

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A1WI  
Revision 30  
Textron Aviation Inc.  
525  
525A  
525B  
525C  
April 16, 2021

**TYPE CERTIFICATE DATA SHEET NO. A1WI**

This data sheet which is part of Type Certificate No. A1WI prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of Title 14 of the Code of Federal Regulations.

Type Certificate Holder                      Textron Aviation Inc.  
One Cessna Boulevard  
Wichita, Kansas 67215

Type Certificate Holder Record          Cessna Aircraft Company transferred to  
Textron Aviation Inc. on July 29, 2015

**I. Model 525 (Normal Category) S/N 525-0001 through 525-0359 Approved October 15, 1992; S/N 525-0360 through 525-0599 Approved February 16, 2000; S/N 525-0600 through 525-0684 and 525-0686 through 525-0701 Approved June 17, 2005; S/N 525-0685 and 525-0800 and On Approved December 20, 2013**

Engines                      Two Williams International, L.L.C. FJ44-1A turbofans (525-0001 through 525-0599)  
Two Williams International, L.L.C. FJ44-1AP (P/N 72100-200) turbofans  
(0600 through 525-0684 and 525-0686 through 525-0701)  
Two Williams International, L.L.C. FJ44-1AP (P/N 72100-201) turbofans  
(525-0685 and 525-0800 and On)

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

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**I. Model 525** (cont'd)

## Fuel (cont'd)

(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

## Engine Limits Static thrust standard day, sea level:

Takeoff (525-0001 through 525-0599) 1900 lb.

Takeoff (525-0600 through 525-0701 and 525-0800 and On) 1965 lb.

## Max. permissible engine rotor operating speeds (Takeoff and Maximum Continuous):

N<sub>1</sub>(fan) (525-0001 through 525-0599) 104.4% (100% = 17,245 rpm)N<sub>2</sub> (Gas Gen.) (525-0001 through 525-0599) 99.3% (100% = 41,200 rpm)N<sub>1</sub>(fan) (525-0600 through 525-0684 and 525-0686 through 525-0701) 102.64% (100% = 17,245 rpm)N<sub>1</sub>(fan) (525-0685 and 525-0800 and On) 104.7% (100% = 17,245 rpm)N<sub>2</sub> (Gas Gen.) (525-0600 through 525-0701 and 525-0800 and On) 100.0% (100% = 41,200 rpm)

## 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 and 525-0800 and On) 835 Degrees C

Transient (starting 15 sec.) (525-0600 through 525-0701 and 525-0800 and On) 1000 Degrees C

## Airspeed limitations

V<sub>mo</sub> (maximum operating)

Sea level to 30,500 ft.

M<sub>mo</sub> above 30,500 ft.

263 KIAS (260 KCAS)

0.71 M<sub>I</sub> (0.70 Mach calibrated)

**I. Model 525** (cont'd)

## Airspeed limitations (cont'd)

Va (maneuvering sea level) 10,400 lb. (525-0001 through 525-0359)	199 KIAS (198 KCAS)
10,600 lb. (525-0360 through 525-0599) <i>See AFM for variations with weight and altitude.</i>	201 KIAS (200 KCAS)
10,700 lb. (525-0600 through 525-0701 and 525-0800 and On) <i>See AFM for variations with weight and altitude.</i>	202 KIAS (201 KCAS)
Vb (speed for max. gust intensity)	217 KIAS (215 KCAS)
V <sub>FE</sub> (Flaps extended)	
15 degrees (takeoff & approach)	200 KIAS (198 KCAS)
35 degrees (landing)	161 KIAS (160 KCAS)
60 degrees (ground flaps)	prohibited in flight
V <sub>mca</sub> (Minimum control speed) Air	
(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)
(525-0600 through 525-0701 and 525-0800 and On) Flaps 15 deg.	77 KIAS (77 KCAS)
V <sub>mca</sub> (Minimum control speed) Ground	
525-0001 through 525-0359	95 KIAS (93 KCAS)
525-0360 through 525-0599	93 KIAS (93 KCAS)
525-0600 through 525-0701 and 525-0800 and On	89 KIAS (92 KCAS)
V <sub>LO</sub> (landing gear operating)	
Extending (525-0001 and On)	186 KIAS (185 KCAS)
Retracting (525-0001 through 525-0457)	186 KIAS (183 KCAS)
Retracting (525-0458 through 525-0701 and 525-0800 and On)	175 KIAS (172 KCAS)
V <sub>LE</sub> (landing gear extended)	186 KIAS (183 KCAS)
V <sub>SB</sub> (speed brakes extended)	Any speed with or without flaps
Maximum autopilot operating speed	
Sea level to 30,500 ft.	263 KIAS (260 KCAS)
Above 30,500 ft.	0.71 M <sub>I</sub> (0.70 Mach calibrated)
Maximum tire ground speed	165 knots

## C.G. Range (Landing Gear Extended) Design C.G. Limits:

Applicable to airplanes S/N 525-0001 through 525-0359:

Forward Limits: Linear variation from 244.14 in. aft of datum (22.29% MAC) at 10,500 lb. to 244.04 in. aft of datum (22.14% MAC) at 10,400 lb. to 242.43 in. aft of datum (19.81% MAC) at 8,800 lb.; Linear variation from 242.43 in. aft of datum (19.81% MAC) at 8,800 lb. to 240.14 in. aft of datum (16.50% MAC) at 7,700 lb.; 240.14 in. aft of datum (16.50% MAC) at 7,700 lb. to 6,000 lb.

Aft Limits: 248.78 in. aft of datum (29.00 % MAC) at 10,500 lb. to 6,000 lb.

**I. Model 525** (cont'd)**C.G. Range (Landing Gear Extended) Design C.G. Limits: (cont'd)**

Applicable to airplanes S/N 525-0360 through 525-0599:

Forward Limits: Linear variation from 244.34 in. aft of datum (22.58% MAC) at 10,700 lb. to 244.24 in. aft of datum (22.43% MAC) at 10,600 lb. to 242.43 in. aft of datum (19.81% MAC) at 8,800 lb.; Linear variation from 242.43 in. aft of datum (19.81% MAC) at 8,800 lb. to 240.14 in. aft of datum (16.50% MAC) at 7,700 lb.; 240.14 in. aft of datum (16.50% MAC) at 7,700 lb. to 6,000 lb.

Aft Limits: 248.78 in. aft of datum (29.00 % MAC) at 10,700 lb. to 6,000 lb.

Applicable to airplanes S/N 525-0600 through 525-0701 and 525-0800 and On:

Forward Limits: Linear variation from 244.44 in. aft of datum (22.72% MAC) at 10,800 lb. to 244.34 in. aft of datum (22.58% MAC) at 10,700 lb. to 242.43 in. aft of datum (19.81% MAC) at 8,800 lb.; Linear variation from 242.43 in. aft of datum (19.81% MAC) at 8,800 lb. to 240.14 in. aft of datum (16.50% MAC) at 7,700 lb.; 240.14 in. aft of datum (16.50% MAC) at 7,700 lb. to 6,000 lb.

Aft Limits: 248.43 in. aft of datum (28.50 % MAC) at 10,800 lb. to 6,000 lb.

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)

Maximum Weight

	S/N 525-0001 through 525-0359	S/N 525-0360 through 525-0599	S/N 525-0600 through 525-0684 & 525-0686 through 525-0701	S/N 525-0685 and 525-0800 & On
Takeoff	10,400 lb.	10,600 lb.	10,700 lb.	10,700 lb.
Landing	9,700 lb.	9,800 lb.	9,900 lb.	9,900 lb.
Zero Fuel	8,400 lb.	8,400 lb.	8,400 lb.	8,500 lb.
Ramp	10,500 lb.	10,700 lb.	10,800 lb.	10,800 lb.

Minimum Crew for all Flights (See NOTE 5 for cockpit equipment/arrangement restrictions): One pilot (in the left pilot seat) plus additional equipment as specified in the Kinds of Operations Equipment List (KOEL) contained in the Limitations Section of the FAA Approved Airplane Flight Manual (AFM)

OR

One pilot and one copilot

No. of Seats Maximum 8 occupants. Airplane must be equipped as required by operating rules, appropriate to the number of passenger seats.

Maximum Baggage (525-0001 through 525-0599)

Nose compartment 400 lb. ( + 74.0 in. aft of datum)  
Aft cabin 100 lb. ( +270.70 in. aft of datum)  
Tailcone 325 lb. ( +356.50 in. aft of datum)

(525-0600 through 525-0701 and 525-0800 and On)

Nose compartment 400 lb. ( + 74.0 in. aft of datum)  
Tailcone 325 lb. ( +356.50 in. aft of datum)

**I. Model 525** (cont'd)

Fuel Capacity (usable)	(525-0001 through 525-0684 and 525-0686 through 525-0701) Total usable fuel 3,220 lb. (477 gal). Two wing tanks with 1,610 lb. (238.5 gal) usable each (see NOTE 1 for unusable); +252.99 in. aft of datum		
	(525-0685 and 525-0800 and On) Total usable fuel 3,296 lb. (492 gal). Two wing tanks with 1,648 lb. (246 gal) usable each (see NOTE 1 for unusable); +253.0 in. aft of datum		
Oil Capacity (usable)	(525-0001 through 525-0599) Tank mounted on each engine: 2.0 quarts usable each engine; +312.30 in. aft of datum; (see NOTE 1)		
	(525-0600 through 525-0701 and 525-0800 and On) Tank mounted on each engine: 3.4 quarts usable each engine; +314.74 in. aft of datum; (see NOTE 1)		
Maximum Operating Altitude	41,000 ft.		
Control Surface Movements			
Elevator	Up	20 +0/-1 degrees (525-0001 through 525-0599)	
	Up	18.5 +0/-0.5 degrees (525-0600 through 525-0701 and 525-0800 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./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 525-0800 and On)			
See Airplane Maintenance Manual for rigging instructions.			
Serial Nos. Eligible	525-0001 through 525-0701 and 525-0800 and On		
Datum	94.0 in. forward of the front face of the forward pressure bulkhead.		
Leveling Means	Longitudinal: Left hand upper floorboard aft of FS 151.00. Lateral: Left hand and right hand upper floorboard aft of FS 152.00.		

**I. Model 525** (cont'd)**Certification Basis:**

1. (a) 525-0001 through 525-0599:  
14 CFR Part 23 effective February 1, 1965, as amended by Amendments 23-1 through 23-38, and 23-40
- (b) 525-0600 through 525-0684 and 525-0686 through 525-0701:  
14 CFR Part 23 effective February 1, 1965, as amended by Amendments 23-1 through 23-38, and 23-40; except the following paragraphs applicable for Engines and FADECs:  
  
14 CFR §§ 23.611, 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.
- (c) 525-0685 and 525-0800 and On:  
14 CFR Part 23 effective February 1, 1965, as amended by Amendments 23-1 through 23-38, and 23-40; except the following paragraphs applicable for Engines and FADECs:  
  
14 CFR §§ 23.611, 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.

**I. Model 525** (cont'd)**Certification Basis:** (cont'd)**Additions:**

Reg. No.	Title	Amendment Level	Comments
23.441	Maneuvering loads	23-48	Winglets only
23.443	Gust loads	23-48	Winglets only
23.445	Outboard fins	23-42	Winglets only
23.575	Inspections and other procedures	23-48	Winglets only
23.621	Casting factors	23-45	Entire aircraft
23.867	Lightning protection of structure	23-49	Winglets only
23.929	Engine installation ice protection	23-51	Entire aircraft
23.953	Fuel system independence	23-43	Entire aircraft
23.957	Flow between interconnected tanks	23-43	Entire aircraft
23.959	Unusable fuel supply	23-51	Entire aircraft
23.971	Fuel tank sump	23-43	Entire aircraft
23.975	Fuel tank vents and carburetor vapor vents	23-51	Entire aircraft
23.977	Fuel tank outlet	23-43	Entire aircraft
23.991	Fuel pumps	23-43	Entire aircraft
23.993	Fuel system lines and fitting	23-43	Entire aircraft
23.997	Fuel strainer or filter	23-43	Entire aircraft
23.999	Fuel system drains	23-43	Entire aircraft
23.1001	Fuel jettisoning system	23-51	Entire aircraft
23.1306	Lightning protection	23-61	For changed systems only
23.1308	High-Intensity Radiated Fields (HIRF) protection	23-57	For changed systems only
23.1543	Instrument markings: general	23-50	Entire aircraft
23.1553	Fuel quantity indicator	23-50	Entire aircraft
23.1555	Control markings	23-62	Entire aircraft
23.1557	Miscellaneous markings and placards	23-45	Entire aircraft
23.1559	Operating limitations placard	23-50	Entire aircraft
23.1563	Airspeed placards	23-50	Entire aircraft
23.1567	Flight maneuver placard	23-50	Entire aircraft

2.
  - (a) 525-0001 through 525-0599  
14 CFR Part 36 effective December 1, 1969, Noise standards, as amended by Amendments 36-1 through 36-18
  - (b) 525-0600 through 525-0701 and 525-0800 and On  
14 CFR Part 36 effective December 1, 1969, Noise standards, as amended by Amendments 36-1 through 36-28
3.
  - (a) 525-0001 through 525-0599  
14 CFR Part 34 effective September 10, 1990, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes, Amendment Original.
  - (b) 525-0600 through 525-0684 and 525-0686 through 525-0701  
14 CFR Part 34 effective September 10, 1990, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes, as amended by Amendments 34-1 through 34-3.
  - (c) 525-0685 and 525-0800 and On  
14 CFR Part 34 effective September 10, 1990, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes, as amended by Amendments 34-1 through 34-5.

**I. Model 525** (cont'd)**Certification Basis:** (cont'd)

4. Compliance with the Noise Control Act of 1972;
5. Special Conditions as follows:
  - (a) 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 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 procedures, performance information, airspeed indicator, effects of contamination on Natural Laminar Flow airfoils, definitions, and AFM approved information.
6. Exemption as follows:
  - (a) Exemption No. 5759 granted to use a relaxed "Dutch Roll" damping criteria above 18,000 ft. in lieu of damping criteria of 14 CFR § 23.181(b).
7. Equivalent Level of Safety (ELOS) as follows (applicable to airplanes S/N 525-0360 through 525-0701 equipped with Collins Proline 21 electronic displays of engine instruments):
  - (a) Number ACE-00-01: 14 CFR §§ 23.1305(c)(2)(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.  
  
(Applicable to airplanes S/N 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 ft. 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.
8. Compliance with ice protection has been demonstrated in accordance with 14 CFR §§ 23.1416 and 23.1419.

Application for type certificate dated February 14, 1990. Type Certificate A1WI issued October 15, 1992, obtained by the manufacturer using Delegation Option Authorization (DOA) Procedures of Part 21 of Title 14 of the Code of Federal Regulations. The Model 525 is defined by Cessna Airplane Assembly Drawing Number 6300000.

**Production Basis:**

Production Certificate No. 4 issued and DOA No. DOA-230428-CE (CE-3) authorized to issue Airworthiness Certificates under DOA Procedures of Part 21 of Title 14 of the Code of Federal Regulations through January 4, 2009.

Production Certificate No. 4 issued and Organization Designation Authorization (ODA) No. ODA-100129-CE authorized to issue Airworthiness Certificates under ODA procedures of Part 21 of Title 14 of the Code of Federal Regulations effective January 5, 2009.

**Equipment:**

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



**I. Model 525** (cont'd)

NOTE 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 certificated 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 525-0800 and On)	15.6 lb.
Hydraulic Fluid (525-0001 through 525-0599)	27.5 lb.
Hydraulic Fluid (525-0600 through 525-0701 and 525-0800 and On)	16.78 lb.
Anti-ice Fluid (525-0001 and On)	3.4 lb.

NOTE 2. 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.

NOTE 3. See Maintenance Manual, Chapter 4, "Airworthiness Limitations" for inspections, mandatory retirement life information, and other requirements for continued airworthiness.

NOTE 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.

NOTE 4. (cont'd) 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.

NOTE 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 approval from the responsible Aircraft Certification Office.

**I. Model 525** (cont'd)

NOTE 6. Certain airplane serial numbers meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

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 525-0684 and 525-0686 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 Cessna factory will be identified in the individual airplane equipment list.

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

NOTE 7. The Model 525 (S/N 525-0600 through 525-0684 and 525-0686 through 525-0701 with engine P/N 72100-200) 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 TD4020WI-A, dated April 27, 2005, from Standards Office, Small Airplane Directorate and Standards Office, Engine and Propeller Directorate

NOTE 8. The following serials are manufactured under the name Cessna Aircraft Company: 525-0001 through 525-0874, 525-0876, 525-0879 and 525-0880.

NOTE 9. Company name change effective 7/29/15. The following serials are manufactured under the name Textron Aviation Inc.: 525-0875, 525-0877, 525-0878, 525-0881 and On.

**II. Model 525A (Normal Category) S/N 525A0001 through 525A0299 Approved June 21, 2000; S/N 525A0300 and On Approved September 30, 2005**

Engines Two Williams International L.L.C. FJ44-2C turboprops (525A0001 through 525A0299)  
Two Williams International, L.L.C. FJ44-3A-24 turboprops (525A0300 and On)

Fuel Commercial kerosene Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8, RT or TS-1. (525A0001 through 525A0299)  
Commercial kerosene Jet A, Jet A-1, JP-5, JP-8, Jet 3, RT or TS-1. (525A0300 and On)

Engine Limits Static thrust standard day, sea level

Takeoff (525A0001 through 525A0299) 2,400 lb.

Takeoff (525A0300 and On) 2,490 lb.

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 rpm)

N<sub>2</sub> (Gas Gen.) (525A0300 and On) 100.00% (100% = 41,200 rpm)

**II. Model 525A** (cont'd)

## 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

## Airspeed limitations

V <sub>mo</sub> (maximum operating)	
Sea level to 8,000 ft. (525A0001 and On)	260 KIAS (260 KCAS)
8,000 ft. to 29,300 ft. (525A0001 through 525A0299)	275 KIAS
(Varies linearly between 274 KCAS and 272 KCAS)	
8,000 ft. to 29,124 ft. (525A0300 and On)	278 KIAS
(Varies linearly between 277 KCAS and 275 KCAS)	
M <sub>mo</sub> above 29,300 ft. (525A0001 through 525A0299)	0.72 M <sub>I</sub> (0.707 Mach calibrated)
M <sub>mo</sub> above 29,124 ft. (525A0300 and On)	0.737 M <sub>I</sub> (0.722 Mach calibrated)
V <sub>a</sub> (maneuvering sea level, 12,375 lb.)	
(525A0001 through 525A0299)	197 KIAS (197 KCAS)
V <sub>a</sub> (maneuvering sea level, 12,500 lb.) (525A0300 and On)	196 KIAS (196 KCAS)
<i>See AFM for variations with weight and altitude.</i>	
V <sub>b</sub> (speed for max. gust intensity)	217 KIAS (217 KCAS)
V <sub>FE</sub> (Flaps extended)	
15 degrees (takeoff & 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 (140 KCAS)
(ground flaps) (Emergency Only)	
V <sub>mca</sub> (Minimum control speed) Air	
0 degrees (takeoff) (525A0001 through 525A0299)	89 KIAS (90 KCAS)
15 degrees (takeoff & approach) (525A0001 through 525A0299)	81 KIAS (82 KCAS)
0 degrees (takeoff) (525A0300 and On)	83 KIAS (84 KCAS)
15 degrees (takeoff & approach) (525A0300 and On)	76 KIAS (77 KCAS)
Airspeed limitations (continued)	
V <sub>mcg</sub> (Min control speed) Ground (525A0001 through 525A0299)	89 KIAS (90 KCAS)
V <sub>mcg</sub> (Min control speed) Ground (525A0300 and On)	79 KIAS (80 KCAS)
V <sub>LO</sub> (landing gear operating)	
Extend	200 KIAS (200 KCAS)
Retract	200 KIAS (199 KCAS)
V <sub>LE</sub> (landing gear extended) (525A0001 through 525A0299)	200 KIAS (199 KCAS)
V <sub>LE</sub> (landing gear extended) (525A0300 and On)	200 KIAS (199 KCAS)
V <sub>SB</sub> (speed brakes extended)	Any speed with or without flaps
Maximum autopilot operating speed	Any normal operating speed
Maximum tire ground speed	165 knots

C.G. Range (Landing Gear Extended) Design C.G. Limits

**II. Model 525A** (cont'd)

Applicable to airplanes S/N 525A0001 through 525A0299:

Forward Limits: Linear variation from 277.03 in. aft of datum (19.66% MAC) at 12,500 lb. to 276.89 in. aft of datum (19.46% MAC) at 12,375 lb. to 273.33 in. aft of datum (14.50% MAC) at 9,200 lb.; 273.33 in. aft of datum (14.50% MAC) at 9,200 lb. to 8,500 lb.; Linear variation from 273.33 in. aft of datum (14.50% MAC) at 8,500 lb. to 277.99 in. aft of datum (21.00% MAC) at 7,500 lb.

Aft Limits: 283.72 in. aft of datum (29.00% MAC) at 12,500 lb. to 7,500 lb.

Applicable to airplanes S/N 525A0300 and On:

Forward Limits: Linear variation from 277.17 in. aft of datum (19.86% MAC) at 12,625 lb. to 277.03 in. aft of datum (19.66% MAC) at 12,500 lb. to 273.33 in. aft of datum (14.50% MAC) at 9,200 lb.; 273.33 in. aft of datum (14.50% MAC) at 9,200 lb. to 8,500 lb.; Linear variation from 273.33 in. aft of datum (14.50% MAC) at 8,500 lb. to 277.99 in. aft of datum (21.00% MAC) at 7,500 lb.; 277.99 in. aft of datum (21.00% MAC) at 7,500 lb.

Aft Limits: 283.73 in. aft of datum (29.00% MAC) at 12,625 lb. to 7,500 lb.

Landing Gear retracting moment (+687.27) in-lb.

Empty Wt. C.G. Range None

MAC 71.720 in (L.E. of MAC at +262.926 in. aft of datum)

Maximum Weights	525A0001 through 525A0299	525A0300 and On
Takeoff	12,375 lb.	12,500 lb.
Landing	11,500 lb.	11,525 lb.
Zero Fuel	9,300 lb.	9,700 lb.
Ramp	12,500 lb.	12,625 lb.

Minimum Crew for all Flights (see NOTE 5 for cockpit equipment/arrangement restrictions):

One pilot (in the left pilot seat) plus additional equipment as specified in the Kinds of Operations Equipment List (KOEL) contained in the Limitations Section of the FAA Approved AFM

OR

One pilot and one copilot

No. of Seats Maximum ten (two crew plus eight passenger seats)

Maximum Baggage 525A0001 through 525A0299:

Nose compartment	400 lb. (+ 74.0 in. aft of datum)
Aft cabin	100 lb. (+301.7 in. aft of datum)
Tailcone	600 lb. (+384.60 in. aft of datum)

525A0300 and On:

Nose compartment	400 lb. (+ 74.0 in. aft of datum)
Tailcone	600 lb. (+384.60 in. aft of datum)

Fuel Capacity (usable) Total usable fuel 3,961 lb. (586.8 gal).  
Two wing tanks with 1,980.5 lb. (293.4 gal) usable each;  
+288.68 in. aft of datum (see NOTE 1 for unusable)

**II. Model 525A** (cont'd)

Oil Capacity (usable) (525A0001 through 525A0299) Tank mounted on each engine: 2.0 quarts usable each engine; +364.3 in. aft of datum (see NOTE 1)

(525A0300 and On) Tank mounted on each engine: 3.75 quarts usable each engine; +371.44 in. aft of datum (see NOTE 1)

Maximum Operating Altitude 45,000 ft.

**Control Surface Movements**

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	Neutral position (TE Up)	2.0 +/- 0.5 degrees
	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
	Landing	35 +/- 1 degrees
	Ground	60 +/- 2 degrees
Speed Brakes - Upper	Up	0 to 49 +/- 2 degrees
Speed Brakes - Lower	Down	0 to 68 +/- 2 degrees
Thrust Attenuators	Stow	-4.5 +/- 0.3 degrees (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

Serial Nos. Eligible 525A0001 and On

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

Leveling Means

Lateral: Place 525 Leveling Tool across inboard crew seat rails at approximately FS 148. Ensure Leveling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Leveling Tool with base parallel to the long axis of the Leveling Tool.

Longitudinal: Place 525 Leveling Tool across inboard crew seat rails at approximately FS 148. Ensure Leveling Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Leveling Tool with base perpendicular to the long axis of the Leveling Tool at BL 0.

**II. Model 525A** (cont'd)**Certification Basis:**

1. (a) 525A0001 and On  
14 CFR Part 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:
  - (b) Additions (525A0001 and On):

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;
  - (c) Addition for Engines and FADECs installation only (525A0300 and On):

14 CFR §§ 23.777, 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.
2. (a) 525A0001 through 525A0299:  
14 CFR Part 36 effective December 1, 1969, Noise Standards, as amended by Amendments 36-1 through 36-22.
  - (b) 525A0300 and On:  
14 CFR Part 36 effective December 1, 1969, Noise Standards, as amended by Amendments 36-1 through 36-28.
3. 14 CFR Part 34 effective September 10, 1990, Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes, as amended by Amendments 34-1 through 34-3.

**II. Model 525A** (cont'd)**Certification Basis:** (cont'd)

4. Special Conditions as follows:
  - (a) 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.
  - (b) 23-102-SC, High Altitude Operation (45,000 ft.).  
Additional requirements for ventilation, air conditioning, pressurized cabins, oxygen equipment and supply, supplemental oxygen, oxygen distribution and equipment. (See NOTE 6.)
- (5) Exemption Number 5759 granted to use a relaxed "Dutch Roll" damping criteria above 18,000 ft. in lieu of damping criteria of 14 CFR § 23.181(b).
- (6) Equivalent level of safety as follows:
  - (a) Number ACE-00-01: 14 CFR §§ 23.1305(c)(2)(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.
  - (b) Number ACE-99-07: 14 CFR § 23.841(b)(6), Cabin Pressurization – High Altitude Takeoff and Landing Operations.
  - (c) Number ACE-00-05; 14 CFR § 23.841(a), to allow small temporary cabin altitude excursions above 15,000 ft. in the event of any probable pressurization system failure."
- (7) Compliance with ice protection has been demonstrated in accordance with 14 CFR §§ 23.1416 and 23.1419.

Application to amend type certificate dated May 14, 1998. Type Certificate A1WI amended June 21, 2000, obtained by the manufacturer using Delegation Option Authorization Procedures of Part 21 of Title 14 of the Code of Federal Regulations. The Model 525A is defined by Cessna Airplane Assembly Drawing Number 6300001.

**Production Basis:**

Production Certificate No. 4 issued and Delegation Option Authorization (DOA) No. DOA-230428-CE (CE-3) authorized to issue Airworthiness Certificates under DOA Procedures of Part 21 of Title 14 of the Code of Federal Regulations through January 4, 2009.

Production Certificate No. 4 issued and Organization Designation Authorization (ODA) No. ODA-100129-CE authorized to issue Airworthiness Certificates under ODA procedures of Part 21 of Title 14 of the Code of Federal Regulations effective January 5, 2009.

**Equipment:**

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

**II. Model 525A** (cont'd)

NOTE 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 AFM at the time of original certification.

The certificated 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)	18.40 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.

NOTE 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.

NOTE 3. See Maintenance Manual Chapter 4, "Airworthiness Limitations" for mandatory component retirement life information.

NOTE 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 Part 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.

NOTE 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 Aircraft Certification Office.

NOTE 6. Model 525A airplanes have been approved for high altitude operations (altitudes above 41,000 ft.), 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.



**II. Model 525A** (cont'd)

NOTE 7. Certain airplane serial numbers meet the initial airworthiness requirements for operation in RVSM airspace.

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.
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 Cessna factory will be identified in the individual airplane equipment list. Each operator must obtain RVSM operating approval directly from the FAA.

NOTE 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.

NOTE 9. The following serials are manufactured under the name Cessna Aircraft Company:  
525A0001 through 525A0524.

NOTE 10. Company name change effective 7/29/15. The following serials are manufactured under the name Textron Aviation Inc.: 525A0525 and On.

**III. Model 525B (Commuter Category) S/N 525B0001 through 525B0056 and 525B0058 through 525B0450**  
**Approved October 15, 2004;**  
**S/N 525B0057 and 525B0451 and On Approved September 4, 2014**

Engines Two Williams International, L.L.C. FJ44-3A turbofans

Fuel Commercial kerosene Jet A, Jet A-1, JP-5, JP-8, Jet 3, RT or TS-1.

Engine Limits Static thrust standard day, sea level

Takeoff 2,820 lb.

Max. permissible engine rotor operating speeds (Takeoff and Maximum Continuous):

N <sub>1</sub> (fan)	102.78%	(100% = 18,000 r.p.m.)
N <sub>2</sub> (Gas Gen.)	100.00%	(100% = 41,200 r.p.m.)

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

Airspeed limitations

V <sub>mo</sub> (maximum operating)	
Sea level to 8,000 ft.	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)
V <sub>a</sub> (maneuvering sea level at 13,870 lb.)	207 KIAS (205 KCAS)

*See AFM for variations with weight and altitude.*

**III. Model 525B** (cont'd)

V <sub>b</sub> (speed for max. gust intensity)	230 KIAS (228 KCAS)
V <sub>FE</sub> (Flaps extended)	
15 degrees (takeoff & approach)	200 KIAS (198 KCAS)
35 degrees (landing)	161 KIAS (158 KCAS)
55 degrees (ground flaps)	prohibited in flight
Maximum speed with flaps failed to 55 degrees (ground flaps) (Emergency Only)	140 KIAS (138 KCAS)
V <sub>MCA</sub> (Minimum control speed) Air	
0 degrees (takeoff)	88 KIAS (88 KCAS)
15 degrees (takeoff & approach)	81 KIAS (81 KCAS)
V <sub>MCG</sub> (Minimum control speed) Ground	89 KIAS (88 KCAS)
V <sub>LO</sub> (landing gear operating)	
Extend	200 KIAS (198 KCAS)
Retract	200 KIAS (195 KCAS)

## Airspeed limitations (cont'd)

V <sub>LE</sub> (landing gear extended)	200 KIAS (195 KCAS)
V <sub>SB</sub> (speed brakes extended)	Any speed with or without flaps
Maximum autopilot operating speed	Any normal operating speed
Maximum tire ground speed	165 knots

## C.G. Range (Landing Gear Extended) Design C.G. Limits:

Forward Limits: Linear variation from 298.90 in. aft of datum (21.20% MAC) at 14,070 lb. to 293.90 in. aft of datum (14.50% MAC) at 9,700 lb.; 293.90 in. aft of datum (14.50% MAC) at 9,700 lb. to 9,000 lb.; linear variation from 293.90 in. aft of datum (14.50% MAC) at 9,000 lb. to 298.70 in. aft of datum (21.00% MAC) at 8,000 lb.

Aft Limits: 304.70 in. aft of datum (29.00% MAC) at 14,070 lb. to 13,000 lb.; linear variation from 304.70 in. aft of datum (29.00% MAC) at 13,000 lb. to 302.50 in. aft of datum (26.00% MAC) at 8,000 lb.

Landing Gear retracting moment +518.64 in-lb.

Empty Wt. C.G. Range None

MAC 74.817 in. (L.E. of MAC at +283.01 in. aft of datum)

## Maximum Weight

	S/N 525B0001 through 525B0056 & 525B0058 through 525B0450	S/N 525B0057 & 525B0451 & On
Takeoff	13,870 lb.	13,870 lb.
Landing	12,750 lb.	12,750 lb.
Zero Fuel	10,510 lb.	10,675 lb.
Ramp	14,070 lb.	14,070 lb.

Minimum Crew for all Flights (see NOTE 5 for cockpit equipment/arrangement restrictions):

One pilot (in the left pilot seat) plus additional equipment as specified in the Kinds of Operations Equipment List (KOEL) contained in the Limitations Section of the FAA Approved AFM

OR

One pilot and one copilot

**III. Model 525B** (cont'd)

No. of Seats	Maximum ten (two crew plus eight passenger seats)		
Maximum Baggage	(525B0001 through 525B0207)		
	Nose Compartment	400 lb. ( +74.00 in. aft of datum)	
	Aft cabin	100 lb. ( +330.20 in. aft of datum)	
	Tailcone	600 lb. ( +414.60 in. aft of datum)	
	(525B0208 and On)		
	Nose Compartment	400 lb. ( +74.00 in. aft of datum)	
	Tailcone	600 lb. ( +414.60 in. aft of datum)	
Fuel Capacity (usable)	Total usable fuel 4,710 lb. (703 gal)		
	Two wing tanks with 2,355 lb. (351 gal) usable each; +310.10 in. aft of datum (see NOTE 1 for unusable)		
Oil Capacity (usable)	Tank mounted on each engine: 3.75 US quarts usable each engine; +401.44 in. aft of datum; (see NOTE 1)		
Maximum Operating Altitude	45,000 ft.		
Control Surface Movements			
Elevator	Up	20.5 ± 0.5 degrees	
	Down	15.0 ± 1.0 degrees	
Elevator Trim Tab	Up	9.0 ± 1.0 degrees	
	Down	17.0 ± 1.0 degrees	
Rudder	Right	27.0 ± 1.0 degrees	
	Left	27.0 ± 1.0 degrees	
Rudder Trim Tab	Right	20.0 ± 1.0 degrees	
	Left	20.0 ± 1.0 degrees	
Aileron	Up	23.5 ± 1.0 degrees	
	Down	20.5 ± 1.0 degrees	
Aileron Trim Tab	Up	20.0 ± 1.0 degrees	
	Down	18.0 ± 1.0 degrees	
Wing Flap	U	0 ± 1.0 degrees	
	T.O./Appr.	15 ± 1.0 degrees	
	Land	35 ± 1.0 degrees	
	Ground	55 ± 2.0 degrees	
Speed Brakes	– Upper Up	0 to 49.0 ± 2.0 degrees	
	– Lower Down	0 to 68.0 ± 2.0 degrees	
	See Airplane Maintenance Manual for rigging instructions.		
Serial Nos. Eligible	525B0001 and On		
Datum	94.0 in. forward of the front face of the forward pressure bulkhead.		
Leveling Means	<p>Lateral: Place 525 Leveling Tool across inboard crew seat rails at approximately FS 148. Ensure Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Leveling Tool with base parallel to the long axis of the Leveling Tool. Adjust the main gear jack to level aircraft.</p> <p>Longitudinal: Place 525 Leveling Tool across inboard crew seat rails at approximately FS 148. Ensure Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Leveling Tool with base perpendicular to the long axis of the Leveling Tool. Adjust the nose gear jack to level aircraft.</p>		

**III. Model 525B** (cont'd)**Certification Basis:**

1. 14 CFR Part 23 effective February 1, 1965, as amended by Amendments 23-1 through 23-54;
  - (a) Exceptions:
 

14 CFR §§ 23.773, 23.775, 23.807(e), 23.865, 23.933, 23.1309, 23.1311, 23.1419, 23.1431, 23.1441, and 23.1453 as amended through Amendment 23-40;

14 CFR § 23.1451 as amended through Amendment 23-40 for 525B0001 through 525B0056 and 525B0058 through 525B0450;

§ 23.1309 as amended through Amendment 23-49 for the engine FADEC installation only;

§ 23.562 as amended through Amendment 23-54 for emergency landing dynamic conditions for each seat/restraint system as required by Exemption No. 7981

- (b) Additions (for 525B0057 and 525B0451 and On):

Regulation No.	Title	Amendment Level
23.1306	Lightning Protection	23-62
23.1308	High-Intensity Radiated Fields (HIRF) Protection	23-62
23.1451	Fire Protection for Oxygen Equipment	23-62
23.1555	Control Markings	23-62

2. 14 CFR Part 34 of the Code of Federal Regulations effective September 10, 1990, as amended by amendment 34-1 through 34-3;
3. 14 CFR Part 36 of the Code of Federal Regulations effective December 1, 1969, as amended by amendment 36-1 through 36-28;
4. Special Conditions as follows:
  - (a) 23-ACE-55, paragraphs 2, 3, 4, and 37.
  - (b) 23-102-SC, High Altitude Operation (45,000 ft.). Additional requirements for ventilation, air conditioning, pressurized cabins, oxygen equipment and supply, supplemental oxygen, oxygen distribution and equipment. (See NOTE 6.)
  - (c) 23-145-SC, Flight Performance, Flight Characteristics, and Operating Limitations. Special Conditions SC 23.51 Takeoff speeds; SC 23.63 Climb: General; SC 23.67 Climb: One engine inoperative; SC 23.149 Minimum control speed; SC 23.161 Trim; SC 23.173 Static longitudinal stability; SC 23.177 Static directional and lateral stability; SC 23.201 Wings level stall; SC 23.203 Turning flight and accelerated turning stalls; SC 23.251 Vibration and buffeting; SC 23.253 High speed characteristics; SC 23.1505 Airspeed limitations; SC 23.1545 Airspeed indicator; SC 23.1583 Operating limitations; and SC 23.1585 Operating procedures.
5. Exemption as follows:
  - (a) Exemption No. 7981 to permit certification in the Commuter category.
  - (b) Exemption No. 8323 for use of a relaxed "Dutch Roll" damping criteria above 18,000 ft. in lieu of damping criteria of 14 CFR § 23.181(b).

**III. Model 525B** (cont'd)**Certification Basis:** (cont'd)

6. Equivalent level of safety as follows:
- (a) 525B0001 through 525B0056 and 525B0058 through 525B0450:  
 Number ACE-00-01A: 14 CFR §§ 23.1305(c)(2)(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.  
 525B0057 and 525B0451 and On:  
 Number ACE-14-12: 14 CFR §§ 23.1549(a)(b)(c), Electronic Display of the Engine Parameters; N<sub>2</sub>, Oil Pressure, Oil Temperature, and Fuel Flow, on a Garmin 3000 Integrated Flight Deck.
  - (b) Number ACE-99-07A: 14 CFR § 23.841(b)(6), Cabin Pressurization – High Altitude Takeoff and Landing Operations.
  - (c) Number ACE-00-05A: 14 CFR § 23.841(a), to allow small temporary cabin altitude excursions above 15,000 ft. in the event of any probable pressurization system failure.
  - (d) Number ACE-02-18: 14 CFR § 23.783(f)(1), Passenger Entry Door Opening Dimensions.
  - (e) Number ACE-02-20: 14 CFR § 23.815(b), Cabin Aisle Width.
  - (f) Number ACE-03-07: 14 CFR § 23.853(d)(2) No Smoking Placard Lettering Size.
  - (g) Number ACE-04-06: 14 CFR § 23.1447(e) Passenger Oxygen Dispensing Units.
  - (h) Number ACE-11-07: 14 CFR § 23.855(c)(3) Cargo and Baggage Compartment Fire Protection.  
 Note: No Model 525B Aircraft will be configured to meet ELOS ACE-11-07.

14 CFR § 23.1311 Electronic display instrument systems not complied with. This requirement is addressed in Special Condition 23-ACE-55, Paragraph 4.

Compliance with ice protection has been demonstrated in accordance with 14 CFR §§ 23.1416 and 23.1419. (See NOTE 9).

Application to amend type certificate was dated February 7, 2002. Type Certificate A1WI amended October 15, 2004, obtained by the manufacturer using Delegation Option 'Authorization Procedures of Part 21 of Title 14 of Code of Federal Regulations. The Model 525B is defined by Cessna Assembly Drawing Number 6300300.

**Production Basis:**

Production Certificate No. 4 issued and Delegation Option Authorization (DOA) Manufacturer No. DOA-230428-CE (CE-3) authorized to issue Airworthiness Certificates under DOA Procedures of Part 21 of the Federal Aviation Regulations through January 4, 2009.

Production Certificate No. 4 issued and Organization Designation Authorization (ODA) No. ODA-100129-CE authorized to issue Airworthiness Certificates under ODA procedures of Part 21 of Title 14 of the Code of Federal Regulations effective January 5, 2009.

**Equipment:**

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

NOTE 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 AFM at the time of original certification.

The certificated empty weight must include:

Unusable fuel	49.68 lb.
Full oil	17.48 lb.
Hydraulic Fluid	15.90 lb.
Anti-ice Fluid	3.40 lb.

**III. Model 525B** (cont'd)

NOTE 2. 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.

NOTE 3. See Maintenance Manual, Chapter 4, "Airworthiness Limitations" for mandatory component retirement life information.

NOTE 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 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 casing it to open. Any other configuration must be verified by dynamic test.

NOTE 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 Aircraft Certification Office.

NOTE 6. Model 525B airplanes have been approved for high altitude operations (altitudes above 41,000 ft.), 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.

NOTE 7. Airplane Serial Numbers identified below meet the airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

S/N 525B0001 through 525B0056 and 525B0058 through 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 525B0451 and On	All airplanes are equipped with Garmin G3000.

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

NOTE 8. 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.

NOTE 9. Flight into known icing is approved for the following Serial Number effectivity: S/N 525B0001, 525B0002 thru 525B0012 incorporating Cessna Service Bulletin SB525B-30-01, and 525B0013 and On.

**III. Model 525B** (cont'd)

NOTE 10. The following serials are manufactured under the name Cessna Aircraft Company:  
525B0001 through 525B0473.

NOTE 11. Company name change effective 7/29/15. The following serials are manufactured under the name  
Textron Aviation Inc.: 525B0474 and On.

**IV. Model 525C (Commuter Category) Approved March 12, 2010**

Engines Two Williams International, L.L.C. FJ44-4A turboprops

Fuel Commercial kerosene Jet A, Jet A-1, JP-5, JP-8, Jet 3, RT or TS-1.

Engine Limits Static thrust standard day, sea level

Takeoff 3,621 lb.

Max. permissible engine rotor operating speeds (Takeoff and Maximum Continuous):

N <sub>1</sub> (fan)	104.76%	(100% = 16,360 r.p.m.)
Transient (2 minute operational limit)	105.76%	
N <sub>2</sub> (Gas Gen.) Max continuous	100.86%	(100% = 37,450 r.p.m.)
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 30 sec.)	900 Degrees C

Airspeed limitations

V <sub>mo</sub> (maximum operating)	
Sea level to 8,000 ft.	260 KIAS (261 KCAS)
8,000 ft. to 28,000 ft.	305 KIAS (306 KCAS)
M <sub>mo</sub> above 28,000 ft.	0.77 M <sub>I</sub> (0.774 Mach calibrated)
V <sub>o</sub> (maximum operating maneuvering sea level at 16,950 lb.)	185 KIAS (185 KCAS)
<i>See AFM for variations with weight and altitude.</i>	
V <sub>b</sub> (speed for max. gust intensity)	232 KIAS (233 KCAS up to 40,060 ft) 0.77 M <sub>I</sub> (0.774 Mach calibrated) above 40,060 ft
V <sub>FE</sub> (Flaps extended)	
15 degrees (takeoff & approach)	200 KIAS (200 KCAS)
35 degrees (landing)	160 KIAS (160 KCAS)
V <sub>MCA</sub> (Minimum control speed) Air	
0 degrees (takeoff)	94 KIAS (94 KCAS)
15 degrees (takeoff & approach)	85 KIAS (85 KCAS)
V <sub>MCG</sub> (Minimum control speed) Ground	88 KIAS (88 KCAS)
V <sub>LO</sub> (landing gear operating)	
Extend 200 KIAS (200 KCAS)	
Retract 200 KIAS (199 KCAS)	
V <sub>LE</sub> (landing gear extended)	200 KIAS (199 KCAS)
V <sub>SB</sub> (speed brakes extended)	Any speed with or without flaps
Maximum autopilot operating speed	Any normal operating speed up to 305 KIAS or 0.7 M <sub>I</sub>
Maximum tire ground speed	165 knots

**IV. Model 525C** (cont'd)**C.G. Range (Landing Gear Extended) Design C.G. Limits:**

Forward Limits: Linear from 312.06 in. aft of datum (21.0% MAC) at 9,500 lb. to 306.65 in. aft of datum (14.5% MAC) at 10,500 lb. to 306.65 in. aft of datum (14.5% MAC) at 13,250 lb. to 307.31 in. aft of datum (15.3% MAC) at 14,500 lb. to 307.98 in. aft of datum (16.1% MAC) at 15,250 lb. to 309.23 in. aft of datum (17.6% MAC) at 16,250 lb. to 311.02 in. aft of datum (19.47% MAC) at 17,230 lb.

Aft Limits: Linear from 317.06 in. aft of datum (27.0% MAC) at 9,500 lb. to 317.06 in. aft of datum (27.0% MAC) at 12,150 lb. to 316.23 in. aft of datum (26.0% MAC) at 13,000 lb. to 316.23 in. aft of datum (26.0% MAC) at 14,500 lb. to 317.89 in. aft of datum (28.0% MAC) at 15,750 lb. to 317.89 in. aft of datum (28.0% MAC) at 17,230 lb.

Landing Gear retracting moment -3386 in-lb.

Empty Wt. C.G. Range

None

MAC

83.290 in. (L.E. of MAC at +294.571 in. aft of datum)

Maximum weights

Takeoff	17,110 lb.
Landing	15,660 lb.
Zero Fuel	12,500 lb.
Ramp	17,230 lb.

Minimum Crew for all Flights (see NOTE 5 for cockpit equipment/arrangement restrictions):

One pilot (in the left pilot seat) with equipment as specified in the Kinds of Operations Equipment List (KOEL) contained in the Limitations Section of the FAA Approved AFM

OR

One pilot and one copilot

No. of Seats

Maximum 11 (two crew plus nine passenger seats)

Maximum Baggage

Nose Compartment	400 lb. ( +76.14 in. aft of datum)
Tailcone	600 lb. ( +431.70 in. aft of datum)

Fuel Capacity (usable)

Total usable fuel 5,828 lb. (869.8 gal)  
Two wing tanks with 2914 lb. (434.9 gal) usable each.  
+319.30 in. aft of datum (see NOTE 1 for unusable)

Oil Capacity (usable)

Tank mounted on each engine: 4.8 US quarts usable each engine; +424.64 in. aft of datum (see NOTE 1)

Maximum Operating Altitude 45,000 ft.



**IV. Model 525C** (cont'd)**Control Surface Movements**

Elevator		Up	25.5 ± 0.5 degrees
		Down	12.0 ± 1.0 degrees
Elevator Trim Tab		Up	6.0 ± 1.0 degrees
		Down	14.0 ± 1.0 degrees
Rudder		Right	32.0 ± 1.0 degrees
		Left	32.0 ± 1.0 degrees
Rudder Trim Tab		Right	20.0 ± 1.0 degrees
		Left	20.0 ± 1.0 degrees
Aileron		Up	23.5 ± 1.0 degrees
		Down	20.5 ± 1.0 degrees
Aileron Trim Tab		Up	19.0 ± 1.0 degrees
		Down	19.0 ± 1.0 degrees
Wing Flap		Up	0 ± 1.0 degrees
		T.O./Appr.	15 ± 1.0 degrees
		Land	35 ± 1.0 degrees
Speed Brakes (In-Air)	– Upper	Up	0 to 40.0 ± 2.0 degrees
	– 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.

Serial Nos. Eligible                      525C0001 and On

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

Leveling Means                              Lateral: Place 525 Leveling Tool across inboard crew seat rails at approximately FS 145.5. Ensure Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Leveling Tool with base parallel to the long axis of the Leveling Tool. Adjust the main gear jack to level aircraft.

Longitudinal: Place 525 Leveling Tool across inboard crew seat rails at approximately FS 145.5. Ensure Tool is parallel to fuselage station plane and is resting solidly on seat rails. Position inclinometer on Leveling Tool with base perpendicular to the long axis of the Leveling Tool. Adjust the nose gear jack to level aircraft.

**Certification Basis:**

- (1) 14 CFR Part 23 of the Commuter Category as amended by Amendments 23-1 through 23-57, with exceptions addressed in Special Conditions, ELOS's, and Exemptions.

In addition, the installation of the Full Authority Dual-Channel Electronic Control (FADEC) system must comply with the requirements of 14 CFR § 23.1309 (a) through (e) as amended through Amendment 23-57.

14 CFR § 23.1306(b) as amended by Amendments 23-1 through 23-61, is applicable to Global Positioning System Sensor(s) for S/N 525C0267 and on.

14 CFR § 23.1457(a)(6) as amended by Amendments 23-1 through 23-58, is applicable to Controller-Pilot Data Link Communications.

**IV. Model 525C** (cont'd)**Certification Basis:** (cont'd)

- (2) 14 CFR Part 34 effective September 10, 1990, as amended by amendment 34-1 through 34-4;
- (3) 14 CFR Part 36 effective December 1, 1969, as amended by amendment 36-1 through 36-31;
- (4) Special Conditions as follows:
  - (a) 23-102-SC, High Altitude Operation (45,000 ft). Additional requirements for ventilation, air conditioning, pressurized cabins, oxygen equipment and supply, supplemental oxygen, oxygen distribution and equipment. (See NOTE 6.)
  - (b) 23-145-SC, Flight Performance, Flight Characteristics, and Operating Limitations.
  - (c) 23-234-SC, Single Point Refuel/Defuel System.
  - (d) 23-236-SC, Lithium Ion Battery Installation.
  - (e) 23-239-SC, High Fuel Temperature.
  - (f) 23-240-SC, Flight special conditions in lieu of 14 CFR §23.161(b)(2), Trim and §23.181(a)(d), Dynamic Stability.
- (5) Exemptions as follows:
  - (a) Exemption No. 9495 to permit modification of the airplane landing gear loads and associated airframe loads in lieu of 14 CFR §§ 23.473, 23.477, 23.479, 23.481, 23.483, 23.493, 23.723, 23.725, 23.726, 23.727, and C23.1 Appendix C of Title 14, Code of Federal Regulation.
  - (b) Exemption No. 9593 to permit for the installation of a multi-place side-facing couch, in lieu of 14 CFR §23.562(a).
- (5) Exemptions as follows (cont'd):
  - (c) Exemption No. 9906 to permit certification without a warning system indicating a failure of the pressure refueling automatic shutoff system as specified in the rule until August 1, 2010, in lieu of 14 CFR §23.979(b)(2). Exemption No. 9906A extends Exemption No. 9906 to February 1, 2011, and Exemption No. 9906B extends Exemption No. 9906A to May 1, 2011. In order to conduct operations after May 1, 2012, airplanes prior to S/N 525C0025 that do not have a warning system indicating the failure of the pressure refueling automatic shutoff system must comply with Service Bulletin SB525C-28-01.
  - (d) Exemption No. 9920 for use of a relaxed “Dutch Roll” damping criteria above 18,000 ft. in lieu of damping criteria of 14 CFR §23.181(b).
  - (e) Exemption No. 9534 to permit certification in the commuter category, in lieu of 14 CFR §23.3(d).
  - (f) Exemption No. 9997 to allow type certification with the current engine low pressure rotary group shaft speed (N1) and interstage turbine temperature (ITT) displays until April 30, 2011, in lieu of 14 CFR §23.1549(a), (b), and (c). In order to conduct operations after April 30, 2012, airplanes prior to S/N 525C0025 must comply with Service Bulletin SB525C-34-02.
  - (g) Exemption No. 9998 to allow type certification with the current engine oil pressure and temperature displays until April 30, 2011, in lieu of 14 CFR §§ 23.1321(b), 23.1549(a)(b)(c). In order to conduct operations after April 30, 2012, airplanes prior to S/N 525C0025 must comply with Service Bulletin SB525C-34-02.

**IV. Model 525C** (cont'd)**Certification Basis:** (cont'd)

- (6) Equivalent Level of Safety (ELOS) as follows:
  - (a) ELOS No. ACE-00-05B: 14 CFR §23.841(a), to allow small temporary cabin altitude excursions above 15,000 ft. in the event of any probable pressurization system failure.
  - (b) ELOS No. ACE-08-01: 14 CFR §23.1555(d)(1), Useable Fuel Capacity Marking.
  - (c) ELOS No. ACE-08-03A: 14 CFR §23.841(b)(6), Cabin Pressurization - High Altitude Takeoff and Landing Operation.
  - (d) ELOS No. ACE-08-04: 14 CFR §23.815(b), Cabin Aisle Width
  - (e) ELOS No. ACE-08-07: 14 CFR §23.853(d)(2) No Smoking Placard Lettering Size.
  - (f) ELOS No. ACE-08-08: 14 CFR §23.807(e), Emergency Exit Water Barrier.
  - (g) ELOS No. ACE-09-07: 14 CFR §23.1303(c) for a Direction Indicator (non-stabilized magnetic compass) applicable to airplanes S/N 525C0001 through 525C0263.
  - (h) ELOS No. ACE-09-13: 14 CFR §§ 23.1305(a)(1)(2)(3)(c)(1)(2)(5), 23.1549(a)(b)(c), 23.1553, Digital Displays of Powerplant and Fuel System Instrumentation, Fuel Flow, N2 Indication and Fuel Quantity.
  - (i) ELOS No. ACE-10-06: 14 CFR §23.1236(b), Pitot Heat Indication System.
  - (j) ELOS No. TXTAV-015771-SE-5: 14 CFR §23.1303(c) for a Direction Indicator (non-stabilized magnetic compass) applicable to airplanes S/N 525C0264 and on.
- (7) Compliance with ice protection has been demonstrated in accordance with 14 CFR §23.1416 and 23.1419.

Application for Type Certificate was first dated August 9, 2006, with a six month extension of the application period to February 9, 2010, requested and subsequently granted. This was followed by an additional extension request on January 11, 2010, to go with a new application date of May 31, 2007. An extension until May 31, 2010 was granted via FAA Memo dated January 22, 2010, and documented in FAA Letter L115W-10-161 dated February 19, 2010.

Type Certificate A1WI, amended March 12, 2010, was obtained by the manufacturer using Organization Designation Authorization (ODA) Procedures of Part 183 Subpart D of Title 14 of Code of Federal Regulations. The Model 525C is defined by Cessna Assembly Drawing Number 7100000.

**Production Basis:**

Production Certificate No. 4 issued and ODA No. ODA-100129-CE authorized to issue Airworthiness Certificates under ODA Procedures of Part 21 of the Federal Aviation Regulations.

Until the Model 525C is added to the Production Limitation Record (PLR) for PC No. 4, the FAA Wichita Manufacturing Inspection District Office (MIDO) must issue the original airworthiness certification of each aircraft.

**Equipment:**

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

NOTE 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 certificated empty weight must include:

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

**IV. Model 525C** (cont'd)

- NOTE 2. 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.
- NOTE 3. See Maintenance Manual, Chapter 4, "Airworthiness Limitations" for mandatory component retirement life information.
- NOTE 4. All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with the installation requirements of 14 CFR §§ 23.561, 23.562, and 23.785.  
The seat cushion foam buildup of all seats (crew and passenger) may not be altered, unless the deviations in the foam construction or stiffness are shown to comply with the requirements of 14 CFR §§ 23.562.  
The cabinets that are installed forward of the RH forward side-facing seat and of the LH aft belted toilet are an integral part of the certified seat and restraint system. These cabinets may not be structurally altered, unless the changes are shown to comply with the requirements of 14 CFR §§ 23.561, 23.562, and 23.785.
- NOTE 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 Aircraft Certification Office.
- NOTE 6. Model 525C airplanes have been approved for high altitude operations (altitudes above 41,000 ft.), 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.
- NOTE 7. RVSM: Per the approved Type Design, S/N 525C0001 and On are considered to be compliant with the applicable RVSM aircraft approval requirements contained in 14 CFR Part 91, Appendix G. However, operational approval to fly in RVSM airspace must still be granted by the cognizant Flight Standards organization and each operator must obtain RVSM operating approval directly from the FAA.
- NOTE 8. The Model 525C is approved for One Engine Inoperative 10 minutes thrust capability with the Williams International FJ44-4A engine, per FAA Policy Memo Policy Statement on Approval for 10-Minute Rated Takeoff 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, 2006.
- NOTE 9. The System Safety Assessment process has identified mandatory maintenance actions, which must be performed at specific intervals to compensate for latent failures. A list of those actions is contained in report RL-525C-176, and cannot be changed without participation from the certifying ACO. This document has influenced certain maintenance actions documented in Airworthiness Limitations section (Chapter 4) of the maintenance manual. Those particular items cannot be changed without participation from the certifying ACO.
- NOTE 10. Deleted.

**IV. Model 525C** (cont'd)

- NOTE 11. The Model 525C shall not be eligible for operations under 14 CFR Part 121 (Reference: Exemption No. 9534).
- NOTE 12. The following serials are manufactured under the name Cessna Aircraft Company: 525C0001 through 525C0192.
- NOTE 13. Company name change effective 7/29/15. The following serials are manufactured under the name Textron Aviation Inc.: 525C0193 and On.

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