

I. Model 650, Citation III and Citation VI (cont'd)

Engine Limits (cont'd)	Max. permissible engine rotor operating speed:	
	N ₁ (Fan) steady state	101.5% r.p.m. 101.5% r.p.m.
	N ₂ (Gas gen.) steady state	100.0% r.p.m. 101.0% r.p.m.
	N ₁ (Fan)	101.5% to 103 % r.p.m. 101.5% to 103% r.p.m.
		Limited to 1 min. Limited to 1 min.
	N ₂ (Gas Gen.)	100% to 103% r.p.m. 101% to 103% r.p.m.
		Limited to 1 min. Limited to 1 min.
	Max. permissible interturbine gas temperatures:	
	Takeoff (5 minutes)	910° C. 910° C.
	APR Takeoff (5 minutes)	929° C. (Emergency Only)
	Max. continuous	910° C. 910° C.
	Starting	910° C. 910° C.
Airspeed Limits	Airplane Serial Numbers (S/N) 650-0001 through 650-0093	Airplane Serial Numbers (S/N) 650-0094 through 650-0241; and earlier Serials incorporating SB650-32-13
V _{MO} (Maximum Operating) (Calibrated Altitudes)	305 KIAS below 8000 ft. 346 KIAS at 8000 ft. with linear decrease to 293 KIAS (.851 M) at 34,275 feet See NOTE 8 for V _{MO} with Optional Zero Wing Fuel Weight	305 KIAS below 8000 ft. 336 KIAS at 8000 ft. with linear decrease to 278 KIAS (.851 M) at 36,524 feet
M _{MO} (Calibrated Altitude)	.851 M above 34,275 feet	851 M above 36,524 feet
	V _A (Sea level)	10,000 lb. 155 KIAS 12,000 lb. 164 KIAS 15,000 lb. 184 KIAS 22,000 lb. 224 KIAS
	See Airplane Flight Manual (AFM) for variations with weight and altitude and optional configurations.	
	V _B (Speed for maximum gust intensity)	220 KIAS
	V _{FE} (Flaps extended)	
	Partial flaps, 7° or 20°	210 KIAS
	Ldg Position - Full Flaps	170 KIAS
	V _{MCA} (Minimum control speed) Air	98 KIAS
	V _{MCG} (Minimum control speed) Ground	99 KIAS
	(19,000 lb.. and below, see AFM for variation with weight)	
	V _{LO} (Landing gear operating)	210 KIAS
	V _{LE} (Landing gear extended)	210 KIAS
	Landing light extended	250 KIAS
	Max. tire ground speed	165 knots
	Speed Brakes Extension Speed	Maximum No Limit
	Panels 2, 3, 6 & 7	Minimum V _{REF} + 15 KIAS
	(Airplanes S/N 650-0152 through 650-0241; and Airplanes S/N 650-0001 through 650-0151 incorporating SB650-27-23.) Extension of the speed brakes with the flaps in any position other than the UP position is prohibited below 500 feet AGL. Above 500 feet AGL the speed brakes may be extended with the flaps in any position.	
	(Airplanes S/N 650-0001 through 650-0151 not incorporating SB650-27-23.) Extension of the speed brakes is prohibited in flight with flaps in any position other than the UP position.	
	Spoiler Extension Speed (In flight restricted to emergency descent)	
	Panels 1, 2, 3, 4, 5, 6, 7 & 8	Maximum V _{MO} /M _{MO}
		Minimum 150 KIAS

I. Model 650, Citation III and Citation VI (cont'd)

Airspeed Limits (cont'd)	Spoiler extension in flight is restricted to emergency descent use. Extension of the spoilers is prohibited in flight with the flaps in any position other than the up position. There is no restriction on roll control spoilers (Panels 1 & 8)
C.G. Range	<u>Takeoff weights up to 21,000 lb. (Landing Gear Extended)</u> Airplanes S/N 650-0001 through 650-0093 [airplanes not incorporating SB650-32-13 or SB650-32-14]
Forward limit:	Linear variation from 324.29 inches aft of datum (23.89% MAC) at 21,000 lb. to 316.20 inches aft of datum (14.00% MAC) at 18,000 lb.; 316.20 inches aft of datum (14.00% MAC) at 18,000 lb. to 14,500 lb.; Linear variation from 316.20 inches aft of datum (14.00% MAC) at 14,500 lb. to 321.10 inches aft of datum (20.00% MAC) at 12,000 lb.
Aft Limit:	330.1 inches aft of datum (31.00% MAC) at 21,000 lb. or less.
C.G. Range	<u>Takeoff weights up to 21,000 lb. (Landing Gear Extended)</u> Airplanes S/N 650-0001 through 650-0093 [airplanes incorporating SB650-32-14 but not SB650-32-13]
Forward limit:	Linear variation from 321.66 inches aft of datum (20.67% MAC) at 21,000 lb. to 316.20 inches aft of datum (14.00% MAC) at 19,000 lb.; 316.20 inches aft of datum (14.00% MAC) at 19,000 lb. to 14,500 lb.; Linear variation from 316.20 inches aft of datum (14.00% MAC) at 14,500 lb. to 321.10 inches aft of datum (20.00% MAC) at 12,000 lb.
Aft Limit:	330.10 inches aft of datum (31.00% MAC) at 21,000 lb. or less.
C.G. Range	<u>Takeoff weights up to 21,500 lb. (Landing Gear Extended)</u> Airplanes S/N 650-0001 through 650-0093 [airplanes incorporating SB650-32-13 or SB650-32-14]
Forward limit:	Linear variation from 323.02 inches aft of datum (22.33% MAC) at 21,500 lb. to 316.20 inches aft of datum (14.00% MAC) at 19,000 lb.; 316.20 inches aft of datum (14.00% MAC) at 19,000 lb. to 14,500 lb.; Linear variation from 316.20 inches aft of datum (14.00% MAC) at 14,500 lb. to 321.10 inches aft of datum (20.00% MAC) at 12,000 lb.
Aft Limit:	330.10 inches aft of datum (31.00% MAC) at 21,500 lb. or less.
C.G. Range	<u>Takeoff weights up to 22,000 lb. (Landing Gear Extended)</u> Airplanes S/N 650-0094 through 650-0241
Forward limit:	Linear variation from 324.38 inches aft of datum (24.00% MAC) at 22,000 lb. to 316.20 inches aft of datum (14.00% MAC) at 19,000 lb.; 316.20 inches aft of datum (14.00% MAC) at 19,000 lb. to 14,500 lb.; Linear variation from 316.20 inches aft of datum (14.00% MAC) at 14,500 lb. to 321.10 inches aft of datum (20.00% MAC) at 12,000 lb.
Aft Limit:	330.10 inches aft of datum (31.00% MAC) at 22,000 lb. or less.
Empty Wt. C.G. Range	None
Datum	Zero reference datum is 221.0 inches forward of the leveling screw just aft of the cabin door on Water Line 127.25.
MAC	81.725 in. (L.E. of MAC at Sta. +304.768)

I. Model 650, Citation III and Citation VI (cont'd)

Leveling Means	Seat rails
Maximum Weight	<u>Airplanes S/N 650-0001 through 650-0093 [airplanes not incorporating SB650-32-13]:</u>
	Ramp 21,200 Pounds
	Takeoff 21,000 Pounds
	Landing 17,000 Pounds
	Zero fuel 14,650 Pounds
	Design Zero Wing fuel (optional) 16,300 Pounds [See NOTE 8]
	<u>Airplanes S/N 650-0001 through 650-0093 [airplanes incorporating SB650-32-13]:</u>
	Ramp 21,700 Pounds
	Takeoff 21,500 Pounds
	Landing 19,000 Pounds
	Zero Wing fuel 16,300 Pounds [See NOTE 8]
	<u>Airplanes S/N 650-0094 through 650-0241:</u>
	Ramp 22,200 Pounds
	Takeoff 22,000 Pounds
	Landing 20,000 Pounds
	Zero Wing fuel 16,300 Pounds [See NOTE 8]
Minimum Crew	For all flights: 2 persons (pilot and co-pilot)
No. of Seats	15 (2 pilots, up to 13 passengers) See NOTE 5
Maximum Baggage	Tail compartment 700 lb. (500 lb. for A/C with APU)
Fuel Capacity (Gal.)	Two wing tanks: Usable 480.4 each; Arm 315.46 in. Fuselage tank: Usable 133.5; Arm 387.5 in. See NOTE 1 for data on unusable fuel
Oil Capacity (Gal.)	Two engine mounted tanks: Total 2.9 each; usable 1.87 each Arm = +411.24 in. See NOTE 1 for data on unusable oil.
Max. Operating Altitude	51,000 ft.
Control Surface Movements	Stabilizer Range of Stabilizer Setting (Primary Trim)
	Max. Up +2° Max Down -13°
	Elevator Up 15.5° +0°, -5° Down 15° ±1°
	Rudder (perpendicular to hinge) Right 25° +1°, -0° Left 25° +1°, -0°
	Rudder trim tab Right 11.75°, ±1° Left 11.75° ±1°
	(Perpendicular to hinge) (Servo Action 11° +1°, -1°)
	Aileron Up 12.5° +1°, -0° Down 12.5° +1°, -0° from neutral from neutral

I. Model 650, Citation III and Citation VI (cont'd)

Certification Basis (cont'd)

- (7) FAR § 25.801 ditching not complied with.
- (8) Compliance with ice protection has been demonstrated in accordance with FAR § 25.1419.

Application for Type Certificate dated April 30, 1977. Type Certificate No. A9NM issued April 30, 1982. The Model 650, Citation III and VI, are defined by Cessna Airplane Assembly Drawing Number 6200000.

Production Basis Production Certificate (P.C.) No. 312. Effective February 15, 1985 and on, P.C. No. 4 is applicable to all spares production. See NOTE 9 for specific S/N effectivity of P.C. No. 4.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.

The certified empty weight and corresponding center of gravity location must include:

	WEIGHT – lbs.	C.G. LOCATION – in.
Alcohol	3.4	+ 92.5 (full)
Hydraulic Fluid	37.2	+ 379.8 (full)
Unusable Fuel Wing	56.8	+ 304.0
Unusable Fuel Fuselage	3.0	+ 387.2
Engine Unusable Oil	16.0	+ 411.2
Engine Usable Oil	29.0	+ 411.1 (full)

NOTE 2. These airplanes must be operated according to the appropriate FAA approved AFM, including latest approved revisions. FAA approved AFM, P/N 65C3FM-01, is applicable to the Citation III. FAA approved AFM, P/N 65C6FM-03, is applicable to the Citation VI. Required placards are included in Chapter Eleven (11) of the ICA.

NOTE 3. See the FAA approved airworthiness limitation section of the ICA for mandatory compliance retirement life or inspection.

NOTE 4. All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with FAR 25.785.

NOTE 5. For operation with 10 or more passengers, Cessna Drawing 6211274 must be complied with.

NOTE 6. The following nose wheel tires are approved:

BFG	P/N 031-613-2	S/N 650-0001 through 650-0241
Goodyear	P/N 184F13-5	S/N 650-0001 through 650-0241
BFG	P/N 031-613-8	S/N 650-0001 through 650-0093 not incorporating SB650-32-13 or SB650-32-14
Goodyear	P/N 184F13-3	S/N 650-0001 through 650-0093 not incorporating SB650-32-13 or SB650-32-14

NOTE 7. Airplanes modified in accordance with Cessna Drawing 6200011 or Service Bulletin SB650-03-01 are eligible for Canadian Registration (S/N 650-0001 through 650-0241).

I. Model 650, Citation III and Citation VI (cont'd)

- NOTE 8. Airplanes S/N 650-0001 through 650-0083 incorporating SB650-34-10 or airplanes S/N 650-0064 through 650-0093 incorporating the optional zero wing fuel weight (EC19432) are eligible for operation with zero fuel weight of 16,300 lb. with the following V_{MO}/M_{MO} limitations:
305 KIAS below 8,000 ft.
336 KIAS at 8,000 ft. with linear decrease to 278 KIAS/.851 M at 36,524 ft.
.851 M above 36,524 ft.
Zero fuel weight plus fuel in the fuselage tank cannot exceed 16,300 lb.
- NOTE 9. P. C. No. 4 effective at Serial 650-0079 through 650-0241.
- NOTE 10. Deleted at Rev. 25.
- NOTE 11. Applicable to those airplanes incorporating EC 19112 or SB650-76-1. Automatic Performance Reserve Installation.
- NOTE 12. Applicable to those airplanes incorporating EC 20600 Auxiliary Power Unit Inflight Operable Installation.
- NOTE 13. Airplanes S/N 650-0100 through 650-0178 which are modified in accordance with Cessna Drawing 6200019 are eligible for export to France.
- NOTE 14. Equipment installations or other modifications to the tailcone area must be coordinated with the Wichita Aircraft Certification Office.
- NOTE 15. Airplanes S/N 650-0100 through 650-0178 which are modified in accordance with Cessna Drawing 6200012 are eligible for export to the United Kingdom.
- NOTE 16. Airplanes S/N 650-0001 through 650-0241 which are modified in accordance with Cessna Drawing 6200017 are eligible for export to Denmark.
- NOTE 17. Airplanes S/N 650-0001 through 650-0241 which are modified in accordance with Cessna Drawing 6200018 are eligible for export to Brazil.
- NOTE 18. Applicable to airplane S/N 650-0227 through 650-0241, and prior serial numbers that incorporate Service Bulletin SB650-72-01.
- NOTE 19. Deleted at Rev. 25.
- NOTE 20. Model 650, Citation III and VI, airplanes have been approved for high altitude operations (altitudes above 41,000 feet), by Special Conditions. Any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the certification basis. This includes modifications which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 3.98 sq. in.
- NOTE 21. Model 650, Citation III, airplanes that incorporate the factory installed Honeywell SPZ-8000 (IFCS) and have accomplished Cessna Service Bulletin SB650-34-97, meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace. Model 650, Citation III or Citation VI, airplanes that incorporate the factory installed Honeywell SPZ-650 (AFCS) and have accomplished Cessna Service Bulletin SB650-34-107 or SB650-34-105 respectively, meet the initial airworthiness requirements for operation in RVSM airspace. Each operator must obtain final RVSM operating approval directly from the FAA.

II. Model 650, Citation VII, (Transport Category), Approved January 23, 1992

Engines	Two Garrett TFE731-4R-2S	
Fuel	Commercial kerosene Jet A, Jet B, Jet A-1, JP-4, JP-5, and JP-8 fuel, conforming to AiResearch Manufacturing Co. Fuel Specifications EMS 53111, EMS 53112, or EMS 53116.	
Engine Limits	Static thrust standard day, sea level:	TFE731-4R-2S
	Takeoff (5 min.)	4080 lb.
	Max. continuous	4080 lb.
	Max. permissible engine rotor operating speed:	
	N ₁ (Fan) steady state	101.5% r.p.m.
	N ₂ (Gas gen.) steady state	101% r.p.m.
	N ₁ (Fan)	101.5% to 104.5% r.p.m. limited to 5 sec.
	N ₂ (Gas gen.)	101% to 103% r.p.m. limited to 5 sec.
	Max. permissible interturbine gas temperatures:	
	Takeoff (5 minutes)	952° C.
		974° C. (Emergency only)
	Max. continuous	924° C.
	Starting	952° C.
Airspeed Limits	V _{MO} (Maximum Operating) (Calibrated Altitudes)	275 KIAS below 8000 ft. 336 KIAS at 8000 ft. with linear decrease to 278 KIAS/.851 M at 36,524 ft. See NOTE 8 for alternate V _{MO} & ZFW
	M _{MO} (Calibrated Altitude)	.851 M above 36,524 ft.
	V _A (Sea level)	14,500 lb. 177 KIAS 16,500 lb. 191 KIAS 19,600 lb. 210 KIAS 23,000 lb. 227 KIAS
	See AFM for variations with weight and altitude and optional configurations.	
	V _B (Speed for maximum gust intensity)	220 KIAS
	V _{FE} (Flaps extended)	
	Partial flaps, 7° or 20°	210 KIAS
	Ldg Position - Full Flaps	170 KIAS
	V _{MCA} (Minimum control speed) Air	103 KIAS
	V _{MCG} (Minimum control speed) Ground (19,000 lb. and below, see AFM for variation with weight)	102 KIAS
	V _{LO} (Landing gear operating)	210 KIAS
	V _{LE} (Landing gear extended)	210 KIAS
	Landing light extended	250 KIAS
	Max. Tire Ground Speed	165 knots
	Speed Brakes Extension Speed	Maximum No Limit
	Panels 2, 3, 6 & 7	Minimum V _{REF} + 15 KIAS
	Extension of the speed brakes with the flaps in any position other than the UP position is prohibited below 500 feet AGL. Above 500 feet AGL the speed brakes may be extended with the flaps in any position.	

II. Model 650, Citation VII (cont'd)

Airspeed Limits (cont'd)	Spoiler Extension Speed (In flight restricted to emergency descent) Panels 1, 2, 3, 4, 5, 6, 7 & 8	
	Maximum	V_{MO}/M_{MO}
	Minimum	150 KIAS
	Spoiler extension in flight is restricted to emergency descent use. Extension of the spoilers is prohibited in flight with the flaps in any position other than the up position.	
	There is no restriction on roll control spoilers (Panels 1 & 8)	
C.G. Range	(Landing Gear Extended)	
Forward limit:	Linear variation from 324.55 inches aft of datum (24.21% MAC) at 23,000 lb. to 316.20 inches aft of datum (14.00% MAC) at 19,000 lb.; 316.20 inches aft of datum (14.00% MAC) at 19,000 lb. to 16,500 lb.; Linear variation from 316.20 inches aft of datum (14.00% MAC) at 16,500 lb. to 321.00 inches aft of datum (19.86% MAC) at 14,500 lb.	
Aft Limit:	Linear variation from 324.55 inches aft of datum (24.21% MAC) at 23,000 lb. to 330.10 inches aft of datum (31.00 % MAC) at 22,450 lb.; 330.10 inches aft of datum (31.00 % MAC) at 22,450 lb. to 13,705 lb.	
Empty Wt. C.G. Range	None	
Datum	Zero reference datum is 221.0 inches forward of the leveling screw just aft of the cabin door on Water Line 127.25.	
MAC	81.725 in. (L.E. of MAC at Sta. +304.768)	
Leveling Means	Seat rails	
Maximum Weight	Ramp	23,200 Pounds
	Takeoff	23,000 Pounds
	Landing	20,000 Pounds
	Zero fuel	16,500 Pounds
	Alternate Zero Fuel (See NOTE 8)	15,350 Pounds
Minimum Crew	For all flights: 2 persons (pilot and co-pilot)	
No. of Seats	15 (2 pilots, 13 passengers) See NOTE 5	
Maximum Baggage	Tail compartment 700 lb. (500 lb. for A/C with APU)	
Fuel Capacity (Gal.)	Two wing tanks: Usable 480.4 each; Arm 315.46 in. Fuselage tank: Usable 133.5; Arm 387.5 in. See NOTE 1 for data on unusable fuel	
Oil Capacity (Gal.)	Two engine mounted tanks: Total 2.9 each; usable 1.87 each Arm = +411.24 in. See NOTE 1 for data on unusable oil	
Max. Operating Altitude	51,000 ft.	

II. Model 650, Citation VII (cont'd)

Control Surface Movements	Stabilizer	Range of Stabilizer Setting (Primary Trim)			
		Max. Up	+2°	Max Down	-13°
	Elevator	Up	15.5° +0°, -0.5°	Down	15° ±1°
	Rudder (perpendicular to hinge)	Right	25° +1°, -0°	Left	25° +1°, -0°
	Rudder trim tab	Right	11.75°, ±1°	Left	11.75° ±1°
		(Perpendicular to hinge) (Servo Action 11° +1°, -1°)			
	Aileron	Up	12.5° +1°, -0°	Down	12.5° +1°, -0°
			from neutral		from neutral
	Wing flap positions:	Up	0°		
		T.O./Appr	20°, 7°		
		Ldg	37°, 20°*		
	Speed brakes	Panels 2, 3, 6 & 7	0° to 47° +3°, -0°		
	Spoiler	Outboard (Panels 1 & 8)	0° to 47° +3°, -0°		
		Inboard (Panels 4 & 5)	0° to 30° +1°, -1°		

(See Instructions for Continued Airworthiness for rigging instructions)
*See AFM for required Approach flap settings.

Serial Nos. Eligible 650-7001 through 650-7119

Data Pertinent to Model 650, Citation VII**Certification Basis**

- (1) Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by Amendments 25-1 through 25-39;
 - (a) Additions:
FAR §§ 25.901(c) and 25.1199 as amended by Amendments 25-1 through 25-40; §§ 25.1309 and 25.1351(d) as amended by Amendments 25-1 through 25-41; §§ 25.177, 25.255 and 25.703 as amended by Amendments 25-1 through 25-42; § 254.1326 as amended by Amendments 25-1 through 25-43; § 25.1413 as amended by Amendments 25-1 through 25-44; §§ 25.1305 and 25.1529 as amended by Amendments 25-1 through 25-54; § 25.904 as amended by Amendments 25-1 through 25-62; § 25.773 as amended by Amendments 25-1 through 25-72.
 - (b) Additions for the Sperry SPZ-8000 Digital Integrated Flight Control System only:
FAR §§ 25.1321(a), (b), (d), and (e), 25.1331, 25.1333, and 25.1335 as amended by Amendments 25-1 through 25-41.
 - (c) Addition for airplanes equipped with inflight operable Auxiliary Power Unit (APU):
FAR § 25.901(d) as amended by Amendments 25-1 through 25-46.
- (2) FAR Part 36 effective December 1, 1969, as amended by Amendments 36-1 through 36-18.
- (3) FAR Part 34 effective September 10, 1990, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes.
- (4) Special Conditions as follows:
 - (a) 25-102-NM-7, High Altitude Operations (51,000 feet). See NOTE 10.
 - (b) 25-ANM-54, Protection from the induced effects of lightning and High Intensity Radiated Fields (HIRF) due to installation of digital electronic engine controls.
- (5) Exemption as follows:
 - (a) Exemption No. 3436 from compliance with FAR § 25.1305(d)(3), for type certification without an engine rotor system unbalance indicator.

II. Model 650, Citation VII (cont'd)

- NOTE 8. The following alternate V_{MO}/M_{MO} limitations apply when airplanes are loaded to the alternate zero fuel weight of 15,350 pounds:
275 KIAS below 8000 ft.
346 KIAS at 8000 ft. with linear decrease to 293 KIAS/.851 M at 34,275 ft.
.851 M above 34,275 ft.
- NOTE 9. Applicable to those airplanes incorporating Auxiliary Power Unit Inflight Operable Installation.
- NOTE 10. Model 650, Citation VII, airplanes has been approved for high altitude operations (altitudes above 41,000 feet), by Special Conditions. Any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the certification basis. This includes modifications which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 3.98 sq. in.
- NOTE 11. Model 650, Citation VII, S/N 650-7001 through 650-7075, airplanes that have accomplished Cessna Service Bulletin SB650-34-97, and Model 650, Citation VII, S/N 650-7076 through 650-7119, airplanes meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace. Each operator must obtain final RVSM operating approval directly from the FAA.

.....END.....