DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A27CE
Revision 18
Textron Aviation Inc.
501
551
July 29, 2015

TYPE CERTIFICATE DATA SHEET NO. A27CE

This data sheet which is part of Type Certificate No. A27CE 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 501, Citation (Normal Category), Approved January 7, 1977

Engines: Two Pratt & Whitney Aircraft of Canada, Ltd. JT15D-1A or JT15D-1B turbofans used in any combination (See Note 13).

Fuel: Commercial kerosene Jet A, Jet A-1, Jet A-2, Jet B, JP-4, JP-5 or JP-8. These fuels, except Military JP-4, JP-5 and JP-8, require addition of anti-ice additive (Phillips PFA55MB, MIL-I-27686D or MIL-I-27686E) and must be blended into the aircraft fuel in concentrations not less than 0.060 percent or more than 0.15 percent by volume. For emergency use of aviation gasoline and fueling procedures, refer to Airplane Flight Manual.

Engine Limits: Static thrust standard day, sea level:

Takeoff (5 min.)	2200 lb.
Max. continuous	2090 lb.
Max. permissible engine rotor operating speeds:	
N_1 (Fan) JT15D-1A 102.1 percent	16,336 r.p.m.
N_1 (Fan) JT15D-1B 102.1 percent	16,336 r.p.m. below 30,000 ft.
N_1 (Fan) JT15D-1B 103.4 percent	16,540 r.p.m. 30,000 ft. and above
N_2 (Gas Gen.) 95 percent	31,120 r.p.m.
Max. permissible interturbine gas temperatures:	
Takeoff	700° C.
Max. continuous	680° C.
Transient (starting 2 Sec.)	700° C.

I. Model 501 (cont'd)

Airspeed Limits (CAS)	V_{MO} (Maximum operating)	
	Sea level to 14,000 ft.	260 knots
	14,000 ft. to 28,000 ft.	275 knots*
	M_{MO}	
	Above 28,000 ft.	0.70 Mach
	V_A (Sea level)	
	11,850 lb.	182 knots
	See AFM for variations with weight and altitude and optional configurations	
	V_{SB} (Speed for maximum gust intensity)	210 knots
	V_{FE} (Flaps extended)	
	40° (Landing)	174 knots
	15° (Takeoff and approach)	200 knots
	V_{MCA} (Minimum control speed) Air	Below stall speed for all weights
	V_{MCG} (Minimum control speed) Ground	55 knots
	V_{LO} (Landing gear operating)	174 knots
	V_{LE} (Landing gear extended)	174 knots
	V_{SB} (Speed brakes extended)	Any speed with or without flaps
	*See NOTE 6 for restricted V_{MO} for optional fuel weight configuration	
C.G. Range (Landing Gear Extended)	(+246.4 in.) to (+255.9 in.) at 7,500 lb. or less (18-30 percent MAC) (+250.0 in.) to (+255.9 in.) at 11,850 lb. (22.6-30 percent MAC) Variation is linear between points	
Empty Wt. C.G. Range	None	
MAC	79.61 in. (L.E. of MAC at Sta. +232.04) Note this is reference MAC for basic wing without tip	
Maximum Weight	Takeoff	11,850 lb.
	Landing	11,350 lb.
	Zero fuel*	8,400 lb.
	Ramp	12,000 lb.
	*See NOTE 6 for optional zero fuel weights	
Minimum Crew	For all flights: one pilot plus equipment specified in the Airplane Flight Manual, or two pilots	
No. of Seats	Maximum of nine (See Aircraft Weight and Balance Manual for optional seating arrangements)	
Maximum Baggage	Nose compartment	350 lb. (at Sta. + 74.0)
	Aft cabin	650 lb. (at Sta. +286.3)
Fuel Capacity (Gal.)	Two wing tanks: Total 287 each; usable 282 each ARM = +256.0 in. See NOTE 1 for data on unusable fuel	
Oil Capacity (Gal.)	Two engine mounted tanks: Total 2.14 each; usable 1.25 each ARM = +322.0 in. See NOTE 1 for data on undrainable oil	
Maximum Operating Altitude	41,000 ft.	

I. Model 501 (cont'd)

Control Surface Movements	Elevator	Up	20° ±1°	Down	15° ±1°
	Elevator trim tab	Up	10° ±1°	Down	19° ±1°
	Rudder (perpendicular to hinge)	Right	22° ±1°	Left	22° ±1°
	Rudder trim tab (perpendicular to hinge)	Right	10° ±1°	Left	10° ±1°
	Aileron	Up	21° from neutral		
				Down	16° from neutral
	(rig neutral 2° down)				
	Aileron trim tab	Up	20° from neutral		
				Down	20° from neutral
	Wing flap			Down	0° to 40° ±1°
	Speed brake - Upper	Up	0° to 58° ±2°		

See Airplane Maintenance Manual or Cessna Dwg. 5500003 for rigging tolerances

Serial Nos. Eligible: 501-0001 and on

II. Model 551, Citation II (Normal Category), Approved June 30, 1978

Engines: Two Pratt and Whitney Aircraft of Canada, Ltd. JT15D-4 turbofans

Fuel: Commercial kerosene Jet A, Jet A-1, Jet A-2, Jet B, JP-4, JP-5 or JP-8. These fuels, except Military JP-4, JP-5 and JP-8, require addition of anti-ice additive (Phillips PFA55MB, MIL-I-27686D or MIL-I-27686E) and must be blended into the aircraft fuel in concentrations not less than 0.060 percent or more than 0.15 percent by volume. For emergency use of aviation gasoline and fueling procedures, refer to Airplane Flight Manual.

Engine Limits: Static thrust standard day, sea level:

Takeoff (5 min.)	2500 lb.
Max. continuous	2375 lb.

Max. permissible engine rotor operating speeds:

N_1 (Fan) JT15D-4 104 percent	16,540 r.p.m.
N_2 (Gas Gen.) 96 percent	31,450 r.p.m.

Max. permissible interturbine gas temperatures:

Takeoff	700° C.
Max. continuous	680° C.
Transient (starting 2 sec.)	700° C.

Airspeed Limits (CAS):

V_{MO} (Maximum operating)		
Sea level to 14,000 ft.		260 knots
14,000 ft. to 28,000 ft.		275 knots*
Sea level to 30,500 ft.		260 knots
		(S/N 551-0550 and up)
M_{MO} Above 28,000 ft.		0.70 Mach
V_A (Sea level)		181 knots
12,500 lb.		
See AFM for variations with weight and altitude and optional configurations		
V_{SB} (Speed for max. gust intensity)		210 knots
V_{FE} (Flaps extended)		
40° (Landing)		174 knots
15° (Takeoff and approach)		200 knots
V_{MCA} (Minimum control speed) Air		75 knots
V_{MCG} (Minimum control speed) Ground		62 knots
V_{LO} (Landing gear operating)		174 knots
V_{LE} (Landing gear extended)	174 knots	
V_{SB} (Speed brakes extended)	Any speed with or without flaps	

*See NOTE 6 for restrictive V_{MO} for optional fuel weight configuration, S/N 551-0001 through 551-0549

II. Model 551 (cont'd)

C.G. Range (Landing Gear Extended)	(+276.1 in.) to (+285.8 in.) at 8,540 lb. or less (18-30 percent MAC) (+279.2 in.) to (+285.8 in.) at 12,500 lb. or less (22.6-30 percent MAC) Variation is linear between points
Empty Wt. C.G. Range	None
MAC	80.98 in. (L.E. of MAC at Sta. +261.56) Note this is reference MAC for basic wing without tip
Maximum Weight	Takeoff 12,500 lb. Landing 12,000 lb. Zero fuel* 9,500 lb. (S/N 551-0001 through 551-0549) 11,000 lb. (S/N 551-0550 and up) Ramp 12,700 lb. *See NOTE 6 for optional zero fuel weight (S/N 551-0001 through 551-0549)
Minimum Crew	For all flights: one pilot plus equipment specified in the Airplane Flight Manual, or two pilots
No. of Seats	Maximum of eleven (See Aircraft Weight and Balance Manual for optional seating arrangements)
Maximum Baggage	Nose compartment 350 lb. (at Sta. + 74.0) Aft cabin 400 lb. (at Sta. +321.0) 200 lb. (at Sta. +338.0) Tailcone 200 lb. (at Sta. +442.0)
Fuel Capacity (Gal.)	Two wing tanks: Total 376 each; usable 371 each ARM = +285.9 in. See NOTE 1 for data on unusable fuel
Oil Capacity (Gal.)	Two engine mounted tanks: Total 2.08 each; usable 1.50 each ARM = +367.0 in. See NOTE 1 for data on undrainable oil
Maximum Operating Altitude	43,000 ft.
Control Surface Movements	Elevator Up 20° ±1° Down 15° ±1° Elevator trim tab - S/N 551-0001 through S/N 551-0576 Up 15° +1°, -0° Down 17° +1°, -0° Elevator trim tab - S/N 551-0577 and up Up 17° +1°, -0° Down 15° +1°, -0° Rudder Right 22° ±1° Left 22° ±1° (perpendicular to hinge) Rudder trim tab Right 10° ±1° Left 10° ±1° (perpendicular to hinge) Aileron Up 19° ±1° Down 15° ±1° Aileron trim tab Up 20° ±1° Down 20° ±1° Wing flap Down 0° to 40° ±1° Speed brake - Upper Up 0° to 58° ±2° See Airplane Maintenance Manual for rigging instructions
Serial Nos. Eligible	551-0001 and on

Data Pertinent to All Models

Datum	94.0 in. forward of the front face of the forward pressure bulkhead which is station +94.0.
Leveling Means	Seat rails

Certification Basis:

Model 501

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-16 except as follows: Delete Paragraphs 23.45 through 23.77, 23.831, 23.1091(c)(2), 23.1303, 23.1323, 23.1441 through 23.1449, 23.1581 through 23.1583(f), 23.1583(h) through 23.1587; Add Paragraph 23.1385 as amended through 23-20, and from Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by 25-1 through 25-17, Paragraphs 25.1195, 25.1199 and 25.1203; as amended by 25-1 through 25-37, Paragraphs 25.101 through 25.125, 25.831, 25.934, 25.1091(d)(2), 25.1197, 25.1201, 25.1303, 25.1305(a)(7), 25.1323, 25.1439 through 25.1453, 25.1581 through 25.1583(c)(3), 25.1583(e) through 25.1587; Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by 36-1 through 36-5; SFAR 27, fuel venting.

Equivalent safety items

(1) Ground Loads	FAR 23.471 through 23.511
(2) Landing Gear	FAR 23.723 through 23.727
(3) Retracting Mechanism	FAR 23.729(e)
(4) Wheels, Tires and Brakes	FAR 23.731 through 23.735
(5) Engine Rotation	FAR 23.903(e)(2)
(6) Fuel System Icing	FAR 23.951(c)
(7) Fuel System Check Valves	FAR 23.995(f)
(8) Oil Strainer Indicator	FAR 23.1019(a)(3)
(9) Flight Director Disconnect	FAR 23.1335
(10) Airspeed Indicator Markings	FAR 23.1545
(11) Maneuvering Speed Placard	FAR 23.1563(a)
(12) Protective Breathing Equipment	FAR 25.1439(b)

Note: Compliance with Special Conditions No. 25-25-CE-4 dated June 10, 1970, has been shown.

Model 551

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-16 except as follows: Delete Paragraphs 23.21 through 23.31, 23.45 through 23.77, 23.157, 23.171 through 23.177, 23.251, 23.345, 23.351, 23.361, 23.471 through 23.511, 23.571, 23.572, 23.629, 23.679, 23.723 through 23.737, 23.773, 23.775, 23.777, 23.783, 23.807, 23.831, 23.903(c), 23.1091(c)(2), 23.1301, 23.1303, 23.1307, 23.1309, 23.1321, 23.1323, 23.1325, 23.1385(c), 23.1435, 23.1441 through 23.1449, 23.1581 through 23.1583(f), 23.1583(i) through 23.1587. Add Paragraphs 23.1143(e) and 23.1385(c) as amended through 23-18 and 23.1301 and 23.1335 as amended through 23-20; and from Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by 25-1 through 25-17, Paragraphs 25.812, 25.863, 25.1195, 25.1199, 25.1203, 25.1309, and 25.1435; as amended by 25-1 through 25-37, Paragraphs 25.21 through 25.31, 25.101 through 25.125, 25.147(c)(e), 25.171 through 25.177, 25.251, 25.305(c), 25.345, 25.351, 25.361, 25.471 through 25.511, 25.571, 25.573, 25.629, 25.679, 25.721 through 25.737, 25.773, 25.775, 25.777, 25.783, 25.807, 25.831, 25.851, 25.903(b)(d), 25.934, 25.1091(d)(2), 25.1189(g)(h), 25.1197, 25.1201, 25.1303, 25.1305(a)(7), 25.1305(c)(4), 25.1307, 25.1321, 25.1323, 25.1325, 25.1439 through 25.1453, 25.1581 through 25.1583(c)(3), 25.1583(f) through 25.1587, and Paragraphs 25.901(c), 25.903(e)(3), and 25.1351(d) as amended through 25-41; Part 36 of the Federal Aviation Regulations effective December 1, 1969, as amended by 36-1 through 36-6; SFAR 27, as amended by 27-1 through 27-3, fuel venting. For the Bendix EFS-10, Sperry EDZ-600, Sperry EDZ-601, and Sperry EDZ-603 Electronic Flight Instrument Systems only, compliance has been shown with the following regulations: FAR 25.1301, 25.1303(b), 25.1322 as amended through 25.38; FAR 25.1309, 25.1321(a), (b), (d), and (e), 25.1331, 25.1333, 25.1335 as amended through 25-41.

Equivalent Safety Items

(1) Stall Warning	FAR 23.207(c)
(2) Engine Rotation	FAR 23.903(e)(2)
(3) Fuel System Icing	FAR 23.951(c)
(4) Fuel System Check Valve	FAR 23.995(f)
(5) Oil Strainer Installation	FAR 23.1019(a)(3)
(6) Airspeed Indicator Markings	FAR 23.1545
(7) N_2 Indicator Markings	FAR 23.1549(a)(b)
(8) Maneuvering Speed Placard	FAR 23.1563(a)
(9) Clear Vision	FAR 25.773(b)(2)
(10) Emergency Exit Ditching	FAR 25.807(d)
(11) Fire Bottle Pressure Relief Valve	FAR 25.1199(b)(c)

(12) Protective Breathing Equipment FAR 25.1439(b)

Data Pertinent to All Models (cont'd)

Certification Basis (cont'd)

Model 551 (cont'd)
Note: Where applicable FAR 25 requirements reference other FAR 25 requirements, the corresponding FAR 23 requirement should be substituted unless the referenced FAR 25 requirement is included in the certification basis, or there is no corresponding FAR 23 requirement.

Compliance with ice protection has been demonstrated in accordance with FAR 23.1419.

Application for Type Certificate dated November 12, 1976. Type Certificate No. A27CE issued January 7, 1977.

Production Basis:
Production Certificate No. 312. Effective February 15, 1985, and on, Production Certificate No. 4 is applicable to all spares production. See NOTE 8 for specific effectivity of P.C. 4 on new airplane serials.

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

NOTE 1. 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	58.0 lb. at +247.0 in. (S/N 501-0001 and on)
	52.8 lb. at +298.4 in. (S/N 551-0001 and on)
Undrainable oil	3.0 lb. at +322.0 in. (501-0001 and on)
	3.0 lb. at +367.0 in. (551-0001 and on)
Hydraulic fluid	27.5 lb. at +284.0 in. (501-0001 and on)
	30.5 lb. at +322.0 in. (551-0001 and on)

NOTE 2. The aircraft must be operated according to the FAA Approved Airplane Flight Manual. Required placards are listed on Cessna Drawing 5500000 and 5400100 for the Model 501, and 6500000 and 6401000 for the Model 551, and are also included in Chapter 11 of the Airplane Maintenance Manual.

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

NOTE 4. All replacement seats (crew and passenger), although they may comply with TSO C39, must also be demonstrated to comply with FAR 25.785.

NOTE 5. Deleted.

NOTE 6. Aircraft conforming to ECR EC04139 are eligible for 9,500 lb. zero fuel weight with VMO reduced to 260 KCAS from 14,000 ft. to 30,500 ft. (Model 501)

Model 551, S/N 551-0001 through 551-0549, conforming to ECR EC04574 are eligible for 11,000 lb. zero fuel weight with VMO reduced to 260 KCAS from 14,000 ft. to 30,500 ft. 11,000 lb. zero fuel weight provision is standard at S/N 551-0550 and up.

NOTE 7. Approved nose tires are limited to those listed in the Limitations Section of the Airplane Flight Manual.

NOTE 8. Production Certificate No. 4 effective at Serial 501-0687 and on.

NOTE 9. Equipment installations or other modifications to the tailcone area must be coordinated with the Wichita Aircraft Certification Office.

Data Pertinent to All Models (cont'd)

NOTE 10. For the Model 501, the basic unit number and the serial number may not coincide until unit number 675 (S/N 501-0675). Contact Cessna Customer Service regarding Model 501 unit number and airplane serial number effectivity.

NOTE 11. For the Model 551, the basic unit number and serial number may not coincide until unit number 445 (S/N 551-0445). Contact Cessna Customer Service regarding Model 551 unit number and airplane serial number effectivity.

NOTE 12. Certain Models meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RSVM) airspace.

Model 501 Citation Unit Numbers 501-0275 through 501-0689 that have accomplished Cessna Service Bulletin SB500-34-65.

Model 551 Citation II Unit Numbers 551-0002 through 551-0733 that have accomplished Cessna Service Bulletin SB 550-34-79.

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

NOTE 13. Per Cessna Service Bulletin SB72-2, a JT15D-1B used in combination with a JT15D-1A is required to be operated to JT15D-1A engine limitations.

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