general aviation fleet.) Republic was not aware of the full potential of the fuel shortage when it paid for Mooney, but the company feels the fuel crunch will not affect the modest projections set for production of the three existing Mooney models: 150 planes the first year, and 400 to 500 units by the third year.

Cumming is not naming any dollars-and-cents figures, but obviously Republic has made a sizable commitment of money and personnel in Kerrville. In addition to the fat purchase price it paid (rumored to be around \$2½ million), a management group drawn from high levels of industrial production and marketing has already settled in at Mooney, and a five-year plan has been tentatively okayed by the Republic board.

"What are you going to do to the existing Mooney planes?" I asked.

"Leave 'em alone!" Cumming replied. Emphatically. "We are dedicated to building a low-cost high-performance



Mooney's two top men at Kerrville are General Manager Jerry Vaverek (left) and Marketing/Promotion Manager Donald Cox.

airplane—and we've already got one. We'll make modifications only if they can improve the performance without changing the distinctive Mooney styling." He then threatened to drown any engineer who subtracts a half knot of speed from any of the planes. I felt better.

Still, one wants to see for oneself, so I traveled recently to Louis Schreiner Field on the outskirts of the little central-Texas community of Kerrville. On approach, one can see the basic assets acquired by Republic—six buildings clustered on one side of the two runways, and 120 acres of hilly green/brown Texas land.

It was one of those maddening Texas winter days when the temperature is 24° in the morning, but by noon the mercury is pushing 90° in the shade and the airplanes need an extra 50 feet of takeoff roll. It was the day that Mooney's first production aircraft was scheduled for its first test flight (a week ahead of projections), and it afforded a good introduction to the new Mooney management. They were all out in the boonies by the runway, sweating like crazy, with dust settling all over their city clothes,

to cheer Veston George, Mooney's chief (and only) test pilot as he put the aircraft through its paces.

Mooney's management group is noticeably enthusiastic, young and aggressive. It is also made up primarily of non-aviation types, Yankee-bred boys who haven't yet mastered the drawl. There is nothing green, however, about their experience in manufacturing heavy products. Heading the staff are General Manager Jerry Vaverek, who is responsible for all phases of production at Mooney, and Marketing/Promotion Manager Donald Cox. Vaverek, whose private ticket and 250 hours make him the third-ranking pilot on the staff, comes from Republic's Manufacturing Group, where he was manager of new product development. Cox was formerly on the sales management staff at White Motors. The onus is primarily on these two men to turn Mooney into a profit center.

Sales and production will be built up slowly but steadily, with staff and dealers being added as necessary. At present, employment is under 100; by the third year it is projected to be around 700. Distribution will be handled by direct dealers who are being hand-picked by Cox. For start-up, he has appointed 11 dealers (Mooney Marketing Centers), and held his first dealer meeting early in January. Ultimately, he wants a maximum of 50 domestic dealers, located in all prime aviation areas, and about three times that many Authorized Mooney Service Centers to provide major repairs and parts all over the country. An international program will be established as soon as possible—probably within a year.

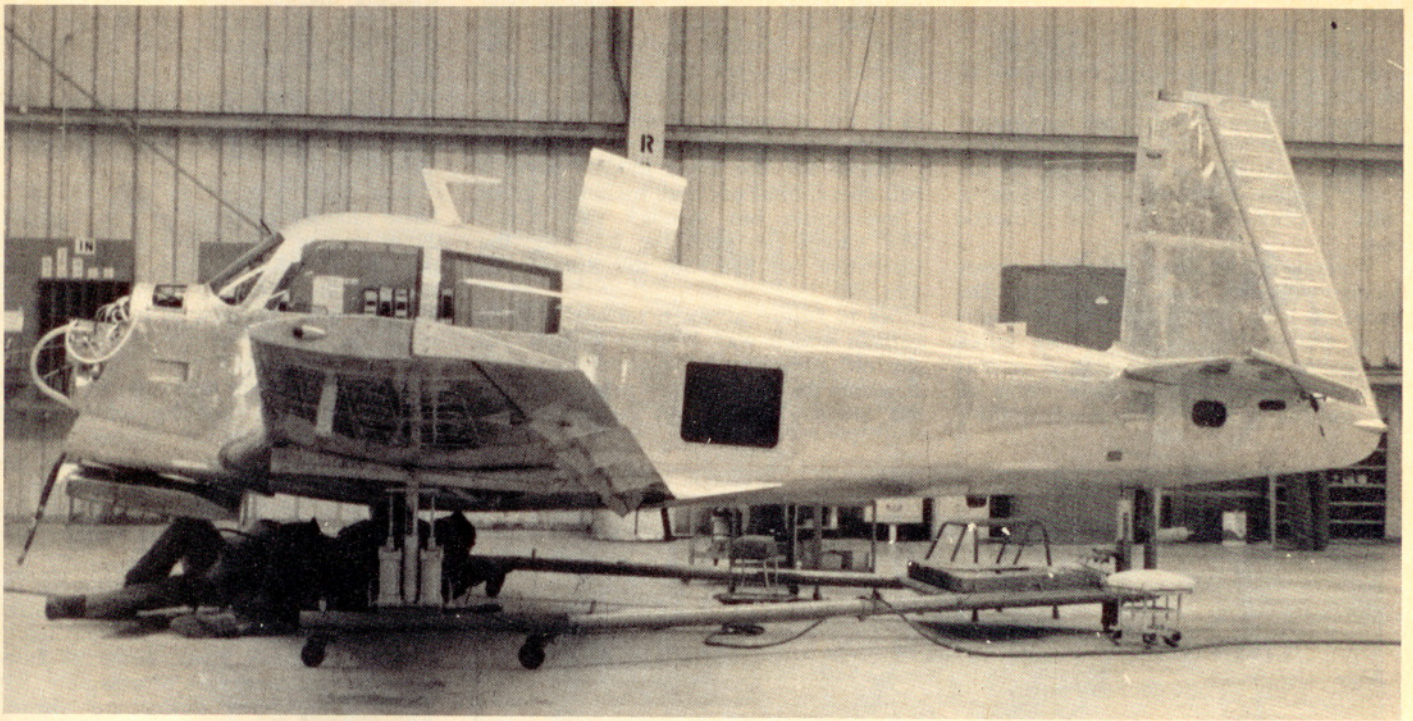
Mooney's dealer support will include a national advertising campaign, show and exhibit program, service and sales collateral, periodical service bulletins, and the guarantee of a minimum of eight aircraft per year (which seems to be the minimum sales Mooney expects of its dealers). At press time Mooney had made its first delivery—a Ranger—to Conn Mooney, Danbury, Conn.

Republic is also looking into company finance plans and standardized training packages, according to Cumming.

The current Mooney line, which consists of the Ranger, the Chaparral and the Executive, will remain basically unchanged.

The speediest, though not the largest, is the Chaparral, named for the amusing, zip-fast roadrunner. It has the same engine—the Lycoming IO-360, fuel injected—that powers its top four competitors: the Piper Arrow, the Cessna Cardinal RG, the Beech Sierra, and the Aero Commander 112. The Chaparral cruises at 184 mph (according to the specs) at 75%, getting about 18 miles per gallon. (Tell that to your car-driving, gas-hoarding, nonflying friends and watch their jaws drop.) The range, with 45-minute reserve, is 798 statute miles.

The more posh Executive is powered by the same engine and is basically the same aircraft, except that it has been stretched 10 inches to provide a little more room in the cabin (dimensions of



The third aircraft off the reactivated Mooney assembly line features the distinctive backswept tail unique to the Mooney profile. A "stinger" that extruded from the lower tail section and a "beak" at the top of the vertical stabilizer—both added during the Butler Aviation regime—have been removed.

which cause broad-shouldered men to "scrootch"). The aircraft loses about 7 mph with the added weight, but makes up for it with leg room and a 977-mile range.

The Ranger has exactly the same body as the Chaparral but is powered by the 180-hp Lycoming O-360-A1D. It has a cruise of 172 mph and a range of 822 miles.

Of the 150 planes scheduled for production this initial year, half will be Executives, the remainder being divided

fairly equally between the Chaparral and the Ranger, depending on early orders.

I had not been in a Mooney since the M-20, so a few things came as nice surprises when I took a short flight in a Chaparral, a leftover from the Butler inventory. It had a nice red-and-white paint job and handsome interior, both Butler innovations. The ride was quieter than I'd remembered, thanks to some heavy soundproofing, and it was also smoother because of the built-in wing-

leveling system called Positive Control (PC).

(PC is great to have in rough weather, but very annoying when you want to do it yourself. Despite Mooney's assurances, it is not easy to override manually, and to do a maneuver, one must constantly depress a small, uncomfortable button on the left arm of the yoke.)

The most remarkable difference is in the gear. Gear up and down are each accomplished in about three seconds, and that old "wrassle stick" (better known as a Johnson T-Bar) that used to fight you for the gear was taken out in 1969. Electric gear was added as an option back in 1967, for those of you who are as ignorant as I was.

Modifications will be relatively few, the most noticeable being the removal of a "stinger" on the tail that was added by Butler, ostensibly to improve the aerodynamic characteristics, though no one can really say just what good it did. A "beak" at the top of the vertical stabilizer, added as a counterbalance to the stinger, will also go. The distinctive backswept tail can be seen on production model number 3. (Numbers 1 and 2 will be kept as company transportation and experimental testbeds.) A new paint scheme will be available by this spring, and a new interior is forthcoming, although Cox says the company will not be held to annual model changes.

The panel, which now has a great deal of wasted space, will be redesigned to fit more instrumentation into the space allotted, and instruments will be updated. A more functional and comfortable yoke will probably replace the little ram's horn wheel, and new panel lighting is in the works. A complete



The last Mooney Chaparral built prior to the plant's shutdown in 1971 displays the "stinger" and counterbalancing "beak" added by Butler Aviation. These features will not be retained on the new models, which will get a new paint scheme and a redesigned instrument panel.

line of autopilots is being evaluated as an alternate to PC.

Another distinctive feature is planned for obsolescence: the old Mooney bird emblem. It is due to be replaced by an eagle, which Vaverek refers to as a "bird of prey—to go after the competition."

Vaverek and Cox are optimistic about Mooneys versus the competition. On paper, at least, the Executive and Chaparral deliver faster cruise, more miles per gallon, and a lower cost of operation than the four contenders. Some of the built-in safety features—including

the one-piece wing and the tubular steel roll bar that surrounds the cabin and keeps the fuselage intact under abnormal stress—are unique for this type of aircraft. Its major drawbacks appear to be the somewhat cramped cabin and a here-today-gone-tomorrow reputation.

Prices for the three models cover a full operational package including gyros ("everything but radios," says Cox). The Chaparral goes for \$27,850; the Executive for \$29,730; the Ranger for \$26,350.

As to future aircraft, no one is quite certain which way Mooney will go, but the old rumorers whisper "light twin." It seems the new Mooney people feel the old Mooney people got burned in the

training market; however, the only entries into this highly competitive field were two bastardized and impractical planes: a Mark 20 with fixed gear (my one bad memory of past Mooneys) and an Aircoupe with its well-known little twin tail replaced by the well-known Mooney tail.

One R&D project in progress is a basic Mooney powered by Continental's Tiara engine, which purportedly would provide a 215-225 mph cruise while maintaining economical operations. If all goes well, the new Mooney could be ready for delivery within 18 months, according to Vaverek.

Before departing Kerrville, one should tour the Mooney facilities, which reveal a curious mixture of modern manufacturing and dusty ghosts from the past. Every single part of a Mooney, with the exception of the gear and the instruments, is produced within the 330,000 square feet of floor space.

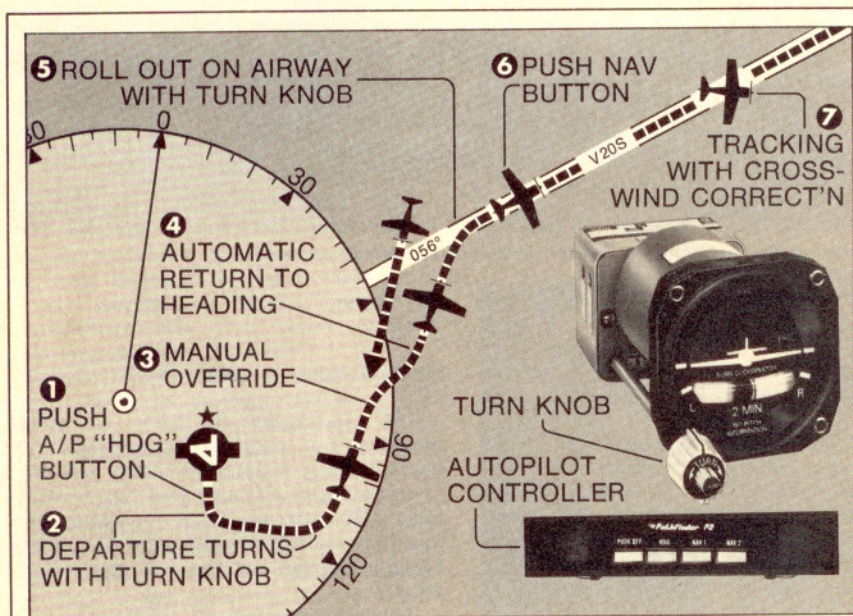
The main building is a mammoth 75-by-150-foot steel structure, impressive for its size, cleanliness, and efficiently flowing assembly lines. Some 25 fuselages in various stages of assembly, left when Butler shut down, are already moving forward. One production line lies empty, however, a few bits of scrap metal and some old cartons being all that's left to remind one that the AeroStar was once to be produced in this factory. (Butler had purchased Ted Smith's twin in 1970, readied the Kerrville facility for production, and even changed the "Mooney" name to "AeroStar," but never drilled a hole. Two years later, Smith got his airplane back and moved it to California, leaving a hole in the Mooney assembly area.)

Behind the assembly buildings, where the tumbleweeds roll in the dry dust, are the ghosts of the M-22 Mustang. A few half-finished fuselages and some rusting tooling conjure up Mooney's pressurized, high- and fast-flying dream plane of the 1960s, which turned into a nightmare of expenses that helped put the company into bankruptcy in 1969.

In the experimental building, along with the Tiara-powered Statesman, is the funny little Aircoupe with its backwards tail. Some wag has hung a "for sale" sign on the propeller, which is probably not all a joke. It has been rumored around the industry that both the Mustang and the Mooney-Coupe (Cadet was its real name) are up for grabs, but Cumming says the company wants to do its homework a little better before making any decisions on either plane.

The facility purchased by Republic Steel is a far cry from Al Mooney's first little plant in Wichita, Kan., founded in 1948 to produce the Mite. The financial picture is quite different as well, for Mooney had continuous problems. Finally, after moving to Kerrville in 1953, he was forced to sell out to avoid bankruptcy. Partners Hal Rachal and Norman Hoffman took over, bringing in many good business practices and engineering developments, including the four-place M-20 series and all-metal construction.

In its heyday, Mooney sold close to



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800 airplanes per annum and employed 1,000 people with an annual payroll of \$5 million. In the mid-1960s it sold more single-engine retractables than all the competition combined. But the costly Mustang program, begun in 1964, and a disastrous venture with the Mitsubishi MU-II turboprop proved too heavy a drain on the company's resources. Mooney went into bankruptcy in early 1969 and was purchased by American Electronics Laboratories. It took AEL about nine months to decide they couldn't build airplanes profitably, and they sold to Butler Aviation. Within a year and a half, Butler decided the same thing. Mooney was again out of production, and the long, dry spell set in.

It is to Butler's credit that all tooling, raw materials, parts and partially completed aircraft were left intact when production ceased in June 1971. Although they did not have the wherewithal to produce the line themselves, they were convinced that someone else could. Rather than sell off equipment to pay their sizable debts, they left the plant as it was, and kept a skeleton staff of 24 to produce parts for Mooney and Aerostar owners.

For 2½ years, this small, dedicated group worked daily with the knowledge that they might be out of a job tomorrow.

row. Headed by Dayton Widenfelder, they produced and sold \$30,000 worth of parts monthly to stay alive. One of those staff members, Ed Penney, now (as then) manager of customer services, called it a "period of stagnation. It was depressing, but we felt an obligation to the Mooney owners, so we just couldn't quit."

During the downtime, Mooney owners also remained loyal to the cause. At one point, some of them formed an association to look for capital to start up the plant again, and to help members obtain parts and service. At this writing, the Mooney Association of America has over 750 members, who pay \$12 annually to receive the monthly "Mooney Profile" newsletter and discounts on certain avionics. (The association also plans to offer group insurance and to organize regional and national fly-ins, the first being planned for August in Denver, depending on the fuel situation.)

It looks as though everyone connected with Mooney—owners, employees, and even the fanciers—is determined to hang in there. No matter how many times Mooney goes down, it just keeps coming back. As one of my fellow fanciers says, with parental pride in his voice, "That tough little baby just won't stay dead!" □

MOONEY MODEL LINE

	Executive	Chaparral	Ranger
Performance			
Cruise speed (75% power)	177 mph	184 mph	172 mph
Range (75% power, 45-min reserve)	977 mi	798 mi	822 mi
Rate of climb (sea level)	1,055 fpm	1,125 fpm	860 fpm
Takeoff run (zero wind, sea level, standard day)	879 ft	760 ft	815 ft
Landing roll (zero wind, sea level, standard day)	785 ft	595 ft	595 ft
Stall speed (power off, gear and flaps down)	62 mph	57 mph	57 mph
Specifications			
Engine	Lycoming IO-360-A1A, 200 hp	Lycoming IO-360-A1A, 200 hp	Lycoming O-360-A1D, 180 hp
Maximum gross weight	2,740 lb	2,575 lb	2,575 lb
Empty weight	1,640 lb	1,600 lb	1,525 lb
Useful load	1,100 lb	975 lb	1,050 lb
Fuel capacity	64 gal	52 gal	52 gal
Wing loading	16.4 lb/sq ft	15.4 lb/sq ft	15.4 lb/sq ft
Wingspan	35 ft	35 ft	35 ft
Wing area	167 sq ft	167 sq ft	167 sq ft
Landing gear	electric	electric	electric
Flaps	electric	electric	electric
Price (full operational package, including gyros)	\$29,730	\$27,850	\$26,350