

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A25CE Revision 13 Textron Aviation Inc. 404 406 October 29, 2015

TYPE CERTIFICATE DATA SHEET NO. A25CE

This data sheet which is part of Type Certificate No. A25CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation 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 404, Titan, (Normal Category), Approved July 21, 1976

Engines	Two Teledyne Continental GTSIO-520-M Reduction gear ratio .667:1
Fuel	100/130 or 100 low-lead minimum grade aviation gasoline See NOTE 3 for optional anti-icing additive
Engine Limits	For all operations, 2235 propeller r.p.m. (375 hp.) 40.0 in. Hg. mp. up to critical altitude of 16,000 feet in standard atmosphere. Above 16,000 feet the following maximum mp. applies for maximum r.p.m.

<u>Altitude (ft.)</u>	<u>Max. Allowable Mp. (in. Hg)</u>
16,000	40.0
18,000	37.5
20,000	35.0
22,000	32.0
24,000	29.2
26,000	26.0
28,000	23.0
30,000	20.0

Propeller and Propeller Limits	Two McCauley full-feathering three-bladed propeller installations (a) McCauley hub 3FF32C501 with 90UMB-0 blades Diameter: not over 90.0 in., not under 88.5 in. No further reduction permitted Pitch settings at 30.0 in. sta.: low 16.6°, ±0.2°, feathering 84.6°, ±0.3° <u>S/N 404-0001 through 404-0600</u> (b) Hydraulic governor McCauley DCF290D2/T6, DCFU290D2/T6, DCFS290D2/T6, DCFUS290D2/T6, DCF290D7/T6, DCFU290D7/T6 or DCFU290D13/T6, DCFS290D7/T6, DCFUS290D7/T6 or DCFUS290D13/T6 <u>S/N 404-0601 and up</u> (b) Hydraulic governor McCauley DCF290D7/T6, DCFU290D7/T6 or DCFU290D13/T6, DCFS290D9/T6, DCFUS290D9/T6 (c) Propeller spinner and bulkhead assembly, McCauley D3534/D-4506
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I. Model 404 (cont'd)

Airspeed Limits (IAS)	Maneuvering	160 KIAS
	Maximum structural cruising	212 KIAS
	Never exceed	241 KIAS
	Landing gear operating	182 KIAS
	Landing gear extended	182 KIAS
	Flaps extended - takeoff	182 KIAS
	Flaps extended - landing	152 KIAS
	Minimum control	78 KIAS
C.G. Range (Landing Gear Extended)	(+170.31) to (+179.08) at 8400 lb. (+165.6) at 6100 lb. or less Straight line variation between points given Landing gear retracted moment change: +1113 in./lb.	
Empty Wt. C.G. Range	None	
Leveling Means	Two screws located on W.L. 93.80 @ sta. 248.25 and sta. 272.65	
Maximum Weight	<u>S/N 404-0001 through 404-0200</u> Landing 8100 lb., takeoff 8400 lb.	
	<u>S/N 404-0201 and up</u> Landing 8100 lb., ramp 8450 lb., takeoff 8400 lb.	
No. of Seats	<u>One through eleven</u> (2 at +137.0, 2 at +171.0, 2 at +199.0, 2 at +227.0, 1 at +255.0 and 2 at +296.0) See manufacturer's equipment list for other seating arrangements	
Maximum Baggage	250 lb. (+32.0), 350 lb. (+71.0), 400 lb. (+211.0), 400 lb. (+301.0) and 100 lb. (+317.0)	
Fuel Capacity	<u>S/N 404-0001 through 404-0200</u> 348.0 gallons (2 wing tanks, 174.0 gallons each, 170.0 gallons usable at +181.2)	
	<u>S/N 404-0201 and up</u> 348.0 gallons (2 wing tanks, 174.0 gallons each, 172.0 gallons usable at +181.2)	
	See NOTE 1 for data on unusable fuel	
Oil Capacity	26 quarts (13 quarts in each engine at +129.0; usable 7.0 quarts per engine)	
	See NOTE 1 for data on undrainable oil.	
Maximum Operating Altitude	30,000 feet	
Control Surface Movements	Wing flaps	Down 35°, ±1° (Inboard)
		Down 23°, +0°, -1° (Outboard)
	Main surfaces	
	Aileron	Up 25°, +1°, -0°
	Elevator	Up 24°, +1°, -0°
	Rudder	Right 32°, +1°, -0°
	(Read degrees normal to rudder hinge line)	
	Tab (main surface in neutral)	
	Aileron	Up 15°, +1°, -0°
	Elevator	Up 4°, +0.5°, -0.0°
	Rudder	Right 9°, +0.0°, -0.5°
	(Read degrees normal to rudder hinge line)	
Serial Nos. Eligible	404-0001 through 404-0859	

II. Model 406, Caravan II, (Normal Category), Approved June 27, 1986

Engines	Two Pratt and Whitney Aircraft of Canada, Ltd., PT6A-112 turboprops																																
Fuel	Aviation turbine fuel ASTM D-1655, Jet A, Jet A-1, or Jet B; MIL-T-5624, JP-4, JP-5; MIL-T-83133, JP-8. Anti-icing additive per MIL-I-27686D, MIL-I-27686E, or Phillips PFA55MB must be blended into the aircraft fuel in concentrations not less than 0.060% or more than 0.15% by volume. For emergency use of aviation gasoline and fueling procedures, refer to approved Airplane Flight Manual.																																
Engine Limits	<table><thead><tr><th></th><th colspan="4">Operating Limits</th></tr><tr><th></th><th>Ng Gas Generator Speed (% r.p.m.)</th><th>Indicated Torque (ft.-lbs.)</th><th>Prop Shaft Speed (r.p.m.)</th><th>Maximum Permissible Interturbine Temp. (°C)</th></tr></thead><tbody><tr><td>Takeoff static and max. continuous</td><td>500</td><td>101.6</td><td>1382</td><td>1900</td><td>725</td></tr><tr><td>Starting (2 seconds)</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1090</td></tr><tr><td>Maximum reverse</td><td>480</td><td>101.6</td><td>1382</td><td>1815</td><td>725</td></tr></tbody></table>						Operating Limits					Ng Gas Generator Speed (% r.p.m.)	Indicated Torque (ft.-lbs.)	Prop Shaft Speed (r.p.m.)	Maximum Permissible Interturbine Temp. (°C)	Takeoff static and max. continuous	500	101.6	1382	1900	725	Starting (2 seconds)	-	-	-	-	1090	Maximum reverse	480	101.6	1382	1815	725
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Propeller and Propeller Limits	Two McCauley three-bladed, full-feathering, reversible Hub: 3GFR34C701 Blade: 93KB-0 Diameter: Not over 93 inches, not under 90-5/8 inches; no further reduction permitted Pitch at 30-inch station: Low pitch 18.5°, feathered 85.5°, reverse -13.5°																																
Airspeed Limits (IAS)	<table><tbody><tr><td>V_{MO} (Maximum operating)</td><td></td></tr><tr><td>Sea level to 21,500 ft.</td><td>229 knots</td></tr><tr><td>M_{MO} Above 21,500 ft.</td><td>.52 mach</td></tr><tr><td>V_A (Maneuvering)</td><td>162 knots</td></tr><tr><td>V_{FE} (Flaps extended)</td><td></td></tr><tr><td>30° (Landing)</td><td>180 knots</td></tr><tr><td>20° (Approach)</td><td>200 knots</td></tr><tr><td>10° (Takeoff)</td><td>200 knots</td></tr><tr><td>V_{MCA} (Air minimum control speed)</td><td>90 knots</td></tr><tr><td>V_{LO} (Landing gear operating)</td><td>180 knots</td></tr><tr><td>V_{LE} (Landing gear extended)</td><td>180 knots</td></tr></tbody></table>					V _{MO} (Maximum operating)		Sea level to 21,500 ft.	229 knots	M _{MO} Above 21,500 ft.	.52 mach	V _A (Maneuvering)	162 knots	V _{FE} (Flaps extended)		30° (Landing)	180 knots	20° (Approach)	200 knots	10° (Takeoff)	200 knots	V _{MCA} (Air minimum control speed)	90 knots	V _{LO} (Landing gear operating)	180 knots	V _{LE} (Landing gear extended)	180 knots						
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C.G. Range (Landing Gear Extended)	(+166.99 in.) to (+180.28 in.) at 6,500 lb. or less (11% to 32% MAC) (+172.42 in.) to (+180.28 in.) at 9,360 lb. (19.6% to 32% MAC) Variation is linear between points Landing gear retracting moment (+1346 in.-lb.)																																
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Leveling Means	Two screws located on W.L. 93.80 @ sta. 248.25 and sta. 272.65																																
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Number of Seats	<u>One through fourteen</u> (2 at +137.0, 2 at +166.0, 2 at +192.0, 2 at +218.0, 2 at +244.0, 2 at +270.0, and 2 at +296.0) See manufacturer's equipment list for other seating arrangements																																

II. Model 406 (cont'd)

Maximum Baggage	250 lb. (+32.0), 350 lb. (+71.0), 400 lb (+211.0), 400 lb. (+301.0), and 100 lb. (+317.0)			
Fuel Capacity	3227 lb. (481.5 gal.) total in two wing tanks, 1613.5 lb. (240.75 gal.) each 3183 lb. (475 gal.) usable total, 1591.5 lb. (237.5 gal.) in each tank at sta. +181.9 Fuel weight based on 6.70 lb./gal. See NOTE 1 for data on unusable fuel			
Oil Capacity	5.28 gal. total, 3.00 gal. usable (2.3 gal. in each engine-mounted tank at +142.1) See NOTE 1 for data on undrainable oil			
Maximum Operating Altitude	30,000 ft.			
Control Surface Movements	Elevator (horn faired)	Up	14°, +1°, -0°	Down 17°, +1°, -0°
	Elevator trim tabs	Up	8°, +1°, -0°	Down 10°, +2°, -0°
	Rudder (perpendicular to hinge 0° faired with fin)	Right	32°, +1°, -0°	Left 32°, +1°, -0°
	Rudder trim tab			
	(perpendicular to hinge)	Right	11°, +1°, -0°	Left 16°, +1°, -0°
	Aileron	Up	25°, +1°, -0°	Down 14°, +1°, -0°
	Aileron trim tab	Up	19°, +1°, -0°	Down 19°, +1°, -0°
	Wing flap (inboard)			Down 30°, +1°, -0°
	Wing flap (outboard)			Down 20°, +1°, -0°
Serial Nos. Eligible	406-0001 and on			

Data Pertinent to All Model

Datum 100.0 inches forward of forward face of fuselage bulkhead forward of rudder pedals.

Certification Basis:**Model 404:**

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-13 except Subpart B as amended through 23-14; and FAR 23.1385(c) as amended through 23-21; and 23.1327 as amended through 23-23. Findings of equivalent level of safety were made for FAR 23.1189(a), 23.1545, and 23.1583(a). In addition, effective S/N 404-0601, FAR 36 dated December 1, 1969, as amended by 36-1 through 36-4.

In addition to the above certification basis, compliance with ice protection has been demonstrated in accordance with FAR 23.1419 of Amendment 23-14 effective December 20, 1973, when ice protection equipment is installed in accordance with Cessna Drawing 5114400, Factory Kit (FK) No. 194, and Pilot's Operating Handbook and FAA Approved Airplane Flight Manual. Aircraft which have been modified in compliance with Accessory Kit (AK) No. 421-106 are considered to be equivalent to those with Factory Kit (FK) No. 194.

Model 406:

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-13 except Subpart B as amended through 23-14; and 23.427, 23.929, 23.979, 23.1017, 23.1027, 23.1163, 23.1182, 23.1189, 23.1192 as amended through 23-14; 23.951, 23.997, 23.1013, 23.1015, 23.1019(a)(1), 23.1019(a)(2), 23.1019(a)(4), 23.1019(a)(5), 23.1019(b), 23.1183 as amended through 23-15; 23.933, 23.971, 23.977, 23.999, 23.1111, 23.1125, 23.1143, 23.1165, 23.1303 (a through d), 23.1385(c), 23.1549 as amended through 23-17; 23.901, 23.939, 23.943, 23.959, 23.967, 23.973, 23.975, 23.995, 23.1093, 23.1121, 23.1141, 23.1145, 23.1193, 23.1203, 23.1305 (a through u and w), 23.1337 as amended through 23-18; 23.1323, 23.1325, 23.1327, 23.1351, 23.1357, 23.1547 as amended through 23-20; 23.45, 23.49, 23.65, 23.67, 23.77, 23.161, 23.1043, 23.1353, 23.1521 as amended through 23-21; 23.1545 as amended through 23-23; 23.903, 23.1529 as amended through 23-26; SFAR 27 as amended by 27-1 through 27-4; Part 36 as amended by 36-1 through 36-12; SFAR 41C; and Exemption No. 4661 from exact compliance with the requirements of Section 23.207(c). Findings of equivalent level of safety were made for FAR 23.1189(a), and that design of the elevator tab control system provides the level of safety intended by the requirements of FAR 21.21(b)(2) by preventing an unsafe condition. Therefore, FAR 23.629(f), as amended by Amendment 23-23, is applicable to the elevator tab control system, in addition to other requirements in the cited certification basis.

Data Pertinent to All Model (cont'd)**Model 406** (cont'd)

In addition to the above certification basis, compliance with ice protection has been demonstrated in accordance with FAR 23.773 and 23.1419 of Amendment 23-14, FAR 23.1309 as amended through Amendment 23-17, and FAR 23.1416 of Amendment 23-23 when ice protection equipment is installed in accordance with Cessna Drawing 6015006, Factory Kit (FK) No. 194, and Pilot's Operating Handbook and FAA Approved Airplane Flight Manual. Aircraft which have been modified in accordance with Accessory Kit (AK) No. 421-106 are considered to be equivalent to those with Factory Kit (FK) No. 194. Application for type certificate dated October 9, 1973. Type Certificate No. A25CE issued July 21, 1976, obtained by the manufacturer under delegation option procedures.

Production Basis:

Production Certificate No. 312 issued and Delegation Option Manufacturer No. CE-3 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations. Effective February 15, 1985, and on, Production Certificate No. 4 is applicable to all spares production for the Model 404 and to all production on the Model 406.

Equipment:

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following item of equipment is required:

Stall Warning Indicator - Cessna Dwg. 5818008 (404), 5718030 (406) or
Angle-of-Attack Indicator System - Cessna Dwg. 0800302 (404)

NOTE 1. Current weight and balance report together with 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 certified empty weight and corresponding center of gravity location must include undrainable oil (not included in Oil Capacity) and unusable fuel as follows:

(a) S/N 404-0001 through 404-0200

Fuel 48 lb. at (+177.6)

S/N 404-0201 and up

Fuel 28 lb. at (+177.6)

S/N 406-0001 and up

Fuel 44 lb. (6.5 gal.) at (+186.7)

(b) Oil 0.0 lb.

NOTE 2. The placards specified in the FAA Approved Airplane Flight Manual must be displayed.

NOTE 3. (404-0001 and up)

1%, by volume, isopropyl alcohol approved for use as fuel anti-icing additive when used as outlined in Cessna Service Letter ME73-25 dated November 2, 1973, or subsequent revisions.

NOTE 4. (S/N 404-0201 and up), (406-0001 and up)

An optional cargo configuration is available which excludes the passenger air distribution and seating. Such airplanes may be operated with passenger seats installed provided the operating rules for supplemental oxygen are complied with.

Data Pertinent to All Model (cont'd)

NOTE 5. Aircraft operators must observe limitations and placards shown in the applicable Pilot's Operating Manual and FAA Approved Airplane Flight Manual, or later approved revisions as listed below:

Cessna P/N D1540-3-13:	Model 404 Serial 404-0001 through 404-0136 (1977 Model)
Cessna P/N D1563-1-13:	Model 404 Serial 404-0201 through 404-0246 (1978 Model)
Cessna P/N D1572-2-13PH:	Model 404 Serial 404-0401 through 404-0460 (1979 Model)
Cessna P/N D1583-3-13PH:	Model 404 Serial 404-0601 through 404-0695 (1980 Model)
Cessna P/N D1593-1-13PH:	Model 404 Serial 404-0801 through 404-0859 (1981 Model)
Cessna P/N D1624-13PH:	Model 406 Serial 406-0001 and on

NOTE 6. The Model 406 type design has been duplicated as Model F406 in Type Certificate No. A54EU. The type design file is common between Models 406 and F406 and duplicates of the type design file are maintained by the respective type certificate holders.

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