Civil Aviation Authority
United Kingdom

TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00062

for

Cessna 182 Series (Skylane)

Type Certificate Holder

Textron Aviation Inc.

One Cessna Boulevard

Wichita, Kansas 67215

USA

For models: 182S

182T

T182T

Issue: 1

Date of issue: 23 January 2023

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CONTENT

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SECTION 1: GENERAL, Model 182S/182T Type Design

A. General

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the CAA in the UK for the affected types and models.

This TCDS includes:

a) Details of the type design changes that affect the TCDS that have been approved or accepted by the CAA in the UK since 01 January 2021.

b) Details of the type design that affected the TCDS that were approved or accepted by EASA before 01 January 2021, and were incorporated into EASA TCDS EASA.IM.A.052 at Issue 7 dated 21 June 2018, and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

WARNING : Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage and is, therefore, prohibited on Textron Aviation Inc. (former Cessna) Airplanes.

General

1. a) Type:	Model 182S and 182T
b) Variant:	N/A
2. Airworthiness Category:	FAR-23 Normal Category
3. Type Certificate Holder:	Textron Aviation Inc. One Cessna Boulevard P.O. Box 7704 Wichita, Kansas 67277 USA
4. Manufacturer:	Textron Aviation Inc. One Cessna Boulevard P.O. Box 7704 Wichita, Kansas 67277 USA
5. JAA Certification Application Date:	N/A
6. JAA recommendation Date:	N/A
7. EASA Type Certification Date:	28 September 2003

B Certification Basis

1. Reference Date for determining the applicable requirements:	FAA Application date for model 182S - 22 January1996 and for model 182T - 13 October 1999
2. (Reserved)	
3. (Reserved)	
4. Certification Basis:	As defined in FAA TCDS 3A13

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5.	Airworthiness Requirements:	FAR 23 as defined in FAA TCDS 3A13, and JAR-23, Change 1, plus Special Conditions as defined inGarmin G-1000 EASA CRI A-01, Issue 5, dated 17 March 2008 for the Nav III avionics option.
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	As defined in CRI A-01 for the Nav III avionics option only.
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	Environmental Protection Standards Noise	 ICAO Annex 16, Volume I, Chaptyer 10 (see TCDSN UK.TC.A.00062 for details)

C Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Master Drawing List, Document No.182-96-003, latest FAA Approved Revision.
2.	Description:	Single-engine, all-metal, four-place, high-wing airplane, fixed tricycle landing gear.
3.	Equipment:	Equipment list, Owner's Manual No. 182SPHUS00 or latest revision, 182TPHUS00 or latest revision, or 182TPHAUS00 (Garmin) or latest revision, or 182TPHBUS00 (GFC-700) or latest revision.
4.	Dimensions:	
	Span	10.9728 m (36.00 ft.)
	Length	8.84225 m (29.01 ft.)
	Height	2.8321 m (9.29 ft.)
	Wing Area	16.3045 m² (175.50 ft²)
5.	Engines:	Lycoming IO-540-AB1A5
		The EASA Engine Type Certification standard includes that of FAA TC 1E4, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003, Other standards conforming to TC/TCDS standards Certificated by individual EU member States prior to 28 September 2003 are also acceptable.
	5.1 Engine Limits:	For all operations 2400 RPM (230 hp)
		For power-plants limits refer to AFM/POH No. 182SPHUS00 or latest revision, 182TPHUS00 or

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latest revision or 182TPHAUS00 (Garmin) or latest revision.

6. Propellers:

182S

a. McCauley Propellers. P/N B2D34C235/90DKB-8(2 blade)

The EASA Propeller Type Certification standard includes that of FAA TC P7EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003, Other standards conforming to TC/TCDS standards Certificated by individual EU member States prior to 28 September 2003 are also acceptable.

Maximum Diameter: not over 2.0828 m (82.0 inch)
Minimum Diameter: not under 2.0447 m (80.5 inch)
Number of Blades: 2
Pitch settings at 0.762 m (30 in.)
sta.: Low 17.0º, High 31.8º
No operating limitations to 2400 RPM

182S and 182T

b. McCauley Propellers. P/N B3D36C431/80VSA-1 (3 blade)

The EASA Propeller Type Certification standard includes that of FAA TC P58GL, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003, Other standards conforming to TC/TCDS standards Certificated by individual EU member States prior to 28 September 2003 are also acceptable.

Maximum Diameter: not over 2.0066 m (79 inch)
Minimum Diameter: not under 1.9685 m (77.5 inch)
Number of Blades: 3
Pitch settings at 0.762m (30in.) sta.: Low 14.9º, High 31.7º
No operating limitations to 2400 RPM

Propeller Limits: Static RPM at full throttle:
Not over 2400 RPM ; not under 2300 RPM

7. Fluids:

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7.1 Fuel:	100/100LL minimum grade aviation gasoline
7.2 Oil: Engine	MIL-L-6082 or SAE J1966 Aviation Grade Straight Mineral Oil or MIL-L-22851 or SAE J1899 Aviation Grade Ashless Dispersant Oil. Oil conforming to Textron Lycoming Service Instruction No. 1014, latest revision,must b used after first 50 hours or once oil consumption has stabilized.
7.3 Coolant:	Not Applicable

8. Fluid capacities:

8.1 Fuel:	182S	Total:	348.258 liters	(92 US Gallons)
		Usable:	333.116 liters	(88 US Gallons)
	182T	Total:	348.258 liters	(92 US Gallons)
			329.331 liters	(87 US Gallons)

Two 174.129 liter (46 gal.) tanks in wings at 1.1811 m (46.5 inches) aft of datum.
See Note 1 for data on unusable fuel.

8.2 Oil: Maximum: 8.51718 liters [9.0 qts at 0.38 m (14.8 in.)] forward of datum.
Minimum: 4.73177 liters (5.0 qts unusable)

9. Air Speeds:

a. 182S

Maneuvering	110 KIAS	(108 KCAS)
Maximum Structural Cruising	140 KIAS	(138 KCAS)
Never Exceed	175 KIAS	(170 KCAS)
Flaps Extended	100 KIAS	(99 KCAS)

b. 182T

Maneuvering	110 KIAS	(108 KCAS)
Maximum Structural Cruising	140 KIAS	(136 KCAS)
Never Exceed	175 KIAS	(171 KCAS)
Flaps Extended	100 KIAS	(99 KCAS)

10. Maximum Operating Altitude: With a portable oxygen system, the aircraft is limited to 5516.88 m (18100 ft). Oxygen must be provided as required by the operating rules. Only portable oxygen systems listed in the AFM, document number 182SPHUS00, 182TPHUS00, 182TPHAUS00 or 182TPHBUS00, or later FAA approved revisions, are allowed.

11. Operational Capability: VFR Day and Night
IFR Day and Night

12. Maximum Masses:

a. (Normal Category):

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Ramp	1410.67 kg (3110 lb.)
Take-Off	1406.14 kg (3100 lb)
Landing	1338.10 kg (2950 lb)

See Note 5.

13. Centre of Gravity Range:

a. 182S (Normal Category):

Forward Limits: Linear variation from 1.03886 m (40.9 in.) aft of datum at 1406.14 kg (3100 lbs.) to 0.8382 m (33.0 in.) aft of datum at 1020.58 kg (2250 lbs.); 0.8382 m (33.0 in.) aft of datum at 1020.58 kg (2250 lbs.) or less.

Aft Limits: 1.1684 m (46.0 in.) aft of datum at 1406.14 kg (3100 lbs.) or less.

b. 182T (Normal Category):

Forward Limits: Linear variation from 1.03886 m (40.9 inches) aft of datum at 1406.14 kg (3100 lbs.) to 0.9017 m (35.5 in.) aft of datum at 1224.70 kg (2700 lbs.) to 0.8382 m (33.0 inches) aft of datum at 1020.58 kg (2250 lbs.); 0.84 m (33.0 inches) aft of datum at 1020.58 kg (2250 lbs.) or less.

Aft Limits: 1.1684 m (46.0 in.) aft of datum at 1406.14 kg (3100 lbs.) or less.

14. Datum: Lower portion of front face of firewall

15. (Reserved)

16. Levelling Means: Left side of tailcone at 3.54711 m (139.65 inches) and 4.35991 m (171.65 inches) aft of datum

17. Minimum Flight Crew: 1 (Pilot)

18. Maximum Passenger Seating Capacity: 3

19. Baggage / Cargo Compartment

54.4311 kg (120 lb) at 2.0828 to 2.7686 m (82.0 to 109.0 in.) aft of datum

36.2874 kg (80 lbs.) at 2.7686 to 3.4036 m (109.0 to 134.0 inches) aft of datum

(Maximum combined weight capacity for baggage areas is 90.7185 kg [200 lbs.])

20. Wheels and Tires

Nose Wheel Tire Size	5.00 x 5
Main Wheel Tire Size	6.00 x 6

21. Control Surface Movements

Wing flaps	38° ± 0°, -1°
Elevator tab	Up 24° ± 2° Down 15° ± 1°
Ailerons	Up 20° ± 2° Down 15° ± 2°
Elevator (relative to stabilizer)	Up 28° ± 1° Down 21° ±1°
Rudder (parallel to 0.00 W.L.)	Right 24° +0°, -1°; Left 24° + 0°, -1°
(Perpendicular to hinge line)	Right 27° 13' +0°, - 1°; Left 27° 13' +0°, - 1°

D . Operating and Service Instructions

Airplane Flight Manual

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	(AFM):ManualNo.182SPHUS00,182TPHUS00, 182TPHAUS00 or 182TPHBUS00, latest approved revision.
Airplane Maintenance Manual (AMM) (Including Airworthiness Limitations)	Manual No. 182MM00 or latest revision

E Operational Suitability Data

Master Minimum Equipment List (MMEL)	182MMELEU, Initial Issue, EASA approved 24 November 2015, or any later UK-CAA approved issue.

F Notes

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: Weight and Balance:

§ Serial Nos. 18280001 Through 18280944: (Model 182S):

The certificated basic empty weight and corresponding center of gravity location must include unusable fuel of 10.8862 kg (24 lbs). at 1.2192 m (48 inches) aft of datum, and full oil of 7.3482 kg (16.2 lb.) at 0.37592 m (14.8 inches) forward of datum.

Serial Nos. 18280945 and On: (Model 182T):

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 13.6078 kg (30 lbs.) at 1.2192 m (48 inches) aft of datum, and full oil of 7.3482 kg (16.2 lb.) at 0.37592 m (14.8 inches) forward of datum.

NOTE 2 FAA Approved Airplane Flight Manual (AFM): Part Number 182SPHUS00 (or later FAA approved revisions) are applicable to the Model 182S. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070810, Airplane Assembly (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

FAA Approved Airplane Flight Manual (AFM): Part number 182TPHUS00 (or later FAA approved revision) is applicable to the Model 182T. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070810, Airplane Assembly (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

FAA Approved Airplane Flight Manual (AFM): Part Number 182TPHAUS-00 (or later FAA

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approved revisions) are applicable to the Model 182T equipped with Garmin G1000 Integrated Cockpit System. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070810, Airplane Assembly (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

FAA Approved Airplane Flight Manual (AFM): Part Number 182TPHBUS-00 (or later FAA approved revisions) are applicable to the Model 182T equipped with Garmin G1000 Integrated Cockpit System and Garmin GFC-700 AFCS. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070810, Airplane Assembly (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

NOTE 3: The CHT probe must be installed on Head #1 (182S) or #3 (182T).

NOTE 4: Special Ferry Flight Authorization. Flight Standard District Offices are authorized to issue Special overweight ferry flight authorizations. This airplane is structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (VNE) and Maximum Structural Cruising Speed (VC) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5g. to -1.0g. may not be exceeded. Requirements for any additional engine oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the increased weights have not been evaluated. Procedures for issuing a Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC 21-4B.

NOTE 5: Model 182S airplane serial numbers 18280617 through 18280670 may differ structurally and are, therefore, not eligible for any weight increases above the approved maximum takeoff weight limit of 1406.14 kg (3,100 pounds). Any exceptions must first be coordinated with the Wichita Aircraft Certification Office. Exceptions to this limitation have been inspected and found to comply with type data for the Model 182S, and include the following serial number aircraft: 18280620.

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NOTE 6: FAA Certification Basis (Model 182S & 182T)

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6, except as follows:
FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323; and 23.1563 as amended by Amendment 23-7.
FAR 23.807 and 23.1524 as amended by Amendment 23-10.
FAR 23.507; 23.771; 23.853(a),(b), (c); and 23.1365 as amended by Amendment 23-14.
FAR 23.951 as amended by Amendment 23-15.
FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 and 23.1322 as amended by Amendment 23-17.
FAR 23.1301 as amended by Amendment 23-20.
FAR 23.1353; and 23.1559 as amended by Amendment 23-21.
FAR 23.603; 23.605; 23.613; 23.1329 and 23.1545 as amended by Amendment 23-23.
FAR 23.441 and 23.1549 as amended by Amendment 23-28.
FAR 23.779 and 23.781 as amended by Amendment 23-33.
FAR 23.1; 23.51 and 23.561 as amended by Amendment 23-34.
FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735; and 23.831 as amended by Amendment 23-42.
FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 and 23.1385 as amended by Amendment 23-43.
FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)3, and 23.562(c)4 as amended by Amendment 23-44.
FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 and 23.731 as amended by Amendment 23-45.
FAR 36 dated December 1, 1969, as amended by Amendments 36-1 through 36-21.

Equivalent Safety Items, 182S:

(1)	Induction System Icing Protection	FAR § 23.1093.
(2)	Throttle Control	FAR § 23.1143(g)
(3)	Mixture Control	FAR § 23.1147(b)

Date of Application for Amended Type Certificate was January 22, 1996.
Type Certificate No. 3A13 was amended October 3, 1996.

Equivalent Safety Items, 182T:

(1) Induction System Icing Protection
FAR § 23.1093; Refer to FAA letter dated 12/19/00
(2) Throttle Control
FAR § 23.1143(g); Refer to FAA letter dated 12/19/00
(3) Mixture Control
FAR § 23.1147(b); Refer to FAA letter dated 12/19/00
(4) Anti-collision Lights
FAR § 23.1401(d); Refer to FAA letter dated 2/20/01
(5) Aviation White Color Reqmt
14CFR § 23.1397(c); Refer to ACE-07-11, FAA letter dated 11/29/07.

Additions for the Garmin G1000 Integrated Cockpit System (ICS) only:

14 CFR 23.303; 23.307; 23.601; 23.1163(a)(1)(2); 23.1367 and 23.1381 as amended by Amendment 23-N/C.
14 CFR 23.1589 as amended by Amendment 23-13.
14 CFR 23.771(a) as amended by Amendment 23-14.
14 CFR 23.607 and (Electrical System) 23.1309(a)(1)(2), (c) as amended by Amendment 23-17.
14 CFR 23.1301; 23.1327 and 23.1547(e) as amended by Amendment 23-20.
14 CFR 23.1501 and 23.1541(a)(1), (a)(2), (b)(1), (b)(2) as amended by Amendment 23-21.
14 CFR 23.603 and 23.605 as amended by Amendment 23-23.
14 CFR 23.1529 as amended by Amendment 23-26.
14 CFR 23.561(e); 23.1523; 23.1581(a)(2); 23.1583(a)(1), (a)(2), (b)(h) and 23.1585(a)(b)(d) as amended by Amendment 23-34.
14 CFR 23.301 as amended by Amendment 23-42.
14 CFR 23.1322; 23.1331 and 23.1357(a)(b)(c)(d) as amended by Amendment 23-43.
14 CFR 23.305; 23.773(a)(1), (a)(2); 23.1525 and 23.1549 as amended by Amendment 23-45.
14 CFR 23.1303(a)(b)(c)(f); 23.1309(a)(1)(i), (a)(1)(ii), (a)(2), (b)(1), (b)(2)(i), (b)(2)(ii), (b)(3), (b)(4)(i), (b)(4)(ii), (b)(4)(iii), (b)(4)(iv), (c)(1), (c)(2)(iii), (c)(3), (d), (e), (f)(1); 23.1311; 23.1321(a)(c)(d)(e); 23.1323(a), (b)(1), (b)(2), (c); 23.1329(g)(h); 23.1351(a)(1), (a)(2)(i), (b)(1)(iii), (b)(2)(3), (c)(4), (d)(1); 23.1353(a)(b)(c)(d)(e); 23.1359(c); 23.1361; 23.1365(a)(b)(d)(e)(f) and 23.1431(a)(b)(d)(e) as amended by Amendment 23-49.
14 CFR 23.1325(a), (b)(1), (b)(2)(i), (b)(3), (c)(d)(e); 23.1543(b)(c); 23.1545(a), (b)(1), (b)(2), (b)(3), (b)(4); 23.1553; 23.1555(a)(b); 23.1563(a) and 23.1567(a) as amended by Amendment 23-50.
14 CFR 23.777(a)(b); 23.955(a)(2); 23.1337(a)(1), (a)(2), (b)(1), (c) as amended by Amendment 23-51. 14 CFR 23.1305(a)(1), (a)(2), (a)(3), (b)(2), (b)(3)(i), (b)(4)(i), (b)(5), (b)(6)(i) as amended by Amendment 23-52.
14 CFR 23.901(a)(b) as amended by Amendment 23-53.

Additions for the Garmin GFC-700 Automatic Flight Control System (AFCS) only:

14 CFR 23.1335 as amended by Amendment 23-20, 14 CFR 23.1329 (a)(c)(d)(e)(f) as amended by Amendment 23-49.

Additions for the Garmin GI 275 Electronic Flight Instrument Only:

14 CFR 23.1327 as amended by Amendment 23-20; 23.1501 as amended by Amendment 23-21; 23.1529 as amended by Amendment 23-26; 23.1523(b) and 23.1581(a)(1)(2) as amended by Amendment 23-34; 23.1322 and 23.1331 as amended by Amendment 23-43; 23.1525 as amended by Amendment 23-45; 23.1303(a)(b)(f), 23.1309(a)(1)(2)(b)(c)(1)(2)(iii)(3)(d)(e)(f), 23.1311(a)(b), 23.1321(a)(c)(d)(e), 23.1323(a)(c), 23.1351(a)(1)(2)(i), 23.1359(c), 23.1365(a)(d)(e) and 23.1431(a)(b) as amended by Amendment 23-49; 23.1325(a)(b)(1)(i)(ii)(iii)(2)(i), 23.1543(b)(c), 23.1545(a)(b)(1)(2)(3)(4) and 23.1555(a)(b) as amended by Amendment 23-50; 23.777(a)(b) as amended by Amendment 23-51; 23.1308(a)(b)(c) as amended by Amendment 23-57; 23.1306(a)(b) as amended by Amendment 23-61; 23.2010 and 23.2510 as amended by Amendment 23-64

Special Conditions as follows:

No. 23-146-SC, “Special Conditions: Cessna Aircraft Company; Cessna Model 182T/T182T Airplane; Installation of Electronic Flight Instrument System and the Protection of the System From High Intensity Radiated Fields (HIRF).

Production Basis (Model 182S)

Production Certificate No. PC-4 issued June 30, 1997. Applies to airplane serial numbers 18280013, 18280016, 18280017, 18280019 and on. Airplane serial numbers not listed were produced under Type Certificate only. Textron Aviation Inc. is authorized to issue airworthiness certificates under the delegation provisions of Delegation Option Authorization No. CE-1 in accordance with Part 21 of the Federal Aviation Regulations.

Production Basis (Model 182T)

Production Certificate No. PC-4 issued March 8, 2001. Applies to airplane serial numbers 18280945 and on. Textron Aviation Inc. is authorized to issue airworthiness certificates under the delegation provisions of Delegation Option Authorization No. DOA-100129-CE in accordance with Part 21 of the Federal Aviation Regulations.

SECTION 2: GENERAL, Model T182T Type Design

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A General

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the CAA in the UK for the affected types and models.

This TCDS includes:

a) Details of the type design changes that affect the TCDS that have been approved or accepted by the CAA in the UK since 01 January 2021.

b) Details of the type design that affected the TCDS and were approved or accepted by EASA before 01 January 2021, and were incorporated into EASA TCDS EASA.IM.A.052 at Issue 7 dated 21 June 2018 and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

1. a) Type:	Model T182T
b) Variant:	N/A
2. Airworthiness Category:	FAR-23 Normal Category
3. Type Certificate Holder:	Textron Aviation Inc. One Cessna Boulevard P.O. Box 7704 Wichita, Kansas 67277 USA
4. Manufacturer:	Textron Aviation Inc. One Cessna Boulevard P.O. Box 7704 Wichita, Kansas 67277 USA
5. JAA Certification Application Date:	N/A
6. JAA recommendation Date:	N/A
7. EASA Type Certification Date:	28 September 2003

B . Certification Basis

1. Reference Date for determining the applicable requirements:	FAA Application date 13 October 1999
2. (Reserved)	
3. (Reserved)	
4. Certification Basis:	As defined in FAA TCDS 3A13
5. Airworthiness Requirements:	FAR 23 as defined in FAA TCDS 3A13, and JAR-23, Change 1, plus Special Conditions as defined in Garmin G-1000 EASA CRI A-01, Issue 5, dated 17 March 2008 for the Nav III avionics option.
6. Requirements elected to comply:	None

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7. EASA Special Conditions:	As defined in CRI A-01 for the Nav III avionics option only.
8. EASA Exemptions:	None
9. EASA Equivalent Safety Findings:	None
10. Environmental Protection Standards Noise	 ICAO Annex 16, Volume I, Chapter 10 (see TCDSN UK.TC.A.00062 for details)

C . Technical Characteristics and Operational Limitations

1. Type Design Definition:	Master Drawing List, Document No.T182-01-001, latest FAA Approved Revision.
2. Description:	Single-engine, all-metal, four-place, high-wing airplane, fixed tricycle landing gear.
3. Equipment:	Equipment list, Owner's Manual No. T182TPHUS00 or latest revision, or T182TPHAUS00 (Garmin) or latest revision, or T182TPHBUS00 (GFC-700) or latest revision.
4. Dimensions:	
Span	10.9728 m (36.00 ft.)
Length	8.84225 m (29.01 ft.)
Height	2.54356 m (8.35 ft.)
Wing Area	16.1651 m² (174.00 ft²)
5. Engines:	Lycoming TIO-540-AK1A
	The EASA Engine Type Certification standard includes that of FAA TC E14EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003, Other standards conforming to TC/TCDS standards Certificated by individual EU member States prior to 28 September 2003 are also acceptable.
5.1 Engine Limits:	For all operations 2400 RPM (235 hp) For power plants limits refer to AFM/POH No. T182TPHUS00, latest revision or T182TPHAUS00 (Garmin), latest revision or T182TPHBUS00 (GFC-700) or latest revision.
6. Propellers:	(a) McCauley Constant Speed P/N B3D36C442/80VSB-1

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The EASA Propeller Type Certification standard includes that of FAA TC P58GL, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003, Other standards conforming to TC/TCDS standards Certificated by individual EU member States prior to 28 September 2003 are also acceptable.

Maximum Diameter: Not over 2.0066 m (79.0 inches)
Minimum Diameter: Not under 1.9685 m (77.5 inches)
Number of Blades: 3
Pitch settings at 0.762 m (30 in.) sta.: Low 15.3º, High 35.4º
Static RPM at full throttle: Not over 2400, not under 2300

(b) McCauley Spinner: D-7261-2
(c) McCauley Governor: DC290D1/T8

7. Fluids:

7.1 Fuel:	100/100LL minimum grade aviation gasoline
7.2 Oil: Engine	MIL-L-6082 or SAE J1966 Aviation Grade Straight Mineral Oil or MIL-L-22851 or SAE J1899 Aviation Grade Ashless Dispersant Oil. Oil conforming to Textron Lycoming Service Instruction No. 1014, latest revision, must be used after first 50 hours or once oil consumption has stabilized.
7.3 Coolant:	Not Applicable

8. Fluid capacities:

8.1 Fuel:	T182T	Total:	348.258 liters (92 US Gallons)
		Usable:	329.331 liters (87 US Gallons)
8.2 Oil:		Maximum:	8.52718 liters [9.0 qts (0.38 [14.8 in].)] foward of datum
		Minimum:	4.73177 liters [5.0 qts (usable)]

9. Air Speeds:

Maneuvering	110 KIAS	(110 KCAS)
Maximum Structural Cruising	140 KIAS	(137 KCAS)
Never Exceed	175 KIAS	(170 KCAS)
Flaps Extended	100 KIAS	(100 KCAS)

10. Maximum Operating Altitude: With a portable oxygen system, the aircraft is limited to 6096 m (20,000 ft). Oxygen must be

provided as required by the operating rules. Only portable oxygen systems listed in the AFM, document number T182TPHUS00 or T182TPHAUS00 or T182TPHBUS00, or later FAA approved revisions, are allowed

11. Operational Capability: VFR Day and Night
IFR Day and Night

12. Maximum Masses:

a. T182T (Normal Category):

Ramp	1410.67 kg (3110 lb.)
Take-Off	1406.14 kg (3100 lb)
Landing	1338.10 kg (2950 lb)

13. Centre of Gravity Range:

a. T182T (Normal Category):

Forward Limits: Linear variation from 1.03886 m (40.9 inches) aft of datum at 1406.14 kg (3100 lbs.) to 0.9017 m (35.5 inches) aft of datum at 1224.70 kg (2700 lbs.); 0.8382 m (33.0 inches) aft of datum at 1020.58 kg (2250 lbs.); 0.8382 m (33.0 inches) aft of datum at 1020.58 kg (2250 lbs.) or less.

Aft Limits: 1.1684 m (46.0 inches) aft of datum at 1406.14 kg (3100 lbs.) or less.

14. Datum: Lower portion of front face of firewall

15. (Reserved)

16. Levelling Means: Left side of tail cone at 3.54711 m (139.65 inches) and 4.35991 m (171.65 inches) aft of datum

17. Minimum Flight Crew: 1 (Pilot)

18. Maximum Passenger Seating Capacity: 3

19. Baggage / Cargo Compartment: 54.3411 kg (120 lb) at 2.0828 to 2.7686 m (82.0 to 109.0 in.) aft of datum

36.2874 kg (80 lbs.) at 2.7686 to 3.4036 m (109.0 to 134.0 in.) aft of datum

(Maximum combined weight capacity for baggage areas is 90.7185 kg [200 lbs.])

20. Wheels and Tires

Nose Wheel Tire Size	5.00 x 5
Main Wheel Tire Size	6.00 x 6

21. Control Surface Movements
Wing flaps 38° + 0°, -1°
Elevator tab Up 24° ± 2° Down15° ± 1°
Ailerons Up 20° ± 2° Down 15° ± 2°
Elevator (relative to stabilizer) Up 28° ± 1° Down 21° ±1°
Rudder (parallel to 0.00 W.L.)

Right 24° +0°, -1°; Left 24° + 0°, -1°
(Perpendicular to hinge line)
Right 27° 13' +0°, - 1°; Left 27° 13' +0°, -1°

D . Operating and Service Instructions

	Airplane Flight Manual (AFM): Manual No. T182TPHUS00, T182TPHAUS00 or T182TPHBUS00, latest approved revision.
Airplane Maintenance Manual (AMM) (Including Airworthiness Limitations)	Manual No. 182MM00 or latest revision

E Operational Suitability Data

Master Minimum Equipment List (MMEL)	182MMELEU, Initial Issue, EASA approved 24 November 2015, or any later UK-CAA approved issue.

F Notes

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: Weight and Balance:

Serial Nos. T18208001 and On: (Model T182T):

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 13.6078 kg (30 lbs.) at 1.2192 m (48 inches) aft of datum, and full oil of 7.3482 kg (16.2 lb.) at 0.37592 m (14.8 inches) forward of datum.

NOTE 2: Pilot's Operating Handbook (POH) and FAA Approved Airplane Flight Manual (AFM): part number T182TPHUS00 (or later FAA approved revision) is applicable to Model T182T. The airplane must be operated according to the appropriate POH/AFM. Required placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070811, Airplane Assembly. (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

FAA Approved Airplane Flight Manual (AFM): Part Number T182TPHAUS-00 (or later FAA approved revision) are applicable to the Model 182T equipped with Garmin G1000 Integrated Cockpit System. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070811, Airplane Assembly. (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

FAA Approved Airplane Flight Manual (AFM): Part Number T182TPHBUS-00 (or later FAA approved revision) are applicable to the Model T182T equipped with Garmin G1000 Integrated Cockpit System and Garmin GFC-700 AFCS. The airplane must be operated according to the appropriate AFM. Required

placards are included in the AFM, the applicable operating rules, or the certification basis must be installed as specified via the parts list for 070811, Airplane Assembly. (A useful placarding reference is the Textron Aviation Illustrated Parts Catalogue (IPC). Any discrepancies identified between the IPC and an aircraft under inspection need to be reconciled using the previously stated parts list).

NOTE 3: The CHT probe must be installed on Head #4.

NOTE 4: Special Ferry Flight Authorization. Flight Standard District Offices are authorized to issue Special overweight ferry flight authorizations. This airplane is structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (VNE) and Maximum Structural Cruising Speed (VC) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5g. to -1.0g. may not be exceeded. Requirements for any additional engine oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the increased weights have not been evaluated. Procedures for issuing a Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC 21-4B.

NOTE 5: FAA Certification Basis (Model T182T)

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6, except as follows:

FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323; and 23.1563 as amended by Amendment 23-7.
FAR 23.807 and 23.1524 as amended by Amendment 23-10.
FAR 23.507; 23.771; 23.853(a),(b),(c); and 23.1365 as amended by Amendment 23-14.
FAR 23.951 as amended by Amendment 23-15.
FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 and 23.1322 as amended by Amendment 23-17.
FAR 23.1301 as amended by Amendment 23-20.
FAR 23.1353; and 23.1559 as amended by Amendment 23-21.
FAR 23.603; 23.605; 23.613; 23.1329 and 23.1545 as amended by Amendment 23-23.
FAR 23.441 and 23.1549 as amended by Amendment 23-28.
FAR 23.779 and 23.781 as amended by Amendment 23-33.
FAR 23.1; 23.51 and 23.561 as amended by Amendment 23-34.
FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735; and 23.831 as amended by Amendment 23-42.
FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 and 23.1385 as amended by Amendment 23-43.
FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)3, and 23.562(c)4 as amended by Amendment 23-44.
FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 and 23.731 as amended by Amendment 23-45.

FAR 36 dated December 1, 1969, as amended by Amendments 36-1 through 36-22.

Equivalent Level of Safety Items:

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(1) Throttle Control
FAR § 23.1143(g); Refer to FAA letter dated 12/19/00
(2) Mixture Control
FAR § 23.1147(b); Refer to FAA letter dated 12/19/00
(3) Anti-collision Lights
FAR § 23.1401(d); Refer to FAA letter dated 02/20/01
(4) Aviation White Color Reqmt
14CFR § 23.1397(c);Refer to ACE-07-11, FAA letter dated 11/29/07

Additions for the Garmin G1000 Integrated Cockpit System (ICS) only:

14 CFR 23.303; 23.307; 23.601; 23.1163(a)(1)(2); 23.1367 and 23.1381 as amended by Amendment 23-N/C.
14 CFR 23.1589 as amended by Amendment 23-13.
14 CFR 23.771(a) as amended by Amendment 23-14.
14 CFR 23.607 and (Electrical System) 23.1309(a)(1)(2), (c) as amended by Amendment 23-17.
14 CFR 23.1301; 23.1327 and 23.1547(e) as amended by Amendment 23-20.
14 CFR 23.1501 and 23.1541(a)(1), (a)(2), (b)(1), (b)(2) as amended by Amendment 23-21.
14 CFR 23.603 and 23.605 as amended by Amendment 23-23.
14 CFR 23.1529 as amended by Amendment 23-26.
14 CFR 23.561(e); 23.1523; 23.1581(a)(2); 23.1583(a)(1), (a)(2), (b)(h) and 23.1585(a)(b)(d) as amended by Amendment 23-34.
14 CFR 23.301 as amended by Amendment 23-42.
14 CFR 23.1322; 23.1331 and 23.1357(a)(b)(c)(d) as amended by Amendment 23-43.
14 CFR 23.305; 23.773(a)(1), (a)(2); 23.1525 and 23.1549 as amended by Amendment 23-45.
14 CFR 23.1303(a)(b)(c)(f); 23.1309(a)(1)(i), (a)(1)(ii), (a)(2), (b)(1), (b)(2)(i), (b)(2)(ii), (b)(3), (b)(4)(i), (b)(4)(ii), (b)(4)(iii), (b)(4)(iv), (c)(1), (c)(2)(iii), (c)(3), (d), (e), (f)(1); 23.1311; 23.1321(a)(c)(d)(e); 23.1323(a), (b)(1), (b)(2), (c); 23.1329(g)(h); 23.1351(a)(1), (a)(2)(i), (b)(1)(iii), (b)(2)(3), (c)(4), (d)(1); 23.1353(a)(b)(c)(d)(e); 23.1359(c); 23.1361; 23.1365(a)(b)(d)(e)(f) and 23.1431(a)(b)(d)(e) as amended by Amendment 23-49.
14 CFR 23.1325(a), (b)(1), (b)(2)(i), (b)(3), (c)(d)(e); 23.1543(b)(c); 23.1545(a), (b)(1), (b)(2), (b)(3), (b)(4); 23.1553; 23.1555(a)(b); 23.1563(a) and 23.1567(a) as amended by Amendment 23-50.
14 CFR 23.777(a)(b); 23.955(a)(2); 23.1337(a)(1), (a)(2), (b)(1), (c) as amended by Amendment 23-51.
14 CFR 23.1305(a)(1), (a)(2), (a)(3), (b)(2), (b)(3)(i), (b)(4)(i), (b)(5), (b)(6)(i) as amended by Amendment 23-52.
14 CFR 23.901(a)(b) as amended by Amendment 23-53.

Additions for the Garmin GFC-700 Automatic Flight Control System (AFCS) only:

14 CFR 23.1335 as amended by Amendment 23-20, 14 CFR 23.1329 (a)(c)(d)(e)(f) as amended by Amendment 23-49.

Special Conditions as follows:

No. 23-146-SC, “Special Conditions: Cessna Aircraft Company; Cessna Model 182T/T182T Airplane; Installation of Electronic Flight Instrument System and the Protection of the System From High Intensity Radiated Fields (HIRF)

Production Basis (Model T182T)

Production Certificate No. 4 issued March 8, 2001. Applies to airplane serial numbers T18208001 and on. Textron Aviation Inc. is authorized to issue airworthiness certificates under the delegation provisions of Delegation Option Authorization No. DOA-100129-CE in accordance with Part 21 of the Federal Aviation Regulations.

SECTION 3: Reserved

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ADMINSTRATIVE SECTION

I. Acronyms

Acronym / Abbreviation	Definition
A/C	Aircraft
AFM	Airplane Flight Manual
ASTM	American Society for Testing and Materials
ATA	Air Transport Association
CAA	(United Kingdom) Civil Airworthiness Authority
CFR	Code of Federal Regulations
CG	Centre of Gravity
CRI	Certification Review Item
CS	Certification Specification
EASA	European Union Aviation Safety Agency
ELOS	Equivalent Level of Safety
FAA	Federal Aviation Administration
HIRF	High Intensity Radiated Field
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
JAA	Joint Aviation Authorities
KCAS	Knots Calibrated Airspeed
Kg	Kilograms
Lbs	U.S. Pounds
MAC	Mean Aerodynamic Chord
MTOM	Maximum Take-off Mass
No	Number
OSD	Operational Suitability Data
PSI	Pounds per Square Inch (pressure)
Ref	Reference
STA	Station
STC	Supplemental Type Certificate
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise
TCH	Type Certificate Holder
USA	United States of America
VFR	Visual Flight Rules
V_{MO}	Maximum Operating Limit Speed (KCAS)
WBM	Weight and Balance Manual

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I **Type Certificate Holder Record**

TCH Record	**Period**
Textron Aviation Inc. One Cessna Boulevard P.O. Box 7704 Wichita Kansas 67277 USA.	29 July 2015 to Present.

III. Change Record

Issue	Date	Change	TC issue no & date
1	04 January 2023	The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS EASA.IM.A.052 at Issue 7 dated 21 June 2018 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the Cessna 182 accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement, except as listed below: Editorial changes and Changes to reflect EU Exit: • Section 1.A: "General" Explanatory note added. • Section 1.F "Notes" Note 2 AFM references updated. • Section 1.F "Notes" Note 6 updated cert basis to include:-Additions for the Garmin GI 275 Electronic Flight Instrument as an ISI, as approved under CAA approval ref UK.MAJ.00178. • Section 2.A: "General" Explanatory note added. • Section 2.F "Notes" Note 2 AFM references updated. Section I: Additional Acronyms and Abbreviations added.	04 Jan 2023

END-

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