DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A42EU
Revision 4
CESSNA

Cessna F182P
Cessna F182Q
Cessna FR182

April 16, 2012

TYPE CERTIFICATE DATA SHEET No. A42EU

"WARNING: Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes."

This data sheet which is a part of Type Certificate No. A42EU 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 — Cessna Aircraft Company
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Wichita, Kansas 67277

Type Certificate A42EU was transferred from Reims Aviation S.A., 51 Aerodrome de Reims-Prunay, Reims, France, to Cessna Aircraft Company on December 11, 2006. Coincident with this transfer, the Federal Aviation Administration (FAA) has accepted the status of State of Design and State of Manufacture as defined by Annex 8 to the Convention of International Civil Aviation. Prior to December 11, 2006, products identified under Type Certificate A42EU were approved by the FAA in accordance with the Federal Aviation Regulation appropriate to Imported Products (FAR 21.29). Effective December 11, 2006, and after, these products are to be considered domestic products for the purpose of certification, and Federal Aviation Regulations 21.21 becomes appropriate.

I. Model F182P, 4 PCLM (Normal Category), Approved October 29, 1976

Engine — Continental O-470-S

*Fuel — 80/87 minimum grade aviation gasoline

*Engine limits — For all operations, 2600 rpm (230 hp)

Propeller and propeller limits

1. McCauley constant speed
   (a) Hub 2A34C201/90DA-8
   Diameter: not over 82 in., not under 80 in.
   Pitch settings at 30 in. sta.: low 13°, high 24.5°
   (b) Cessna spinner 0752637
   (c) Woodward governor 210065, 210105, 210345, 210155, A210452 or Garwin 34-828-01-2A or McCauley C290D2/T1 or C290D3/T1

2. McCauley constant speed
   (a) Hub 2A34C66/90AT-8 blades
   Diameter: not over 82 in., not under 80 in.
   Pitch settings at 36 in. sta.: low 10.5°, high 22°
   (b) Cessna spinner 0752637
   (c) Woodward governor 210065, 210105, 210155, 210345, 210452 or Garwin 34-828-01 or McCauley C290D2/T1 or C290D3/T1

3. McCauley constant speed
   (a) Hub 2A34C203/90DCA-8 blades
   Diameter: not over 82 in., not under 80.5 in.
   Pitch settings at 30 in. sta.: low 12.5°, high 25°
   (b) Cessna spinner 0752637
   (c) Woodward governor 210065, 210155, 210345, 210105, 210452 or Garwin 34-828-01 or McCauley C290D2/T1 or C290D3/T1

I. Model F182P (cont'd)

*Airspeed limits (IAS) (See NOTE 4 on use of IAS)	Maneuvering	127 mph (110 knots)
	Maximum structural cruising	162 mph (141 knots)
	Never exceed	203 mph (176 knots)
	Flaps extended	110 mph (95 knots)

C.G. range: (+39.5) to (+48.5) at 2950 lb.
(+33.0) to (+48.5) at 2250 lb. or less
Straight line variation between points given.

Empty weight C.G. range: None

*Maximum weight: 2950 lb.

No. of seats: 4 (2 front at +32.0 to +50.0)
(2 rear at +74.0)

Maximum baggage: 200 lb. (120 lb. at + 82.0 to +108.0)
(80 lb. at +108.0 to +136.0)

Fuel capacity: Standard Range Tanks:
61 gal. (56 gal. usable); two 30.5 gal. tanks in wings at +48

Long Range Tanks:
80 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil capacity: 12 qt (-15)(7.5 qt usable)
See NOTE 1 for data on unusable oil

Control surface movements:

Wing Flaps			Down	40° + 1°, -2°
Elevator tab	Up	25° ± 2°	Down	15° ± 1°
Ailerons	Up	20° ± 2°	Down	15° ± 2°
Elevator (relative to stabilizer)	Up	26° ± 1°	Down	17° ± 1°
Rudder (parallel to 0.00 W.L.)	Right	24° ± 1°	Left	24° ± 1°
Rudder (perpendicular to hinge line)	Right	27°13' ± 1°	Left	27°13' ± 1°

Serial Numbers Eligible: F18200001 through F18200025

II. Model F182Q, 4 PCLM (Normal Category), Approved December 14, 1976

Engine: Continental O-470-U

*Fuel: 100/130 minimum grade aviation gasoline (1977 Model)
100LL/100 aviation grade gasoline (1978 Model and on)

*Engine limits: For all operations, 2400 rpm (230 hp)

Propeller and propeller limits: McCauley constant speed
(a) Hub C2A34C204/90DCB-8
Diameter: not over 82 in., not under 80.5 in.
Pitch settings at 30 in. sta.: low 15°, high 29.4°
(b) Cessna spinner 0752637
(c) McCauley governor C290D3/T14

*Airspeed limits (IAS) (See NOTE 4 on use of IAS)	Maneuvering	111 knots
	Maximum structural cruising	143 knots
	Never exceed	179 knots
	Flaps extended	95 knots

II. Model F182Q (cont'd)

C.G. range	(+39.5) to (+48.5) at 2950 lb. (+33.0) to (+48.5) at 2250 lb. or less Straight line variation between points given.
Empty weight C.G. range	None
*Maximum weight	2950 lb.
No. of seats	4 (2 front at +32.0 to +50.0) (2 rear at +74.0)
Maximum baggage	200 lb. (120 lb. at +82.0 to +108.0) (80 lb. at +108.0 to +136.0)
Fuel capacity	Standard Range Tanks: 61 gal. (56 gal. usable); two 30.5 gal. tanks in wings at +48 (1977 and 1978 Models) Long Range Tanks: 80 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48 (1977 and 1978 Models) 92 gal. (88 gal. usable); two 46.0 gal. integral tanks in wing at +46.5 (1979 Model and on) See NOTE 1 for data on unusable fuel
Oil capacity	12 qt (-15) (7.5 qt usable) See NOTE 1 for data on undrainable oil.

Control surface movements

Wing Flaps			Down	40° ± 1°, -2°
Elevator tab	Up	25° ± 2°	Down	15° ± 1°
Ailerons	Up	20° ± 2°	Down	15° ± 2°
Elevator (relative to stabilizer)	Up	26° ± 1°	Down	17° ± 1°
Rudder (parallel to 0.00 W.L.)	Right	24° ± 1°	Left	24° ± 1°
Rudder (perpendicular to hinge line)	Right	27°13' ± 1°	Left	27°13' ± 1°

Serial Numbers Eligible: F18200026 through F18200169

III. Model FR182, 4 PCLM (Normal Category), Approved December 20, 1978

Engine	Lycoming O-540-J3C5D
*Fuel	100LL/100 aviation grade gasoline
*Engine limits	For all operations, 2400 rpm (235 hp)
Propeller and propeller limits	McCauley constant speed (a) Hub B2D34C214/90DHB-8 Diameter: not over 82 in., not under 80.5 in. Pitch settings at 30 in. sta.: low 15.8°, high 29.4° (b) Cessna spinner 2250003 (c) McCauley Governor C29D3/T16

*Airspeed limits (IAS) (See NOTE 4 on use of IAS)

Maneuvering	112 knots
Maximum structural cruising	144 knots (1978 Model) 160 knots(1979 Model and on)
Never exceed	182 knots
Flaps extended	95 knots

C.G. range	(+40.9) to (+47.0) at 3100 lb. (+35.5) to (+47.0) at 2700 lb. (+33.0) to (+47.0) at 2250 lb. or less Straight line variation between points given.

III. Model FR182 (cont'd)

Empty weight C.G. range	None
*Maximum weight	3100 lb.
No. of seats	4 (2 front at +32.0 to +50.0) (2 rear at +74.0)
Maximum baggage	200 lb. (120 lb. at +82.0 to +110.0) (80 lb. at +110.0 to +134.0)
Fuel capacity	a) 1978 Model: Standard Range Tanks: 61 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48 Long Range Tanks: 80 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48 b) 1979 Model and on: 92 gal. (88 gal. usable); two 46.0 gal. integral tanks in wings at +46.5 See NOTE 1 for data on unusable fuel
Oil capacity	9 qt (-15.7)

Control surface movements

Wing Flaps			Down	40° ± 1°, -2°
Elevator tab	Up	25° ± 2°	Down	15° ± 1°
Ailerons	Up	20° ± 2°	Down	15° ± 2°
Elevator (relative to stabilizer)	Up	28° ± 1°	Down	17° ± 1°
Rudder (parallel to 0.00 W.L.)	Right	24° ± 1°	Left	24° ± 1°
Rudder (perpendicular to hinge line)	Right	27°13' ± 1°	Left	27°13' ± 1°

Serial Numbers Eligible: FR18200001 through FR18200070

DATA PERTINENT TO ALL MODELS

Datum	Front face of firewall
Leveling means	Upper door sill. Top surface centerline of tailcone (1977 Model) Jig located nutplates and screws on left of tailcone (1978 Model and on)
Certification basis	F182 Series Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 and paragraph 3.112 as amended October 1, 1959. In addition effective 1979 Model and on, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus amendments 36-1 through 36-6 (Model F182Q and on). FR182 Series Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 and paragraph 3.112 as amended October 1, 1959; and Sections 23.729, 23.777(e), 23.781, 23.1555(e)(1) and (2), and 23.1563 of the Federal Aviation Regulations dated February 1, 1965, as amended February 14, 1975. In addition effective 1979 Model and on, FAR 23.1559 effective March 1, 1978 FAR 36 dated December 1, 1969, plus amendments 36-1 through 36-6.

DATA PERTINENT TO ALL MODELS (cont'd)

Application for Type Certificate dated June 30, 1976.

Type Certificate No. A42EU issued October 29, 1976.
Equivalent Safety Items:

F182 Series

- Airspeed indicator	CAR 3.757 (See NOTE 4 for use of IAS)
- Operating Limitations	CAR 3.778 (a)

FR182 Series

Airspeed Indicator	CAR 3.757 (See NOTE 4 for use of IAS)
- Operating Limitations	CAR 3.778 (a)
- Fuel System	CAR 3.430

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

This equipment must include a current Airplane Flight Manual effective 1979 Model and on. In addition, the following item of equipment is required:

1. Stall warning indicator, Cessna Dwg 0511062

NOTES

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and locating instructions when necessary, must be provided for each aircraft at the time of original certification.

(a) Models F182P
The certificated empty weight and the corresponding center of gravity location must include unusable fuel of 30 lb. at (+46) and undrainable oil of 0 lb.

(b) Models F182Q (1977 and 1978 Models)
The certificated empty weight and the corresponding center of gravity location must include unusable fuel of 30 lb. at (+46) and include oil of 22 lb. (-15.0).

(c) Models F182Q (1979 Model and on)
The certificated empty weight and the corresponding center of gravity location must include unusable fuel of 24 lb. at (+48) and full oil of 22.5 lb. at (-15.0).

(d) Models FR182 (1978 Model)
The certificated empty weight and the corresponding center of gravity location must include unusable fuel of 30 lb. at (+46) and include oil of 16.5 lb. (-15.7)

(e) Models FR182 (1979 Model and on)
The certificated empty weight and the corresponding center of gravity location must include unusable fuel of 24 lb. at (+48) and include oil of 16.9 lb. (-15.7)."

NOTE 2. The following placards must be displayed as indicated:

A. Applicable to Models F182P

(1) In full view of the pilot:

(a) This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

Maximums		
Maneuvering speed (IAS)	110 knots	
Gross weight	2950 lb.	
Flight load factor	Flaps up	+3.8, -1.52
	Flaps down	+2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 160 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable).

NOTE 2 (cont'd)

(2) On the fuel selector valve plate:
Standard range tanks: "Off. Left tank level flight only 29 gal. Both on for landing and takeoff all flight attitudes, 56 gal. Right tank level flight only 29 gal."

Long range tanks: "Off. Left tank level flight only 37 gal. Both on for landing and takeoff all flight attitudes, 75 gal. Right tank level flight only 37 gal."

(3) On the control lock: "Control lock - remove before starting engine".

(4) On the baggage door : "Forward of baggage door latch, 120 lb. maximum baggage and/or auxiliary passenger. Aft of baggage door latch, 80 lb. maximum baggage including 25 lb. maximum in baggage wall hat shelf. Maximum 200 lb. combined. For additional loading instructions see weight and balance data".

(5) On flap control indicator: "(a) 0° to 10° - (Blue color code and 140 kts callout; also, mechanical detent at 10°)

(b) 10° to 20° - Full (Indices at these positions with white color code and 95 kts callout; also, mechanical detent at 10° and 20°)."

(6) Forward of the filler cap on the wing surface:
Standard range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline. Capacity 30.5 gal."

Long range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline. Capacity 40.0 gal."

(7) On aft panel of baggage compartment:
"Oxygen refill" (All models with oxygen)

(8) Adjacent to overvoltage light:
"High voltage".

(9) Above the left fuel gauge: "Do not turn off alternator in flight except in emergency".

B. Applicable to Model F182Q

(1) In full view of the pilot:

(a) 1977 and 1978 Models:

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

Maximums		
Maneuvering speed (IAS)	111 knots	
Gross weight	2950 lb.	
Flight load factor	Flaps up	+3.8, -1.52
	Flaps down	+2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 160 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable).

NOTE 2 (cont'd)

(b) 1979 Model and on:
"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Pilot's Operating Handbook and FAA approved Airplane Flight Manual.

No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable).

(c) Near airspeed indicator (1979 Model and on):
"Maneuver Speed
111 KIAS"

(2) On the fuel selector valve plate:
(a) 1977 and 1978 Models:
Standard range tanks: "Off.
Left - 29 gal. Level flight only.
Both - 56 gal. All flight attitudes.
Both on for takeoff and landing
Right - 29 gal. Level flight only."

Long range tanks: "Off.
Left - 37 gal. Level flight only.
Both - 75 gal. All flight attitudes.
Both on for takeoff and landing.
Right - 37 gal. Level flight only."

(b) 979 Model and on:
"Off
Left - 44 gal. Level flight only.
Both - 88 gal. All flight attitudes.
Both on for takeoff and landing.
Right - 44 gal. Level flight only".

(3) On the control lock : "Control lock - remove before starting engine".

(4) On the baggage door : "Forward of baggage door latch, 120 lb. maximum baggage and/or auxiliary passenger. Aft of baggage door latch, 80 lb. maximum baggage including 25 lb. maximum in baggage wall hat shelf. Maximum 200 lb. combined. For additional loading instructions see weight and balance data".

(5) On flap control indicator: "(a) 0° to 10° - (Blue color code and 140 kts callout; also, mechanical detent at 10°)

(b) 0° to 20° - Full (Indices at these positions with white color code and 95 kts callout; also, mechanical detent at 10° and 20°)."

(6) Forward of the filler cap on the wing surface:
(a) <u>1977 Model</u>
Standard range tanks : "Service this airplane with 100/130 minimum aviation grade gasoline. Capacity 30.5 gal."

Long range tanks: "Service this airplane with 100/130 minimum aviation grade gasoline. Capacity 40.0 gal."

NOTE 2 (cont'd)

(b) 1978 Model

Standard range tanks: "Service this airplane with 100LL/100 minimum aviation grade gasoline. Capacity 30.5 gal."

Long range tanks: "Service this airplane with 100LL/100 minimum aviation grade gasoline. Capacity 40.0 gal."

(c) 1979 Model and on

"Fuel 100LL/100 minimum grade aviation gasoline. Capacity 46 U.S. gal. Capacity 34.5 U.S. gal. to bottom of filler collar."

(7) On aft panel of baggage compartment: "Oxygen refill" (All models with oxygen)

(8) Adjacent to overvoltage light:

(a) 1977 and 1978 Models

"High voltage".

(b) 1979 Model and on

"Low Voltage"

C. Applicable to Model FR182

(1) In full view of the pilot:

(a) 1978 Model

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

Maximums		
Gross weight . 3100 lb.		
Flight load factor	Flaps up	+3.8, -1.52
	Flaps down	+2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 240 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable).

(b) 1979 Model and on

"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Pilot's Operating Handbook and FAA approved Airplane Flight Manual.

No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable).

(c) Near Airspeed Indicator:

"MAX SPEED - KIAS

Maneuver	112
Gear Oper.	140
Gear Down	140"

NOTE 2 (cont'd)

(2) On the fuel selector valve plate:

(a) 1978 Model

Standard range tanks: Off.
Left - 29 gal. Level flight only.
Both - 56 gal. All flight attitudes.
Both on for takeoff and landing
Right - 29 gal. Level flight only."

Long range tanks : "Off.
Left - 37 gal. Level flight only.
Both - 75 gal. All flight attitudes.
Both on for takeoff and landing.
Right - 37 gal. Level flight only."

b) 1979 Model

Off
Left - 44 gal. Level flight only.
Both - 88 gal. All flight attitudes.
Both on for takeoff and landing.
Right - 44 gal. Level flight only".

(3) On the control lock : "Control lock - remove before starting engine".

(4) On the baggage door : "120 Pounds Maximum
Baggage and/or auxiliary passenger
Forward of baggage door latch and 80 Pounds Maximum

Baggage aft of baggage door latch
Maximum 200 Pounds combined

For additional loading instructions see Weight and Balance Data".

(5) On flap control indicator:
0° to 10° - (Blue color code and 140 kts callout; also, mechanical detent at 10°)
0° to 20° - Full (Indices at these positions with white color code and 95 kts callout; also, mechanical detent at 10° and 20°)".

(6) Forward of the filler cap on the wing surface:

(a) 1978 Model

Standard range tanks :"Service this airplane with 100LL/100 minimum aviation grade gasoline. Capacity 30.5 gal."

Long range tanks : "Service this airplane with 100LL/100 minimum aviation grade gasoline. Capacity 40.0 gal."

(b) 1979 Model

"Fuel 100LL/100 minimum grade aviation gasoline. Capacity 46 U.S. gal.
Capacity 34.5 U.S. gal. to bottom of filler collar."

(7) Adjacent to voltage light:

(a) 1978 Model
"High voltage".

(b) 1979 Model
"Low Voltage"

NOTE 2 (cont'd)

(8) Near gear hand pump:

"Manual Gear Extension

1. Select gear down.
2. Pull handle fwd.
3. Pump vertically

CAUTION

Do not pump with gear UP selected"

NOTE 3. The cylinder head thermistors must be installed as follows:

Model	Engine and Cylinder Head Number		
	O-470-S	O-470-U	O-540-J
F182P	3	N/A	
F182Q	N/A	3	
FR182	N/A	N/A	5

NOTE 4. "The marking of the airspeed indicator with IAS provides an equivalent level of safety to CAR 3.757 when the approved airspeed calibration data presented in Section V of the Pilots' Operating Handbooks, listed below is available to the pilot:

F182P -	CESSNA P/N D1062-13	(1976 Model)
F182Q -	CESSNA P/N D1087-13	(1977 Model)
F182Q -	CESSNA P/N D1114-13	(1978 Model)
F182Q -	CESSNA P/N D1141-13	(1979 Model)
FR182 -	CESSNA P/N D1115-13	(1978 Model)
FR182 -	CESSNA P/N D1142-13	(1979 Model)

NOTE 5. Fourteen Volt Electrical System
(F182 Series thru 1977 Model)

Twenty Eight Volt Electrical System
(F182 Series 1978 Model and on)
(FR182 Series Model and on)

In addition to the above specified placards, the prescribed operating limitations indicated by an asterisk (*) under Sections I through III of this data sheet must be also displayed by permanent markings.

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