"Here's the fastest four-place single around.
A real dream to fly."
"I like it. I'll take one. Call the factory
and place my order."
"Only one catch: They don't make 'em any more."

Used Airplane Pilot Report: Aero Commander 200

text and photographs
by Norbert Aubuchon

AERO COMMANDER 200s are said to be the fastest piston-driven, four-place personal singles extant. Bonanzas wobble in their wakes, and even Comanche 400s fall behind. The 200s fly like dreams; they are extremely strong; when new, they could be bought for about $30,000; yet there were only 133 made. Today, they are orphans but dearly loved in spite of their foibles by a small coterie of owners, former owners and a few knowledgeable onlookers.

At Transpo '72, a young couple was examining the glittering new Aero Commander 112 on display. The wife, cooing over the spacious interior, was interrupted by the salesman's question.

"What are you flying now?" he asked, hoping for a Culver Cadet answer.

"An Aero Commander 200," the husband piped.

The salesman coughed delicately. His eyes flicked through the nearby crowd. Then in muffled monotone, he advised them to keep what they had until ready to step up to a twin.

The 200 was designed and originally built by the Meyers Aircraft Company, of Tecumseh, Michigan. There were only 48 Meyers 200s built before Rockwell-Standard bought the rights in 1965 and, with difficulty, built 85 more. After the North American Rockwell merger, the rights were shelled off to Interceptor Corporation, an F. Lee Bailey enterprise, which mounted a gas turbine in the nose, and pressurized both the cabin and the price tag.

The Aero Commander 200 in the photos on these pages is being modified to make it "the safest of all high-performance singles for night flying," according to its owner, Stephan J. Snyder. How? By the installation of quick-attach parachutes to be tucked neatly in each head rest. Preposterous? Maybe you and I might think so, but not Snyder: An aeronautical engineer (Georgia Tech, '58), he is one of the world's leading designers and manufacturers of sport parachutes. He may be the most technically articulate of the pilots within the 200's fawning claque.

My introduction to Snyder's airplane was almost theatrical. I waited with a pilot friend in front of dingy hangar doors. They parted as curtains on a stage to reveal a glittering white-and-orange flying machine; its shape snapped out in sharp contrast to the murky interior of the shelter. The sun broke through as if on cue. I half-expected triumphal music. Looks like a Navion, I thought to myself. Snyder was center stage, tugging on the tow bar. He eased his aircraft outside, talking all the while about the exceptional performance that Allen H. Meyers and his small group of craftsmen had created. Snyder stowed the tool, paused to let us absorb. Then he spoke again.

"Do you think I'm just an overly enthusiastic owner?" Snyder asked, grinning at my friend, who happened to be an automobile dealer.

"No," he said, "you just sound like I do when my used-car lot begins to look like Times Square."

Unflinching and still smiling, Snyder began the guided tour. "Note the substantial taper of the wing, and the thick wing root. This feature allows attach points to be positioned farther apart for added strength. The root structure is a welded truss buildup that extends three feet from the fuselage on each side, with conventional construction outboard of that. The span is short, and while the root section is quite thick, the taper makes the average dimension of the airfoil relatively thin. This translates into a high maneuvering speed [115 knots], for one thing. The root contains four 20-gallon tanks. That's an hour and a quarter each at almost 175 knots at 65-percent power."

This ain't no Navion, I had decided. My eyes traveled to the curious-looking stall strips on the leading edge. These were short, handcut lengths of copper tubing with the ends pinched flat, pierced and attached to the skin with self-tapping screws. This lash-up seemed amateurish, and I said so.

"Yes, it seems homegrown," Snyder said, "and it is. These aircraft were individu-


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ally tuned to fine pitch. For example, the strips were cut, tried, cut and tried again until the characteristics of one wing were exactly matched to the other. The same technique was used throughout the airplane."

Snyder pointed out a minnow of difference in the semi-Fowler flaps of his airplane. When retracted, the left flap had been made to stop a quarter of an inch before the flush position. He showed how the nosewheel doors had received special custom treatment to achieve a perfect fit. The differences from plane to plane are significant in detail—all to gain uniformity in the final product.

Another important design feature is the teardrop-shaped fuselage, which reduces the wetted area from the passenger compartment aft. Its shape is reminiscent of the Staggerwing Beechcraft. Snyder maintains that had the Wing Derringer been so made, the reduction of drag from this alone might have made the difference between mediocrity and reasonable performance.

The three landing-gear wheels are of equal size to provide rough-field capability. Prop clearance, even with compressed strut and flat tire, will get you through. The nosewheel is steerable but stiff. With Snyder's plane, you cannot make a tight taxiing turn without the help of a brake. I'd guess 200s are all the same; Snyder is touchy about abnormalities in aircraft.

The gear operates hydraulically. As a preventive against accidental retraction while on the ground, a switch built into the gear-handle mechanism cuts out the starter circuit when the handle is in the neutral or up position. This is fine unless you start the engine before you bump the lever to up.

The elevator trim tabs are not only unusually large but hinge on the trailing edge of the tail, and therefore extend back as though they were a complete afterthought. As you stand at the tail looking forward, you can see straight through the cabin, getting an idea of the enormous visibility afforded by the canopy design. More important, the pilot can see the elevator tabs. This, it turns out, becomes as important for safety as a magneto check. An attempted takeoff with an extreme adjustment is almost sure to render the plane unmanageable, despite the fact that during certification, the FAA somehow became convinced that a 170-pound man could maintain control with one arm during takeoff under such conditions. After the ATC was awarded, there was talk at Meyers about recessing the tabs, but this was never done.

Walking on around, Snyder called our attention to the main landing-gear doors, and said these were adjusted to final size and fit after repeated air-to-air inspections. The doors and gear need to work right and be rugged to fill the advertised claim that the emergency extension speed is 182 knots.

The way aboard is via a hydraulically extended step with a convenient but unsightly handhold that looks like a chrome towel rack. Though excellent functionally, it's curious that an otherwise clean airframe would be garnished with such a blemish. Getting in and out of the cabin is easy except for the copilot. His exit is difficult. Somehow, quarters are tighter than they look. For the unpracticed, the word is "awkward."

The seats are overstuffed and comfortable. There is nothing Spartan here. The 360-degree visibility strikes you immediately, and then you notice the distinctive instrument panel. Flight instruments are all on the left. A complete avionics stack is in the middle, and all power gauges are on the right. The automatic pilot clings to the bottom of the panel's center section. The entire layout is neat, clean and convenient. On a panel just under the pilot's left arm are miscellaneous switches, the fuel gauge and the tank-selector valve. Unfortunately, there is no way of getting a fuel-gauge indication before actually turning to the tank in mind. Adjacent and below this side panel are the circuit-breaker buttons. Slightly forward and under the main panel is the manual hydraulic-pump handle.

Protruding from the instrument panel are doorknob-type push-pull power controls; no way to the airline-captain fantasy here. Worse, you may be a bit confused. There are four such knobs—prop, throttle, mixture . . . and one more. It doesn't pull or push, through; it twists. It's the pitch-trim control, of all things. Were this for the ailerons (there is one) or the rudder (there isn't one, unfortunately), its movement would seem logical, but making a lateral motion to achieve a longitudinal movement is awkward at first. It's like learning to work a new combination lock.

"Turn right—nose down—to the stop," Snyder said. "Then left by five half turns. Now, pull the wheel back and look back. If the tabs are close to alignment with the elevator, we'll keep out of trouble."

The idea for this screwy control is claimed by Raymond Betzoldt, former production manager and test pilot for Meyers. "I wanted something different," he said. "But let a guy fly this for 15 hours and he'll fall in love with it."

Different it is. After about three hours in Snyder's plane, I still had to stop and think which way was "up." However, there is never a time from chock to chock when major trim adjustment is necessary, so fine-tuning works well.

The fuel-injected Continental IO-520-A is rated for a continuous 285 hp, or 300 hp for five minutes at 2,850 rpm, according to the engine book. The pilot's manual, however, restricts it to 2,700 rpm at full throttle for one minute.

Now, with flaps in trail (20 degrees), you aim this bullet down the runway. Don't be casual about your takeoff. This is no ordinary airplane. If you've transitioned with a tailwheel fighter aircraft, it'll be a piece of cake. If you've come from something benign, you have a bit to learn even if you've memorized all that you've been told about torque.

Apply throttle abruptly and you're going

200

All three wheels take the same size tire, so rough fields are no strain. The shape, so reminiscent of the Navion, artfully minimizes wetted area. The result: low drag and a fast airplane.

200

Aero Commander 200

Price, used	$18,000 and up
Engine	Cont. IO-520-A, 285 hp
Propeller	McCauley constant-speed
Length	24 ft. 4 in.
Height	7 ft. 4 in.
Wingspan	30 ft. 6 in.
Wing area	161.5 sq. ft.
Wing loading	18.75 lb./sq. ft.
Seats	4
Empty weight	1,940 lbs.
Useful load	1,060 lbs.
Payload w/full fuel, average equipt	535 lbs.
Gross weight	3,000 lbs.
Power loading	10.5 lbs./hp
Fuel capacity (standard)	40 gals./240 lbs.
Fuel capacity (optional)	80 gals./480 lbs.
Baggage capacity	200 lbs.

Performance

Minimum runway requirement	1,200 ft.
Rate of climb	1,400 fpm
Service ceiling	18,500 ft.
Maximum speed	215 mph/187 knots
Cruise (75% @ 7,500')	210 mph/182 knots
Range @ max cruise (45-min res., opt. tanks)	1,096 sm/952 nm
Duration @ max cruise (no res., opt. tanks)	5.2 hrs.
Stall speed (clean)	67 mph/58 knots
Stall speed (gear and flaps down)	54 mph/47 knots

Flight characteristics

Handling qualities (cruise)	Beautiful
Handling qualities (slow flight)	Beautiful
Stall recovery	Benign
Hands-off stability	Beautiful
Runway and taxi handling	Good
Crosswind handling	Good

Pilot utility

Visibility	Exceptional
Accessibility of switches, etc.	Good
Panel layout	Excellent

Cabin comfort

Entry-exit ease	Poor
Front-seat room	Fair
Rear-seat room	Fair
Ventilation (in flight)	Excellent
Ventilation (on ground)	Good
Cabin sound (@ 75% power)	Fair

Quality

Interior finish	Superb
Exterior finish	Superb

to make a sharp left turn. Guaranteed. Get right rudder and aileron into your act before you *ease* power on and you'll have a leg up. Then the zigzagging you do may remind you of nothing worse than one of your early student takeoffs. The forces aren't difficult to balance with a little practice, but it does take practice. "I've had guys get as many as two runway lights the first time they've flown this plane," Snyder said.

Another event during takeoff caught my attention. It was a slight wobble that occurred an instant after rotation. I couldn't eliminate it no matter what I did. I asked Snyder to make a takeoff with me observing. He minimized the wobble with conscious effort but didn't erase it. Later, examining a series of sequential photographs of the airplane that I'd shot during one takeoff run, I noticed that the nosewheel was cocked to the right during the roll. It seemed turned about 10 degrees. Then, during rotation, the nosewheel swung to 15 or 20 degrees. The already strenuous use of right rudder during the takeoff run increases sharply at rotation as the turning force of the nosewheel is withdrawn. Additionally, the rudder effectiveness is diminished slightly at the same time by the horizontal stabilizer as the angle of attack changes. During your first few takeoffs, you may be so preoccupied with the overall performance that you may miss this phenomenon. If you watch the rudder-pedal differential while someone else takes off, you'll notice about a two-inch difference that snaps to three or four inches at rotation.

Ray Betzoldt says he applies forward pressure during the takeoff run. Easing the pressure at about 55 knots, he claims the 200 will fly off itself without noticeable wobble at 65. Since all the relevant forces are always present, I suppose it's merely a matter of how you arrange for the transfers, but I, for one, would want to know a lot more about this aircraft before attempting a takeoff in a strong left crosswind.

Once you're off, you heft a large aluminum disk upward and 1,000 psi of hydraulics lifts the gear. When the red lights go on, you neutralize the system and bring up the flaps. The hydraulics idle at 300 psi. With power reduced to 24 inches and 2,500 rpm, the rate of climb at 100 knots (best climb) was 1,400 fpm for us.

Trimming out for cruise takes a little doing for the uninitiated. I couldn't believe the nose-low attitude at first. I trimmed more than I thought necessary and was still climbing. Stabilized with 21 inches and 2,375 rpm at 5,000 feet, there it was: 174 knots at 65 percent. Seventy-five percent gave us 179 knots. The book says 182, but it wasn't quite there with three aboard and full fuel. The airplane seems rock-stable, and your right leg is resting. This machine needs a rudder trim for takeoff and climb, though. The Meyers people felt this wasn't necessary. Obviously, the Rockwell people agreed. Aileron control is sensitive but a little heavy. There is an aileron trim, but on Snyder's airplane, it had been disconnected in favor of an autopilot. For pitch, the vernier mechanism with its fine-tune capability proves to be excellent.

Here we are in an exquisite airplane moving easily at almost 175 knots. The ventilation system is excellent, front and back. The noise level isn't low, but it is acceptable. The book talks about Super Soundproofing. Well, we can let that go. The narrow span smooths the ride. Stalls are benign; the ailerons stay with you after the pitch. You don't need rudder to pick up a wing.

Landing is a breeze, once you get the hang of it. The gear comes down at 140 knots, making an excellent speed brake. The flaps won't lower until you're at about 105. However, you can preselect. The flap control will not go to the full 40 degrees until the flaps themselves are at 20 degrees. You can depress the flap handle as soon as your gear is in the green, and matters will take care of themselves for a while. You'll note no gyrations when the flaps do come down; a mechanical interconnect system automatically compensates to offset the pitching moment normally generated. Now, at something over 80, you hit full flaps. Again, no horsing around with trim. This is a power machine. Down the slope you go at 80, slowing to 70 over the fence. You're easing the power off with the vernier. Now, as you flare, you're likely to make a minor mistake. Remove all the power and the plane will thump on. Keep a little power on and you'll get a grease job. This, incidentally, isn't a sometimes thing. It's reproducible about 90 percent of the time.

Why is this remarkable machine an orphan? Ask North American Rockwell and you'll probably get a "no comment" answer. After all, who wants to be haunted by the past if they have new airplanes of lesser performance to sell? I turned to Tecumseh, and Ray Betzoldt kindly reviewed the history. Back in the early 1950s, public demand for a four-placer made itself known to Meyers. Meyers, Betzoldt and three helpers set out to comply. In 1954, they towed their first mocked-up airframe with a truck to test balance and landing gear. Next, in 1956, came the pre-prototype. It ticked off 152 knots with a 225-hp engine—almost 10 knots faster than expected. In 1959, the prototype flew, and enough engineering drawings were made to satisfy the FAA. The ATC and the first sale were completed that year. Meyers had a factory force of 25 people who handcrafted the planes until 1965, when Rockwell-Standard came along with enough money—reportedly an even million dollars—to buy Meyers's profitable business.

All the king's horses and all the king's men . . . Rockwell-Standard set up in Albany, Georgia with hordes of help, at least by comparison with the Meyers operation: Some where between 200 and 400 people turned

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Aero Commander 200

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to. Initial production revealed poor sheet-metal workmanship in spots, but as time went on, this improved. It was the welded-steel framing that did them in. Somehow, there was no way to "mass" produce this airplane and make a profit, especially with the overhead any large corporation must assign to each of its projects. All that remains to tell about parenthood is to say that there is a group of old-time ex-Meyers people at Tecumseh who, with love and kindness, will give factory care to your 200 whether it be a Meyers or an Aero Commander. Ray Betzoldt, who now owns Tecumseh Aviation, stands ready with five associates. Come to think of it, any one of the Big Three might be hard-pressed to assemble that much in-depth knowledge in one place to help a person fix his airplane.

If you're in the market: In addition to Tecumseh, Hibbard Aviation of Oakland, California is specializing in 200s. They advise that selling prices range from the low $20,000s to low $30,000s, depending on what's aboard. An autopilot should bring a premium. According to Norm Hibbard, to have one installed today would cost about $4,000. Words of caution: Because there were so few 200s made, most maintenance people are ignorant of idiosyncrasies. Hibbard highlights *some* chronic problems: Landing-gear bushings are often worn; original fuel lines are starting to leak and complete replacement is a task; certain parts of the glass in the canopy give repeating trouble. Look for signs of excessive leaning; though following instructions, some owners have unwittingly burned engines. Hibbard suggests that an extra gallon per hour wards off premature overhaul.

During its short commercial life, the Aero Commander 200 swept race after race in its class, flown by pilots such as Brodbeck, Washburn, Loening, Spunk. It became a celebrity with theatrical types as pilots—Susan Oliver, James Franciscus, Cliff Robertson. Even A. J. Foyt bought one to fly between auto races.

The one big too-bad thing is that the aircraft was certificated with less gross than many people believe it can carry safely. Peter Gluckman circled the globe in a 200 with 480 gallons of fuel. An "overload" of 200 to 300 pounds is not the least bit uncomfortable, I'm told, but the low gross of 3,000 pounds is likely to remain unless some commercial interest with more moxie than Rockwell had comes along to do the "impossible." +

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