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# 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



# CONTENT

## **SECTION A: 525**

- A.I. General
- A.II. Certification Basis
- A.III. Technical Characteristics and Operational Limitations
- A.IV. Operation and Service Instructions
- A.V. Operational Suitability Data (OSD)
- A.VI. Notes

## **SECTION B: 525A**

- B.I. General
- B.II. Certification Basis
- B.III. Technical Characteristics and Operational Limitations
- B.IV. Operation and Service Instructions
- B.V. Operational Suitability Data (OSD)
- B.VI. Notes

## **SECTION C: 525B**

- C.I. General
- C.II. Certification Basis
- C.III. Technical Characteristics and Operational Limitations
- C.IV. Operation and Service Instructions
- C.V. Operational Suitability Data (OSD)
- C.VI. Notes

## **SECTION D: 525C**

- D.I. General
- D.II. Certification Basis
- D.III. Technical Characteristics and Operational Limitations
- D.IV. Operation and Service Instructions
- D.V. Operational Suitability Data (OSD)
- D.VI. Notes

## **ADMINISTRATIVE SECTION**

- I. Acronyms
- II. Type Certificate Holder Record
- III. Change Record



## **SECTION A: 525**

### **A.I. General**

1. Data Sheet No.: EASA IM A.078 Issue 9
2. a) Type: 525  
b) Model: 525  
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 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 through 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)



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.

CS 23.1309(a) as amended through Amendment 3, for Portable Electronic Device (PED) tolerance only.

CS-23 regulations 23.2000, 23.2005, 23.2010, 23.2325(a)(2), 23.2410, 23.2510, 23.2525, and 23.2605, Amendment 6 (see note 9) for new or changed lithium battery systems only.

(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.

CS 23.1309(a) as amended through Amendment 3, for Portable Electronic Device (PED) tolerance only.



Additions

CS-23 regulations 23.2000, 23.2005, 23.2010, 23.2325(a)(2), 23.2410, 23.2510, 23.2525, and 23.2605, Amendment 6 (see note 9) for new or changed lithium battery systems only.

<b>Reg. No.</b>	<b>Title</b>	<b>Amendment Level</b>	<b>Comments</b>
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 (c)(d)(e)	Material strength properties and design values	CS 23, Amdt 2	Main landing gear actuator internal keylock and ramlock only
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	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 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

SC-F23.2555-01 Lightweight flight recorder

4. Exemptions:

N/A

5. Deviations:

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

6. Equivalent Safety Findings:

(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<sub>2</sub>), 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 (N<sub>2</sub>), oil pressure, oil temperature and fuel flow indications

7. 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)

9. (Reserved) Additional National Requirements:

10. (Reserved)

### **A.III. Technical Characteristics and Operational Limitations**

- 1. Type Design Definition: Cessna Airplane Assembly Drawing Number 6300000, 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: (525-0001 through 525-0359)  
Equipment List according to AFM, 525FM-00, or later approved revision  
(525-0360 through 525-0599)  
Equipment list according to AFM, 525FMA-00, or later approved revision  
(525-0600 through 0684 and 0686 through 525-0701)



Equipment List according to AFM, 525FMB-00, or later approved revision

(525-0800 and On)

Equipment list according to AFM, 525FMC-00, or later approved revision

(see note 3)

4. Dimensions: (525-0001 through 525-0701) (525-0800 and On)

Span	14.20 m (46ft. 7in)	14.33 m (47ft. 0in)
Length	12.98 m (42ft. 7in)	12.98 m (42ft. 7in)
Height	4.19 m (13ft. 9in)	4.27 m (14ft. 0in)
Wing Area	22.30 sq.m(240 sq.ft)	22.30 sq.m (240 sq.ft)

5. Engine:

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 (Takeoff and Maximum Continuous):

N1(fan) (525-0001 through 525-0599) 104.4% (100% = 17,245 rpm)

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. 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
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)

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)

8.3 Coolant: Not applicable

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)

9.2 Oil: (525-0001 through 525-0599)  
2.0 quarts usable each engine; +312.30 in. aft of datum.  
(525-0600 through 525-0701 and 0800 and On)  
3.4 quarts usable each engine; +314.74 in. aft of datum.  
(See Note 2 for unusable)

9.3 Coolant system capacity: Not Applicable

10. Air Speeds:

Maximum Operating  $V_{MO}$   
Sea Level to 30,500 feet 263 KIAS (260 KCAS)  
 $M_{MO}$  above 30,500 feet 0.71  $M_I$  (0.70 Mach calibrated)

Manoeuvring

$V_A$  (Manoeuvring sea level)  
10,400 lb. (525-0001 through 525-0359) 199 KIAS (198 KCAS)

10,600 lb. (525-0360 through 525-0599)\* 201 KIAS (200 KCAS)

\*See AFM for variations with weight and altitude.

10,700 lb. (525-0600 through 525-0701 and 0800 and On)\*  
202 KIAS (201 KCAS)

\*See AFM for variations with weight and altitude.



Speed for max.gust intensity	$V_B$	217 KIAS (215 KCAS)
Flaps Extended	$V_{FE}$	
	Flaps 15° (Takeoff and approach) KIAS (198 KCAS)	200
Landing Gear Operating	Flaps 35° (Landing) KIAS)	161 KIAS (160 KCAS)
	Flaps 60 ° (Ground Flaps)	Prohibited in Flight
	$V_{LO}$	
	(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 and 525-0800 and On) 175 KIAS (172 KCAS) (Retracting)	
	$V_{MCA}$	
	(525-0001 through 525-0599)	92 KIAS (91 KCAS)
	(525-0600 through 525-0701 and 525-0800 and On) Flaps 0 deg. 86 KIAS (86 KCAS)	
Minimum Control Ground	(525-0600 through 525-0701 and 525-0800 and On) Flaps 15 deg. 77 KIAS (77 KCAS)	
	$V_{MCG}$	
	(525-0001 through 525-0359)	95 KIAS (93 KCAS)
	(525-0360 through 525-0599)	93 KIAS (93 KCAS)
	(525-0600 through 525-0701 and 0800 and On)	89 KIAS (92 KCAS)
Landing Gear Extended		
Speed Break Extended	$V_{LE}$	186 KIAS (183 KCAS)
Maximum Autopilot Operating Speed	$V_{SB}$	Any speed with or without flaps
Sea level to 30,500ft		263 KIAS (260 KCAS)
Above 30,500ft		0.71 $M_i$ (0.70 Mach calibrated)
Maximum Tire Ground Speed		165 knots
11. Maximum Operating Altitude:	12, 497 m (41,000 ft)	



12. All-weather Operations VFR Day and Night  
 Capability: IFR Day and Night  
 RVSM (See Note 6)  
 Flight into known icing(See Limitations Section of EASA  
 Approved Airplane Flight Manual)

13. Maximum Weights:

Aircraft Serial Number	Max. Zero Fuel Weight	Max. Ramp Weight	Max. Take-Off Weight	Max. Landing Weight
525-0001 through 525-0359	3,810 kg (8,400 lbs)	4,763 kg (10,500 lbs.)	4,717 kg (10,400 lbs.)	4,400 kg (9,700 lbs.)
525-0360 through 525-0599	3,810 kg (8,400 lbs)	4,853 kg (10,700 lbs.)	4,808 kg (10,600 lbs.)	4,445 kg (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.)
525-0685 and 525-0800 and On	3,856 kg (8,500 lbs)	4,899 kg (10,800 lbs.)	4,853 kg (10,700 lbs.)	4,491 kg (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 F.S. 248.78 (29.00% MAC)  
 (6,000 lbs)

(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 F.S. 248.78 (29.00% MAC)  
 (6,000 lbs)



(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)

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)

15. Datum: 94.0 in forward of the front face of the forward pressure bulkhead

16. Control surface deflections:

Elevator Up 20 +/-1 degrees (525-0001 through 525-0599)  
Up 18.5 +/-0.5 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

Aileron Up 23.5 +/-1 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./Apr. 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  
Lateral- Left hand and right hand upper floorboard aft of FS 152.00. Level is determined with a level gauge placed on the cabin door floor longeron.
18. Minimum Flight Crew: (see note 3 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: 6 Passengers
20. Baggage/Cargo Compartments:
- |   |  |
|---|--|
| (525-0001 through 525-0599)                 |  |
| Nose Compartment                            | 181.4 kg (400 lbs. +74.0 in. aft of datum)   |
| Aft Cabin                                   | 45.4 kg (100 lbs. +270.70 in. aft of datum)  |
| Tailcone                                    | 147.4 kg (325 lbs. +356.50 in. aft of datum) |
| (525-0600 through 525-0701 and 0800 and On) |  |
| Nose Compartment                            | 181.4 kg (400 lbs. +74.0 in. aft of datum)   |
| Tailcone                                    | 147.4 kg (325 lbs. +356.50 in. aft of datum) |
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 certification basis, must be installed as specified for this Type 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.)
  
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. Notes:**

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	(525-0001 and 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	(525-0001 and on)	3.4 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 permitted by the approved MMEL, without prior approval from the responsible Authority.

- Reserved.

- 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.

- 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 525-0599	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 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 525-0800 & On	All airplanes are equipped with Garmin G3000.

\* 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.
8. 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.
9. CS-23 23.2005 Certification Level and Performance Level: Level 3, High Speed



## **SECTION B: 525A**

### **B.I. General**

1. Data Sheet No.: EASA IM A.078 Issue 9
2. a) Type: 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**

1. Reference Date for determining the applicable requirements: 14 May 1998
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,



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;

CS 23.1309(a) as amended through Amendment 3, for Portable Electronic Device (PED) tolerance only.

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  
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, bailed 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 Findings:

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<sub>2</sub>), 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: (525A0001 through 0299) (525A0300 and On)
- |           |                       |                       |
|-----------|-----------------------|-----------------------|
| Span      | 15.09 m(49ft. 6in)    | 15.09 m(49ft. 6in)    |
| Length    | 14.53 m(47ft. 8in)    | 14.53 m(47ft. 8in)    |
| Height    | 4.27 m(14ft. 0in)     | 4.32 m( 14ft. 2.23in) |
| Wing Area | 24.53 sq.m(264 sq.ft) | 24.53 sq.m(264 sq.ft) |



5. Engine:

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 engine rotor operating speeds (Takeoff and Maximum Continuous)

N<sub>1</sub> (fan) (525A0001 through 525A0299) 105.2% (100% = 17,245 r.p.m.)

N<sub>2</sub> (Gas Gen.) (525A0001 through 525A0299) 98.8% (100% = 41,200 r.p.m.)

N<sub>1</sub> (fan) (525A0300 and on) 102.78% (100% = 18,000 r.p.m.)

N<sub>2</sub> (Gas Gen.) (525A0300 and on) 100.00% (100% = 41,200 r.p.m.)

7. Max. permissible interturbine gas temperatures.

Takeoff (525A0001 through 525A0299) 820 Degrees C

Max. Continuous (525A0001 through 525A0299) 805 Degrees C

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
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 capacity:	Not applicable
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)
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)



	35 degrees (landing)	
	161 KIAS (161 KCAS)	
	60 degrees (ground flaps)	prohibited in flight
	Maximum speed with flaps	
	failed to 60 degrees	140 KIAS (140KCAS)
	(ground flaps)	(Emergency only)
Landing Gear Operating	V <sub>Lo</sub>	
	Extend	200 KIAS (200 KCAS)
	Retract	200 KIAS (199 KCAS)
Minimum Control Air	V <sub>MCA</sub>	
	(525A0001 through 525A0299)	89 KIAS (90 KCAS)
	(Flaps 0° takeoff)	
	(525A0001 through 525A0299)	81 KIAS (82 KCAS)
	(Flaps 15° takeoff and approach)	
	(525A0300 and On)	83 KIAS (84 KCAS)
	(Flaps 0° takeoff)	
	(525A0300 and On)	76 KIAS (77 KCAS)
	(Flaps 15° takeoff and approach)	
Minimum Control Ground	V <sub>MCG</sub>	
	(525A0001 through 525A0299)	89 KIAS (90 KCAS)
	(525A0300 and on)	79 KIAS (80 KCAS)
	V <sub>LE</sub>	200 KIAS (199 KCAS)
Landing Gear Extended		
(525A0001 through 525A0299)		
Landing Gear Extended (525A-	V <sub>LE</sub>	200 KIAS (199 KCAS)
0300 and on)		
Speed Break Extended	V <sub>SB</sub>	Any speed with or without flaps
Maximum Autopilot Operating		Any normal operating speed
Speed		
Maximum Tire Ground Speed	165 knots	
11. Maximum Operating	13, 716 m (45,000 ft)	
Altitude:		
12. All-weather Operations	VFR Day and Night	
Capability:	IFR Day and Night	





RVSM (See Note 7)

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

13. Maximum Weights:

Aircraft Serial Number	Max. Zero Fuel Weight	Max. Ramp Weight	Max. Take-Off Weight	Max. Landing 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 On	4,400 kg (9,700 lbs)	5,727 kg (12,625 lbs.)	5,670 kg (12,500 lbs.)	5,228 kg (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 3,856 kg (8,500 lbs)	F.S. 273.33 (14.50% MAC) 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 (7,500 lbs)	F.S. 283.72 (29.00% MAC)

(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 3,856 kg (8,500 lbs)	F.S. 273.33 (14.50% MAC) 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 (7,500 lbs)	F.S. 283.73 (29.00% MAC)

\* Straight line variation between given points

Landing Gear Retracting Moment

Empty Wt. C.G. Range

+687.27 in-lb

MAC

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 the long axis of the Levelling Tool.



18. Minimum Flight Crew: (see note 5 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: 8 Passengers

20. Baggage/Cargo Compartments:

(525A0001 through  
525A0299)

Nose Compartment	181.4 kg (400 lbs. at +74.0 in. aft of datum)
Aft Cabin	45.4 kg (100 lbs. at 301.7 in. aft of datum)
Tailcone	272.2 kg (600 lbs. at 384.60 in. aft of datum)

(525A0300 and On)

Nose Compartment	181.4 kg (400 lbs. at +74.0 in. aft of datum)
Tailcone	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" for inspections, mandatory retirement life information and other requirements for continued airworthiness. "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.
7. 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.

8. 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+).



## **SECTION C: 525B**

### **C.I. General**

1. Data Sheet No.: EASA IM A.078 Issue 9
2. a) Type: 525  
b) Model: 525B  
c) Variant: 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: 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)

CS 23.1309(a) as amended through Amendment 3, for Portable Electronic Device (PED) tolerance only.



CS-23, regulations 23.0000, 23.2005, 23.2010, 23.2325(a)(2), 23.2410, 23.2510, 23.2525 and 23.2605, Amendment 6 (see Note 11) for new or changed lithium battery systems only.

(525B-0057 and 525B-0451 and On)  
CS-ACNS, issue 2

### 3. Special Conditions:

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.



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 Findings:

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
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. Technical Characteristics and Operational Limitations**

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 speeds (Takeoff and Maximum Continuous):

N1(fan)	102.78% (100% = 18,000 rpm)
N2 (Gas Gen.)	100.0% (100% = 41,200 rpm)

5.1.5 Max. permissible interturbine gas temperatures:

Takeoff	877 Degrees C (5 min, 10 min OEI)
Max. continuous	840 Degrees C
Transient (starting 15 sec.)	1000 Degrees C

8. Fluids:

8.1 Fuel: (525B0001 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  
Mobil 254 MIL-L-23699

8.3 Coolant: Not applicable

9. Fluid 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)

9.3 Coolant system capacity: Not applicable

10. Air Speeds:

Maximum Operating  $V_{MO}$



	Sea Level to 8,000 feet	260 KIAS (257 KCAS)
	8,000 ft to 29,300 ft	278 KIAS (275 KCAS)
	M <sub>MO</sub>	
	Above 29, 300 ft.	0.737 M <sub>I</sub> (0.72 Mach calibrated)
Manoeuvring	V <sub>A</sub> (Manoeuvring sea level) (525B0001 and On)*	207 KIAS (205 KCAS)
	* See AFM for variations with weight and altitude	
Speed for max.gust intensity	V <sub>B</sub>	217 KIAS (215 KCAS)
Flaps Extended	V <sub>FE</sub> Flaps 15°(takeoff and approach) 200 KIAS (198 KCAS) Flaps 35° (landing) 161 KIAS (158 KCAS) Flaps 55 °(ground flaps) Prohibited in Flight Maximum speed with flaps failed to 55 degrees (ground flaps) (Emergency only)	140 KIAS (138 KCAS)
Landing Gear Operating	V <sub>LO</sub> (525B0001 and On) (Extend) (525B0001 and On) (Retract)	200 KIAS (198 KCAS) 200 KIAS (195 KCAS)
Landing Gear Extended	V <sub>LE</sub>	200 KIAS (195 KCAS)
Minimum Control Air	V <sub>MCA</sub> (525B0001 and On) degrees )(takeoff) (525B0001 and On) degrees)(takeoff & approach)	88 KIAS (88 KCAS) (0 81 KIAS (81 KCAS) (15
Minimum Control Ground Speed Break Extended	V <sub>MCG</sub> V <sub>SB</sub>	89 KIAS (88 KCAS) Any speed with or without flaps
Maximum Autopilot Operating Speed		Any normal operating speed



Maximum Tire Ground Speed 165 knots

11. Maximum Operating Altitude: 13, 716 m (45,000 ft)

12. All-weather Operations Capability: VFR Day and Night  
IFR Day and Night  
RVSM ()

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

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 6,382 kg (14,070 lbs) F.S. 298.90 (21.20% MAC)

Allowable Forward C.G at 4,400 kg (9,700 lbs) to 4,082 kg (9,000 lbs) F.S. 293.90 (14.50% MAC)

Allowable Forward C.G up to 3,629 kg (8,000 lbs) F.S. 298.70 (21.00% MAC)

Aft C.G Up to 6,382 kg (14,070 lbs) to 5,897 kg (13,000 lbs) 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 between given points

Landing Gear Retracting Moment +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 deflections:

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 Left 27.0 +/-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 20 +/-1 degrees Down 18 +/-1 degrees
Wing Flap	Up 0 +/-1 degrees T.O./Aprpr. 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 Airplane Flight Manual or



## One pilot and one co-pilot

19. Maximum Passenger Seating Capacity: 8 Passengers

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

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, "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.

### **C.V. Operational Suitability Data**

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

### **C.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	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. Reserved.

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.

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

S/N 525B0001 thru 525B0056, 525B0058 thru 525B0450	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.
8. 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+).
10. Required Equipment. The basic required equipment prescribed in the applicable airworthiness requirements (see certification basis) must be installed in the aircraft. Only handheld fire extinguishers containing Halon 2111 (BCF, CBrC1F2), or Water, or Halotron BrX (2-BTP, C3H2BrF3) are approved for use. No airplanes may have any combination of dissimilar agents installed on a particular unit.
11. CS-23 23.2005 Certification Level and Performance Level: Level 3, High Speed



## 12. SECTION D: 525C

### D.I. General

1. Data Sheet No.: EASA IM A.078
2. a) Type: 525  
b) Model: 525C  
c) Variant: 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 23.1309(a) as amended through Amendment 3, for Portable Electronic Device (PED) tolerance only.  
  
CS-ACNS, issue 2
3. Special Conditions:  
CRI B-01 Performance and Handling  
CRI B-02 Flight High Speed Characteristics  
CRI B-03 Stall Speed Determination  
CRI C-01 Sonic Fatigue





CRI C-02	Pressurised and Non-Pressurised Areas
CRI C-03	Speed Margins
CRI C-04	Yawing Manoeuvre
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:

6. Equivalent Safety Findings:

CRI C-08	Ground Loads
CRI F-57	Use of LED Lighting
CRI F-107	Pitot Heating



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)

### **D.III. Technical Characteristics and Operational Limitations**

1. 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)         |
| Wing Area | 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 engine rotor operating speeds (Maximum Continuous) | N1(fan)                                | 104.76% (100% = 16,360 rpm) |
|   | Transient (2 minute operational limit) | 105.76%                     |
|   | N2 (Gas Gen.)                          | 100.86% (100% = 37,450 rpm) |
|   | Transient (2 minute operational limit) | 101.59%                     |



Max. permissible interturbine gas temperatures:	Takeoff	855 Degrees C (5 min, 10 min OEI)
	Max. continuous	835 Degrees C
	Transient (starting 15 sec.)	1000 Degrees C
	Transient (starting 15 sec.)	900 Degrees C

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: Not applicable

10. Air Speeds:

Maximum Operating	$V_{MO}$	
	Sea Level to 8,000 feet	260 KIAS (261 KCAS)
	8,000 ft to 28,000 ft	305 KIAS (306 KCAS)

$M_{MO}$	
Above 28, 000 ft.	0.77 $M_I$ (0.774 Machcalibrated)

Maximum Operating Manoeuvring	$V_O$	185 KIAS (185 KCAS)
	* See AFM for variations with weight and altitude	

$V_B$	232 KIAS (233 KCAS upto 40,000ft)
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- Speed for max.gust intensity 0.77 M<sub>I</sub>(0.774 Mach calibrated above 40,060 ft)
- Flaps Extended  $V_{FE}$   
 Flaps 15° (takeoff and approach) 200 KIAS (200 KCAS)  
 Flaps 35° (landing) 160 KIAS (160 KCAS)  
 No Ground Flaps
- Speed Break Extended  $V_{SB}$  Any speed with or without flaps  
 Maximum Autopilot Operating Speed Any normal operating speed
- Maximum Tire Ground Speed 165 knots
- Landing Gear Operating  $V_{LO}$   
 (525C0001 and On) 200 KIAS (200 KCAS) (Extending)  
 (525C0001 and On) 200 KIAS (199 KCAS) (Retracting)
- Landing Gear Extended  $V_{LE}$  200 KIAS (199 KCAS)
- Minimum Control Ground  $V_{MCG}$  88 KIAS (88 KCAS)
- Minimum Control Air  $V_{MCA}$   
 Flaps 0° (take off) 94 KIAS (94 KCAS)  
 Flaps 15° (take off & approach) 85 KIAS (85 KCAS)
11. Maximum Operating Altitude: 13, 716 m (45,000 ft)
12. All-weather Operations Capability:  
 VFR Day and Night  
 IFR Day and Night  
 RVSM (See Note 6)  
 Flight into known icing  
 (See Limitations Section of EASA Approved Airplane Flight Manual)
13. Maximum Weights:

Aircraft Serial Number	Max. Zero Fuel Weight	Max. Ramp Weight	Max. Take-Off Weight	Max. Landing Weight
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525C0001 and On	5670 kg (12,500 lbs)	7815 kg (17,230 lbs.)	7760 kg (17,110 lbs.)	7103 kg (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)	F.S. 312.06 (21.0% MAC)
Allowable Forward C.G up to 4,309 kg (9,500 lbs)	
	F.S. 317.89 (28.0% MAC)
Aft C.G Up to 7,743 kg (17,230 lbs)	F.S. 316.23 (26.0% MAC)
Aft C.G Up to 6,577 kg (14,500 lbs)	F.S. 317.06 (27.0% MAC)
Aft C.G Up to 4,309 kg (9,500 lbs)	

\* Straight line variation between given points

Landing Gear Retracting Moment	-3386 in-lb (382.6 N-m)None
Empty Wt. C.G. Range	83.290 in. (L.E. of MAC at +294.571 in. aft of datum)
MAC	

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



Wing Flap	Down 19.0 +/-1 degrees Up 0 +/-1 degrees 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	Up 55.0 +/- 2.0 degrees
Center	Up 55.0 +/- 2.0 degrees
Outboard	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 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” for inspections, mandatory retirement life information and other requirements for continued airworthiness. “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 Revision	MMEL 525CCPMEU-00-00 or later approved

#### **D.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	33.6 lb.
Full oil	24.16 lb.
Hydraulic Fluid	25.12 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 approval from the responsible Aircraft Certification Office.
3. Reserved.
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 approved Type 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.
7. 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 30<sup>th</sup>, 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).





- 10.** Required Equipment. The basic required equipment prescribed in the applicable airworthiness requirements (see certification basis) must be installed in the aircraft. Only handheld fire extinguishers containing Halon 2111 (BCF, CBrC1F2), or Water, or Halotron BrX (2-BTP, C3H2BrF3) are approved for use. No airplanes may have any combination of dissimilar agents installed on a particular unit.



## **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  
LBS – 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



## 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



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.
Issue 17	16 August 2024	Model 525 and 525B update of Certification Basis, inclusion of SC-F23.2555-01 Lightweight flight recorder for 525 and CS-23 Amendment 6 requirements for new or changed lithium battery systems for 525 and 525B.
Issue 18	12 November 2024	The note related to placards and markings was removed. This information is already included in Operation and Service Instructions under Flight Manual section.

