



awareness in the congested terminal area.

The descent was continued to 3,000ft, and flaps set to 15° as the aircraft slowed to 150kt. Once established on the localiser, gear was lowered and flaps set to full. At glideslope intercept, about 57% N_1 was required to hold a target approach speed of 120kt (reference speed (V_{REF}) + 5kt). Power response was good and the flight director allowed me to track both localiser and glideslope easily. Pitch attitude was relatively flat, the nose on the horizon in a 500ft/min descent.

Crab technique

Because of the X's long wing and short trailing-link gear, a wings-level crabbed approach is flown in crosswinds. There was a slight left crosswind for our first landing, so only a few degrees of crab were required. This crab technique may feel a bit unusual for most pilots who have grown up flying wing-low approaches. Touchdown should be in a wings-level attitude, using the rudder to align the fuselage with the runway just before touchdown.

The flare manoeuvre itself also differs from that of other Citations. Unlike its straight-wing brethren, only a very slight flare – 2-3° of pitch change – is required to establish the landing attitude. Also, no attempt should be made to hold the aircraft off the runway with more and more yoke backpressure. Despite these differences, landing the Citation X is easy: just start pulling the power to idle at about 50ft and flare slightly a few feet above the runway.

Once on the runway, I extended the speedbrakes and Snider set the flaps to 15° in preparation for the go-around. When

The 5% extra thrust squeezed from the X's Rolls-Royce AE3007 engines gives a 180kg increase in MTOW

flaps were in position, I retracted the speedbrakes and advanced power to the take-off detent. After rotating at 120kt, the aircraft lifted off, and Snider retracted the gear and pulled the right AE3007 to idle to simulate an engine failure. At 135kt it took about 45kg rudder pressure to maintain wings-level on runway heading.

Flaps were retracted in the climb and the aircraft was accelerated to the en-route speed of 190kt. There was enough trim available to zero out rudder forces in the climb, and I appreciated having a conventional slip ball on the lower edge of the PFD. Once level at pattern altitude, I centred the rudder trim and flew the rest of the approach.

The single-engine approach was flown like the two-engine one before it, with 35° flaps, but at V_{REF} + 10kt (125kt). If climb performance is a concern, 15° flaps can be used. Unlike the first approach, where I flared several feet high, this one was on the money, touching down just after the slight flare.

The last approach flown was a visual circuit with both engines. Final approach speed was 120kt. After a smooth touchdown at 115kt, I extended the speedbrakes and lowered the nose to the runway. Firmly on the ground, I selected reverse thrust on both engines and applied the

main wheel toe brakes. Deceleration was rapid, even though I was not applying enough brake pressure to cycle the anti-skid. Thrust reversers were stowed at 70kt. With a 7kt headwind, the 11,770kg aircraft was brought to a halt less than 300m from the touchdown point.

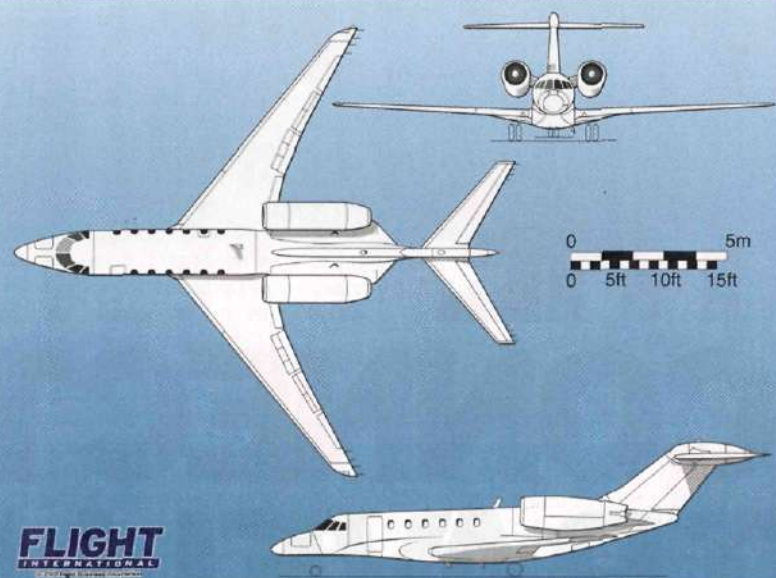
Extreme performer

During the 1h 36min flight, I was able to sample the Citation X at the extremes of its flight envelope. It was easily hand-flown at M0.90 and 43,000ft. The well-appointed cabin was quiet even at high cruise speed. Speedbrakes and a M0.92 maximum operating speed allowed the aircraft to get down rapidly from high altitude.

Low-speed performance was no less remarkable. Both the clean and landing configuration stalls were as benign as any I have experienced, the latter occurring at only 98kt. Approach speeds were also low, helped by the wide-span leading-edge slats.

Landing the Citation X was easy, although it required different techniques to other Citations. The world's fastest business jet proved easy to fly at both ends of its wide speed range. Increased engine thrust and higher gross weight are just two reasons why customers looking for a fast jet are likely to consider the upgraded Citation X. ■

CESSNA CITATION X SPECIFICATIONS



Length overall	22.1m	Take-off field length	1,567m
Wing span	19.4m	Landing field length	1,036m
Wing area	49.0m ²	IFR range (185km alternate + 45min reserve)	5,956km
Maximum operating altitude	51,000ft	Powerplant	2 x Rolls-Royce AE3007C-1 turbofans
Maximum take-off weight	16,375kg		30.09kN @ 30°C and sea level
Max landing weight	14,424kg	Accommodation	Flight crew: two
Max fuel load	5,865kg		Passengers Typical 8: up to 12
Standard empty weight	9,809kg		Baggage volume: 2.32m ³
(not including 2 pilots)			
Limit	Mach 0.92		
Maximum cruise speed @ 35,000ft	525kt		