



Used aircraft: Cessna 205

First hauler

Before the Stationair

BY JULIE K. BOATMAN

It's not quite a secret, but few pilots know about the Cessna 205. And if you're in the market for a utility airplane that's rock solid to fly—and can find a current 205 owner willing to part with his prize—the predecessor to the popular 206 is an option worth considering.

The 210-5 (205) and 210-5A (205A) came out in 1963 and 1964, respectively, and precede the Cessna 206, which debuted in 1965. Originally the 205 was designed to give pilots greater cabin space than the 210—which, as a retract, had the gear folding into prime real estate. Hence, the designation “210-5.”

Later, Cessna followed the popular six-seat heavy haulers with the 207 "stretch" models, and the P206 (P for *personalized* in this case; only a few P206 models were turbocharged), the U206 (a cargo version, with U for *utility*), and the current-production 206H and T206H (turbocharged) models.

Will fly to fish

Duane Larson, owner of N8326Z, featured on these pages, had his heart set on the 205. He wanted capability enough to do the outdoor activities (once he was finished flying to his destination) that beckon when you live as close as Larson does to the Rocky Mountains. He bases the airplane at Denver's Rocky Mountain Metropolitan Airport (formerly Jefferson County Airport, or Jeffco).

"I learned to fly because I liked to fish," says Larson. "In the late '80s I flew on a fishing trip to Yellowstone in a friend's 205 and became enamored with its ability to haul large quantities of gear at an economical cost."



Compare the useful load of the 205 with a similarly equipped 206 and you can see what the draw is.

In July 1998, Larson purchased N8326Z from a dentist in Gillette, Wyoming, after searching for a 205 for four years. Given the dry climate that the airplane had enjoyed its entire life, the airframe was in good shape. Larson installed a J.P. Instruments engine monitor, but otherwise left well enough alone for several years.

Compare the useful load of the 205 with a similarly equipped 206 and you can see what the draw is. Early 206s vary widely, but the 1976 U206F featured in AOPA's Aero SUV 1999 Sweepstakes (see "Sporting a Ute for You," February 1999 *Pilot*) had a useful load of 1,456 pounds. Larson's 205 had a 1,550-pound useful load before he headed into upgrade territory (the details of which follow), with a cruise speed of 140 mph on a fuel burn of 12 gallons per hour.

Upgrades

But like most grown men who can't leave well enough alone, Larson found an excuse for his decision to upgrade the airplane from its steady, functional state. "I actually blame AOPA to some

extent, because I followed the [Cessna] 206 SUV renovation and contest with total envy." Better justification? "I also wanted to create a craft able to get into shorter high-elevation grass strips to get me nearer to many of the trout streams in Montana and Idaho, and to get gear to my house on the Rio Grande near Del Norte, Colorado." He retired in May 2002 after a career that included developing Children's World childcare and education centers.

During the annual inspection in February 2002, Larson replaced the standard 5.00 (inch)-by-6 (inch) nose-wheel and 6.00-by-6 main gear tires with 6.00- and 8.00-by-6 tires, respectively. "They're not tundra tires, but bigger than the normal tires," says Larson, and they are OK'd in the owner's manual. Larson also added a heavy-duty nose-gear assembly, plus a Horton STOL (short takeoff and landing) kit. Then he sent the 205 to Texas Skyways in Boerne, Texas, for a new engine. He chose a Continental IO-550 to replace the Continental IO-470 that

originally powered the 205. The new engine required a three-blade Hartzell prop, and upped the horsepower from 260 to 300. The one drawback? "I lost about 100 pounds of useful load with the new engine," he says.

Larson, who likes both the color yellow and the local university sports teams, the Colorado Buffaloes, had Pamela Wiltgen of Designs by Pamela in Grand Junction, Colorado, design the vivid paint scheme, which was executed by Dial Eastern States Aircraft Painting Inc., in Cadiz, Ohio. An avid runner, Larson notes that the Buff on the tail honors the nationally acclaimed men's and women's cross-country squads at the University of Colorado at Boulder.

The interior, a mix of cloth and leather suitable for some rough backcountry handling, came from Air Mod, of Batavia, Ohio, located at Clermont County Airport. One telling addition: an integral tube installed into the empennage and accessible from the baggage compartment—for fly rods. Larson chose Cincinnati Avionics to redo the panel, as it was on the same airport

as Air Mod and could coordinate well with its shop.

To address the modest stack originally gracing the 205, Larson hired Cincinnati Avionics to bring on board a Garmin GNS 530 and 430, with a GMA 340 audio panel and GTX 327 transponder. The shop also added the Goodrich (now L-3 Communications) Stormscope WX-500, Bendix/King KCS 55A horizontal situation indicator and KR 87 automatic direction finder, and S-Tec Fifty Five X autopilot. The total panel cost (including the new metal panel itself) was a little north of \$83,000. The airplane returned to Colorado in October 2002.

Total cost of new paint, interior, panel, and engine added \$255,000 to Larson's \$70,000 purchase price. "Yes, I know I'm nuts," says Larson, but adds in his defense that, at the time of his upgrades, a similarly equipped new 206 would have cost almost \$100,000 more (currently, a Garmin G1000-equipped 2007 206H model starts at \$479,500). And that new 206 wouldn't have quite

the useful load: 1,380 pounds is the maximum (before options) on a new 206H, and Larson has 1,450 pounds at his disposal after installing the bigger (and heavier) engine, plush interior, and a host of panel candy.

How is this not a 206?

I flew Larson's 205 on an essentially standard day (5 degrees Celsius at the airport's elevation of 5,673 feet), with the typical Front Range spring winds out of the west at 15 knots on up. In some places the ride was smooth, in some much more exciting, but the 205 straddled the bumps with a feel common to heavily loaded high-wing Cessnas.

The takeoff roll and climb get a certain hand from the additional 40 horsepower up front and the Horton

The new leather-trim interior can stand up to the abuse of the backcountry, and it hides a couple of secret compartments designed to aid the owner's mission—the rear baggage area even has a fly-rod holder—an Air Mod special.



STOL, with its droop tips and stall fences. Larson claims that the ground roll can be reduced to about 325 feet using short-field techniques, but I wasn't as aggressive and saw about 600 feet with about 10 knots on the nose (and some more from the left side as we launched from Runway 29 at Jeffco).

One hot day in Colorado, Larson saw a service ceiling of about 12,500 feet on the original engine—but the

The Horton STOL kit and larger tires make the 205 even more of a back-road flier. After the STOL mod and Texas Skyways engine conversion, Larson saw his takeoff roll cut in half.



1963 Cessna 205

Current Vref market value: \$59,000 to \$190,000 (as tested)

Specifications

Powerplant	Continental IO-550, 300 hp
Recommended TBO	1,700 hr
Propeller	Hartzell 3 blade, 80-in dia, constant speed
Length	27 ft 4 in
Height	9 ft 9 in
Wingspan	36 ft 7 in
Wing area	175.5 sq ft
Wing loading	18.8 lb/sq ft
Power loading	11 lb/hp
Seats	6
Standard empty weight	1,850 lb
Max gross weight	3,300 lb
Useful load	1,450 lb
Payload w/full fuel	1,060 lb
Fuel capacity, std.....	65 gal (63.4 gal usable)
	390 lb (381 lb usable)
Fuel capacity, opt.....	84 gal (80 gal usable)
	504 lb (480 lb usable)
Aft baggage capacity	varies w/seat configuration

Performance

Takeoff distance, ground roll, 20 degrees flaps	650 ft
Takeoff distance over 50-ft obstacle, 20 degrees flaps	1,150 ft
Rate of climb, sea level	1,000 fpm

Cruise speed/range w/45-min rsv (fuel consumption)	
@ 65% power, best-power mixture, 7,500 ft..	155 mph/518 nm (15.5 gph)
@ 60% power, best-economy mixture, 8,500 ft	145 mph/630 nm (14.5 gph)
Service ceiling.....	16,100 ft
Landing distance over 50-ft obstacle	1,100 ft
Landing distance, ground roll	500 ft

Limiting and Recommended Airspeeds

V _X (best angle of climb).....	78 mph
V _Y (best rate of climb)	99 mph
V _A (design maneuvering).....	138 mph
V _{FE} (max flap extended)	110 mph
V _{NO} (max structural cruising)	170 mph
V _{NE} (never exceed)	210 mph
V _R (rotation)	70 mph
V _{S1} (stall, clean).....	61 mph
V _{SO} (stall, in landing configuration) ..	51 mph

All specifications are based on manufacturer's calculations and incorporate changes with upgraded engine and STOL kit. All performance figures are based on standard day, standard atmosphere, sea level, gross weight conditions unless otherwise noted.



Larson hired Cincinnati Avionics to bring on board a Garmin GNS 530 and 430, with a GMA 340 audio panel and GTX 327 transponder.



bigger engine improves the ceiling to roughly 14,500 feet, just enough to clear every mountain in the state. "It makes all the difference in the world," says Larson.

A stall series performed at 8,500 feet further emphasized the abilities of the STOL kit, as there was no classic break in a power-off stall, only a sink that set up around 57 mph.

For speed, we saw 145 mph at 8,500 feet at 60-percent power (the light to occasionally moderate chop got in the

The panel features everything a pilot needs, with Garmin avionics, Bendix/King HSI, L-3 Communications Stormscope WX-500, and S-Tec Fifty-Five X autopilot with autotrim. Larson preserved details such as the Cessna nameplate within the engine gauges (above right).

way). Larson typically flies at 20 inches manifold pressure and 2,400 rpm—at about 65-percent power—and now sees a cruise speed around 155 mph between 7,500 and 8,500 feet.

When he heads into the mountains—which is often, given his home base and his predilection for outdoor activity—he uses an Aerox portable oxygen system with cannulas.

"The airplane loves to go fish the Green River via Dutch John [Airport] in Utah, the North Platte via Saratoga [Shively Field], Wyoming, and the Bighorn via Fort Smith [Landing Strip] in Montana. All are paved strips, with Fort Smith being the most interesting to get into (short with power lines).

Hits

- A lot of useful load for the weight.
- Easy to fly, easy to transition up to.
- Stable, solid single.
- Decent short-field performance.
- Good value.

Misses

- Doesn't perform as well with original engine.
- Fair-size AD list because it's the first of its kind.
- Somewhat ponderous control feel.
- Tough to find on the used-aircraft market.


[My wife and I] have been to several dirt and grass strips including Red Feather Lakes [Crystal Lakes Airport, a private strip in north-central Colorado], but are still looking forward to that great 'camping by the river' trip," says Larson.

The airplane performs marvelously on takeoff, and landings are pleasant as well—most of the non-Cardinal Cessnas land similarly; the nose just gets heavier the more power you have up front. The 205 is no exception, and lands true to form: pretty short and sweet, as long as you're on airspeed—which requires significant back-pressure through final and on into the roundout with just the two of us in the airplane and nearly full fuel. Like most airplanes in its class, it will float in ground effect if you carry too much speed to the runway, but not painfully so.

A history of happy owners

Of the 557 that were built in 1963 and 1964, fewer than 250 remain on the registry, and owners are loathe to part with them. Aficionado Stewart Silvernale, of Powell, Wyoming, sums up the utility of the 205 well: "Cessna stopped building the most practical aircraft ever produced [the 205] 40 years ago. With the original 65 gallons of fuel it could fly for four hours at 60-percent power with all six seats occupied plus a briefcase or two. There would still be over an hour of fuel in reserve." **AOPA**

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 *Links to additional information on the Cessna 205 are available on AOPA Pilot Online (www.aopa.org/pilot/links.shtml).*