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Citation CJ4

Simple Citation reliability, 1,900 nm with 4 passengers

FOR LESS THAN \$6 MILLION, YOU CAN BUY A SINGLE-PILOT CITATION that can fly 4 passengers from San Diego, California to Savannah, Georgia, and land only 7 minutes behind a Learjet 45XR performing the same mission. The top line CJ differs from previous iterations of the CitationJet as it has a new wing, adapted and scaled down from Citation Sovereign, more robust Williams International FJ44-4 turbopfans, more fuel and higher operating weights. With full fuel, it can carry a 987-lb. payload. Each additional passenger costs about 60 nm of range. The 9.0 psi pressurization provides a 7,800-ft. cabin at FL 450, the aircraft's top cruise altitude.

Interiors typically feature a forward, side-facing, one- or two-seat divan, four club chairs in the main cabin and two forward facing chairs in the aft cabin. The main seating area is 7-in. longer than that in the CJ3, affording passengers more legroom. A 5-in. dropped aisle affords 57 in. of headroom in the center of the interior. There is a 15 cu. ft. crew baggage compartment in the nose, 6.5 cu. ft. of internal storage in a forward cabinet and an aft 55.6 cu. ft. baggage compartment.

The standard Collins Venue cabin management system includes a BluRay/DVD player, 10.6-in. bulkhead monitor, two 10.6-in. side-ledge monitors, XM satellite radio receiver, moving map display and remote control cabin fan speed and temperature control. Also included are a two channel Iridium SATCOM phone, left and right side 110-volt AC outlets and a data port to accommodate personal media devices. A dual zone climate control includes a virtually trouble-free vapor cycle air-conditioner.

In keeping with three decades of CJ design philosophy, short field performance is a strong suit. Standard-day takeoff field length is 3,410 ft. and up at BCA's 5,000-ft. elevation, ISA+20C airport, it's 5,180 ft. While 3,000 ft. of pavement is sufficient for shorter, work-a-day missions, operators say they plan on 4,000 ft. for safe margins.

The CJ4 has been upgraded with more robust systems. It's the first CE525 to have scratch-resistant glass windshields. It has a quad-redundant electrical system, single-point pressure refueling and a 3,000-psi hydraulic system that powers the landing gear, flaps and speed brakes. A separate hydraulic power pack supplies the wheel brakes. Aircraft s.n. 100 and subsequent have externally serviced lavatories. SB525C-38-01, priced at \$115,000, makes this available on earlier aircraft, according to Gavin Woodman, co-founder of the brokerage firm AEROCOR.

The CJ4's Collins Pro Line 21 cockpit in 2010 was the most advanced of any Model 525, having four 10 in. by 8-in. displays,

MultiScan weather radar, TCAS II, automatic emergency descent mode and left and right CDUs for FMS-3200 and radio control, plus airport performance computer, XM satellite radio weather receiver and Class A TAWS. One FMS was standard. A second was optional. Operators say the \$6,000 annual subscription for navigation database updates seems steep, twice or more as expensive as Garmin database subscriptions for other CJs.

The aircraft is easy to fly, similar to earlier members of the CJ family. The displays are crisp and they include full EICAS. But synthetic vision is not available. A Pro Line Fusion upgrade, similar to that offered for CJ3, has not been announced. FADECs slash the workload associated with managing the 3,621-lbf turbopfans. Plan on block speeds of 410 to 420 kt. for most trips. Most pilots are comfortable flying the aircraft 4 hr. or about 1,700 nm in no-wind conditions.

As delivered from the factory, the CJ4 was provisioned for ADS-B. But avionics were designed for Do-260A compliance, rather than Do-260B, the current standard. Serial number 177, plus s.n. 187 and subsequent are compliant with the new standard, says Woodman. SB525C-34-12 is a \$23,000 option that upgrades older aircraft to Do-260B. Be careful with downtime. Collins Aerospace says it takes four weeks of advance notice and 23 days of shop time to upgrade the TDR-95D transponders for ADS-B, Woodman advises.

Direct operating costs are moderate. Plan on 160 gal./hr. for fuel, \$317 per hour for Williams TapAdvantage engine maintenance plan, \$269 per hour for Textron Aviation's Pro Tech labor program and \$370 per hour for Pro Parts. Engine TBO is 5,000 hr. Pro Tech and Pro Labor enrollment fees for aircraft not in those Textron maintenance programs is based on aircraft age, flight hours and maintenance history.

While the oldest models command about \$5.5 million to \$5.8 million in the resale market, newer models, incorporating all the service bulletin updates and having fresher paint and interiors sell for \$7 million and higher. The CJ4's arch competitor is Embraer Phenom 300, having similar cruise speeds and range, but better fuel efficiency and more tanks-full payload. Textron Aviation's own CJ3+ is another competitor, offering almost as much range, but it carries fewer passengers with full tanks and it cruises slower.

Of the 288 CJ4s built, only 7 to 10 are for sale. While the resale market has plateaued from 2018 levels, prices haven't declined significantly. Textron Aviation's product support for its top line CJ remains strong, so this light jet gets high marks from operators and it will remain in service for decades to come. **BCA**



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