This data sheet, which is part of Type Certificate No. 9304, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

I - Model 525 (Normal Category), approved 20 October 1993.

ENGINE

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 (525-0600 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)

<table>
<thead>
<tr>
<th>Jet A</th>
<th>ASTM D1655</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet A1</td>
<td>ASTM D1655</td>
</tr>
<tr>
<td>Jet B</td>
<td>ASTM D6615</td>
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<tr>
<td>JP-4</td>
<td>MIL-DTL-5624</td>
</tr>
<tr>
<td>Jet 3</td>
<td>GB6537</td>
</tr>
<tr>
<td>JP-5</td>
<td>MIL-DTL-5624</td>
</tr>
<tr>
<td>JP-8</td>
<td>MIL-DTL-83133</td>
</tr>
<tr>
<td>RT</td>
<td>GOST 10227</td>
</tr>
<tr>
<td>TS-1</td>
<td>GOST 10227</td>
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</table>

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

<table>
<thead>
<tr>
<th>Jet A</th>
<th>ASTM D1655</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet A1</td>
<td>ASTM D1655</td>
</tr>
<tr>
<td>Jet 3</td>
<td>GB6537</td>
</tr>
<tr>
<td>JP-5</td>
<td>MIL-DTL-5624</td>
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<tr>
<td>JP-8</td>
<td>MIL-DTL-83133</td>
</tr>
<tr>
<td>RT</td>
<td>GOST 10227</td>
</tr>
<tr>
<td>TS-1</td>
<td>GOST 10227</td>
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</table>

(525-0685 and 525-0800 and on)
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

<table>
<thead>
<tr>
<th>ENGINE LIMITS</th>
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<tbody>
<tr>
<td>Static thrust, standard day, sea level:</td>
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<tr>
<td>- Takeoff (5 min.) 1 900 lb</td>
</tr>
<tr>
<td>Takeoff (525-0600 through 525-0701 and</td>
</tr>
<tr>
<td>525-800 and on) 1 965 lb</td>
</tr>
<tr>
<td>Max. permissible engine rotor operating</td>
</tr>
<tr>
<td>speeds:</td>
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<tr>
<td>(525-0001 through 525-0599)</td>
</tr>
<tr>
<td>- N1 (fan) 104.4% 100% = 17 245 rpm</td>
</tr>
<tr>
<td>- N2 (gas generator) 99.3% 100% = 41 200 rpm</td>
</tr>
<tr>
<td>(525-0600 through 525-0684 and 525-0686 through 525-0701)</td>
</tr>
<tr>
<td>- N1 (fan) 102.64% 100% = 17 245 rpm</td>
</tr>
<tr>
<td>- N2 (gas generator) 100% 100% = 41 200 rpm</td>
</tr>
<tr>
<td>(525-0685 and 525-0800 and on)</td>
</tr>
<tr>
<td>- N1 (fan) 104.7% 100% = 17 245 rpm</td>
</tr>
<tr>
<td>- N2 (gas generator) 100% 100% = 41 200 rpm</td>
</tr>
<tr>
<td>Max. permissible interturbine gas</td>
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<tr>
<td>temperatures:</td>
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<tr>
<td>(525-0001 through 525-0599)</td>
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<tr>
<td>- Takeoff 820°C</td>
</tr>
<tr>
<td>- Max. Continuous 796°C</td>
</tr>
<tr>
<td>- Transient (starting 5 sec) 1 000°C</td>
</tr>
<tr>
<td>(525-0600 through 525-0701 and 525-800 and on)</td>
</tr>
<tr>
<td>- Takeoff (5 min, 10 min OEI) 855°C</td>
</tr>
<tr>
<td>- Max. Continuous 835°C</td>
</tr>
<tr>
<td>- Transient (starting 15 sec) 1 000°C</td>
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</table>

<table>
<thead>
<tr>
<th>OIL</th>
</tr>
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<tbody>
<tr>
<td>Synthetic Conforming MIL-L-23699</td>
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<table>
<thead>
<tr>
<th>AIRSPEED LIMITS (CAS)</th>
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<tbody>
<tr>
<td>Maximum operating ($V_{mo}$):</td>
</tr>
<tr>
<td>- Sea level to 9 296 m (30 500 ft)</td>
</tr>
<tr>
<td>260 kcas (263 kias)</td>
</tr>
<tr>
<td>Maximum operating ($V_{mo}$):</td>
</tr>
<tr>
<td>- Above 9 296 m (30 500 ft)</td>
</tr>
<tr>
<td>0.70 mcas (0.71 mias)</td>
</tr>
<tr>
<td>Maneuvering ($V_{m}$) - sea level:</td>
</tr>
<tr>
<td>- 4 717 kg (10 400 lb), S/N 525-0001 through 525-0359</td>
</tr>
<tr>
<td>198 kcas (199 kias)</td>
</tr>
<tr>
<td>- 4 808 kg (10 600 lb), S/N 525-0360 through 525-0599</td>
</tr>
<tr>
<td>200 kcas (201 kias)</td>
</tr>
<tr>
<td>- See AFM for variations with weight and altitude.</td>
</tr>
<tr>
<td>- 4 853 kg (10 700lb), S/N 525-0600 through 525-0701 and 525-0800 and on</td>
</tr>
<tr>
<td>201 kcas (202 kias)</td>
</tr>
<tr>
<td>- See AFM for variations with weight and altitude.</td>
</tr>
<tr>
<td>Maximum gust intensity ($V_{g}$):</td>
</tr>
<tr>
<td>215 kcas (217 kias)</td>
</tr>
</tbody>
</table>

| Flaps extended ($V_{re}$)              |
| - 15° (takeoff and approach):          |
| 198 kcas (200 kias)                    |
| - 35° (landing):                       |
| 160 kcas (161 kias)                    |
| - 60° (ground flaps):                  |
| prohibited in flight                   |

<table>
<thead>
<tr>
<th>Minimum control speed - Air ($V_{mca}$):</th>
</tr>
</thead>
<tbody>
<tr>
<td>----------------------------------------</td>
</tr>
</tbody>
</table>
525-0001 Through 525-0599
525-0600 through 525-0701 and 525-0800 and on
Flaps 0
525-0600 through 525-0701 and 525-0800 and on
Flaps 15
Minimum control speed - Ground ($V_{MC}$):
525-0001 through 525-0359
525-0360 through 525-0599
525-0600 through 525-0701 and 525-0800 and on
L. G. operation ($V_{L}$):
Extending (S/N 525-0001 and on)
Retracting (S/N 525-0001 – 525-0457)
Retracting (S/N 525-0458 – 525-0701 and 525-0800 and on)
L. G. extended ($V_{L}$):
Speed Brakes extended ($V_{SB}$): Any speed with or without flaps
Maximum autopilot operating speed:
- Sea level to 9 296 m (30 500 ft) 260 kcas (263 kias)
- Above 9 296 m (30 500 ft) 0.70 mcas (0.71 mias)
Maximum tire ground speed: 165 kt

**CG RANGE (Landing Gear Extended)**

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

Forward Limits: Linear variation from 620.12 cm (244.14 in.) aft of datum (22.29% MAC) at 4 763 kg (10 500 lb) to 619.86 cm (244.04 in.) aft of datum (22.14% MAC) at 4 717 kg (10 400 lb) to 615.77 cm (242.43 in.) aft of datum (19.81% MAC) at 3 992 kg (8 800 lb); Linear variation from 615.77 cm (242.43 in.) aft of datum (19.81% MAC) at 3 992 kg (8 800 lb) to 609.96 cm (240.14 in) aft datum (16.50% MAC) at 3 493 kg (7 700 lb); 609.96 cm (240.14 in) aft of datum (16.50% MAC) at 3 493 kg (7,700 lb) to 2 722 kg (6,000 lb).

Aft Limits: 631.90 cm (248.78 in.) aft of datum (29.00 % MAC) at 4 763 kg (10 500 lb.) to 2 722 kg (6 000 lb).
CG RANGE (Cont.)  
(Landing Gear Extended)

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

Forward Limits: Linear variation from 620.62 cm (244.34 in.) aft of datum (22.58% MAC) at 4,853 kg (10,700 lb) to 620.37 cm (244.24 in.) aft of datum (22.43% MAC) at 4,808 kg (10,600 lb.) to 615.77 cm (242.43 in.) aft of datum (19.81% MAC) at 3,992 kg (8,800 lb.); Linear variation from 615.77 cm (242.43 in.) aft of datum (19.81% MAC) at 3,992 kg (8,800 lb.) to 609.96 (240.14 in.) aft of datum (16.50% MAC) at 3,493 kg (7,700 lb.); 609.96 cm (240.14 in.) aft of datum (16.50% MAC) at 3,493 kg (7,700 lb.) to 2,722 kg (6,000 lb).

Aft Limits: 631.90 cm (248.78 in.) aft of datum (29.00 % MAC) at 4,853 kg (10,700 lb.) to 2,722 kg (6,000 lb).

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

Forward Limits: Linear variation from 620.88 cm (244.44 in.) aft of datum (22.72% MAC) at 4,899 kg (10,800 lb.) to 620.62 cm (244.34 in.) aft of datum (22.58 % MAC) at 4,853 kg (10,700 lb.) to 615.77 cm (242.43 in) aft of datum (19.81 % MAC) at 3,992 kg (8,800 lb); Linear variation from 615.77 cm (242.43 in.) aft of datum (19.81% MAC) at 3,992 kg (8,800 lb.) to 609.96 (240.14 in.) aft of datum (16.50% MAC) at 3,493 kg (7,700 lb.); 609.96 cm (240.14 in.) aft of datum (16.50% MAC) at 3,493 kg (7,700 lb.) to 2,722 kg (6,000 lb).

Aft Limits: 631.90 cm (248.43 in.) aft of datum (28.50 % MAC) at 4,899 kg (10,800 lb.) to 2,722 kg (6,000 lb).

Landing Gear retracting moment 7.29 m-kg (+632.65) in-lb.

EMPTY WEIGHT CG RANGE

None.

DATUM

238.76 cm (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.

MEAN AERODYNAMIC CHORD

175.46 cm (69.077 in) - leading edge of MAC at +581.01 cm (+228.745 in.) aft of datum.

MAXIMUM WEIGHT

<table>
<thead>
<tr>
<th>S/N 525-0001 through 525-0359</th>
<th>S/N 525-0360 through 525-0599</th>
<th>S/N 525-0600 through 525-0701 and 525-0800 and on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff: 4,717 kg (10,400 lb)</td>
<td>4,808 kg (10,600 lb)</td>
<td>4,853 kg (10,700 lb)</td>
</tr>
<tr>
<td>Landing: 4,400 kg (9,700 lb)</td>
<td>4,445 kg (9,800 lb)</td>
<td>4,445 kg (9,900 lb)</td>
</tr>
<tr>
<td>Zero Fuel: 3,810 kg (8,400 lb)</td>
<td>3,810 kg (8,400 lb)</td>
<td>3,810 kg (8,400 lb)</td>
</tr>
<tr>
<td>Ramp: 4,763 kg (10,500 lb)</td>
<td>4,853 kg (10,700 lb)</td>
<td>4,899 kg (10,800 lb)</td>
</tr>
</tbody>
</table>

MINIMUM CREW

(See note 6 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 Approved Brazilian Airplane Flight Manual; or One pilot and one copilot.
NUMBER OF SEATS
Maximum eight occupants. Airplane must be equipped as required by operating rules, appropriate to the number of passenger seats.

MAXIMUM BAGGAGE
(S/N 525-0001 through 525-0599)
Nose compartment: 181 kg (400 lb) at + 188.0 cm (+ 74.0 in.) aft of datum
Aft cabin: 45 kg (100 lb) at + 687.58 cm (+270.70 in.) aft of datum
Tailcone: 147 kg (325 lb) at +905.51 cm (+356.50 in.) aft of datum
(S/N 525-0600 through 525-0701 and 525-0800 and on)
Nose compartment: 181 kg (400 lb) at + 188.0 cm (+ 74.0 in.) aft of datum
Tailcone: 147 kg (325 lb) at +905.51 cm (+356.50 in.) aft of datum

FUEL CAPACITY
(525-0001 through 525-0684 and 525-0686 through 525-0701)
Total usable fuel 1461 kg (1806 l) (3220 lb. (477 gal)). Two wing tanks with 730.5 kg (903 l) (1610 lb. (238.5 gal)) usable each; (see NOTE 1 for unusable) + 642.60 cm (+252.99 in.) aft of datum.
(525-0685 and 525-0800 and on)
Total usable fuel 1495 kg (1862 l) (3296 lb. (492 gal)). Two wing tanks with 747.5 kg (931 l) (1648 lb. (246 gal) usable each; (see NOTE 1 for unusable) + 642.62 cm (+253 in.) aft of datum.

OIL CAPACITY
(525-0001 through 525-0599) Tank mounted on each engine: 1.98 l (2.0 quarts) usable each engine; 793.24 cm (+312.30 in.) aft of datum; (see NOTE 1)
(525-0600 through 525-0701 and 525-0800 and on) Tank mounted on each engine: 3.22 l (3.4 quarts) usable each engine; 799.44 cm (+314.74 in.) aft of datum. (see NOTE 1)

MAXIMUM OPERATING ALTITUDE
12 497 m (41 000 ft)

CONTROL SURFACE MOVEMENTS
Elevator:
(525-0001 through 525-0599) Up 20° +0°, -1° Down 15° ±1°
(525-0600 through 525-0701 and 525-0800 and on) Up 18.5° +0°, -5° Down 15° ±1°
Elevator trim tab: Up 12° ±1° Down 20° ±1°
Rudder: Right 30° ±1° Left 30° ±1°
Rudder trim: Right 20° ±1° Left 20° ±1°
Aileron: Up 23.5° ±1° Down 20.5° ±1°
Aileron trim tab: Up 20° ±1° Down 18° ±1°
Wing flaps: Up 0° ±1°
Takeoff/approach down 15° ±1°
Landing down 35° ±1°
Speed breaks -
Ground down 60° ±1°
Upper: Up 0 to 49° ±2°
Lower: Down 0 to 68° ±2°
Thrust Attenuators
(525-0001 through 525-0599) (Ref. To engine longitudinal axis)
Stow: -6° ±1° Deploy: 54° ±1°
Thrust Attenuators not applicable (525-0600 through 525-0701 and 525-0800 and on)
See Airplane Maintenance Manual for rigging instructions.

S/N'S ELIGIBLE
525-0001 through 525-0701 and 525-0800 and on.
IMPOR T ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of an FAA Export Certificate of Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

“The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 9304 and is in condition of safe operation”.

CERTIFICATION BASIS

(1)(a) (525-0001 through 525-0599)
RBAC 21.29 and RBAC 23 (Regulamento Brasileiro de Aviação Civil)
– Brazilian Airworthiness Regulation corresponding to 14 CFR Part 23, effective 01 February 1965, including Amendments 23-1 through 23-38, and 23-40;
(b) (525-0600 through 525-0684 and 525-0686 through 525-0701)
RBAC 21.29 and RBAC 23 corresponding to 14 CFR Part 23, including by Amendments 23-1 through 23-38, and 23-40; except the following paragraphs applicable for engines and FADECs:
(c) (525-0685 and 525-0800 and on)
RBAC 21.29 and RBAC 23 corresponding to 14 CFR Part 23, including by Amendments 23-1 through 23-38, and 23-40; except the following paragraphs applicable for engines and FADECs:
<table>
<thead>
<tr>
<th>Reg. No</th>
<th>Title</th>
<th>Amendment level</th>
<th>comments</th>
</tr>
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<tbody>
<tr>
<td>23.441</td>
<td>Maneuvering Loads</td>
<td>23-61</td>
<td>Winglets only</td>
</tr>
<tr>
<td>23.443</td>
<td>Gust loads</td>
<td>23-61</td>
<td>Winglets only</td>
</tr>
<tr>
<td>23.445</td>
<td>Outboard fins</td>
<td>23-61</td>
<td>Winglets only</td>
</tr>
<tr>
<td>23.575</td>
<td>Inspection and others procedures</td>
<td>23-61</td>
<td>Winglets only</td>
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<td>23-621</td>
<td>Casting Factors</td>
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<td>Entire aircraft</td>
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<td>23.867</td>
<td>Lightning Protection of structure</td>
<td>23-61</td>
<td>Winglets only</td>
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<td>23.929</td>
<td>Engine installation ice protection</td>
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<td>Fuel system independence</td>
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<td>Unusable fuel supply</td>
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<td>Fuel thank Sump</td>
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<td>Fuel thank vents and carburetor vapor vents</td>
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<td>23.977</td>
<td>Fuel tank outlet</td>
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<td>Fuel pumps</td>
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<td>23.993</td>
<td>Fuel system lines and fitting</td>
<td>23-61</td>
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<td>23.997</td>
<td>Fuel strainer or filter</td>
<td>23-61</td>
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<td>23.999</td>
<td>Fuel system drain</td>
<td>23-61</td>
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<td>23.1001</td>
<td>Fuel jettisoning system</td>
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<td>Entire aircraft</td>
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<td>Lightning Protection</td>
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<td>For changed systems only</td>
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<tr>
<td>23.1308</td>
<td>High-Intensity Radiated Fields (HIRF) Protection</td>
<td>23-61</td>
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<td>Instrument markings: general</td>
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<td>23.1553</td>
<td>Fuel Quantity indicator</td>
<td>23-61</td>
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<td>23.1555</td>
<td>Control Markings</td>
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<td>Operating limitations placard</td>
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<td>Airspeed placards</td>
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<td>Flight maneuver placard</td>
<td>23-61</td>
<td>Entire aircraft</td>
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</tbody>
</table>
CERTIFICATION BASIS
(CONT.)

(2) (a) (525-0001 through 525-0599)
RBAC 36 corresponding to 14 CFR Part 36, effective 01 December 1969, Noise Standards as amended by Amendments 36-1 through 36-18;
(b) (525-0600 through 525-0701 and 525-0800 and on)
RBAC / 14 CFR Part 36, as amended by Amendments 36-1 through 36-28;

(3) (a) (525-0001 through 525-0599) RBAC/14 CFR Part 34 effective September 10, 1990
(b) (525-0600 through 525-0684 and 525-0686 through 525-0701)
(c) (525-0685 and 525-0800 and on)

(4) Compliance with the Noise Control Act of 1972;

(5) Special Conditions as follows:
23-ACE-55, additional requirements for:
Smoke evacuation, protection of electronic systems from lightning and high intensity radiated electromagnetic fields (HIFD), electronic flight instrument displays, thrust attenuating systems (thrust attenuating system 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:
Exemption No. 5759 granted to use a relaxed “Dutch Roll” damping criteria above 18 000 feet in lieu of damping criteria of RBAC / 14 CFR Part 23.181(b).

(7) Equivalent level of safety 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 Part 23.1305(c)(2), (c)(5) and 23.1549(a) through (d), direct reading, digital only displays for the high-pressure turbine speed (N2), and fuel flow indications.
(b) ANAC FCAR EI-01 Emergency Locator Signs.
CERTIFICATION BASIS

(continuation)

(Applicable to airplanes S/N 525-0685 and 525-0800 and on equipped with Garmin G3000).

(a) Number ACE+13-09: RBAC / 14 CFR § 23.841(b)(6), cabin pressurization – High Altitude Takeoff and Landing.
(b) Number ACE-00-05C: RBAC / 14 CFR § 23.841(a), to allow small temporary cabin altitude excursions above 4 572 m (15 000 ft) in the event of any probable pressurization system failure.
(c) Number ACE-13-17: RBAC / 14 CFR § 23.1549(a) through (c), direct reading digital displays for high-pressure turbine speed (N2), oil pressure, oil temperature and fuel flow indicators.
(d) ANAC FCAR EI-01 Emergency Locator Signs.

(8) Compliance with ice protection has been demonstrated in accordance with RBAC 14 CFR Part 23.1416 and 23.1419.

Application for type certificate dated 16 October 1990.

REQUIRED EQUIPMENT

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

NOTES:

NOTE 1

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

The certificated empty weight must include:

- Unusable fuel: (525-0001 and on) 13.9 kg (30.64 lb)
- Full oil: (525-0001 through 525-0599) 7.03 kg (15.5 lb)
- Full oil: (525-0600 through 525-0701 and 525-0800 and on) 7.07 kg (15.6 lb)
- Hydraulic fluid: (525-0001 through 525-0599) 12.47 kg (27.5 lb)
- Hydraulic fluid: (525-0600 through 525-0701 and 525-0800 and on) 7.61 kg (16.78 lb)
- Anti-ice fluid: (525-001 and on) 1.54 kg (3.4 lb)

NOTE 2

Markings and placards. The aircraft must be operated according to the Brazilian Approved Flight Manual and associated checklist. For the approved markings and placards translations contact the TC holder and/or ANAC at the following address: ggcp-gr@anac.gov.br

NOTE 3

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

NOTE 4

The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:

   The Brazilian AFM numbers are 525BR-00 or later approved revision for S/N 525-0001 through 525-0359, 525BRA-00 or later approved revision for S/N 525-0360 through 525-0599, 525BRB-00 or later approved revision for S/N 525-0600 through 525-0684 and 525-0686 through 525-0701 and 525BRC-00 or later approved revision for S/N 525-0685 and 525-0800 and on.
2. Markings and placards (see Note 2).
NOTE 5  All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with RBAC / 14 CFR Part 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 RBAC / 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 6  Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during 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.

NOTE 7  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 Display as standard equipment. |
| S/N 525-0685 and 525-0800 and 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.

NOTE 8  The model 525 (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 AT4020WI-A, dated 27 April 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: 525-0001 thru 52-0874, 525-0876, 525-0879 and 52-0880

NOTE 10  Company name change effective 29 July 2015. The following serials are manufactured under the name Textron Aviation Inc.: 525-0875, 525-0877, 525-0878, 525-0881 and on.

ENGINE
Two Williams International L.L.C. FJ44-2C turbofans (525A-0001 through 525A-0299)
Two Williams International L.L.C. FJ44-3A-24 turbofans (525A-0300 and on)

FUEL

ENGINE LIMITS
Static thrust, standard day, sea level:
- Takeoff (5 min.)
  (525A-0001 through 525A-0299) 2 400 lb
  Takeoff (5 min.) (525A-0300 and on) 2 490 lb
Max. permissible engine rotor operating speeds:
(525A-0001 through 525A-0299)
- N1 (fan) 105.2% 100% = 17 245 rpm
- N2 (gas generator) 98.8% 100% = 41 200 rpm
(525A-0300 and on)
- N1 (fan) 102.78% 100% = 18 000 rpm
- N2 (gas generator) 100% 100% = 41 200 rpm
Max. permissible interturbine gas temperatures:
(525A-0001 through 525A-0299)
- Takeoff 820ºC
- Max. Continuous 805ºC
- Transient (starting 15 sec) 1000ºC
(525A-0300 and on)
- Takeoff 877ºC (5 min, 10 min OEI)
- Max. Continuous 840ºC
- Transient (starting 15 sec) 1000ºC

OIL
Synthetic Conforming MIL-L-23699

AIRSPEED LIMITS (CAS)
Maximum operating (V\text{MO}): 
- Sea level to 2 438 m (8 000 ft) 260 kcas (260 kias)
- 2 438 m (8 000 ft) to 8 931 m (29 300 ft) 275 kias
(525A-0001 through 525A-0299)
(Varies linearly between 274 kcas and 272 kcas)
- 2 438 m (8 000 ft) to 8 877 m (29 124 ft) 278 kias
(525A-0300 and on)
(Varies linearly between 277 kcas and 275 kcas)
Maximum operating (M\text{MO}): 
- Above 8 931 m (29 300 ft) 0.707 mcas (0.72 mias)
(525A-0001 through 525A-0299)
- Above 8 877 m (29 124 ft)(525A-0300 and on) 0.722 mcas (0.737 mias)
Maneuvering (V\text{M}) - sea level: 
- At 5 613 kg (12 375 lb) 197 kcas (197 kias)
(525A-0001 through 525A-0299)
- At 5 670 kg (12 500 lb) 196 kcas (196 kias)
(525A-0300 and on)
- See AFM for variations with weight and altitude.
Maximum gust intensity (V\text{G}):
Flaps extended (V\text{RE}) 
15° (takeoff and approach): 200 kcas (200 kias)
35° (landing): 161 kcas (161 kias)
<table>
<thead>
<tr>
<th><strong>60° (ground flaps):</strong></th>
<th><strong>prohibited in flight</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum speed with flaps failed to 60° (ground flaps) (Emergency Only)</td>
<td>140 kcas (140 kias)</td>
</tr>
</tbody>
</table>

**AIRSPEED LIMITS (CAS)**

<table>
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<th><strong>(Cont.)</strong></th>
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</table>

**Minimum control speed - Air \( V_{MCA} \):**

| **0° (takeoff):** | 90 kcas (89 kias) |
| **15° (takeoff and approach):** | 82 kcas (81 kias) |
| (525A-0001 through 525A-0299) |  |

| **0° (takeoff):** | 84 kcas (83 kias) |
| **15° (takeoff and approach):** | 77 kcas (76 kias) |
| (525A-0300 and on) |  |

**Minimum control speed - Ground \( V_{MCG} \):**

| (525A-0001 Through 525A-0299) | 90 kcas (89 kias) |
| (525A-0300 and on) | 80 kcas (79 kias) |

**L. G. operation \( V_{LCO} \):**

| Extend | 200 kcas (200 kias) |
| Retract | 199 kcas (200 kias) |
| (525A-0001 through 525A-0299) |  |

| L. G. extended \( V_{L} \): | 199 kcas (200 kias) |
| (525A-0300 and on) |  |

**Speed Brakes extended \( V_{SB} \):**

Any speed with or without flaps

**Maximum autopilot operating speed:**

Any normal operating speed

**Maximum tire ground speed:**

165 kt

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**CG RANGE**

**(Landing Gear Extended)**

Applicable to airplanes S/N 525A-0001 through 525A-0299:

**Forward Limits:** Linear variation from 703.66 cm (277.03 in) aft datum (19.66% MAC) at 5 670 kg (12 500 lb) to 703.30 cm (276.89 in.) aft datum (19.46% MAC) at 5 613 kg (12 375 lb.) to 694.26 cm (273.33 in.) aft datum (14.50% MAC) at 4 173 kg (9 200 lb.); 694.26 cm (273.33 in.) aft datum (14.50% MAC) at 4 173 kg (9 200 lb.) to 3 855 kg (8 500 lb.); Linear variation from 694.26 cm (273.33 in.) aft datum (14.50% MAC) at 3 855 (8 500 lb.) to 706.09 cm (277.99 in.) aft of datum (21.00% MAC) at 3 402 kg (7 500 lb.).

**Aft Limits:** 720.65 cm (283.72 in.) aft of datum (29.00% MAC) at 5 670 kg (12 500 lb.) to 3 402 kg (7 500 lb.).

Applicable to airplanes S/N 525A-0300 and on:

**Forward Limits:** Linear variation from 704.01 cm (277.17 in) aft datum (19.86% MAC) at 5 727 kg (12 625 lb) to 703.66 cm (277.03 in) aft datum (19.66% MAC) at 5 670 kg (12 500 lb) to 694.26 cm (273.33 in.) aft datum (14.50% MAC) at 4 173 kg (9 200 lb.); 694.26 cm (273.33 in.) aft datum (14.50% MAC) at 4 173 kg (9 200 lb.) to 3 855 kg (8 500 lb.); Linear variation from 694.26 cm (273.33 in.) aft datum (14.50% MAC) at 3 855 (8 500 lb.) to 706.09 cm (277.99 in.) aft of datum (21.00% MAC) at 3 402 kg (7 500 lb.).

**Aft Limits:** 720.67 cm (283.73 in.) aft of datum (29.00% MAC) at 5 723 kg (12 625 lb) to 3 402 (7 500 lb.).

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

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**EMPTY WEIGHT C. G. RANGE**

None.
DATUM

238.8 cm (94.0 in) forward of the front face of the forward pressure bulkhead.

LEVELING MEANS

Lateral - Place 525A 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.

Longitudinal – Place 525A 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 at BL.0.

MEAN AERODYNAMIC CHORD

182.17 cm (71.720 in) - leading edge of MAC at Sta. +667.83 cm (+262.926 in) aft of datum.

MAXIMUM WEIGHT

<table>
<thead>
<tr>
<th></th>
<th>S/N 525A-0001 through 525A-0299</th>
<th>S/N 525A-0300 and On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff:</td>
<td>5 613 kg (12 375 lb)</td>
<td>5 670 kg (12 500 lb)</td>
</tr>
<tr>
<td>Landing:</td>
<td>5 216 kg (11 500 lb)</td>
<td>5 228 kg (11 525 lb)</td>
</tr>
<tr>
<td>Zero Fuel:</td>
<td>4 218 kg (9 300 lb)</td>
<td>4 400 kg (9 700 lb)</td>
</tr>
<tr>
<td>Ramp:</td>
<td>5 670 kg (12 500 lb)</td>
<td>5 727 kg (12 625 lb)</td>
</tr>
</tbody>
</table>

MINIMUM CREW

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 Approved Brazilian Airplane Flight Manual; or One pilot and one copilot.

See Note 6 for cockpit equipment arrangement restrictions.

NUMBER OF SEATS

Maximum ten (two crew plus eight passenger seats).

MAXIMUM BAGGAGE

<table>
<thead>
<tr>
<th></th>
<th>(525A-0001 through 525A-0299)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nose compartment:</td>
<td>181 kg (400 lb) at Sta. +74.0</td>
</tr>
<tr>
<td>Aft cabin:</td>
<td>45.4 kg (100 lb) at Sta. +301.7</td>
</tr>
<tr>
<td>Tailcone:</td>
<td>272 kg (600 lb) at Sta. +384.6</td>
</tr>
<tr>
<td>(525A-0300 and on)</td>
<td>Nose compartment: 181 kg (400 lb) at Sta. +74.0</td>
</tr>
<tr>
<td>Tailcone:</td>
<td>272 kg (600 lb) at Sta. +384.6</td>
</tr>
</tbody>
</table>

FUEL CAPACITY

Total usable fuel 1 797 kg (3 961 lb). 2 221 l (586.8 gal).

Two wing tanks with 898 kg (1 980.5 lb). 1 111 liters (293.4 gal) usable each;
+733.25 cm (+288.68 in.) aft of datum. (see NOTE 1 for unusable)

OIL CAPACITY

<table>
<thead>
<tr>
<th></th>
<th>(525A-0001 through 525-0299)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank mounted on each engine:</td>
<td>1.89 l (2.0 quarts) usable each engine; +925.32 cm (+364.3 in.) aft of datum. (see NOTE 1)</td>
</tr>
<tr>
<td>(525A-0300 and on)</td>
<td>Tank mounted on each engine: 3.55 l (3.75 quarts) usable each engine; +943.46 cm (+371.44 in.) aft of datum. (see NOTE 1)</td>
</tr>
</tbody>
</table>

MAXIMUM OPERATING ALTITUDE

13 716 m (45 000 ft).
CONTROL SURFACE MOVEMENTS

Elevator: Up 18.5° ±0.5°  Down 15° ±1°  
Elevator trim tab: Up 9° ±1°  Down 23° ±1°
Rudder: Right 35° ±1°  Left 35° ±1°  
Rudder trim tab: Right 20° ±1°  Left 20° ±1°
Aileron: Neutral position 2.0° ±0.5°
Aileron trim tab: Up 23.5° ±1°  Down 20.5° ±1°
Wing flaps: Up 0° ±1°
Takeoff/approach down 15° ±1°
Landing 35° ±1°
Ground 60° ±2°
Speed breaks -
Upper: Up 0 to 49° ±2°
Lower: Down 0 to 68° ±2°
Thrust Attenuators (525A-0001 through 525A-0299) Stow: -4.5° ±0.3°
Deploy: 65° ±1° (Ref. to engine longitudinal axis)
Thrust Attenuators not applicable (525A-0300 and on).
See Airplane Maintenance Manual For Rigging Instructions.

S/N’S ELIGIBLE

525A-0001 and on.

IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of on an FAA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

“The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 9304, addendum 1, and in condition of safe operation”.

CERTIFICATION BASIS

(1) (a)(525A-0001 and on)

RBAC 21.29 plus RBAC 23 (Regulamento Brasileiro de Aviação Civil)-Brazilian Airworthiness Regulation corresponding to 14 CFR Part 23, effective 01 February 1965, including 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: (525A-0001 and on)


(c) Addition for engines and FADECs only (525A-0300 and on)


CERTIFICATION BASIS
(Cont.)

(2) (a) (525A-0001 through 525A-0299)

- RBAC 36 corresponding to 14 CFR § 36, effective 01 December 1969, Noise Standards, as amended by Amendments 36-1 through 36-22.

(b) (525A-0300 and on)


(3) RBAC 34 corresponding to 14 CFR § 34, effective 10 September 1990, Fuel Venting and Exhaust Emission Requirements for Turbine Engine powered Airplanes, as amended by amendments 34-1 through 34-3.
CERTIFICATION BASIS
(Cont.)

(4) FAA 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 525A-0300 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, demonstration of static longitudinal stability, static longitudinal stability, static directional and lateral stability, wings level stall, turning flight and accelerated stalls, stall warning, vibration and buffeting, high speeds characteristics, airspeed indicating system, static pressure system, maximum operating speed limit, minimum flight crew, operating limitation, operating procedures, performance information, airspeed indicator, effects of contamination on Natural Laminar Flow airfoils, definitions, and AFM approved information; and

   (b) 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 7)

(5) FAA Exemption: Exemption number 5759 granted to use a relaxed “Dutch Roll” damping criteria above 18,000 feet in lieu of damping criteria of RBAC / 14 CFR § 23.181 (b).

(6) FAA Equivalent level of safety as follows:
   (a) Number ACE-00-01: RBAC / 14 CFR §§ 23.1305 (c) (2), (c) (5), and 23.1549 (a) through (d), direct reading, digital only display for the high-pressure turbine speed (N2), and fuel flow indications.

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

   (c) Number ACE-00-05; RBAC / 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.

   (d) ANAC FCAR EI-01 Emergency Locator Signs.

(7) Compliance with ice protection has been demonstrated in accordance with RBAC / 14 CFR §§ 23.1416 and 23.1419.

REQUIRED EQUIPMENT

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

NOTE 1  Weight and balance. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity location must include:
- Unusable fuel: (525A-0001 and on) 34.8 kg (76.7 lb)
- Full oil: (525A-0001 through 525A-0299) 6.8 kg (15.07 lb)
- Full oil: (525A-0300 and on) 8.3 kg (18.4 lb)
- Hydraulic fluid: (525A-0001 through 525A-0299) 8.6 kg (18.9 lb)
- Hydraulic fluid: (525A-0300 and on) 11.8 kg (25.9 lb)
- Anti-ice fluid: (525A-0001 and on) 1.5 kg (3.4 lb)

NOTE 2  Markings and placards. The aircraft must be operated according to the Brazilian Approved Flight Manual and associated checklist. For the approved markings and placards translations contact the TC holder and/or ANAC at the following address: ggcp-gr@anac.gov.br

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

NOTE 4  The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:
   The Brazilian AFM numbers are 525ABR-00 or later approved revision for S/N 0001 through 0299 and 525ABRA-00 or later approved revision for S/N 0300 and on.
2. Markings and placards (see Note 2).

NOTE 5  All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with RBAC / 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 RBAC / 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 6  Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during 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.

NOTE 7  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.
NOTE 8  Certain airplane Serial Numbers meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

| S/N 525A-0001 through 525A-0299 | 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 525A-0300 and on | All airplanes are equipped with Collins Pro Line 21 dual Data Computers and pilot’s and copilot’s Primary Flight Display 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 certification Authority.


NOTE 10  The following serials are manufactured under the name Cessna Aircraft Company: 525A-0001 thru 525A-0524.

NOTE 11  Company name change effective 29 July 2015. The following serials are manufactured under the name Textron Aviation Inc.: 525A-0525 and on.


**ENGINE**  Two Williams International L.L.C. FJ44-3A turbofans


**ENGINE LIMITS**

<table>
<thead>
<tr>
<th>Static thrust, standard day, sea level:</th>
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</thead>
<tbody>
<tr>
<td>- Takeoff (5 min.)</td>
</tr>
<tr>
<td>Max. permissible engine rotor operating speeds:</td>
</tr>
<tr>
<td>- N1 (fan)</td>
</tr>
<tr>
<td></td>
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<tr>
<td>- N2 (gas generator)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Max. permissible interturbine gas temperatures:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Takeoff</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>- Max. Continuous</td>
</tr>
<tr>
<td>- Transient (starting 15 sec)</td>
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</tbody>
</table>

**OIL**  Synthetic Conforming MIL-L-23699
### AIRSPEED LIMITS (CAS)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Maximum Operating ((V_{MO}))</th>
<th>Maximum Operating ((V_{MO}))</th>
<th>Maximum Operating ((M_{MO}))</th>
<th>Maneuvering ((V_{m}))</th>
<th>Maximum Gust Intensity ((V_{g}))</th>
<th>Minimum Control Speed - Air ((V_{MCA}))</th>
<th>Minimum Control Speed - Ground ((V_{MCG}))</th>
<th>L. G. Operation ((V_{LO}))</th>
<th>Speed Brakes Extended ((V_{SB}))</th>
<th>Maximum Autopilot Operating Speed</th>
<th>Maximum Tire Ground Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Sea level to 2 438 m (8 000 ft)</td>
<td>257 kcas (260 kias)</td>
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<tr>
<td>- 2 438 m (8 000 ft) to 8 931 m (29 300 ft)</td>
<td>275 kcas (278 kias)</td>
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<tr>
<td>- Above 8 931 m (29 300 ft)</td>
<td></td>
<td></td>
<td>0.72 mcas (0.737 mias)</td>
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<tr>
<td>- Sea level at 6 291 kg (13 870 lb)</td>
<td>205 kcas (207 kias)</td>
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<tr>
<td>- See AFM for variations with weight and altitude.</td>
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<tr>
<td>- Maximum Gust Intensity ((V_{g}))</td>
<td>228 kcas (230 kias)</td>
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<tr>
<td>- Flaps extended ((V_{R}))</td>
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<tr>
<td>- 15° (takeoff and approach):</td>
<td>198 kcas (200 kias)</td>
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<tr>
<td>- 35° (landing):</td>
<td>158 kcas (161 kias)</td>
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<td></td>
</tr>
<tr>
<td>- 55° (ground flaps):</td>
<td></td>
<td></td>
<td>228 kcas (230 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Maximum speed with flaps failed to 55° (ground flaps) (Emergency Only)</td>
<td>138 kcas (140 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Minimum Control Speed - Air ((V_{MCA}))</td>
<td>88 kcas (88 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Minimum Control Speed - Ground ((V_{MCG}))</td>
<td>88 kcas (89 kias)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>- L. G. operation ((V_{LO})):</td>
<td></td>
<td></td>
<td>198 kcas (200 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Extend</td>
<td>195 kcas (200 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Retract</td>
<td>195 kcas (200 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- L. G. extended ((V_{LE})):</td>
<td></td>
<td></td>
<td>195 kcas (200 kias)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Speed Brakes extended ((V_{SB})):</td>
<td>Any speed with or without flaps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Maximum Autopilot Operating Speed: Any normal operating speed</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Maximum Tire Ground Speed:</td>
<td>165 kt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### CG RANGE

#### Forward Limits:
Linear variation from 759.21 cm (298.90 in.) aft of datum (21.20% MAC) at 6 382 kg (14 070 lb.) to 746.51 cm (293.90 in.) aft of datum (14.50% MAC) at 4 400 kg (9 700 lb.); 746.51 cm (293.90 in.) aft of datum (14.50% MAC) at 4 400 kg (9 700 lb.) to 4 082 kg (9 000 lb.); linear variation from 746.51 cm (293.90 in.) aft of datum (14.50% MAC) at 4 082 kg (9 000 lb.) to 758.70 cm (298.70 in.) aft of datum (21.00% MAC) at 3 629 kg (8 000 lb.);

#### Aft Limits:
773.94 cm (304.70 in.) aft of datum (29.00% MAC) at 6 382 kg (14 070 lb.) to 5 897 kg (13 000 lb.); linear variation from 773.94 cm (304.70 in.) aft of datum (29.00% MAC) at 5 897 kg (13 000 lb.) to 768.35 cm (302.50 in.) aft of datum (26.00% MAC) at 3 629 kg (8 000 lb.).

Landing Gear retracting moment +518.64 in-lb.

### EMPTY WEIGHT C. G. RANGE
None.

### DATUM
238.8 cm (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 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 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.

MEAN AERODYNAMIC CHORD

190.035 cm (74.817 in) - leading edge of MAC at Sta.+718.85 cm (+283.01 in.) aft of datum

MAXIMUM WEIGHT

Takeoff: 6 291 kg (13 870 lb)
Landing: 5 783 kg (12 750 lb)
Zero Fuel: 4 767 kg (10 510 lb)
Ramp: 6 382 kg (14 070 lb)

MINIMUM CREW

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 Approved Brazilian Airplane Flight Manual; or One pilot and one copilot.

See Note 6 for cockpit equipment / arrangement restrictions.

NUMBER OF SEATS

Maximum ten (two crew plus eight passenger seats)

MAXIMUM BAGGAGE

(525B-001 through 525B-207)

Nose compartment: 181 kg (400 lb) at Sta. + 74.0
Aft cabin: 45 kg (100 lb) at Sta. +330.20
Tailcone: 272 kg (600 lb) at Sta. +414.60

(525-208 and on)

Nose compartment: 181 kg (400 lb) at Sta. + 74.0
Tailcone: 272 kg (600 lb) at Sta. +414.60

FUEL CAPACITY

Total usable fuel 2 136 kg (4 710 lb). 2 661 l (703 gal)

Two wing tanks with 1 068 kg (2 355 lbs). 1 330.5 l (351 gal) usable each;
+787.65 cm (+310.10 in.) aft of datum (see NOTE 1 for unusable)

OIL CAPACITY

Tank mounted on each engine: 3.55 l (3.75 US quarts) usable each engine;
+1019.66 cm (+401.44 in.) aft of datum; (see NOTE 1)

MAXIMUM OPERATING ALTITUDE

13 716 m (45 000 ft)

CONTROL SURFACE MOVEMENTS

Elevator: Up 20.5° ±0.5° Down 15° ±1°
Elevator trim tab: Up 9° ±1° Down 17° ±1°
Rudder: Right 27° ±1° Left 27° ±1°
Rudder trim tab: Right 20° ±1° Left 20° ±1°
<table>
<thead>
<tr>
<th>CONTROL SURFACE MOVEMENTS (Cont.)</th>
<th>Aileron: Up 23.5° ±1°</th>
<th>Down 20.5° ±1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aileron trim tab:</td>
<td>Up 20° ±1°</td>
<td>Down 18° ±1°</td>
</tr>
<tr>
<td>Wing flaps:</td>
<td>Up 0° ±1°</td>
<td></td>
</tr>
<tr>
<td>Takeoff/approach down</td>
<td>15° ±1°</td>
<td></td>
</tr>
<tr>
<td>Landing</td>
<td>35° ±1°</td>
<td></td>
</tr>
<tr>
<td>Ground</td>
<td>55° ±2°</td>
<td></td>
</tr>
<tr>
<td>Speed breaks - Upper:</td>
<td>Up 0 to 49° ±2°</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Down 0 to 68° ±2°</td>
<td></td>
</tr>
</tbody>
</table>

See Airplane Maintenance Manual For Rigging Instructions

S/N’S ELIGIBLE

525B-0001 and on

IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of on an FAA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

“The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 9304, addendum 2, and in condition of safe operation”.
CERTIFICATION BASIS

(1) RBAC 21.29 plus RBAC (Regulamento Brasileiro de Aviação Civil) – Brazilian Airworthiness Regulation 23 corresponding to 14 CFR Part 23 effective 01 February 1965, as amended by Amendments 23-1 through 23-54;

(a) Additions:
- RBAC / 14 CFR Part 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;
- RBAC / 14 CFR Part 23.1451 as amended through amendment 23-40 for 525B-0001 through 525B-0056 and 525B-0058 through 525B-0450;
- RBAC / 14 CFR Part 23.1309 as amended through Amendment 23-49 for the engine FADEC installation only;
- RBAC / 14 CFR Part 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 525B-0057 and 525B-0451 and on):

<table>
<thead>
<tr>
<th>Regulation No.</th>
<th>Title</th>
<th>Amendment Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.1306</td>
<td>Lightning Protection</td>
<td>23-62</td>
</tr>
<tr>
<td>23-1308</td>
<td>High-Intensity Radiated Field (HIRF) Protection</td>
<td>23-62</td>
</tr>
<tr>
<td>23-1451</td>
<td>Fire Protection for Oxygen Equipment</td>
<td>23-62</td>
</tr>
<tr>
<td>23-1555</td>
<td>Control Markings</td>
<td>23-62</td>
</tr>
</tbody>
</table>

(2) RBAC 34 corresponding to 14 CFR Part 34 effective 10 September 1990, as amended by amendment 34-1 through 34-3;

(3) RBAC 36 corresponding to 14 CFR Part 36 effective 01 December 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 feet). Additional requirements for Ventilation, Air Conditioning, Pressurized cabins, Oxygen equipment and supply, Supplemental oxygen, Oxygen distribution and equipment. (See NOTE 7.)
CERTIFICATION BASIS
(Cont.)


(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 feet in lieu of damping criteria of RBHA/ FAR Part 23.181(b).

(6) Equivalent level of safety as follows:
(a) 525B-0001 Through 525B-0056 and 525B-0058 Through 525B-0450:
Number ACE-00-01A: RBAC / 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 (N2), and fuel flow indications.
525B-0056 and 525B-0451 and on:
Number ACE-14-12: 14 CFR §§ 23.1549(a),(b),(d), Electronic Display of the Engine Parameters; N2, Oil Pressure, Oil Temperature, and Fuel Flow, on a Garmin 3000 Integrated Flight Deck.
(c) Number ACE-00-05A: RBAC / 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.
(d) Number ACE-02-18: RBAC / 14 CFR § 23.783(f)(1), Passenger Entry Door Opening Dimensions.
(e) Number ACE-02-20: RBAC / 14 CFR § 23.815(b), Cabin Aisle Width.
(f) Number ACE-03-07: RBAC / 14 CFR § 23.853(d)(2) No Smoking Placard Lettering Size.
(g) Number ACE-04-06: RBAC / 14 CFR § 23.1447(e) Passenger Oxygen Dispensing Units.
Note: No model 525B Aircraft will be configured to meet ELOS ACE-11-07
(g) ANAC FCAR EI-01 Emergency Locator Sign.
CERTIFICATION BASIS (Cont.)  

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

(8) Compliance with ice protection has been demonstrated in accordance with RBAC / 14 CFR §§ 23.1416 and 23.1419. (See Note 10).

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

NOTES:

NOTE 1  
Weight and balance. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity location must include:
- Unusable fuel: 22.53 kg (49.68 lb)
- Full oil: 7.83 kg (17.48 lb)
- Hydraulic fluid: 6.84 kg (15.09 lb)
- Anti-ice fluid 1.54 kg (3.4 lb)

NOTE 2  
Markings and placards. The aircraft must be operated according to the Brazilian Approved Flight Manual and associated checklist. For the approved markings and placards translations contact the TC holder and/or ANAC at the following address: ggcp-gr@anac.gov.br

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

NOTE 4  
The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:
   The Brazilian AFM number is 525BBR-00 or later approved revision for 525B-0001 through 525B-0056 and 525B-0058 through 525B-0450 or 525BBRA-00 or later approved revision for 525B-0057 and 525B-0451 and on.
2. Markings and placards (see Note 2).

NOTE 5  
All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with RBAC / 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 RBAC / 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 6  
Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during 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.
NOTE 7  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.

NOTE 8  Airplane Serial Numbers identified below meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>525B-0001</td>
<td>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.</td>
</tr>
<tr>
<td>Through -0056 and 525B-0058 through -0450</td>
<td></td>
</tr>
<tr>
<td>525B-0057 and 525B-0451 and on</td>
<td>All airplanes are equipped with Garmin G3000.</td>
</tr>
</tbody>
</table>

Each operator must obtain RVSM operating approval directly from the certification Authority.

NOTE 9  The Model 525B is approved for One Engine Inoperative 10 minutes thrust capability with the Williams International FJ44-3A engine.

NOTE 10  Flight into known icing is approved for the following Serial Number effectivity. S/N 525B-0001; S/N 525B-0002 thru 525B–0012 incorporating Cessna Service Bulletin SB525B-30-01; and S/N 525B-0013 and On.

NOTE 11  The following serials are manufactured under the name Cessna Aircraft Company: 525B-0001 thru 525-0473.

NOTE 12  Company name change effective 29 July 2015. The following serials are manufactured under the name Textron Aviation Inc.: 525B-0474 and on.

IV - Model 525C, (Commuter Category), approved 08 August 2011.

ENGINE  Two Williams International L.L.C.  FJ44-4A turbofans


ENGINE LIMITS  

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static thrust, standard day, sea level;</td>
<td></td>
</tr>
<tr>
<td>- Takeoff (5 min.)</td>
<td>3 621 lb</td>
</tr>
<tr>
<td>Max. permissible engine rotor operating speeds:</td>
<td></td>
</tr>
<tr>
<td>- N1 (fan)</td>
<td>104.76% 100% = 16 360 rpm</td>
</tr>
<tr>
<td>- Transient (2 minute operational limit)</td>
<td>105.76%</td>
</tr>
<tr>
<td>- N2 (gas generator)</td>
<td>100.86% 100% = 37 450 rpm</td>
</tr>
<tr>
<td>- Transient (2 minute operational limit)</td>
<td>101.59%</td>
</tr>
<tr>
<td>Max. permissible interturbine gas temperatures:</td>
<td></td>
</tr>
<tr>
<td>- Takeoff</td>
<td>855°C (5 min, 10 min OEI)</td>
</tr>
<tr>
<td>- Max. Continuous</td>
<td>835°C</td>
</tr>
<tr>
<td>- Transient (starting 15 sec)</td>
<td>1000°C</td>
</tr>
<tr>
<td>- Transient (starting 30 sec.)</td>
<td>900 °C</td>
</tr>
</tbody>
</table>

OIL  Synthetic Conforming MIL-L-23699
### AIRSPEED LIMITS (CAS)

**Maximum operating \((V_{MO})\):**
- Sea level to 2,438 m (8,000 ft) 261 kcas (260 kias)
- 2,438 m (8,000 ft) to 8,534 m (28,000 ft) 306 kcas (305 kias)

**Maximum operating \((M_{MO})\):**
- Above 8,534 m (28,000 ft) 0.774 mca (0.77 mias)

**Maneuvering \((V_{O})\):**
- Sea level at 7,688 kg (16,950 lb) 185 kcas (185 kias)
- See AFM for variations with weight and altitude.

**Maximum gust intensity \((V_{G})\):**
- Up to 12,210 m (40,060 ft) 233 kcas (232 kias)
- Above 12,210 m (40,060 ft) 0.774 mca (0.77 mias)

**Flaps extended \((V_{FE})\):**
- 15° (takeoff and approach): 200 kcas (200 kias)
- 35° (landing): 160 kcas (160 kias)

**Minimum control speed - Air \((V_{MCA})\):**
- 0° (takeoff): 94 kcas (94 kias)
- 15° (takeoff and approach): 85 kcas (85 kias)

**Minimum control speed - Ground \((V_{MCG})\):**
- Extend: 88 kcas (88 kias)
- Retract: 156 kcas (156 kias)

**L. G. operation \((V_{LO})\):**
- Extend: 200 kcas (200 kias)
- Retract: 199 kcas (200 kias)
- L. G. extended \((V_{LE})\): 199 kcas (200 kias)

**Speed Brakes extended \((V_{SB})\):** Any speed with or without flaps

**Maximum autopilot operating speed:** Any normal operating speed up to 305 KIAS or 0.7 M_i

**Maximum tire ground speed:** 165 kt

### CG RANGE

(Landing Gear Extended)

**Forward Limits:** Linear variation from 792.63 cm (312.06 in.) aft of datum (21.0% MAC) at 4,309 kg (9,500 lb.) to 778.89 cm (306.65 in.) aft of datum (14.50% MAC) at 4,763 kg (10,500 lb.) to 778.89 cm (306.65 in.) aft of datum (14.50% MAC) at 6,010 kg (13,250 lb.) to 780.57 cm (307.31 in.) aft of datum (15.30% MAC) at 6,577 kg (14,500 lb.) to 782.27 cm (307.98 in.) aft of datum (16.10% MAC) at 6,917 kg (15,250 lb.) to 785.44 cm (309.23 in.) aft of datum (17.60% MAC) at 7,371 (16,250 lb.) to 789.97 cm (311.01 in) aft of datum (19.40% MAC) at 7,815 kg (17,230 lb).

**Aft Limits:** 805.33 cm (317.06 in.) aft of datum (27.00% MAC) at 4,309 kg (9,500 lb.) to 805.33 cm (317.06 in.) aft of datum (27.00% MAC) at 5,511 kg (12,150 lb.) to 803.22 cm (316.23 in.) aft of datum (26.00% MAC) at 5,897 kg (13,000 lb.) to 803.22 cm (316.23 in) aft datum (26.00% MAC) at 6,577 kg (14,500 lb) to 807.44 cm (317.89 in) aft datum (28.00% MAC) at 7,144 kg (15,750 lb) to 807.44 cm (317.89 in) aft of datum (28.00% MAC) at 7,815 kg (17,230 lb).

**Landing Gear retracting moment:** -3,386 in-lb.

### EMPTY WEIGHT C. G. RANGE

None.
**DATUM**

238.8 cm (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.

**MEAN AERODYNAMIC CHORD**

211.56 cm (83.290 in) (L.E. of MAC at +748.21 cm (+294.571 in) aft of datum)

**MAXIMUM WEIGHT**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff:</td>
<td>7 761 kg (17 110 lb)</td>
</tr>
<tr>
<td>Landing:</td>
<td>7 103 kg (15 660 lb)</td>
</tr>
<tr>
<td>Zero Fuel:</td>
<td>5 670 kg (12 500 lb)</td>
</tr>
<tr>
<td>Ramp:</td>
<td>7 815 kg (17 230 lb)</td>
</tr>
</tbody>
</table>

**MINIMUM CREW**

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 Approved Brazilian Airplane Flight Manual; or One pilot and one copilot.

See Note X for cockpit equipment arrangement restrictions.

**NUMBER OF SEATS**

Maximum 11 (two crew plus nine passenger seats)

**MAXIMUM BAGGAGE**

- Nose compartment: 181 kg (400 lb) (+ 193.40 cm (+76.14 in) aft of datum).
- Tailcone: 272 kg (600 lb) (+ 1 096.52 cm (+431.70 in) aft of datum).

**FUEL CAPACITY**

Total usable fuel 2 644 kg (5 828 lb.) 3 290 l (869.8 gal)

Two wing tanks with 1 322 kg (2 914 lbs.) 1 645 l (434.9 gal) usable each; +811.02 cm (+319.30 in.) aft of datum (see NOTE 1 for unusable).

**OIL CAPACITY**

Tank mounted on each engine: 4.5 l (4.8 US quarts) usable each engine; +1 078.59 cm (+424.64 in.) aft of datum; (see NOTE 1)

**MAXIMUM OPERATING ALTITUDE**

13 716 m (45 000 ft)

**CONTROL SURFACE MOVEMENTS**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevator:</td>
<td>25.5° ±0.5°</td>
<td>12° ±1°</td>
</tr>
<tr>
<td>Elevator trim tab:</td>
<td>6° ±1°</td>
<td></td>
</tr>
<tr>
<td>Rudder:</td>
<td>32° ±1°</td>
<td>32° ±1°</td>
</tr>
<tr>
<td>Rudder trim tab:</td>
<td>20° ±1°</td>
<td>20° ±1°</td>
</tr>
<tr>
<td>Aileron:</td>
<td>23.5° ±1°</td>
<td>20.5° ±1°</td>
</tr>
<tr>
<td>Component</td>
<td>Range</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Aileron trim tab</td>
<td>Up $19^\circ \pm 1^\circ$, Down $19^\circ \pm 1^\circ$</td>
<td></td>
</tr>
<tr>
<td>Wing flaps</td>
<td>Up $0^\circ \pm 1^\circ$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Takeoff/Approach down $15^\circ \pm 1^\circ$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Landing        $35^\circ \pm 1^\circ$</td>
<td></td>
</tr>
<tr>
<td>Speed breaks -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>$0$ to $40^\circ \pm 2^\circ$</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Down $0$ to $35.4^\circ \pm 2.5^\circ$</td>
<td></td>
</tr>
<tr>
<td>Ground Spoilers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inboard</td>
<td>Up $55.0 \pm 2^\circ$</td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td>Up $55.0 \pm 2^\circ$</td>
<td></td>
</tr>
<tr>
<td>Outboard</td>
<td>Up $55.0 \pm 2^\circ$</td>
<td></td>
</tr>
</tbody>
</table>

See Airplane Maintenance Manual for rigging instructions.

**S/N’S ELIGIBLE**

- 525C-0001 and on

**IMPORT ELIGIBILITY**

A Brazilian Certificate of Airworthiness may be issued on the basis of an FAA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

“*The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 9304, addendum 2, and in condition of safe operation*.”
CERTIFICATION BASIS

(1) RBAC (Regulamento Brasileiro de Aviação Civil) – Brazilian Airworthiness Regulation 21.29 and RBAC 23 that correspond to 14 CFR Part 23 effective 01 February 1965, as amended by Amendments 23-1 through 23-57;
   (a) In addition, the installation of 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.

(2) RBAC 34 corresponding to 14 CFR Part 34 effective 10 September 1990, as amended by amendment 34-1 through 34-4;

(3) RBAC 36 corresponding to 14 CFR Part 36 effective 01 December 1969, as amended by amendment 36-1 through 36-28;

(4) Special Conditions as follows:
   (a) 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 7.)
   (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 RBAC / 14 CFR § 23.161 (b)(2), trim and § 23.181(a) and (d), Dynamic Stability.

(5) Exemption as follows:
   (a) Exemption No. 9534 to permit certification in the Commuter category, in lieu of RBAC / 14 CFR § 23.3(d).
   (b) Exemption No. 9920 for use of a relaxed “Dutch Roll” damping criteria above 18,000 feet in lieu of damping criteria of RBAC / 14 CFR § 23.181(b).
   (c) Exemption No. 9495 to permit modification of the airplane landing gear loads and associated airframe loads in lieu of RBAC / 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 RBAC / 14 CFR.
   (d) Exemption No. 9593 to permit for the installation of a multi-place side-facing couch, in lieu RBAC / 14 CFR § 23.562(a).

(6) Equivalent level of safety as follows:
   (a) ELOS No. ACE-00-05B: RBAC / 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.
CERTIFICATION BASIS (Cont.)

(b) ELOS No. ACE-08-01: RBAC / 14 CFR § 23.1555(d)(1), Usable Fuel Capacity Marking.
(c) ELOS No. ACE-08-03A: RBAC / 14 CFR § 23.841(b)(6), Cabin Pressurization – High Altitude Takeoff and Landing Operation.
(d) ELOS No. ACE-08-04: RBAC / 14 CFR § 23.815(b), Cabin Aisle width.
(e) ELOS No. ACE-08-07: RBAC / 14 CFR § 23.853(d)(2) No Smoking Placard Lettering Size.
(f) ELOS No. ACE-08-08: RBAC / 14 CFR § 23.807(e), Emergency Exit Water Barrier.
(g) ELOS No. ACE-09-07: RBAC / 15 CFR § 23.1303(c) for a Direction Indication (non-stabilized magnetic compass).
(i) ELOS No. ACE-10-06: RBAC / 14 CFR § 23.1236(b), Pitot Heat Indication System.

(7) Compliance with ice protection has been demonstrated in accordance with RBAC / 14 CFR § 23.1416 and 23.1419.

REQUIRED EQUIPMENT

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

NOTES:

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

- Unusable fuel: 15.24 kg (33.60 lb)
- Full oil: 10.96 kg (24.16 lb)
- Hydraulic fluid: 11.39 kg (25.12 lb)

NOTE 2 Markings and placards. The aircraft must be operated according to the Brazilian Approved Flight Manual and associated checklist. For the approved markings and placards translations contact the TC holder and/or ANAC at the following address: ggcp-gr@anac.gov.br

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

NOTE 4 The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:

   The Brazilian AFM number is 525CBR-01 or later approved revision.
2. Markings and placards (see Note 2).
NOTE 5  All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with RBAC / 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 RBAC / 14 CFR §§ 23.562. The cabinets that are installed forward of 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 RBAC / 14 CFR §§ 23.561, 23.562 and 23.785.

NOTE 6  Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during 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.

NOTE 7  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.

NOTE 8  RVSM (Reduced Vertical Separation Minima): Per the approved Type Design, S/N 525C-0001 and On meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace. Each operator must obtain RVSM operating approval directly from the certification Authority.


NOTE 10  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 certificating FAA ACO. This document has influenced certain maintenance actions documented in Airworthiness Limitations section (Chapter Four) of the maintenance manual. Those particular items cannot be changed without participation from the certificating FAA ACO.

NOTE 11  The Model 525C shall not be eligible for operations under RBAC 121 (Reference Exemption 9534).
NOTE 12  The following serials are manufactured under the name Cessna Aircraft Company: 525C-0001 thru 525-0192.

NOTE 13  Company name change effective 29 July 2015. The following serials are manufactured under the name Textron Aviation Inc.: 525C-0193 and on.

MARIO IGAWA
Gerente Geral de Certificação de Produto Aeronáutico  
(General Manager, Aeronautical Product Certification)