

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

T00007WI  
Revision 11  
Cessna  
750  
August 13, 2007

TYPE CERTIFICATE DATA SHEET NO. T00007WI

This data sheet which is part of Type Certificate No. T00007WI 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                      The Cessna Aircraft Company  
P.O. Box 7704  
Wichita, KS 67277

I - Model 750 (Transport Category). Approved May 31, 1996

The Model 750 is defined by Cessna Airplane Assembly Drawing Number 6700000.

Engines    For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10:

Two Rolls-Royce Model AE 3007C, Part number 23057202. Engines controlled by (2 each engine) Full Authority Digital Electronic Control (FADEC). Approved FADEC part numbers are the following:

FADEC Version:

C7.10	C7.15	C8.3	C9
23068354	23074070	23075295	23077287
23073176	23074072	23075296	23077295
-	23074535	23075297	23077296
			23077297
			23077298
			23077299

For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10:

Two Rolls-Royce Model AE 3007C1, Part number 23074408. Engines controlled by (2 each engine) Full Authority Digital Electronic Control (FADEC). Approved FADEC part numbers are the following:

FADEC Version:

C8.3	C9
23075298	23077294
23075299	23077293
23075300	23077292

Fuel    Jet A, Jet A-1 and Jet B per ASTM D1655, Jet Fuel No. 3 (GB6537-94), JP-4 and JP-5 per MIL-T-5624, JP-8 per MIL-T-83133, NATO F34, F35, F40, F43, and F44. EGME (ASTM D4171, Class 1, or MIL-I-27686) or DIEGME (ASTM D4171, Class 3, or MIL-I-85470) anti-icing additive may be blended into the aircraft fuel in concentrations of not more than 0.15 percent by volume. Mixtures of EGME and DIEGME are permissible if combined concentrations are within limits. JP-5, JP-8, F34, and F44 fuels may have anti-icing additive preblended. Hammonds Biobor JF additive is permitted up to a maximum concentration of 270 parts per million. See Airplane Flight Manual for fueling procedures.

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## Engine Limits

	AE3007C**	AE3007C1***
Static thrust standard day, sea level:		
Takeoff	6442 lbs.	6764 lbs.
Max. continuous	6442 lbs.	6764 lbs.
Max. permissible engine rotor operating speed:		
N <sub>1</sub> (Fan) steady state	100% r.p.m.	100% r.p.m.
N <sub>2</sub> (Gas gen.) steady state	101.6% r.p.m.	101.6% r.p.m.
Max. permissible interturbine gas temperatures:		
Takeoff (5 minute limit)	888° C *850° C	907° C
Max. continuous	850° C	857° C
Starting:		
Starter assisted	800° C	800° C
Windmill	888° C *850° C	888° C
<p>* For airplane serial numbers 750-0003 through 750-0022 not incorporating Cessna Service Bulletin SB 750-34-04** For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10</p> <p>*** For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10</p>		

## Airspeed Limits

V <sub>MO</sub>	(Maximum Operating)	270 KIAS Sea Level to 8000 ft.
	(Calibrated Altitudes)	350 KCAS 8000 ft. to 30,650 ft.
M <sub>MO</sub>	(Maximum Operating)	0.92 Mach above 30,650 ft.
	(Calibrated Altitudes)	
V <sub>A</sub> (Sea Level)		223 KIAS      36,100 lbs. (For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10)
		221 KIAS      35,700 lbs.
		217 KIAS      34,500 lbs.
		202 KIAS      31,500 lbs.
		193 KIAS      28,500 lbs.
		177 KIAS      24,500 lbs.
		163 KIAS      21,500 lbs.
See AFM for variations with weight and altitude and optional configurations.		
V <sub>B</sub>	(Speed for maximum gust intensity)	300 KIAS (0.92M)
V <sub>FE</sub>	(Flaps extended)	
	Slats &/or Flaps 5°	250 KIAS
	Flaps, 15°	210 KIAS
	Ldg Position - Full Flaps	180 KIAS
(For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10)		
V <sub>MCA</sub>	(Minimum control speed) Air	110 KIAS - 15° Flaps
V <sub>MCG</sub>	(Minimum control speed) Ground	109 KIAS - 15° Flaps

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	(For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10)
V <sub>MCA</sub>	(Minimum control speed) Air 112 KIAS - 15° Flaps
V <sub>MCG</sub>	(Minimum control speed) Ground 111 KIAS - 15° Flaps
V <sub>LO</sub>	(Landing gear operating) 210 KIAS
V <sub>LE</sub>	(Landing gear extended) 210 KIAS
	Max. tire ground speeds:
	Nose Gear Tire 182 Knots
	Main Gear Tire 182 Knots
	Speed Brakes Extension Speed No Limit
	There is no restriction on roll control spoilers (Panel #1, #2, #9, & #10).
C.G. Range (Landing Gear Extended)	Maximum Design C.G. Limits
(1) Aft Limits	(For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10) 20.50% MAC from 35,700 lbs. to 35,100 lbs.; linear variation from 20.50% MAC at 35,100 lbs. to 33.00% MAC at 29,400 lbs.; 33.0% MAC at 29,400 lbs. to 26,754 lbs.; linear variation from 33.0% MAC at 26,754 lbs. to 34.42% MAC at 25,700 lbs.; linear variation from 34.42% MAC at 25,700 lbs. to 35.00% MAC at 25,269 lbs.; 35.00% MAC at 25,269 lbs. to 21,310 lbs. (For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10) 20.50% MAC from 36,100 lbs. to 35,100 lbs.; linear variation from 20.50% MAC at 35,100 lbs. to 33.00% MAC at 29,400 lbs.; 33.0% MAC at 29,400 lbs. to 26,754 lbs.; linear variation from 33.0% MAC at 26,754 lbs. to 34.42% MAC at 25,700 lbs.; linear variation from 34.42% MAC at 25,700 lbs. to 35.00% MAC at 25,269 lbs.; 35.00% MAC at 25,269 lbs. to 21,310 lbs.
(2) Forward Limits	(For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10) Linear variation from 15.84% MAC at 35,700 lbs. to 15.00% MAC at 35,100 lbs.; 15.00% MAC from 35,100 lbs. to 32,500 lbs.; linear variation from 15.00% MAC at 32,500 lbs. to 21.00% MAC at 29,500 lbs.; 21.00% MAC at 29,500 lbs. to 28,000 lbs.; linear variation from 21.00% MAC at 28,000 lbs. to 26.16% MAC at 22,374 lbs.; linear variation from 26.16% MAC at 22,374 lbs. to 35.00% MAC at 21,310 lbs. (For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10) Linear variation from 16.40% MAC at 36,100 lbs. to 15.00% MAC at 35,100 lbs.; 15.00% MAC from 35,100 lbs. to 32,500 lbs.; linear variation from 15.00% MAC at 32,500 lbs. to 21.00% MAC at 29,500 lbs.; 21.00% MAC at 29,500 lbs. to 28,000 lbs.; linear variation from 21.00% MAC at 28,000 lbs. to 26.16% MAC at 22,374 lbs.; linear variation from 26.16% MAC at 22,374 lbs. to 35.00% MAC at 21,310 lbs.
Empty Weight C.G. Range	None
Datum	Zero reference datum is 184.5 inches forward of the leveling screw located 2.50 inches forward of the cabin door frame on Water Line 127.25.
MAC	118.60 in. (L.E. of MAC at F.S. 387.60)
Leveling Means	Outboard floor panel inside of door parallel to B.L. 13.00
Maximum Weight	Ramp..... 36,000 pounds (For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10, and not incorporating Cessna Service Bulletin SB750-32-50)

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	Ramp.....	36,400 pounds	(For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10, and aircraft incorporating Cessna Service Bulletin SB750-32-50)		
	Takeoff.....	35,700 pounds	(For airplane serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10, and not incorporating Cessna Service Bulletin SB750-32-50)		
	Takeoff.....	36,100 pounds	(For airplane serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10)		
	Landing.....	31,800 pounds			
	Zero Fuel.....	24,400 pounds			
Minimum Crew	For all flights: 2 persons (pilot and co-pilot)				
No. of Seats	2 pilots, 12 passengers maximum				
Maximum Baggage	Tail compartment:	700 pounds at F.S. 490.0			
	Floor loading density:	170 pounds per square foot			
Fuel Capacity (Gal.)	Two wing tanks:	Usable 521 gals. each;	Arm	410.07 inches	
	Center tank:	Usable 888 gals.;	Arm	335.32 inches	
	See NOTE 1 for data on unusable fuel.				
Oil Capacity	Two engine mounted tanks:	Total 12.1 qts each; (usable ) 11.8 qts each			
	Arm	544.30 inches			
	See NOTE 1 for data on unusable oil.				
Max. Operating Altitude	51,000 ft.				
Control Surface Movements	To insure proper operation of the airplane, the movement of the various control surfaces must be carefully controlled by proper rigging of the flight control systems. The airplane must, therefore, be rigged in accordance with the appropriate FAA approved rigging specification or Cessna drawing. Specific rigging instructions may also be found in the Model 750 Maintenance Manual (Instructions for Continued Airworthiness), part number 75MM00 (or later approved revision).				
Stabilizer	Range of Stabilizer Setting (Leading Edge Position) Cessna Drawing No. 6700750				
	Primary Trim	Max. L.E. Up	$1.2^{\circ} \pm 0.3^{\circ}$	Max. L.E. Down	$-12^{\circ} \pm 0.6^{\circ}$
	Secondary Trim	Max. L.E. Up	$1.2^{\circ} \pm 0.3^{\circ}$	Max. L.E. Down	$-12^{\circ} \pm 0.6^{\circ}$
Elevator	Rigging Spec No. 6760335	Up	$18.5^{\circ} + 0.5^{\circ}/-0^{\circ}$	Down	$14.0^{\circ} \pm 1.0^{\circ}$
Rudder	Rigging Spec. No. 6760405				
Lower	(perpendicular to H.L.)	Right	$29.5^{\circ} \pm 0.5^{\circ}$	Left	$29.5^{\circ} \pm 0.5^{\circ}$
Upper	(perpendicular to H.L.)	Right	$17^{\circ} + 1.5^{\circ}/-1.0^{\circ}$	Left	$17^{\circ} + 1.5^{\circ}/-1.0^{\circ}$
Rudder trim		Right	$11^{\circ} \pm 1^{\circ}$	Left	$11^{\circ} \pm 1^{\circ}$
Aileron	Rigging Spec. No. 6760115				
(from droop position)		Up	$15^{\circ} \pm 0.5^{\circ}$	Down	$15^{\circ} \pm 0.5^{\circ}$
Droop position			$1.5^{\circ} \pm 0.5^{\circ}$	down from faired	
Aileron Trim		Up	$8^{\circ} \pm 1^{\circ}$	Down	$8^{\circ} \pm 1^{\circ}$
Flaps	Cessna Drawing No. 6700750 and Rigging Spec. No. 6762715				
	Flap Position	Nominal Outboard	Nominal Center	Nominal Inboard	Allowable Tolerance
	Up	0°	0°	0°	±0.2°
	5°	5.9°	5.6°	5.2°	±0.5°
	15°	17.4°	16.5°	15.0°	±1.0°
	Full	39.0°	37.8°	36.3°	±2.0°

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Speed brakes	Rigging Spec. No. 6760275 Panels 3, 4, 5, 6, 7, & 8	Up: 40° - 43° Maximum 1.0° between corresponding panels
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Roll Spoilers	Rigging Spec. No. 6760205 Panels 1, 2, 9, & 10	Up: 40° - 43°
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Serial Nos. Eligible                      750-0001 and on

## Certification Basis

- (1) Part 25 of the Federal Aviation Regulations effective February 1, 1965, as amended by Amendments 25-1 through 25-74;
  - (a) Additions:  
FAR § 25.729(e) as amended by Amendment 25-75; and § 25.1316, as amended by Amendment 25-80
- (2) FAR Part 36 effective December 1, 1969 as amended by Amendment 36-1 through 36-21.
- (3) Noise Control Act of 1972.
- (4) FAR Part 34 of the Federal Aviation Regulations effective September 10, 1990.
- (5) Special Conditions as follows:
  - (a) No. 25-ANM-80, additional requirements for High Altitude Operation (See Note 7)
  - (b) No. 25-ANM-99, additional requirements for protection of Electrical and Electronic Systems from High Intensity Radiated Fields (HIRF)
  - (c) No. 25-ANM-113, additional requirements for operation with Fly-by-Wire Rudder.
- (6) Equivalent levels of safety as follows:
  - (a) FAR §§ 25.335(d) and 25.341, Design Discrete Gust Criteria;
  - (b) FAR § 25.811(e)(4), Red Arrow Marking for the Main Passenger Door Handle;
  - (c) FAR § 25.807(e), Ditching Emergency Exits for Passengers;
  - (d) FAR § 25.841(b)(6), Cabin Pressurization - High Altitude Takeoff and Landing Operations;
  - (e) FAR § 25.1549(a) & (c), Digital Turbine Speed;
  - (f) FAR § 25.1305, Digital APU Indicators (Oil Pressure, Oil Temperature, Gas Temperature, Tachometer);
  - (g) FAR §§ 25.101, 25.105, 25.109, 25.113, 25.115, 25.735, and 25.1587, Accelerate-Stop Distance;
  - (h) FAR §§ 25.811(d)(1) and 25.812(b)(1)(i), Emergency Exit Locator Signs;  
and
  - (i) FAR §§ 25.201, 25.203 and 25.207, Stall Warning System for flight conditions above 34,500 feet.
  - (j) FAR 25.813(e), Emergency Exit Access
  - (k) T00002WI-T-AG-12, FAR 25.815, Width of aisle.
- (7) Exemptions:
  - (a) No. 6179, exemption from bird impact requirements of § 25.571(e)(1);
  - (b) No. 6431, exemption from Engine-out lateral trim requirements of § 25.161(d); and
  - (c) No. 6432, exemption from the emergency landing dynamic conditions of § 25.562 for multiple-occupancy, side-facing divans. Expires November 30, 1996.

or

No. 7922, partial grant of exemption from the general occupant protection requirements of 25.785(b) for multiple-occupancy, side-facing divans, restricted to airplanes manufactured prior to January 1, 2004.

or

No. 7922A, grant of exemption from the general occupant protection requirements of 25.785(b) for multiple-occupancy, side-facing divans, (no restriction).

  - (d) No. 8767, exemption from door installation prohibition of interior doors between passenger compartments of § 25.813(e).
- (8) FAR § 25.801 ditching not complied with.
- (9) Compliance with ice protection has been demonstrated in accordance with FAR § 25.1419.

Date of Application for Type Certificate was October 15, 1991.

I-Model 750 (cont'd)

Type Certificate No. T00007WI was issued May 31, 1996.

Production Basis      Production Certificate No. 4 amended to add Model 750 effective October 4, 1996. See Note 6 for airplane serial effectivity of Production Certificate No. 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 airplane for certification.

NOTE 1:                FAA Approved Weight and Balance Manual: part number 75WB-01 (or later approved revision) is applicable to the Model 750 serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10. FAA Approved Weight and Balance Manual: part number 75WBA-00 (or later approved revision) is applicable to the Model 750 serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10. The airplane must be loaded according to the appropriate FAA Approved Weight and Balance Manual. The list of equipment included in certificated empty weight must be provided for each airplane at the time of original certification.

The certified empty weight and corresponding center of gravity location must include:

	Weight – lbs.	Inches aft of datum
Hydraulic Fluid - System A (Total)	35.56	+458.82
Hydraulic Fluid - System B (Total)	21.97	+497.96
Unusable Fuel-Wing	65.00	+385.00
Unusable Fuel-Center	15.00	+385.00
Trapped Fuel	22.20	+366.50
Engine Unusable Oil	1.00	+544.30
Engine Usable Oil	45.80	+544.30 (full)

NOTE 2:                FAA Approved Airplane Flight Manual: part number 75FM-02 (or later approved revision) is applicable to the Model 750 serial numbers 750-0001 through 750-0172 not incorporating Cessna Service Bulletin SB 750-71-10. FAA Approved Airplane Flight Manual: part number 75FMA-00 (or later approved revision) is applicable to the Model 750 serial numbers 750-0173 and on and aircraft incorporating Cessna Service Bulletin SB 750-71-10. The airplane must be operated according to the appropriate FAA Approved Airplane Flight Manual. Required placards are included in the Maintenance Manual (Instructions for Continued Airworthiness), part number 75MM00 (or later approved revision), Chapter 11, Placards and Markings.

NOTE 3:                FAA approved Airworthiness Limitations for mandatory compliance retirement life or inspection are included in the Maintenance Manual (Instructions for Continued Airworthiness), part number 75MM00 (or later approved revision), Chapter 4, Airworthiness Limitations.

NOTE 4:                All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with requirements of FAR §§ 25.333, 25.561, 25.562, and 25.785. The foam cushion buildup of all seats (crew and passenger) may not be altered unless deviations in the foam construction are demonstrated by tests to comply with the listed FAR 25 paragraphs. The LH side facing seat lap belt shall have a buckle which opens from the left to right to prevent the buckle's own inertia from causing it to open. Any other configuration must be verified by dynamic requirements.

NOTE 5:                Two (2) Honeywell AZ-840 or AZ-940 Micro Air Data Computers (MADC) are required equipment. Approved part numbers are listed in the following table:

MADC Part Number	Model 750-xxxx Serial Range	Service Bulletin
7014700-904	-0003 through -0041	N/A
7014700-604	-0001, 0002, -0042 through -0105,	SB750-34-05 Rev 0,1
7014700-607	-0106 through -0240	SB750-34-05 Rev 2
7030700-70706	-0241 and on	N/A

Aircraft with part number 7014700-607 or 7030700-70706 MADCs meet the initial airworthiness requirements for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

NOTE 6:                Production Certificate No. 4 applies to Model 750 serial numbers 750-0001, 750-0002, 750-0004, 750-0006 and on.

I-Model 750 (cont'd)

- NOTE 7: Model 750 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 3.98 sq. in.
- NOTE 8: The airplane is approved for Category II operation using the flight-director with autopilot-coupled or not coupled. This does not constitute operational approval. Minimum approved integrated computer (IC-800) software is Phase IV (P/N 7017300-31201).

.....END.....