Textron Aviation Inc. 525 (Citation Jet)



TYPE-CERTIFICATE

DATA SHEET

NO. EASA.IM.A.078

for 525 (Citation Jet)

Type Certificate Holder

Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA

For models: 525 525A 525B 525C



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SECTION A: 525

A.I. <u>General</u>

1.	Data Sheet No.:	EASA IM A.078 Issue 9
2.	a) Type: b) Model: c) Variant:	525 525 N/A
3.	Airworthiness Category:	14 CFR 23 Normal Category
4.	Type Certificate Holder:	Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA
5.	Manufacturer:	Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA
6.	Certification Application Date:	14 February 1990 for 525-0001
7.	FAA Type Certification Date:	15 October 1992

8. (Reserved)

A.II. EASA Certification Basis

1.	Reference Date for determining the applicable requirements:	14 February 1990 for 525-0001 and on
2.	Airworthiness Requirements:	(525-0001 through 525-0599) Code of Federal Regulations Title 14, Part 23, effective February 1, 1965, as amended by Amendments 23-1 thorough 23-38, and 23-40; The EASA Aircraft Type Certification standard includes that of FAA TCDS A1WI, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003; Other standards conforming to TC/TCDS standards certified by individual EU member States prior to 28 September 2003 are also acceptable. (525-0600 through 525-0684 and 525-0686 through 525-0701)

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Code of Federal Regulations Title 14, Part 23, effective February 1, 1965, as amended by Amendments 23-1 through 23-38, and 23-40; except for the following paragraphs applicable for engines and FADEC's which are CS23.611, 23.777, 23.779, 23.781, 23.865, 23.867, 23.901, 23.903, 23.939, 23.943, 23.951, 23.955, 23.961, 23.973, 23.1011, 23.1013, 23.1019, 23.1021, 23.1041, 23.1043, 23.1045, 23.1091, 23.1093, 23.1103, 23.1111, 23.1121, 23.1123, 23.1141, 23.1143, 23.1145, 23.1163, 23.1181, 23.1182, 23.1183, 23.1189, 23.1191, 23.1193, 23.1195, 23.1203, 23.1301, 23.1305, 23.1309, 23.1337, 23.1521, 23.1549, 23.1583; as amended through Amendment 23-1 through 23-38, and 23-40 through 23-54. (525-0685 and 525-0800 and On)

Code of Federal Regulations Title 14, Part 23, effective February 1, 1965, as amended by Amendments 23-1 through 23-38, and 23-40; except for the following paragraphs applicable for engines and FADEC's which are CS23.611, 23.777, 23.779, 23.781, 23.865, 23.867, 23.901, 23.903, 23.939, 23.943, 23.951, 23.955, 23.961, 23.973, 23.1011, 23.1013, 23.1019, 23.1021, 23.1041, 23.1043, 23.1045, 23.1091, 23.1093, 23.1103, 23.1111, 23.1121, 23.1123, 23.1141, 23.1143, 23.1145, 23.1163, 23.1181, 23.1182, 23.1183, 23.1189, 23.1191, 23.1193, 23.1195, 23.1203, 23.1301, 23.1305, 23.1309, 23.1337, 23.1521, 23.1549, 23.1583; as amended through Amendment 23-1 through 23-28, and 23-40 through 23-54.

Additions

Reg. No.	Title	Amendment Level	Comments
23.441	Maneuvering Loads	CS 23, Amdt 2	Winglets only
23.443	Gust loads	CS 23, Amdt 2	Winglets only
23.445	Outboard fins	CS 23, Amdt 2	Winglets only
23.575	Inspections and other procedures	CS 23, Amdt 2	Winglets only
23.621	Casting Factors	CS 23, Amdt 2	Entire aircraft
23.613	Material strength properties and	CS 23, Amdt 2	Main landing gear
(c)(d)(e)	design values		actuator internal
			keylock and
			ramlock only



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Reg. No.	Title	Amendment Level	Comments
23.867	Lightning protection of structure	CS 23, Amdt 2	Winglets only
23.929	Engine installation ice protection	CS 23, Amdt 2	Entire aircraft
23.953	Fuel system independence	CS 23, Amdt 2	Entire aircraft
23.957	Flow between interconnected tanks	CS 23, Amdt 2	Entire aircraft
23.959	Unusable fuel supply	CS 23, Amdt 2	Entire aircraft
23.971	Fuel Tank Sump	CS 23, Amdt 2	Entire aircraft
23.975	Fuel tank vents and carburetor vapor vents	CS 23, Amdt 2 CS 23, Amdt 2	Entire aircraft
23.977	Fuel tank outlet	CS 23, Amdt 2	Entire aircraft
23.991	Fuel pumps	CS 23, Amdt 2	Entire aircraft
23.993	Fuel system lines and fitting.	CS 23, Amdt 2	Entire aircraft
23.997	Fuel strainer or filter	CS 23, Amdt 2	Entire aircraft
23.999	Fuel system drains	CS 23, Amdt 2	Entire aircraft
23.1001	Fuel jettisoning system	CS 23, Amdt 2	Entire aircraft
23.1306	Lightning Protection	CS 23, Amdt 2	For changed systems only
23.1308	High-Intensity Radiated Fields (HIRF) Protection	CS 23, Amdt 2	For changed systems only
23.1543	Instrument markings: general	CS 23, Amdt 2	Entire aircraft
23.1553	Fuel quantity indicator	CS 23, Amdt 2	Entire aircraft
23.1555	Control markings	CS 23, Amdt 2	Entire aircraft
23.1557	Miscellaneous markings and placards	CS 23, Amdt 2	Entire aircraft
23.1559	Operating limitations placard	CS 23, Amdt 2	Entire aircraft
23.1563	Airspeed placards	CS 23, Amdt 2	Entire aircraft
23.1567	Flight maneuver placard	CS 23, Amdt 2	Entire aircraft

Compliance with ice protection has been demonstrated in accordance with 14 CFR §§23.1416 and 23.1419.

CS-ACNS, issue 2

3. Special Conditions:

23-ACE-55, additional requirements for: Smoke evacuation, protection of electronic systems from lightning and high intensity radiated electromagnetic fields (HIRF), electronic flight instruments displays, thrust attenuating systems (thrust attenuating systems not applicable 525-0600 and On), engine fire extinguishing system, performance, including takeoff, takeoff speeds, accelerate-stop, takeoff path, takeoff distance and takeoff run, takeoff flight path, climb one engine



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inoperative, landing, balked landing, climb, minimum control speed, trim, static longitudinal stability, demonstration of static longitudinal stability, static directional and lateral stability, wings level stall, turning flight and accelerated stalls, stall warning, vibration and buffeting, high speed characteristics, airspeed indicating system, static pressure system, maximum operating speed limit, minimum flight crew, operating limitations, operating procedure, performance information, airspeed indicator, effects of contamination on Natural Laminar Flow airfoils, definitions, and AFM approved information.

(525-0685 and 525-0800 and On equipped with Garmin G3000)

CRI B-52 Human Factors - Integrated Avionics Systems and associated SC-B 23.div-01, Issue 1 CRI F-93 Flight Recorders including Data Link Recording and associated SC-F23.1457-01, Issue 2

- 4. Exemptions:
- 5. Deviations:
- 6. Equivalent Safety Findings:

N/A

relaxed "Dutch Roll" damping criteria above 18,000 feet in lieu of damping criteria CS23.181(b).

(525-0360 through 525-0701 equipped with Collins Proline 21 electronic displays of engine instruments):

ACE-00-01: 14 CFR §§23.1305(c)(2), (c)(5), and 23.1549(a) through (d), direct reading, digital only displays for the high-pressure turbine speed (N_2), and fuel flow indications.

(525-0685 and 525-0800 and On equipped with Garmin G3000)

- (a) Number ACE-13-09: 14 CFR § 23.841(b)(6), Cabin Pressurization – High Altitude Takeoff and Landing Operations.
- (b) Number ACE-00-05C: 14 CFR § 23.841(a), to allow small temporary cabin altitude excursions above 15,000 feet in the event of any probable pressurization system failure.
- (c) Number ACE-13-17: 14 CFR § 23.1549(a) through (c), direct reading, digital only displays for the high-pressure turbine speed (N2), oil



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TCDS No.: EASA.IM.A.078 Issue 16	Textron Aviation Inc. 525 (Citation Jet)	Page 7 of 51 19-Apr-2024
	pressure, oil temperature and fuel fl indications	ow
 Requirements elected to comply: 	N/A	
8. Environmental Standards:	ICAO Annex 16, Volume I,	
	ICAO Annex 16, Volume II, Part II	
	(further details refer to TCDSN.IM.078)	
 (Reserved) Additional National Requirements: 		
10. (Reserved)		

A.III. Technical Characteristics and Operational Limitations

Type De	sign Definition:	Cessna Airplane Assembly Drawing Number 6300000, Document No. A1WI, latest FAA approved revision.	
Descripti	on:	Low wing aircraft with retractable tricycle landing gear, T- tail, pressurised cabin, and two turbofan engines pylon mounted on the rear fuselage.	
Equipme	nt:	(525-0001 through 525-0359)	
		Equipment List according to AFM, 525FM-00, or later approved revision	
		(525-0360 through 525	5-0599)
		Equipment list according to AFM, 525FMA-00, or later	
		(525-0600 through 0684 and 0686 through 525-0701)	
		Equipment List accord approved revision	ing to AFM, 525FMB-00, or later
		(525-0800 and On)	
		approved revision	ng to AFM, 525FMC-00, or later
		()	
Dimensio	ons:	(525-0001 through 525-0701)	(525-0800 and On)
	Span Length Height Wing Area	14.20 m (46ft. 7in) 12.98 m (42ft. 7in) 4.19 m (13ft. 9in) 22.30 sq.m(240 sq.ft)	14.33 m (47ft. 0in) 12.98 m (42ft. 7in) 4.27 m (14ft. 0in) 22.30 sq.m (240 sq.ft)
	Descripti Equipme	Length Height	Document No. A1WI, IDescription:Low wing aircraft with tail, pressurised cabin, mounted on the rear fulEquipment:(525-0001 through 525 Equipment List accord approved revision (525-0360 through 525 Equipment list accordin approved revision (525-0600 through 068 Equipment List accord approved revision (525-0800 and On) Equipment list accordin approved revision (525-0800 and On)Dimensions:(525-0001 through 525-0701) Span Length HeightSpan Length Height14.20 m (46ft. 7in) 12.98 m (42ft. 7in) 4.19 m (13ft. 9in) 22 30 sq m(240 sq ft)

5. Engine:



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5.1.1 Model:	(525-0001 through 525-0599) Two Williams International LLC FJ44-1A turbofans (525-0600 through 0684 and 0686 through 525-0701) Two Williams International LLC FJ44-1AP (P/N 72100-200) turbofans (525-0685 and 525-0800 and On) Two Williams International LLC FJ44-1AP (P/N 72100-201) turbofans
5.1.2 Type Certificate:	TCDS IM.E.016
5.1.3 Limitations:	Static thrust standard day, sea level: Take off:
	(525-0001 through 525-0599)* 862 kg (1,900 lbs)
	(525-0600 through 525-0701 and 0800 and On)* 891 kg (1,965 lbs)
	* Other engine limitations: referred to the engine TC
6. Max. permissible engine rotor operating speeds	N1(fan) (525-0001 through 525-0599) 104.4% (100% = 17,245 rpm)
(Takeoff and Maximum Continuous):	N2 (Gas Gen.) (525-0001 through 525-0599) 99.3% (100% = 41,200 rpm)
	N1(fan) (525-0600 through 525-0684 102.64% (100% = 17,245 rpm)
	and 525-0686 through 525-0701)
	N1(fan) (525-0685 and 525-0800 and On) 104.7% (100% = 17,245 rpm)
	N2 (Gas Gen.) (525-0600 through 525-0701 100.0% (100% = $41,200$ rpm)
	and 525-0800 and On)
7 March a successful to the factor of the	

7. Max. permissible interturbine gas temperatures:

Takeoff (525-0001 through 525-0599) 820 Degrees C Max. continuous (525-0001 through 525-0599) 796 Degrees C Transient (starting 5 sec.) (525-0001 through 525-0599) 1000 Degrees C Takeoff (525-0600 through 525-0701 and 525-0800 and On) 855 Degrees C (5 min, 10 min OEI) Max. continuous (525-0600 through 525-0701 835 Degrees C and 525-0800 and On) Transient (starting 15 sec.) (525-0600 through 525-0701 1000 Degrees C and 525-0800 and On)

8. Fluids:

8.1 Fuel:

(525-0001 through 525-0599)

Fuel Type	Specification
Jet A	ASTM D1655
Jet A1	ASTM D1655
Jet B	ASTM D6615



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JP-4	MIL-DTL-5624
Jet 3	GB6537
JP-5	MIL-DTL-5624
JP-8	MIL-DTL-83133
RT	GOST 10227
TS-1	GOST 10227

(525-0600 through 525-0684 and 525-0686 through 525-0701)

Fuel Type	Specification
Jet A	ASTM D1655
Jet A1	ASTM D1655
Jet 3	GB6537
JP-5	MIL-DTL-5624
JP-8	MIL-DTL-83133
RT	GOST 10227
TS-1	GOST 10227

(525-0685 and 525-0800 and On)

(525-0665 and 525-0600 and On)		
Fuel Type	Specification	
Jet A	ASTM D1655	
Jet A1	ASTM D1655	
Jet 3	GB6537	
JP-5	MIL-DTL-5624	
JP-8	MIL-DTL-83133	
RT	GOST 10227	
RT	GSTU	
	320.00149943.007	
TS-1	GSTU	
	320.00149943.011	
TS-1	GOST 10227	

8.2 Oil:

Mobil Jet II MIL-L-23699 Mobil 254 MIL-L-23699 Exxon 2380 MIL-L-23699 (Emergency only) Not applicable

8.3 Coolant:

9. Fluid capacities:

9.1 Fuel:

(525-0001 through 525-0684 and 525-0686 through 525-0701)

Total usable: 3220 lb (477 gal/ 1805, 6 litres). Two wing tanks with 1610 lbs. (238.5 gal/ 902, 8 litres); +252.99 in. aft of datum.

(525-0685 and 525-0800 and On)

Total usable: 3296 lb (492 gal/ 1862,4 litres). Two wing tanks with 1648 lbs. (246 gal/ 931,2 litres); +253.0 in. aft of datum. (See Note 2 for unusable)



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9.2 Oil:	(525-0001 through 525-0599) 2.0 quarts usable each engine (525-0600 through 525-0701 3.4 quarts usable each engine (See Note 2 for unusable)	e; +312.30 in. aft of datum. and 0800 and On)
9.3 Coolant system capacity:	Not Applicable	
10. Air Speeds:		
Maximum Operating	V_{MO} Sea Level to 30,500 feet M_{MO} above 30,500 feet calibrated)	263 KIAS (260 KCAS) 0.71 M _I (0.70 Mach
Manoeuvring		
	V _A (Manoeuvring sea level) 10,400 lb. (525-0001 through KCAS)	525-0359) 199 KIAS (198
	10,600 lb. (525-0360 through KCAS)	525-0599)* 201 KIAS (200
	*See AFM for variations with	weight and altitude.
	10,700 lb. (525-0600 through 202 KIAS (201 KCAS)	525-0701 and 0800 and On)*
	*See AFM for variations with	weight and altitude.
Speed for max.gust intensity	VB	217 KIAS (215 KCAS)
Flaps Extended	VFE	
	Flaps 15 ^o (Takeoff and approx KIAS (198 KCAS)	ach) 200
Landing Gear	Flaps 35º (Landing) KCAS)	161 KIAS (160
Operating	Flaps 60 ° (Ground Flaps)	Prohibited in Flight
	V∟o (525-0001 through 525-0701) (Extending)	186 KIAS (185 KCAS)
Minimum Control Air	(525-0001 through 525-0457) (Retracting)	186 KIAS (183 KCAS)
	(525-0458 through 525-0701 175 KIAS (172 KCAS) (Retrac	



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Minimum Control Ground	V _{MCA} (525-0001 through 525-0599) (525-0600 through 525-0701 and 0 deg. 86 KIAS (86 KCAS) (525-0600 through 525-0701 and 15 deg. 77 KIAS (77 KCAS) V _{MCG} (525-0001 through 525-0359) (525-0360 through 525-0599) (525-0600 through 525-0701 and (92 KCAS)	nd 525-0800 and On) Flaps nd 525-0800 and On) Flaps 95 KIAS (93 KCAS) 93 KIAS (93 KCAS)
Landing Gear Extended	V _{LE}	186 KIAS (183 KCAS)
Speed Break Extended Maximum Autopilot	V _{SB} Any s	speed with or without flaps
Operating Speed		263 KIAS (260 KCAS)
Sea level to 30,500ft Above 30,500ft	0.71 N	1 ₁ (0.70 Mach calibrated)
Maximum Tire Ground Speed		165 knots
11. Maximum Operating Altitude:	12, 497 m (41,000 ft)	
12. All-weather Operations Capability:	VFR Day and Night IFR Day and Night RVSM (See Note 6) Flight into known icing(See Limi Approved Airplane Flight Manua	

13. Maximum Weights:

Aircraft Serial Number	Max. Zero Fuel Weight	Max. Ramp Weight	Max. Take- Off Weight	Max. Landing Weight
525-0001 through 525-	3,810 kg	4,763 kg	4,717 kg	4,400 kg
0359	(8,400 lbs)	(10,500 lbs.)	(10,400 lbs.)	(9,700 lbs.)
525-0360 through 525-	3,810 kg	4,853 kg	4,808 kg	4,445 kg
0599	(8,400 lbs)	(10,700 lbs.)	(10,600 lbs.)	(9,800 lbs.)
525-0600 through 525- 0684 and 0686 through 0701	3,810 kg (8,400 lbs)	4,899 kg (10,800 lbs.)	4,853 kg (10,700 lbs.)	4,491 kg (9,900 lbs.)



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525-0685 and 525-	3,856 kg	4,899 kg	4,853 kg	4,491 kg
0800 and On	(8,500 lbs)	(10,800 lbs.)	(10,700 lbs.)	(9,900 lbs.)

14. Centre of Gravity Range:

(525-0001 through 525-0359):	
Allowable Forward C.G at 4,763 kg (10,500 lbs)	F.S. 244.14 (22.29% MAC)
Allowable Forward C.G at 4,717 kg (10,400 lbs)	F.S. 244.04 (22.14% MAC)
Allowable Forward C.G at 3,992 kg (8,800 lbs)	F.S. 242.43 (19.81% MAC)
Allowable Forward C.G up to 3,493 kg (7,700 lbs)	F.S. 240.14 (16.50% MAC)
to 2,722 kg (6,000lb)	
Aft C.G Up to 4,763 kg (10,500 lbs) to 2,722 kg (6,000 lbs)	F.S. 248.78 (29.00% MAC)
(525-0360 through 525-0599):	
Allowable Forward C.G at 4,853 kg (10,700 lbs)	F.S. 244.34 (22.58% MAC)
Allowable Forward C.G at 4,808 kg (10,600 lbs)	F.S. 244.24 (22.43% MAC)
Allowable Forward C.G at 3,992 kg (8,800 lbs)	F.S. 242.43 (19.81% MAC)
Allowable Forward C.G up to 3,493 kg (7,700 lbs	F.S. 240.14 (16.50% MAC)
to 2,722 kg (6,000lb)	
Aft C.G Up to 4,853 kg (10,700 lbs) to 2,722 kg (6,000 lbs)	F.S. 248.78 (29.00% MAC)
(525-0600 through 525-0701 and 0800 and On):	
Allowable Forward C.G at 4,899 kg (10,800 lbs)	F.S. 244.44 (22.72% MAC)
Allowable Forward C.G at 4,853 kg (10,700 lbs)	F.S. 244.34 (22.58% MAC)
Allowable Forward C.G at 3,992 kg (8,800 lbs)	F.S. 242.43 (19.81% MAC)
Allowable Forward C.G up to 3,493 kg (7,700 lbs)	F.S. 240.14 (16.50% MAC)
to 2,722 kg (6000lb)	
	E S 249 42 (29 500/ MAC)
Aft C.G Up to 4,899 kg (10,800 lbs) to 2,722 kg (6,000 lbs)	F.S. 248.43 (28.50% MAC)
Landing Gear Retracting Moment +632.65 in-lb	
Empty Wt. C.G. Range	None

MAC

69.077 in. (L.E. of MAC at +228.745 in. aft of datum



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15.	Datum:	94.0 in forward of the front face of the forward pressure bulkhead	
16.	Control surface deflection	ns:	
	Elevator	Up 20 +/-1 degrees (525-0001 through 525- 0599)	
		Up 18.5 +/5 degrees (525-0600 through 525- 0701 and 0800 and On)	
		Down 15 +/-1 degrees	
	Elevator Trim Tab	Up 12 +/-1 degrees	
		Down 20 +/-1 degrees	
	Rudder	Right 30 +/-1 degrees	
		Left 30 +/-1 degrees	
	Rudder Trim Tab	Right 20 +/-1 degrees	
		Left 20 +/-1 degrees	
		Up 23.5 +/-1 degrees	
	Aileron		
		Down 20.5 +/-1 degrees	
	Aileron Trim Tab	Up 20 +/-1 degrees	
		Down 18 +/-1 degrees	
		Up 0 +/-1 degrees	
	Wing Flap	T.O./Appr. 15 +/-1 degrees	
		Land 35 +/-1 degrees	
		Ground 60 +/-1 degrees	
	Speed Brakes - Upper	Up 0 to 49 +/-2 degrees	
	Speed Brakes - Lower	Down 0 to 68 +/-2 degrees	
	Thrust Attenuators	Stow -6 +/-1 degrees (525-0001 through 525- 0599) (Ref to Engine Long. Axis)	
	Thrust Attenuators	Deploy 54 +/-1 degrees (525-0001 through 525-0599) (Ref to Engine Long. Axis)	

Thrust Attenuators not applicable (525-0600 through 525-0701 and 0800 and On) See Airplane Maintenance Manual for rigging instructions.

17. Levelling Means:

Longitudinal- Left hand upper floorboard aft of FS 151.00



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TCDS I Issue 1	No.: EASA.IM.A.078 6	Textron Aviation Inc. 525 (Citation Jet)	Page 14 of 51 19-Apr-2024
		Lateral- Left hand and right hand 152.00. Level is determined with the cabin door floor longeron.	••
18. N	/linimum Flight Crew:	(see note 3 for cockpit equipmen restrictions): One pilot (in the lef equipment as specified in the Ki List (KOEL) contained in the Lin Approved Airplane Flight Manua One pilot and one co-pilot	ft seat) plus additional inds of Operation Equipment nitations Section of the FAA
	Maximum Passenger Seating Capacity:	6 Passengers	
20. E	Baggage/Cargo Compart	ments:	
(!	525-0001 through 525- 0599)		
	Nose Compartment Aft Cabin	181.4 kg (400 lbs. +74.0 in. a lbs. +270.70 in. aft of dat	
	Tailcone	147.4 kg (325 lbs. +356.50 in	n. aft of datum)
(!	525-0600 through 525- 0701 and 0800 and On)		
	Nose Compartment Tailcone	181.4 kg (400 lbs. +74.0 in. a 147.4 kg (325 lbs. +356.50 in	,
21 (Reserved):		

21. (Reserved):

A.IV. Operating and Service Instructions

1. Flight Manual: Airplanes must be operated according to the FAA Approved AFM, part number 525FM-00 (or later approved revision for serials 0001 through 0359), 525FMA-00 (or later approved revision for serials 0360 through 0599), 525FMB-00 (or later approved revision for serials 0600 through 0684 and 0686 through 0701), 525FMC-00 (or later approved revision for serials 0685 and 0800 and On). All placards required by either the FAA Approved AFM, the applicable operating rules, or the certificate via Parts List 6300000, Airplane Assembly. A useful placard reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection needs to be reconciled using the previously stated parts list.)



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2. Technical Manual: Model 525 Maintenance Manual, 525MM00 (or later approved revision for serials 0001 through 0684 and 0686 through 0701), 525MMC-00 (or later approved revision for serials 0685 and 0800 and On). See Chapter 4, "Airworthiness Limitations" for inspections, mandatory retirement life information and other requirements for continued airworthiness. "Airworthiness Limitations" may not be changed without the approval of EASA.

A.V. Operational Suitability Data

OSD FC OSD FC Original from 20 Jun 2014 or later approved Revision MMEL MMEL 525CPMEU-01-00 or later Approved Revision

A.VI. <u>Notes:</u>

- 1. Fuel not having anti-icing additive must have MIL-I-27686 or MIL-I-85470 or T1301 anti-icing additive blended into the aircraft blended into the aircraft fuel in concentrations not less than 0.10 percent or more than 0.15 percent by volume.
- 2. Current weight and balance information, including list of equipment included in certificated empty weight, and loading instruction are provided for each airplane in the FAA Approved Airplane Flight Manual (AFM) at the time of original certification.

The certified empty weight must include:

Unusable Fuel	(525-0001and on)	30.64 lb
Full oil	(525-0001 through 525- 0599)	15.5 lb
Full oil	(525-0600 through 525- 0701 and 0800 and On)	15.6 lb
Hydraulic Fluid	(525-0001 through 525- 0599)	27.5 lb
Hydraulic Fluid	(525-0600 through 525- 0701 and 0800 and On)	16.78 lb
Anti-ice Fluid	(525-0001and on)	3.4 lb

3. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during FAA certification testing. No significant changes may be made to the installed



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cockpit equipment or arrangement (EFIS, autopilot, avionics, etc), except as permitted by the approved MMEL, without prior approval from the responsible Authority.

- 4. Required placards and markings are listed in Chapter Eleven (11) of Maintenance Manual, part number 525MM00 (or later approved revision for serials 0001 through 0684 and 0686 through 0701), 525MMC-00 (or later approved revision for serials 0685 and 0800 and On).
- 5. All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with 14 CFR §§23.321, 23.395, 23.561, 23.562, and 23.785.

The foam cushion buildup of all seats (crew and passenger) may not be altered. Any deviations in the foam construction or stiffness must be demonstrated by test to comply with the listed 14 CFR 23 paragraphs.

The RH side facing seat lap belt shall have a buckle which opens from left to right, thereby preventing the buckle's own inertia from causing to open. Any other configuration must be verified by dynamic test.

6. Certain airplane Serial Numbers meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace. See table below:

S/N 525-0001 through 525- 0358	Airplanes that have accomplished Cessna Service Bulletin SB525-34-41
S/N 525-0359	Received factory installation of Dual Ametek AM-250 altimeters
S/N 525-0360 through 525-	Airplanes that have received factory installation* of optional Ametek AM-250 copilot's altimeter; or
0599	Airplanes that have received factory installation* of optional Collins Pro Line 21 copilot's Air Data Computer and Primary Flight Display; or
	Airplanes that have accomplished Cessna Service Bulletin SB525-34-40.
S/N 525-0600 through 0684 and 0686 through 525- 0701	All airplanes are equipped with Collins Pro Line 21 dual Air Data Computers and pilot's and copilot's Primary Flight Displays as standard equipment.
S/N 525-0685 and	All airplanes are equipped with Garmin G3000.
525-0800 & On	

* Equipment installed by the Textron Aviation factory will be identified in the individual airplane equipment list.

Each operator must obtain RVSM operating approval directly from the FAA.



- 7. The Model 525 (525-0600 and on) is approved for One Engine Inoperative 10 minutes thrust capability with the Williams International FJ44-1AP engine, per FAA Policy Memo "Guidance of Engine Operation at Takeoff Thrust/ Power for Ten-Minutes in a One- Engine Inoperative Situation for Cessna Model 525 Airplane" Project AT4020WI-A, dated April 27, 2005, from Standards Office, Small Airplane Directorate and Standards Office, Engine and Propeller Directorate.
- The Model 525 S/N 0001 through 0359 is also known as Citation Jet (CJ), Model 525 S/N 0360 through 0599 is known as Citation Jet 1 (CJ1), Model 525 S/N 0600 through 0684 and 0686 through 0701 is known as Citation Jet1+ (CJ1+), and the Model 525 S/N 0685 and 0800 and On is known as the M2.



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SECTION B: 525A

B.I. <u>General</u>

1.	Data Sheet No.:	EASA IM A.078 Issue 9
2.	а) Туре:	525
	b) Model:	525A
	c) Variant:	N/A
3.	Airworthiness Category:	14 CFR 23 Normal Category
4.	Type Certificate Holder:	Textron Aviation Inc.
		One Cessna Boulevard Wichita, Kansas 67215 USA
5.	Manufacturer:	Textron Aviation Inc.
		One Cessna Boulevard
		Wichita, Kansas 67215 USA
•		
6.	Certification Application Date:	14 May 1998 for 525A0001 and on
7.	FAA Type Certificate Date:	21 June 2000 (525A0001 and on)
8.	(Reserved)	

B.II. EASA Certification Basis

- Reference Date for determining the applicable 14 May 1998 requirements:
- 2. Airworthiness Requirements: (525A0001 and On)

14 CFR 23, effective February 1, 1965, as amended by Amendments 23-1 through 23-40; except for additional paragraphs listed, and for paragraphs for Engines and FADECs only as amended by Amendments 23-1 through 23-54:

Additions:

14 CFR §§23.331, 23.351, 23.421, 23.423, 23.425, 23.427, 23.939, and 23.1163 as amended by Amendments 23-1 through 23-42;

14 CFR §§23.943, 23.951, 23.957, 23.961, 23.967, 23.991, 23.993, 23.997, 23.999, 23.1001, 23.1011, 23.1019, 23.1041, 23.1061, 23.1189, 23.1322,



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23.1357, 23.1391, 23.1393, 23.1395, 23.1443, and 23.1445 as amended by Amendments 23-1 through 23-43;

14 CFR §§ 23.179, 23.305, 23.321, 23.361, 23.397, 23.479, 23.485, 23.613, 23.615, 23.621, 23.731 and 23.1549 as amended by Amendments 23-1 through 23-45;

14 CFR §§23.335, 23.337, 23.341, 23.343, 23.345, 23.347, 23.371, 23.393, 23.399, 23.415, 23.441, 23.443, 23.455, 23.457, 23.473, 23.499, 23.561, 23.571, 23.572, 23.611, 23.629, 23.673, and 23.725 as amended by Amendments 23-1 through 23-48;

14 CFR §§23.677, 23.723, 23.785, 23.787, 23.791, 23.853, 23.855, 23.1303, 23.1307, 23.1321, 23.1351, 23.1353, 23.1361, and 23.1401 as amended by Amendments 23-1 through 23-49;

14 CFR §§23.233, 23.235, 23.1555, and 23.1589 as amended by Amendments 23-1 through 23-50;

14 CFR §§23.901, 23.903, 23.929, 23.963, 23.965, 23.1013, 23.1043, 23.1143, 23.1183, 23.1191, and 23.1337 as amended by Amendments 23-1 through 23-51;

The EASA Aircraft Type Certification standard includes that of FAA TCDS A1WI, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003; Other standards conforming to TC/TCDS standards certified by individual EU member States prior to 28 September 2003 are also acceptable.

(525A0300 and On)

Additions:

The following paragraphs applicable for engines and FADEC's which are, CS23.777, 23.779, 23.865, 23.867, 23.901, 23.903, 23.955, 23.973, , 23.1041, 23.1045, 23.1091, 23.1093, 23.1103, 23.1121, 23.1123, 23.1141, 23.1145, 23.1181, , 23.1193, , 23.1305, 23.1309, 23.1521, and



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23.1583; as amended by Amendments 23-1 through 23-54 for engine and FADEC installation only.

(525A0001 and On)

Compliance with ice protection has been demonstrated in accordance with CS §§23.1416 and 23.1419;

3. Special Conditions: 23-ACE-55, additional requirements for:

Smoke evacuation, protection of electronic systems from lightning and high intensity radiated electromagnetic fields (HIRF), electronic flight instrument displays, thrust attenuating systems (thrust attenuating systems not applicable 525A0300 and On), engine fire extinguishing system, performance, including takeoff, takeoff speeds, accelerate-stop, takeoff path, takeoff distance and takeoff run, takeoff flight path, climb one engine inoperative, landing, balked landing, climb, minimum control speed, trim, static longitudinal stability, demonstration of static longitudinal stability, static directional and lateral stability, wings level stall, turning flight and accelerated stalls, stall warning, vibration and buffeting, high speed characteristics, airspeed indicating system, static pressure system, maximum operating speed limit, minimum flight crew, operating limitations, operating procedures, performance information, airspeed indicator, effects of contamination on Natural Laminar Flow airfoils, definitions, and AFM approved information.

23-102-SC, High Altitude Operation (45,000 feet). Additional requirements for ventilation, air conditioning, pressurized cabins, oxygen equipment and supply, supplemental oxygen, oxygen distribution and equipment. (See Note 6)

4. (Reversed)
5. Deviations: No. 5759 granted to use a relaxed "Dutch Roll" damping criteria above 18, 000 feet in lieu of damping criteria of 14 CFR 23.181(b).
6. Equivalent Safety ACE-00-01: 14 CFR §§23.1305(c)(2), (c)(5), and

Findings:

ACE-00-01: 14 CFR §§23.1305(c)(2), (c)(5), and 23.1549(a) through (d), direct reading, digital only



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displays for the high- pressure turbine speed (N_2), and fuel flow indications.

ACE-99-07: 14 CFR §§23.841(b)(6), Cabin Pressurization- High Altitude Takeoff and Landing Operations

ACE-00-05: 14 CFR §§23.841(a), to allow small temporary cabin altitude excursions above 15, 000 feet in the event of any probable pressurization system failure.

7. Requirements elected to comply:

8.	Environmental Standards:	ICAO Annex 16, Volume I
		ICAO Annex 16, Volume II, Part II
		(further details refer to TCDSN.IM.078)

- 9. Additional National Requirements: (Reserved)
- 10. (Reserved)

B.III. Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Cessna Airplane Assembly Drawing Number 6300001, Document No. A1WI, latest FAA approved revision.	
2.	Description:	Low wing aircraft with retractable tricycle landing gear, T-tail, pressurised cabin, and two turbofan engines pylon mounted on the rear fuselage.	
3.	Equipment:	(525A0001 through 525A0299) Equipment List according to AFM, 525AFM-04, or later approved revision (525A0300 and On) Equipment list according to AFM, 525AFMA-00, or later approved revision (see note 5)	
4.	Dimensions: Span Length Height Wing Area	(525A0001 through 0299) 15.09 m(49ft. 6in) 14.53 m(47ft. 8in) 4.27 m(14ft. 0in) 24.53 sq.m(264 sq.ft)	(525A0300 and On 15.09 m(49ft. 6in) 14.53 m(47ft. 8in) 4.32 m(14ft. 2.23in 24.53 sq.m(264 sq.ft)

5. Engine:



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5.1.1 Model:	(525A0001 through 525A0299) Two Williams International LLC FJ44-2C turbofans	
	(525A0300 and On) Two Williams International LLC FJ44- 3A-24 turbofans	
5.1.2 Type Certificate:	TCDS IM.E.016	
5.1.3 Limitations:	Static thrust standard day, sea level:	
	Take off: (525A0001 through 525A0299)* 1, 089 kg (2,400 lbs) (525A0300 and On) 1, 129 kg (2,490 lbs)	
6. Max. Permissible enginer rotor operating	N₁ (fan) (525A0001 through 525A0299) 105.2% (100% = 17,245 r.p.m.)	
speeds (Takeoff and Maximum Continuous)	N ₂ (Gas Gen.) (525A0001 through 525A0299) 98.8% (100% = 41,200 r.p.m)	
	N_1 (fan) (525A0300 and on) 102.78% (100% = 18,000 r.p.m.)	
	N ₂ (Gas Gen.) (525A0300 and on) 100.00% (100% = 41,200 r.p.m)	
7. Max.	Takeoff (525A0001 through 525A0299) 820 Degrees C	
permissible interturbine gas temperatures.	Max. Continuous (525A0001 through 525A0299) 805 Degrees C	
5	Transient (Starting 15 sec.) (525A0001 through 525A0299) 1000 Degrees C	
	Takeoff (525A0300 and on) 877 Degrees C (5 min, 10 min OEI)	
	Max. Continuous (525A0300 and on) 840 Degrees C	
	Transient (Starting 15 sec.) (525A0300 and on) 1000 Degrees C	
8. Fluids:		
8.1 Fuel:	(525A0001 through 525A0299)	
	Commercial kerosene Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8, RT or TS-1	
	(525A0300 and On)	
	Commercial kerosene Jet A, Jet A-1, Jet 3, JP-5, -JP-8, RT or TS-1	
8.2 Oil:	Mobil Jet II MIL-L-23699 (Preferred)	
	Mobil 254 MIL-L-23699	
	Exxon 2380 MIL-L-23699	
8.3 Coolant:	Not applicable	



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- 9. Fluid capacities:
 - 9.1 Fuel: Total usable: 3,961 lb (586.8 gal/ 2221, 2 litres). Two wing tanks with 1,980.5 lbs. (293.4 gal/ 1110, 6 litres) usable each; +288.68 in. aft of datum. (See Note 1 for unusable fuel)
 9.2 Oil: (525A0001 through 525A0299)
 2.0 quarts usable each engine; +364.3 in. aft of datum. (See Note 1)
 (525A0300 and On)
 3.75 quarts usable each engine; +371.44 in. aft of datum.
 - (See Note 1) 9.3 Coolant system Not applicable
 - capacity:
- 10. Air Speeds:

Maximum Operating	V _{MO} (525A0001 and On) Sea Level to 8,000 feet 260 KIAS (260 KCAS) (525A0001 through 525A0299) 8,000 ft to 29,300 ft 275 KIAS (Varies linearly between 274 KCAS and 272 KCAS) (525A0300 and On)
	8,000 ft to 29,124 ft 278 KIAS
	(Varies linearly between 277 KCAS and 275 KCAS)
	M _{MO} (525A0001 through 525A0299) Above 29, 300 ft. 0.72 MI (0.707 Mach calibrated) (525A0300 and On) Above 29, 124 ft. 0.737 MI (0.722 Mach calibrated)
Manoeuvring	V _A (Manoeuvring sea level) (525A0001 thru' 525A0299)* 197 KIAS (197 KCAS) (525A0300 and On)* 196 KIAS (196 KCAS) * See AFM for variations with weight and altitude
Speed for max.gust intensity	V _B 217 KIAS (217 KCAS)
Flaps Extended	V _{FE} 15 degrees (takeoff and approach) 200 KIAS (200 KCAS)



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	161	degrees (lai KIAS (161 degrees (gr		prohibited in flight
	faile	kimum spee ed to 60 deg ound flaps)	ed with flaps grees	140 KIAS (140KCAS) (Emergency only)
Landing Gear Operatir	Exte			200 KIAS (200 KCAS) 200 KIAS (199 KCAS)
Minimum Control Air	(Fla (52) (Fla (52) (Fla (52)	5A0001 thro ps 0° taked 5A0001 thro ps 15° take 5A0300 and ps 0° taked 5A0300 and	off) ough 525A029 off and approa d On) off)	83 KIAS (84 KCAS) 76 KIAS (77 KCAS)
Minimum Control Grou	nd	V _{MCG} (525A000 KCAS) (525A0300	C C	A0299) 89 KIAS (90 79 KIAS (80 KCAS)
Landing Gear Extende (525A0001 through 52 Landing Gear Extende 0300 and on)	5A0299)	Vle Vle		200 KIAS (199 KCAS) 200 KIAS (199 KCAS)
Speed Break Extended	ł	V _{SB}	Any speed w	<i>i</i> ith or without flaps
Maximum Autopilot Op Speed	erating		Any normal of	operating speed
Maximum Tire Ground	Speed	165 knots		
11. Maximum Operating Altitude:	13, 716	m (45,000 f	ft)	
12. All-weather Operations Capability:		y and Night and Night		



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RVSM (See Note 7)

Flight into known icing (See Limitations Section of EASA Approved Airplane Flight Manual)

13. Maximum Weights:

Aircraft Serial	Max. Zero	Max. Ramp	Max. Take-	Max. Landing
Number	Fuel Weight	Weight	Off Weight	Weight
525A0001 through 525A0299	4,218 kg (9,300 lbs)	5,670 kg (12,500 lbs.)	5,613 kg (12,375 lbs.)	5,216 kg (11,500 lbs.)
525A0300 and	4,400 kg	5,727 kg	5,670 kg	5,228 kg
On	(9,700 lbs)	(12,625 lbs.)	(12,500 lbs.)	(11,525 lbs.)

14. Centre of Gravity Range: (Gear Extended)*

(525A0001 through 525A0299): Allowable Forward C.G at 5,670 kg (12,500 lbs) F.S. 277.03 (19.66% MAC) Allowable Forward C.G at 5,613 kg (12,375 lbs) F.S. 276.89 (19.46% MAC) Allowable Forward C.G at 4,173 kg (9,200 lbs) to F.S. 273.33 (14.50% MAC) 3,856 kg (8,500 lbs) F.S. 277.99 (21.00% MAC) Allowable Forward C.G up to 3,402 kg (7,500 lbs) Aft C.G Up to 5,670 kg (12,500 lbs) to 3402 kg F.S. 283.72 (29.00% MAC) (7,500 lbs) (525A0300 and On): Allowable Forward C.G at 5,727 kg (12,625 lbs) F.S. 277.17 (19.86% MAC) Allowable Forward C.G at 5,670 kg (12,500 lbs) F.S. 277.03 (19.66% MAC) Allowable Forward C.G at 4,173 kg (9,200 lbs) to F.S. 273.33 (14.50% MAC) 3,856 kg (8,500 lbs) F.S. 277.99 (21.00% MAC) Allowable Forward C.G up to 3,856 kg (7,500 lbs) Aft C.G Up to 5,727 kg (12,625 lbs) to 3,856 kg F.S. 283.73 (29.00% MAC) (7,500 lbs) * Straight line variation between given points

Landing Gear Retracting Moment Empty Wt. C.G. Range MAC

+687.27 in-lb None 71.720 in. (L.E. of MAC at +262.926 in. aft of datum)

**** * * *** 15. Datum: 94.0 in forward of the front face of the forward pressure bulkhead
16. Control surface deflections:

Elevator	Up 18.5 +/- 0.5 degrees
	Down 15 +/-1 degrees
Elevator Trim Tab	Up 9 +/-1 degrees
	Down 23 +/-1 degrees
Rudder	Right 35 +/-1 degrees
	Left 35 +/-1 degrees
Rudder Trim Tab	Right 20 +/-1 degrees
	Left 20 +/-1 degrees
Aileron	2.0+/- 0.5 degrees (Neutral position TE Up) Up from neutral 23.5 +/-1 degrees
	Down from neutral 20.5 +/-1 degrees
Aileron Trim Tab	Up 20 +/-1 degrees
	Down 18 +/-1 degrees
Wing Flap	Up 0 +/-1 degrees
	T.O./Appr. 15 +/-1 degrees
	Land 35 +/-1 degrees
.	Ground 60 +/-1 degrees
Speed Brakes - Upper	Up 0 to 49 +/-2 degrees
Speed Brakes - Lower	Down 0 to 68 +/-2 degrees
Thrust Attenuators	Stow - 4.5 +/- 0.3degrees (525A0001 through 525A0299)
	(Ref to Engine Long. Axis)
Thrust Attenuators	Deploy 65 +/-1 degrees (525A0001 through 525A0299)
	(Ref to Engine Long. Axis)

Thrust Attenuators not applicable (525A0300 and On) See Airplane Maintenance Manual for rigging instructions.

17. Levelling Means: Longitudinal- Place 525A Levelling Tool across inboard crew seat rails at approximately FS 148. Ensure Levelling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base perpendicular to the long axis of the Levelling Tool at BL 0.0. Lateral- Place 525A Levelling Tool across inboard crew seat rails at approximately FS 148. Ensure Levelling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base parallel to the long axis of the Levelling Tool.



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18. Minimum Flight Crew:	(see note 5 for cockpit equipmer One pilot (in the left seat) plus a specified in the Kinds of Operati contained in the Limitations Sec Airplane Flight Manual or	dditional equipment as on Equipment List (KOEL)
	One pilot and one co-pilot	
19. Maximum Passenger	8 Passengers	

20. Baggage/Cargo Compartments:

Seating Capacity:

(525A0001 through 525A0299) Nose Compartment Aft Cabin Tailcone	181.4 kg (400 lbs. at +74.0 in. aft of datum) 45.4 kg (100 lbs. at 301.7 in. aft of datum) 272.2 kg (600 lbs. at 384.60 in. aft of datum)
(525A0300 and On) Nose Compartment Tailcone	181.4 kg (400 lbs. at +74.0 in. aft of datum) 272.2 kg (600 lbs. at 384.60 in. aft of datum)

21. (Reserved):

B.IV. Operating and Service Instructions

- 1. Flight Manual: Airplanes must be operated according to the FAA Approved Airplane Flight Manual, Part number 525AFM-04(or later approved revision for serials 0001 through 0299), 525AFMA-00 (or later approved revision for serials 0300 and on).
- 2. Technical Manual: Model 525A Maintenance Manual, 525AMM-05 or later approved revision. See Chapter 4, "Airworthiness Limitations" inspections, for mandatory retirement life information and other requirements continued airworthiness. for "Airworthiness Limitations" may not be changed without the approval of EASA.

B.V. Operational Suitability Data

OSD	OSD FC Original from 20 Jun 2014 or later approved Revision
MMEL	MMEL 525ACPMEU-00-00 or later approved Revision

B.VI. Notes:

1. Current weight and balance information, including list of equipment included in certificated empty weight, and loading instructions are provided for each airplane in the FAA Approved Airplane Flight Manual (AFM) at the time of original certification.

The certified empty weight must include:

Unusable Fuel	(525A0001 and On)	76.7 lb
Full oil	(525A0001 through 525A0299)	15.07 lb
Full oil	(525A0300 and On)	18.4 lb
Hydraulic Fluid	(525A0001 through 525A0299)	18.9 lb
Hydraulic Fluid	(525A0300 and On)	25.9 lb
Anti-ice Fluid	(525A0001 and On)	3.4 lb

- 2. Airplanes must be operated according to the FAA Approved AFM, part number 525AFM-04 (or later approved revision for Serials 525A0001 through 525A0299), 525AFMA-00 (or later approved revision for Serials 525A0300 and On). All placards required by either the FAA Approved AFM, the applicable operating rules, or the certification basis, must be installed as specified for this Type Certificate via Parts List 6300001, Airplane Assembly. A useful placard reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection needs to be reconciled using the previously stated parts list.
- 3. See Maintenance Manual Chapter Four (4) "Airworthiness Limitations" for mandatory component retirement life information.
- 4. All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with 14 CFR §§23.321, 23.395, 23.561, 23.562, and 23.785.

The foam cushion buildup of all seats (crew and passenger) may not be altered. Any deviations in the foam construction or stiffness must be demonstrated by test to comply with the listed 14 CFR 23 paragraphs.

The RH side facing seat lap belt shall have a buckle which opens from left to right, thereby preventing the buckle's own inertia from causing to open. Any other configuration must be verified by dynamic test.



- 5. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during FAA certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as permitted by the approved MMEL, without prior concurrence from the responsible NAA.
- 6. Model 525A 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 3.00 sq.in.
- Certain airplane Serial Numbers meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace. See table below:

S/N 525A0001 through 525A0299	Airplanes that have received factory installation* of optional Ametek AM-250 copilot's altimeter or; Airplanes that have received factory installation* of optional Collins Pro Line 21 copilot's Air Data Computer and Primary Flight Display; or Airplanes that have accomplished Cessna Service Bulletin SB525A-34-01.
S/N 525A0300 and On	All airplanes are equipped with Collins Pro Line 21 dual Air Data Computers and pilot's and copilot's primary Flight Displays as standard equipment.

* Equipment installed by the Textron Aviation factory will be identified in the individual airplane equipment list. Each operator must obtain RVSM operating approval directly from the FAA.

- The Model 525A (525A0300 and On) is approved for One Engine Inoperative 10 minutes thrust capability with the Williams International FJ44-3A-24 engine, per FAA Policy Memo "Guidance of Engine Operation at Takeoff Thrust/ Power for Ten-Minutes in a One- Engine Inoperative Situation for Cessna Model 525A Airplane" Project AT4141WI-A, dated September 8, 2005, from Standards Office, Small Airplane Directorate and Standards Office, Engine and Propeller Directorate.
- 9. The Model 525A S/N 0001 to 0299 is also known as Citation Jet 2 (CJ2), Model 525A S/N 0300 and on is known as Citation Jet2+ (CJ2+).

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SECTION C: 525B

C.I. <u>General</u>

1. Data Sheet No.:	EASA IM A.078 Issue 9
2. a) Type:b) Model:c) Variant:	525 525B N/A
3. Airworthiness Category:	CS 23 Normal Category
4. Type Certificate Holder:	Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA
5. Manufacturer:	Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA
 Certification Application Date: 	28 May 2003 for 525B-0001 and on
7. FAA Type Certificate Date:	15 October 2004
8. EASA Type Certificate Date:	16 June 2006

C.II. EASA Certification Basis

1.	Reference Date for determining the applicable requirements:	28 May 2003
2.	Airworthiness Requirements:	CS-23, Initial issue, dated 14 November 2003 with the following paragraphs retained at 14 CFR 23 through Amendment 40: §§ 23.773, 23.775, 23.807, 23.865, 23.1309 (CS23.1309 for the engine FADEC installation only), 23.1419, 23.1431, 23.1441, 23.1451, and 23.1543
		Compliance with ice protection has been demonstrated in accordance with CS 23.1416 and 23.1419 (See Note 8)
		(525B-0057 and 525B-0451 and On) CS-ACNS, issue 2

3. Special Conditions:



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		CRI A-06	CS23 Jets beyond 5670 kg (12500 lbs)
		CRI B-01	Human Factors
		CRI B-02	CS23 Jet requirements
		CRI B-03	High Altitude Operation
		CRI E-01	FADEC Integration
		CRI F-01	Protection from the Effects of HIRF
		CRI F-02	Protection from the Direct Effects of Lightning strike
		CRI F-03	Protection from the Indirect Effects of Lightning strike
		CRI F-04	Equipment Systems and Installations
		CRI F-05	Databases and Configuration Files
		CRI F-06	Digital Devices Design Assurance
			(525B0057, 525B0451 and on)
		CRI B-52	Human Factors - Integrated Avionics Systems and associated SC-B 23.div-01, Issue 1
		CRI F-93	Flight Recorders including Data Link Recording and associated SC-F23.1457-01, Issue 2
4.	(Reserved)		
5.	Deviations:	No. 7981 to permit certification in the Commuter category.	
		•	ise a relaxed "Dutch Roll" damping feet in lieu of damping criteria of
6.	Equivalent Safety Findings:		
		CRI E-02	Digital reading N2

CRI E-02	Digital reading N2
CRI D-01	Cabin Pressurisation high altitude TO/L
CRI D-02	Cabin Pressurisation Excursion
CRI D-03	Passenger Entry Door
CRI D-04	Aisle Width



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CRI D-05	No Smoking Placard letter size
CRI F-08	Passenger Oxygen Dispensing Unit

7. Requirements elected to comply:

8.	Environmental Standards:	ICAO Annex 16, Volume I
		ICAO Annex 16, Volume II, Part II
		(further details refer to TCDSN.IM.078)

- 9. (Reserved) Additional National Requirements:
- 10. (Reserved)

C.III. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition:	Cessna Airplane Assembly Drawing Number 6300300, Document No. A1WI, latest FAA approved revision.
2. Description:	Low wing aircraft with retractable tricycle landing gear, T-tail, pressurised cabin, and two turbofan engines pylon mounted on the rear fuselage.
3. Equipment:	Equipment List according to AFM, 525BFM-00 or later approved revision. (See Note 2)
4. Dimensions:	
Span	16.13 m (52ft. 10in)
Length	15.29 m (50ft.2in)
Height	4.62 m (15ft. 2in)
Wing Area	27.32 sq.m (294 sq.ft)
5. Engine:	
5.1.1 Model:	(525B0001 and On)
	Two Williams International, L.L.C FJ44-3A turbofans
5.1.2 Type Certificate:	TCDS IM.E.016
5.1.3 Limitations:	Static thrust standard day, sea level:
	Take off:
	(525B0001 and On) 1, 279 kg (2,820 lbs)
5.1.4 Max. permissible engine rotor operating	
	N1(fan)102.78% (100% = 18,000 rpm)N2 (Gas Gen.)100.0% (100% = 41,200 rpm)



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speeds (Takeoff and Maximum Continuous):

5.1.5 Max. permissible interturbine gas temperatures:

			Takeoff877 Degrees C (5 min, 10 min OEI)Max. continuous840 Degrees CTransient (starting 15 sec.)1000 Degrees C
8.	Fluid	IS:	
	8.1	Fuel:	(525B0001 and On) Commercial kerosene Jet A, Jet A-1, Je 3, JP-5, JP-8, RT or TS-1
	8.2	Oil:	Mobil Jet II MIL-L-23699 Mobil 254 MIL-L-23699
	8.3	Coolant:	Not applicable
9.	Fluid	l capacities:	
	9.1	Fuel:	Total usable: 4,710 lb (703 gal/ 2661, 1 litres). Two wing tanks with 2,355 lbs. (351 gal/ 1328, 6 litres) usable each; +310.10 in. aft of datum (See Note 1 for unusable fuel)
	9.2	Oil:	(525B0001 and On) 3.75 quarts usable each engine; +410.44 in. aft of datum (See Note 1)
		Coolant system capacity:	Not applicable
10	. Air S	Speeds:	
	М	aximum Operatin	V _{MO} Sea Level to 8,000 feet 260 KIAS (257 KCAS) 8,000 ft to 29,300 ft 278 KIAS (275 KCAS)
			M _{MO}
			Above 29, 300 ft. 0.737 M _I (0.72 Mach calibrated)
	М	anoeuvring	V _A (Manoeuvring sea level) (525B0001 and On)* 207 KIAS (205 KCAS) * See AFM for variations with weight and altitude



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TCDS No.: EASA.IM.A.078 Issue 16	Textron Aviation Inc 525 (Citation Jet)	c. Page 34 of 51 19-Apr-2024
Speed for max.gust intensity	VB	217 KIAS (215 KCAS)
Flaps Extended	V _{FE} Flaps 15 ^o (takeof 200 KIAS (198 k Flaps 35 ^o (landir 161 KIAS (158 k Flaps 55 ^o (groun Prohibited in Flig Maximum speed failed to 55 degre (ground flaps) (l	(CAS) ng) (CAS) nd flaps) ght I with flaps
Landing Gear Operating	V∟o (525B0001 and ((Extend)	On) 200 KIAS (198 KCAS)
	(525B0001 and (Retract)	On) 200 KIAS (195 KCAS)
Landing Gear Extended	Vle	200 KIAS (195 KCAS)
Minimum Control Air	V _{MCA} (525B0001 and 0 degrees)(takeof (525B0001 and 0	ff)
	degrees)(takeoff	& approach)
Minimum Control Ground	V _{MCG}	89 KIAS (88 KCAS)
Speed Break Extended	V _{SB}	Any speed with or without flaps
Maximum Autopilot Operating Speed	g	Any normal operating speed
Maximum Tire Ground Speed	d	165 knots
11. Maximum Operating Altitude:	13, 716 m (45,000 t	ft)
12. All-weather Operations Capability:	VFR Day and Night IFR Day and Night RVSM () Flight into known ic Approved Airplane	ing (See Limitations Section of EASA



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13. Maximum Weights:

Aircraft Serial Number	Max. Zero Fuel Weight	Max. Ramp Weight	Max. Take- Off Weight	Max. Landing Weight
525B0001 through 525B0056 & 525B0058 through 525B0450	4,767 kg (10,510 lbs)	6,382 kg (14,070 lbs.)	6,291 kg (13,870 lbs.)	5,783 kg (12,750 lbs.)
525B0057 & 525B0451 & On	4,842 kg (10,675 lbs.)	6,382 kg (14,070 lbs.)	6,291 kg (13,870 lbs.)	5,783 kg (12,750 lbs.)

14. Centre of Gravity Range: (Gear

Extended)*

(525B0001 and On):

Allowable Forward C.G at 6,3 (14,070 lbs)	82 kg F.S. 298.90 (21.20% MAC)	
Allowable Forward C.G at 4,4 (9,700 lbs) to 4,082 kg (9		
Allowable Forward C.G up to (8,000 lbs)	3,629 kg F.S. 298.70 (21.00% MAC)	
Aft C.G Up to 6,382 kg (14,07 5,897 kg (13,000 lbs)	70 lbs) to F.S. 304.70 (29.00% MAC)	
Aft C.G Up to 3,629 kg (8,000	lbs) F.S. 302.50 (21.00% MAC)	
 * Straight line variation betwe points 	en given	
Landing Gear Retracting Mon	nent +518.64 in-lb (58.6 N-m)	
Empty Wt. C.G. Range	None	
MAC	74.817 in. (L.E. of MAC at +283.01 in. aft of datum)	
15. Datum:	94.0 in forward of the front face of the forward pressure bulkhead	
16. Control surface deflectior	IS:	
Elevator	Up 20.5 +/- 0.5 degrees	
	Down 15 +/-1 degrees	
Elevator Trim Tab	Up 9.0 +/-1 degrees	
	Down 17.0 +/-1 degrees	
Rudder	Right 27.0 +/-1 degrees	

**** * * * * * *

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Rudder Trim Tab	Left 27.0 +/-1 degrees Right 20.0 +/-1 degrees
	Left 20.0 +/-1 degrees
Aileron	Up 23.5+/- 1.0 degrees Down 20.5 +/-1 degrees
Aileron Trim Tab	Up 20 +/-1 degrees
	Down 18 +/-1 degrees
Wing Flap	Up 0 +/-1 degrees T.O./Appr. 15 +/-1 degrees Land 35 +/-1 degrees
	Ground 55 +/-2.0 degrees
Speed Brakes - Upper	Up 0 to 49.0 +/-2 degrees
Speed Brakes - Lower	Down 0 to 68.0 +/-2 degrees

See Airplane Maintenance Manual for rigging instructions.

- 17. Levelling Means: Longitudinal- Place 525 Levelling Tool across inboard crew seat rails at approximately FS 148. Ensure Levelling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base perpendicular to the long axis of the Levelling Tool. Adjust the nose gear jack to level aircraft Lateral- Place 525 Levelling Tool across inboard crew seat rails at approximately FS 148. Ensure Levelling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base parallel to the long axis of the Levelling Tool. Adjust the main gear jack to level aircraft. 18. Minimum Flight Crew: (see note 2 for cockpit equipment/ arrangement restrictions): One pilot (in the left seat) plus additional equipment as specified in the Kinds of Operation Equipment List (KOEL) contained in the Limitations Section of the FAA Approved
 - One pilot and one co-pilot
- 19. Maximum Passenger 8 Passengers Seating Capacity:
- 20. Baggage/Cargo Compartments: (525B0001 through 525B0207)

Nose Compartment	181.4 kg (400 lbs. ,at +74.0 in. aft of datum)
Aft Cabin	45.4 kg (100 lbs. , at 330.20 in. aft of datum)

Airplane Flight Manual or



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Tailcone (525B0208 and on) Nose Compartment Tailcone 272.2 kg (600 lbs. at 414.60 in. aft of datum) 45.4 kg (400 lbs, +74.0 in. aft of datum) 272.2 kg (600 lbs, +414.60 in. aft of datum)

21. (Reserved):

C.IV. Operating and Service Instructions

- 1. Flight Manual: Airplanes must be operated according to the FAA Approved AFM, part number 525BFM-00 (or later approved revision for 525B0001 through 525B0056 and 525B0058 through 525B0450) or 525BFMA-00 (or later approved revision for 525B0057 and 525B0451 and On). All placards required by either the FAA Approved AFM, the applicable operating rules, or the certification basis, must be installed as specified for this Type Certificate via Parts List 6300300, Airplane Assembly. A useful placard reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection needs to be reconciled using the previously stated parts list.
- 2. Technical Manual: Model 525B Maintenance Manual, 525BMM00 or later approved revision. See Chapter 4. Limitations" "Airworthiness for inspections, mandatory retirement life information and other requirements for continued airworthiness. "Airworthiness Limitations" may not be changed without the approval of EASA.

C.V. Operational Suitability Data



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OSD

MMEL

OSD FC Original from 20 Jun 2014 or later approved Revision MMEL 525BCPMEU-00-01or later approved Revision

C.VI. <u>Notes:</u>

1. Current weight and balance information, including list of equipment included in certificated empty weight, and loading instructions are provided for each airplane in the FAA Approved Airplane Flight Manual (AFM) at the time of original certification.

The certified empty weight must include:

Unusable Fuel	49.68 lb
Full oil	18.40 lb
Hydraulic Fluid	15.09 lb
Anti-ice Fluid	3.40 lb

- 2. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during FAA certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as permitted by the approved MMEL, without prior concurrence from the responsible Aircraft Certification Office.
- 3. Required placards and markings are listed in chapter Eleven (11) of Maintenance Manual, part number 525BMM00 (or later approved revision).
- 4. All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with CS 23.321, 23.395, 23.561, 23.562, and 23.785.

The foam cushion buildup of all seats (crew and passenger) may not be altered. Any deviations in the foam construction or stiffness must be demonstrated by test to comply with the listed CS 23 paragraphs.

The RH side facing seat lap belt shall have a buckle which opens from right to left and the LH side facing belted toilet lap belt shall have a buckle which opens from left to right, thereby preventing the buckle's own inertia from causing it to open. Any other configuration must be verified by dynamic test.

- 5. Model 525B 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 3.00 sq.in.
- Certain airplane Serial Numbers meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace. See table below:



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S/N 525B0001 and On	All airplanes are equipped with Collins Pro Line 21 dual Air Data Computers and pilot's and copilot's Primary Flight Displays as standard equipment.
S/N 525B0057 and 0451 and on	All airplanes are equipped with G3000

Each operator must obtain RVSM operating approval directly from the FAA.

- 7. The Model 525B is approved for One Engine Inoperative 10 minutes thrust capability with the Williams International FJ44-3A engine, per FAA Policy Memo "Guidance of Engine Operation at Takeoff Thrust / Power for Ten-Minutes in a One- Engine Inoperative Situation for Cessna Model 525B Airplane" Project AT3268WI-A, dated April 14, 2004, from Standards Office, Small Airplane Directorate and Standards Office, Engine and Propeller Directorate.
- Flight into known icing is approved for the following Serial Number effectivity. S/N 525B0001; S/N 525B0002 thru 0012 incorporating Service Bulletin SB525B-30-01; and S/N 525B0013 and on.
- 9. The Model 525B S/N 525B0001 through 525B0450 is known as the Citation Jet 3 (CJ3) and S/N 525B0057, 525B0451 and on is known as the Citation Jet 3 Plus (CJ3+).



SECTION D: 525C

D.I. <u>General</u>

1.	Data Sheet No.:	EASA IM A.078
2.	a) Type: b) Model: c) Variant:	525 525C N/A
3.	Airworthiness Category:	CS 23 Normal Category
4.	Type Certificate Holder:	Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA
5.	Manufacturer:	Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA
6.	Certification Application Date:	17 JANUARY 2007
7.	FAA Type Certificate Date:	12 MARCH 2010
8.	EASA Type Certificate Date:	18 MAY 2011

D.II. EASA Certification Basis

1.	Reference Date for determining the applicable requirements:	17 JANUARY 2007		
2.	Airworthiness Requirements:	CS-23, Initial issue, dated 14 November 2003		
		Compliance with ice protection has been demonstrated in accordance with CS 23.1416 and 23.1419 (See Note 8).		
		CS-ACNS, is	sue 2	
3.	Special Conditions:	CRI B-01 CRI B-02 CRI B-03 CRI C-01 CRI C-02 CRI C-03 CRI C-04	Performance and Handling Flight High Speed Characteristics Stall Speed Determination Sonic Fatigue Pressurised and Non-Pressurised Areas Speed Margins Yawing Manoeuvre	



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		CRI C-05	Dynamic Response			
		CRI C-06	Out of Trim Characteristics			
		CRI C-07	Round-the-clock Gust			
		CRI D-01	Take-Off Warning System			
		CRI D-02	Extension and Retraction System			
		CRI D-03	Wheels			
		CRI D-04	Brakes and Braking Systems			
		CRI D-05	Doors			
		CRI D-06	Bird Strikes			
		CRI D-09	High Altitude Operation			
		CRI D-54	Fire Protection of engine mounts			
		CRI D-101	Side Facing Divan			
		CRI E-01	Fuel Tank Crashworthiness			
		CRI E-04	Lines, Fittings and Components			
		CRI E-06	Powerplant Fire Extinguishing Systems			
		CRI E-10	Fuel Tank Ignition Prevention			
		CRI E-11	Cold Soaked Fuel			
		CRI F-01	Battery Endurance Requirements			
		CRI F-02	Hydraulic Systems			
		CRI F-03	Interaction of Systems and Structures			
		CRI F-52	Protection from effect of HIRF			
		CRI F-54	Protection from the effects of lightning strike, indirect effects			
		CRI F-56	FADEC Integration			
		CRI F-58	Use of LiPo–Batteries			
		CRI O-04	Towbarless Towing Loads			
		CRI F-58	Lithium Ion Battery Installation			
		CRI F-60	Oxygen Equipment Qualification above 40000 ft.			
		CRI F-93	F23-1457-01-i2 Flight Recorders including Data Link Recording			
4.	(reserved):					
5.	Deviations:					
	Equivalent Safety Findings:		Cround Loado			
0.		CRI C-08 CRI F-57	Ground Loads			
		CRI F-57 CRI F-107	Use of LED Lighting			
-		CRI F-107	Pitot Heating			
	Requirements elected to mply:					
8.	Environmental Standards:	ICAO Annex	16, Volume I			
		ICAO Annex	ICAO Annex 16, Volume II, Part II			



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(further details refer to TCDSN.IM.078)

9. (Reserved)Additional

National Requirements:

10. (Reserved)

D.III. <u>Technical Characteristics and Operational Limitations</u>

 Type Design Definition: 	Cessna Airplane Assembly Drawing Number 7100000, Document No. A1WI, latest FAA approved revision.		
2. Description:	Low wing aircraft with retractable tricycle landing gear, T-tail, pressurised cabin, and two turbofan engines pylon mounted on the rear fuselage.		
3. Equipment:	Equipment List according to AFM, 525CFM-00 or later approved revision.		
	(See Note 2)		
4. Dimensions:			
Span	15.37 m(50ft. 5in)		
Length	16.26 m(53ft. 4in)		
Height	4.67m (15ft. 5in)		
U	30.67 sq.m (330.3 sq.ft.)		
5. Engine:			
5.1.1 Model:	(525C0001 and On)		
	Two Williams International, L.L.C FJ44-4A turbofans		
5.1.2 Type Certificate:	TCDS IM.E.016		
5.1.3 Limitations:	Static thrust standard day, sea level: Take off:		
	(525C0001 and On) 1,642 kg (3,621 lbs)		
Max. permissible	N1(fan) $104.76\% (100\% = 16,360 \text{ rpm})$		
engine rotor	Transient (2 minute operational limit) 105.76%		
operating speeds (Maximum	N2 (Gas Gen.) 100.86% (100% = 37,450 rpm)		
Continuous)	Transient (2 minute operational limit) 101.59%		
,			
	Takeoff855 Degrees C (5 min, 10 min OEI)Max. continuous825 Degrees C		
Max. permissible	Max. continuous 835 Degrees C Transient (starting 15 sec.) 1000 Degrees C		
interturbine gas	Transient (starting 15 sec.) 900 Degrees C		
temperatures:			

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- 6. (Reserved):
- 7. (Reserved):
- 8. Fluids:
 - 8.1 Fuel: (525C0001 and On) Commercial kerosene Jet A, Jet A-1, JP-5, JP-8, Jet 3, RT or TS-1
 - 8.2 Oil: Mobil Jet II MIL-L-23699 Mobil 254 MIL-L-23699
 - 8.3 Coolant: Not applicable
- 9. Fluid capacities:
 - 9.1 Fuel: Total usable: 5828 lb (869.8 gal/ 3292.5 litres). Two wing tanks with 2,914 lbs. (434.9 gal/ 1646.1 litres) usable each; +319.30 in. aft of datum. (See Note 1 for unusable fuel)
 9.2 Oil: (525C0001 and On)

 4.8 quarts usable each engine; +424.64 in. aft of datum. (See Note 1)

 9.3 Coolant system
 - capacity:

Maximum Operating

10. Air Speeds:

260 KIAS (261 KCAS)
305 KIAS (306 KCAS)

М_{мо} Above 28, 000 ft.

0.77 M_I (0.774 Machcalibrated)

Maximum	Vo	185 KIAS (185 KCAS)
Operating Manoeuvring	* See AFM	for variations with weight and altitude
Speed for max.gust intensity	VB	232 KIAS (233 KCAS upto 40,000ft) 0.77 Mi(0.774 Mach calibrated above 40,060 ft)



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Textron Aviation Inc. 525 (Citation Jet)

Flaps Extended	V _{FE} Flaps 15 ^o (takeoff and approach) (200 KCAS) Flaps 35 ^o (landing) No Ground Flaps			200 KIAS	
				160 KIAS (10	60 KCAS)
Speed Break Extended Maximum Autopilot	V _{SB}	Any speed with	n or withou	ut flaps	
Operating Speed		Any normal operating speed			
Maximum Tire Ground Speed		165 knots	5		
Landing Gear	Vlo				
Operating	(525C0001 and On) (Extending)		200 KIAS (200 KCAS)		
	(525C0001 an	id On)	200 KIAS	(199 KCAS)	(Retracting)
Landing Gear Extended	V _{LE}		200 KIA	S (199 KCAS))
Minimum Control Ground	V _{MCG}		88 KIAS	(88 KCAS)	
Minimum Control	VMCA				
Air	Flaps 0º (take	,		(94 KCAS)	
	Flaps 15º (take	e off & approach	n) 85	KIAS (85 KC	AS)
11. Maximum Operating Altitude:	13, 716 m (45,0	000 ft)			
12. All-weather	, , , , , , , , , , , , , , , , , , , ,				
Operations Capability:	IFR Day and Night RVSM (See Note 6)				
	Flight into know	,			
	•	s Section of EA	SA Approv	ved Airplane F	Flight
13 Maximum Weights:					

13. Maximum Weights:

Aircraft Serial Number	Max. Zero Fuel Weight	Max. Ramp Weight	Max. Take- Off Weight	Max. Landing Weight
525C0001 and On	5670 kg	7815 kg	7760 kg	7103 kg
511	(12,500 lbs)	(17,230 lbs.)	(17,110 lbs.)	(15,660 lbs.)



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14. Centre of Gravity Range: (Gear Extended)*

(525C-0001 and On):	
Allowable Forward C.G at 7,743 kg (17,230 lbs)	F.S. 311.01 (19.4% MAC)
Allowable Forward C.G up to 7,370kg (16,250 lbs)	F.S. 309.23 (17.6% MAC)
Allowable Forward C.G up to 6,917 kg (15,250 lbs)	F.S. 307.98 (16.1% MAC)
Allowable Forward C.G up to 6,577 kg (14,500 lbs)	F.S. 307.31 (15.3% MAC)
Allowable Forward C.G up to 6,010 kg (13,250 lbs)	F.S. 306.65 (14.5% MAC)
to 4,753 kg (10,500 lbs) Allowable Forward C.G up to 4,309 kg (9,500 lbs)	F.S. 312.06 (21.0% MAC)
Aft C.G Up to 7,743 kg (17,230 lbs) Aft C.G Up to 6,577 kg (14,500 lbs) Aft C.G Up to 4,309 kg (9,500 lbs)	F.S. 317.89 (28.0% MAC) F.S. 316.23 (26.0% MAC) F.S. 317.06 (27.0% MAC)
* Straight line variation between given points Landing Gear Retracting Moment Empty Wt. C.G. Range MAC	-3386 in-lb (382.6 N-m)None 83.290 in. (L.E. of MAC at +294.571 in. aft of datum)

- 15. Datum: 94.0 in forward of the front face of the forward pressure bulkhead
- 16. Control surface deflections:

Elevator	Up 25.5 +/- 0.5 degrees
	Down 12.0 +/-1 degrees
Elevator Trim Tab	Up 6.0 +/-1 degrees
	Down 14.0 +/-1 degrees
Rudder	Right 32.0 +/-1 degrees
	Left 32.0 +/-1 degrees
Rudder Trim Tab	Right 20.0 +/-1 degrees
	Left 20.0 +/-1 degrees
Aileron	Up 23.5+/- 1.0 degrees
	Down 20.5 +/-1 degrees
Aileron Trim Tab	Up 19.0 +/-1 degrees
	Down 19.0 +/-1 degrees
Wing Flap	Up 0 +/-1 degrees



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T.O./Appr. 15 +/-1 degrees Land 35 +/-1 degrees

Speed Brakes - Upper	Up 0 to 40.0 +/-2 degrees
Speed Brakes - Lower	Down 0 to 35.4 +/-2.5 degrees
Ground Spoilers- Inboard Center Outboard	Up 55.0 +/- 2.0 degrees Up 55.0 +/- 2.0 degrees Up 55.0 +/- 2.0 degrees

See Airplane Maintenance Manual for rigging instructions.

17. Levelling Means:	Longitudinal- Place 525 Levelling Tool across inboard crew seat rails at approximately FS 145.5. Ensure Levelling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base perpendicular to the long axis of the Levelling Tool. Adjust the nose gear jack to level aircraft Lateral- Place 525 Levelling Tool across inboard crew seat rails at approximately FS 145.5. Ensure Levelling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Levelling Tool with base parallel to the long axis of the Levelling Tool. Adjust the main gear jack to level aircraft.
18. Minimum Flight Crew:	(see note 2 for cockpit equipment/ arrangement restrictions): One pilot (in the left seat) plus additional equipment as specified in the Kinds of Operation Equipment List (KOEL) contained in the Limitations Section of the FAA Approved Airplane Flight Manual or One pilot and one co-pilot
19. Maximum Passenger Seating Capacity:	9 Passengers
20. Baggage/Cargo Compartments:	

(525C0001 and On)	
Nose Compartment	181.4 kg (400 lbs. , at 76.14 in. aft of datum)
Tailcone	
	272.2 kg (600 lbs. , at 431.70 in. aft of datum)

21. (Reserved):

D.IV. Operating and Service Instructions

1. Flight Manual: Airplanes must be operated according to the FAA Approved AFM, part number 525CFM-00 (or later



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approved revision). All placards required by either the FAA Approved AFM, the applicable operating rules, or the certification basis, must be installed as specified for this Type Certificate via Parts List 7100000, Airplane Assembly. A useful placard reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection needs to be reconciled using the previously stated parts list.

2. Technical Manual: Model 525C Maintenance Manual. 525CMM00 or later approved revision. See Chapter 4. "Airworthiness Limitations" inspections, for mandatory retirement life information and other requirements continued airworthiness. for "Airworthiness Limitations" may not be changed without the approval of EASA.

D.V. Operational Suitability Data

OSD

OSD FC Original from 20 Jun 2014 or later approved Revision

MMEL 525CCPMEU-00-00 or later approved

MMEL Revision

D.VI. <u>Notes:</u>

 Current weight and balance information, including list of equipment included in certificated empty weight, and loading instructions are provided for each airplane in the FAA Approved Airplane Flight Manual (AFM) at the time of original certification.

The certified empty weight must include:

Unusable Fuel	33.6 lb.
Full oil	24.16 lb.
Hydraulic Fluid	25.12 lb.

 Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during FAA certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as



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permitted by the approved MMEL, without prior approval from the responsible Aircraft Certification Office.

- 3. Required placards and markings are listed in Chapter Eleven (11) of Maintenance Manual, part number 525CMM-00 (or later approved revision).
- 4. All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with CS 23.321, 23.395, 23.561, 23.562, and 23.785.

The foam cushion buildup of all seats (crew and passenger) may not be altered. Any deviations in the foam construction or stiffness must be demonstrated by test to comply with the listed CS 23 paragraphs.

The RH side facing seat lap belt shall have a buckle which opens from right to left and the LH side facing belted toilet lap belt shall have a buckle which opens from left to right, thereby preventing the buckle's own inertia from causing it to open. Any other configuration must be verified by dynamic test.

- 5. Model 525C 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 3.00 sq. in.
- 6. Per the approvedType Design, S/N 525C0001 and On are considered to be compliant with the applicable RVSM aircraft approval requirements contained in EU OPS 1 § 1. However, each operator must obtain RVSM operating approval directly from the NAA.
- The Model 525C is approved for One Engine Inoperative 10 minutes thrust capability with the Williams International FJ44-4A engine, per FAA Policy Memo Statement on Approval for 10-Minute rated Takoff Thrust/Power during Takeoff with One-Engine Inoperative (OEI) under 14 CFR Part 23 and 14 CFR Part 33 [PS-ANE33-ACE23-2006-1] dated August 30th, 2006.
- 8. Flight into known icing is approved for the following Serial Number effectivity. S/N 525C0001 and On.
- 9. The Model 525C S/N 0001 & On is also known as the Citation Jet 4 (CJ4).



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ADMINISTRATIVE SECTION

I. Acronyms

- A.C. Advisory Circular
- A.D. Airworthiness Directives
- AFM Airplane Flight Manual
- C.G. Centre of Gravity
- CFR Code of Federal Regulations
- CRI Certification Review Items
- CS Certification Specifications
- EASA European Aviation Safety Agency
- EFIS Electronic Flight Information System
- EU European Union
- F.S. Frame Status
- FAA Federal Aviation Administration
- FADEC Full Authority Digital Engine Control
- FC Flight Crew
- FT Feet
- GAL Gallons
- ICAO International Civil Aviation Organization
- IFR Instrument Flight Rules
- KCAS Knots Calibrated Air Speed
- KG Kilo Grams
- KIAS Knots Indicated Air Speed
- $\mathsf{LBS}-\mathsf{Pounds}$
- L.E. Leading Edge
- MAC Mean Aerodynamic Chord
- MIL Military Standard
- MMEL Master Minimum Equipment List
- N.A.A. National Aviation Authority
- OSD Operational Suitability Data
- **RVSM Reduced Vertical Separation Minimum**
- S.B. Service Bulletin
- T.O. Take Off
- TC Type Certificate
- TCDS Type Certificate Data Sheet
- TCDSN Type Certificate Data Sheet Noise.
- TSO Technical Standards Order
- VFR Visual Flight Rules



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II. Type Certificate Holder Record

Since 29 July 2015: Textron Aviation Inc. One Cessna Boulevard Wichita, Kansas 67215 USA

From 15 Oct 1992 to 28 Jul 2015: Cessna Aircraft Company P.O. Box 7704 Wichita, Kansas 67277 USA

III. Change Record

Issue	Date	Changes
Issue 01	13 March 2006	Initial Release
Issue 02	16 June 2006	Addition of Model 525B
Issue 03	10 July 2006	Addition of Model 525A Serial Numbers (525A0300 and On)
Issue 04	14 March 2008	Corrections
Issue 05	18 May 2011	Addition of Model 525C
Issue 06	10 August 2012	Corrections
Issue 07	16 May 2013	Corrections
Issue 08	23 June 2014	Addition of Model 525 Serial Numbers (525-0800 and On)
Issue 09	18 May 2015	Addition of Model 525B Serial Numbers (525B0057, 0451 and on) Corrections throughout all Models
Issue 10	17 Dec 2015	TC holder transfer from Cessna Aircraft Company to Textron Aviation Inc. Corrections throughout all documents Addition of OSD, CB for certain ECRs
Issue 11	22 June 2018	Deletion of wheels and tyres part numbers for alignment with FAA TCDS A1W1 rev 26
Issue 12	28 November 2018	Model C525 MZFW Increase Corrections
Issue 13	06 June 2019	Model C525B MZFW Increase Corrections



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Issue 14	10 May 2021	 Model 525 and 525B Correction of Certification Basis – inclusion of Special Conditions SC-B23.div-01 Human Factors - Integrated Avionics Systems and SC-F23.1457-01 Flight Recorders including Data Link Recording. Model 525C Update of Certification Basis – inclusion of CS-ACNS and Special Condition SC-F23-1457-01 Flight Recorders including Data Link Recording. Corrections throughout all document.
Issue 15	04 August 2022	Model 525 and 525B Correction of Certification Basis – inclusion of CS-ACNS issue 2
Issue 16	19 April 2024	Model 525 update of Certification Basis – inclusion of CS 23.613(c)(d)(e) at amendment 2. Related to EASA Major Change 10084316.



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