Ministry of Transport and Communications of Ukraine
State Aviation Administration

SAA
TYPE CERTIFICATE DATA SHEET № TL 0047

Cessna Model 525 (Citation Jet)

Type Certificate Holder: CESSNA AIRCRAFT COMPANY
PO Box 7704 Wichita, Kansas 67277 USA

Models: 525B

Issue 1, 27 September 2010

This Data Sheet which is integral part of Type Certificate № TL 0047 prescribes the conditions and limitations under which the product(s) for which the Type Certificate was granted meet(s) the airworthiness requirements and environmental protection requirements, stated in Certification basis mentioned in this Data Sheet.

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1. **General**

1. a) Model: 525B

   b) Variant: N/A

2. Airworthiness Category: AR 23 Commuter Category

3. Type Certificate Holder: CESSNA AIRCRAFT COMPANY
   P.O. Box 7704
   Wichita, Kansas 67277
   USA

4. Manufacturer: CESSNA AIRCRAFT COMPANY
   P.O. Box 7704
   Wichita, Kansas 67277
   USA

6. SAA Certification Application Date: 17 June 2008

7. SAA Type Certification Date: 27 September 2010
II. Certification Basis

1. EASA Certification Basis: As defined in CRI A-01, latest issue

2. SAA Certification Basis: AR-23 «Airworthiness Standards for Civil Light Airplane»

3. (Reserved)

4. (Reserved)

5. EASA Special Conditions

- CRI A-06 CS23 Jets beyond 5670 kg (12500 lbs)
- CRI B-01 Human Factors
- CRI B-02 CS23 Jet requirements
- CRI B-03 High Altitude Operation
- CRI E-01 FADEC Integration
- CRI F-01 Protection from the Effects of HIRF
- CRI F-02 Protection from the Direct Effects of Lightning strike
- CRI F-03 Protection from the Indirect Effects of Lightning strike
- CRI F-04 Equipment Systems and Installations
- CRI F-05 Databases and Configuration Files
- CRI F-06 Digital Devices Design Assurance

6. (Reserved)

7. EASA Equivalent Level of Safety Findings:

- CRI E-02 Digital reading N2
- CRI D-01 Cabin Pressurization high altitude TO/ L
- CRI D-02 Cabin Pressurization Excursion
- CRI D-03 Passenger Entry Door
- CRI D-04 Aisle Width
- CRI D-05 No Smoking Placard letter Size
- CRI F-08 Passenger Oxygen Dispensing Unit

8. SAA Equivalent Level of Safety Findings: CRI A-02 CVR and FDR

CRI E-03 Powerplant Warning System

CRI ST-02 Shimmy

9. EASA Environmental Standards:

- ICAO Annex 16, Volume I, Chapter 3
- ICAO Annex 16, Volume II, Part II, Chapter 2
III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Cessna Airplane Assembly Drawing Number 6300300, Document No A1WI, latest FAA approved revision.

2. Description: Low wing aircraft with retractable tricycle landing gear, T-tail, pressurized cabin, and two turbofan engines pylon mounted on the rear fuselage

3. Equipment: Equipment List according to AFM, 525BFM-00 or later approved revision

(See Note 2 and Note 8)

4. Dimensions:
   - Span
   - Length
   - Height
   - Wing Area
   - 16.13 m (52 ft 11 in.)
   - 15.29 m (50 ft 2 in.)
   - 4.62 m (15 ft 2 in.)
   - 27.32 sq.m (294.1 sq ft.)

5. Engines:
   Two Williams International, L.L C. FJ44-3A turbofans
   SAA TCDS № TD0049

   Engine Limits:
   Static thrust standard day, sea level:
   Takeoff: 1,279 kg (2,820 lbs)

   Other engine limitations: referred to the engine TC

6. (reserved)

7. (reserved)

8. Fluids
   8.1 Fuel: Commercial kerosene Jet A, Jet A-1, Jet 3, JP-5, or JP-8; Ukrainian fuels TS-1 (GSTU 320.00149943.011-99) and RT (GSTU 320.00149943.007-97); Russian fuels TS-1 and RT (GOST 10227)

   8.2 Oil: Mobil Jet II MIL-L-23699
   Mobil 254 MIL-L-23699

   8.3 Coolant: Not applicable

9. Fluid capacities:
   9.1 Fuel: Total usable: 4,710 lb. (703 gal / 2661.1 liters) Two wing tanks with 2,355 lbs (351 gal / 1328.6 liters) usable each

   9.2 Oil: 3.75 quarts usable each engine
10. Airplane Limit Speeds (KCAS)

Maximum Operating

\[ V_{MO} \]
- Sea Level to 8,000 feet: 257
- 8,000 feet to 29,300 feet: 275
- Above 29,300 feet: 0.72

Maneuvering

\[ V_A \]
- (525B-0001 and On)*: 205

* See AFM for variations with weight and altitude

Flaps Extended

\[ V_{FE} \]
- Flaps 15°: 198
- Flaps 35°: 160
- Maximum speed with flaps failed to 60 degrees: 140
  (ground flaps) (Emergency only)

Landing Gear Operating

\[ V_{L0} \]
- (525B-0001 and On): 195 (Extending)
- (525B-0001 and On): 195 (Retracting)

Landing Gear Extended

\[ V_{LE} \]
- 195

Minimum Control Air

\[ V_{MCA} \]
- (525B-0001 and On): 88 (Flaps 0°)
- (525B-0001 and On): 81 (Flaps 15°)

11. Maximum Operating Altitude

13,716 m (45,000 ft)

12. Operational Capacity:

VFR Day and Night
IFR Day and Night
RVSM (See Note 7)
Flight into known icing (See Limitations Section of Approved Airplane Flight Manual)

13. Maximum Certified Weights, kg (lbs)

<table>
<thead>
<tr>
<th>Aircraft Serial Number</th>
<th>Max. Zero Fuel Weight</th>
<th>Max. Ramp Weight</th>
<th>Max. Take-Off Weight</th>
<th>Max. Landing Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>525B-0001 and On</td>
<td>4,767 kg (10,510 lbs)</td>
<td>6,382 kg (14,070 lbs.)</td>
<td>6,291 kg (13,870 lbs.)</td>
<td>5,783 kg (12,750 lbs.)</td>
</tr>
</tbody>
</table>

14. Centre of Gravity Range (Gear Extended)*
(525B-0001 and On):

- Allowable Forward C.G. at 6,382 kg (14,070 lbs) F.S. 298. 90
- Allowable Forward C.G. at 4,400 kg (9,700 lbs) F.S. 293. 90
- Allowable Forward C.G. at 4,082 kg (9,000 lbs) F.S. 293. 90
- Allowable Forward C.G. at 3,629 kg (8,000 lbs) F.S. 298. 70
- Aft C.G. at 6,382 kg (14,070 lbs) F.S. 304. 70
- Aft C.G. at 5,897 kg (13,000 lbs) F.S. 304. 70
- Aft C.G. at 3,629 kg (8,000 lbs) F.S. 302.50
* Straight line variation between given points

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

16. (Reserved)

17. Leveling means 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.

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.

18. Minimum Flight Crew (see note 2 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 or One pilot and one copilot

19. Maximum Passenger Seating Capacity: 8 passengers

20. (Reserved)

21 Baggage / Cargo Compartment

<table>
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<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Nose Compartment</td>
<td>181, 4 kg (400 lbs.)</td>
</tr>
<tr>
<td>Aft Cabin</td>
<td>45, 4 kg (100 lbs)</td>
</tr>
<tr>
<td>Tailcone</td>
<td>272, 2 kg (600 lbs.)</td>
</tr>
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</table>

22 Wheels and Tyres

<table>
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<tr>
<th>Type</th>
<th>Size</th>
<th>Manufacturer/Model</th>
</tr>
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<tbody>
<tr>
<td>Main Landing Gear (MLG)</td>
<td>H22 x 8 25-10</td>
<td>Goodyear 229K28-2, Michelin 026-618-0</td>
</tr>
<tr>
<td>Nose Landing Gear (NLG)</td>
<td>18x4.4</td>
<td>Goodyear 184F08-1, Michelin 031-613-8</td>
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</table>
### IV. Operation and Service Instructions

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<th>Manual/Supplement</th>
<th>Requirement</th>
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<tr>
<td>Airplane Flight Manual (AFM)</td>
<td>Airplanes must be operated according to the FAA Approved Airplane Flight Manual, part number 525BFM-00 (or later approved revision).</td>
</tr>
<tr>
<td>Airplane Maintenance Manual</td>
<td>Model 525B Maintenance Manual, 525BMM00 or later approved revision. See Chapter 4, &quot;Airworthiness Limitations&quot; for inspections, mandatory retirement life information and other requirements for continued airworthiness. &quot;Airworthiness Limitations&quot; may not be changed without the approval of EASA.</td>
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<tr>
<td>AFM Supplement for operation in Ukraine</td>
<td>Doc. 525BFM-S26</td>
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V. Notes

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

   The certificated empty weight and corresponding center of gravity location must include:
   - Unusable fuel: 49.68 lb. at +296 80 in.
   - Full oil: 18.40 lb at +401 44 in.
   - Hydraulic Fluid: 15.09 lb at +318.44 in.
   - Anti-ice Fluid: 3.40 lb at +91.5 in.

2. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during FAA certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as permitted by the approved MMEL, without prior approval from the responsible Aircraft Certification Office.

3. Required placards and markings are listed in Chapter Eleven (11) of Maintenance Manual, part number 525BMM00 (or later approved revision).

4. All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with CS 23 321, 23.395, 23.561, 23.562, and 23 785.

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

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

5. Model 525B airplanes have been approved for high altitude operations (altitudes above 41,000 feet), by Special Conditions. Any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the certification basis. This includes modifications which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 3 00 sq in.

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

   | S/N 525B-0001 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. |

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

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

8. In accordance with Ukrainian Aviation Rules the following equipment should be installed: FDR, CVR, EGPWS, TCAS II.

Head of Aeronautical Product
Type Certification Department

S. Gaidenko