DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	3A13
	Revision 66
	CESSNA
182	182K
182A	182L
182B	182M
182C	182N
182D	182P
182E	182Q
182F	182R
182G	R182
182H	T182
182J	TR182
182S	T182T
182T	
	November 3, 2006

TYPE CERTIFICATE DATA SHEET NO. 3A13

This data sheet which is part of Type Certificate No. 3A13 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

P. O. Box 7704

Wichita, Kansas 67277

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

I - Model 182, Skylane, 4 PCLM (Normal Category), Approved March 2, 1956

Engine Continental O-470-L

*Fuel 80 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits 1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 12°, high 24°

- (b) Cessna spinner 0752006
- (c) Woodward governor 210065, 210105, 210155 or 210340
- 2. McCauley constant speed
 - (a) Hub 2A36C with blades 90M-8

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 22°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345 or 210452, or McCauley C290D2/T1 or C290D3/T1

Page No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Rev. No.	66	59	59	59	59	59	59	59	39	39	39	60	49	62	61	51	51	50
Page No	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Rev. No.	51	51	51	51	51	51	43	51	43	51	51	51	55	58	66	66	65	66
Page No	37																	
Rev. No.	66																	

I - Model 182 (Cont'd)

Propeller and

Propeller Limits (cont'd)

3. Hartzell constant speed

(a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low 13°, high 24°

- (b) Cessna spinner 0752619
- (c) Woodward governor 210105AF, 210340 or 210451
- 4. McCauley constant speed
 - (a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345 or 210452 or McCauley C290D2/T1 or C290D3/T1
- 5. Aircraft reworked per Cessna Service Kit SK182-121:

McCauley constant speed (Threadless)

(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 25.0°

Straight line variation between points given

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits (CAS)	Maneuvering Maximum structural cruising Never exceed Flaps extended	122 m.p.h. (106 knots) 160 m.p.h. (139 knots) 184 m.p.h. (160 knots) 100 m.p.h. (87 knots)
C.G. Range	(+39.5) to (+45.8) at 2550 lb. (+35.0) to (+45.8) at 2050 lb. or less	

Empty Wt. C.G. Range

*Maximum Weight 2550 lb.

No. of Seats 4 (2 at +36, 2 at +70)

None

Maximum Baggage 120 lb. (+95)

Fuel Capacity 60 gal. (55 gal. usable); two 30 gal. tanks in wings at +48.

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface	Wing flaps	Takeoff		Retracted	0°
Movements				1st notch	10°
				2nd notch	20°
		Landing		3rd notch	30°
		_		4th notch	40°
	Ailerons	Up	$20^{\circ} \pm 2^{\circ}$	Down	$14^{\circ} \pm 2^{\circ}$
	Adj. stabilizer	Up	$1^{\circ} 50' \pm 15$	Down	8° 20' ± 15'
	Elevator	Up	25° ± 1°	Down	22° 50' ± 1°
	(With stabilizer	full down)			
	D 11	D: 1	0.40 + 10	т с	0.40 10

Rudder Right $24^{\circ} \pm 1^{\circ}$ Left $24^{\circ} \pm 1^{\circ}$

Serial Nos. Eligible Model 182: 613 and 33000 through 33842 (1956 Model)

Rev. 66 Page 3 of 37 3A13

II - Model 182A, Skylane, 4 PCLM (Normal Category), Approved December 7, 1956

Engine Continental O-470-L

*Fuel 80 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits 1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 12°, high 24°

- (b) Cessna spinner 0752006
- (c) Woodward governor 210065, 210105, 210155 or 210340
- 2. McCauley constant speed
 - (a) Hub 2A36C with 90M-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 0752004
- (c) Woodward governor 210065, 210105, 210155 or 210452, or McCauley C290D2/T1 or C290D3/T1
- 3. Hartzell constant speed
 - (a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 13°, high 24°

- (b) Cessna spinner 0752619
- (c) Woodward governor 210105AF, 210340 or 210451
- 4. McCauley constant speed
 - (a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1
- 5. Aircraft reworked per Cessna Service Kit SK182-121:

McCauley constant speed (Threadless)

(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 25.0°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits (CAS)

Maneuvering 122 m.p.h. (106 knots)
Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 184 m.p.h. (160 knots)
Flaps extended 100 m.p.h. (87 knots)

C.G. Range

(+40.0) to (+45.8) at 2650 lb. (+33.5) to (+45.8) at 2100 lb. or less Straight line variation between points given

Empty Wt. C.G. Range

None

*Maximum Weight

2650 lb.

No. of Seats

4 (2 at +36, 2 at +70)

II - Model 182A (cont'd)

120 lb. (+95) Maximum Baggage

65 gal. (55 gal. usable); two 32.5 gal. tanks in wings at +48 Fuel Capacity

See NOTE 1 for data on unusable fuel

12 qt. (-15) (6 qt. usable) Oil Capacity

See NOTE 1 for data on undrainable oil

Control Surface Movements

Takeoff Retracted 0° Wing flaps 1st notch 10° 20° 2nd notch 30° Landing 3rd notch 4th notch 40° Up $20^{\circ} \pm 2^{\circ}$ $14^{\circ} \pm 2^{\circ}$ Ailerons Down Adj. stabilizer Up $1^{\circ} 50' \pm 15'$ Down $8^{\circ} 20' \pm 15'$ Elevator Up $25^{\circ} \pm 1^{\circ}$ Down 22° 50' ± 1° (With stabilizer full down) Left $24^{\circ} \pm 1^{\circ}$

Rudder Right $24^{\circ} \pm 1^{\circ}$

Serial Nos. Eligible Model 182A: 33843 through 34753 (1957 Model)

Model 182A: 34755 through 34999 and 51001 through 51556 (1958 Model)

III - Model 182B, Skylane, 4 PCLM (Normal Category), Approved August 22, 1958

Engine Continental O-470-L

*Fuel 80 minimum octane aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and **Propeller Limits** 1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low 12°, high 24°

- (b) Cessna spinner 0752006
- (c) Woodward governor 210065, 210105, 210155, or 210340
- 2. McCauley constant speed
 - (a) Hub 2A36C with 90M-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 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452,

or McCauley C290D2/T1 or C290D3/T1

- 3. Hartzell constant speed
 - (a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 13°, high 24°

- (b) Cessna spinner 0752619
- (c) Woodward governor 210105AF, 210340, or 210451
- 4. McCauley constant speed
 - (a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1

Rev. 66 Page 5 of 37 3A13

III - Model 182B, Skylane (Cont'd)

5. Aircraft reworked per Cessna Service Kit SK182-121:

McCauley constant speed (Threadless)

(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 25.0° (b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits Maneuvering 122 m.p.h. (106 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)

Never exceed 184 m.p.h. (160 knots) Flaps extended 100 m.p.h. (87 knots)

C.G. Range (+40.0) to (+45.8) at 2650 lb.

(+33.5) to (+45.8) at 2100 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 2650 lb.

No. of Seats 4 (2 at +36, 2 at +70)

Maximum Baggage 120 lb. (+95)

Fuel Capacity 65 gal. (55 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Takeoff Retracted 0° Movements 1st notch 10°

22° 50' <u>+</u>1°

Down

Ailerons Up $20^{\circ}\pm2^{\circ}$ Down $14^{\circ}\pm2^{\circ}$ Adj. stabilizer Up 1° 50' $\pm15'$ Down 8° 20' $\pm15'$

Up

Elevator (With stabilizer full down)

Rudder Right $24^{\circ} \pm 1^{\circ}$ Left $24^{\circ} \pm 1^{\circ}$

Serial Nos. Eligible Model 182B: 34754, 51557 through 52358 except 51623 (1959 Model)

IV - Model 182C, Skylane, 4 PCLM (Normal Category), Approved July 8, 1959 Model 182D, Skylane, 4 PCLM (Normal Category), Approved June 14, 1960

Engine Continental O-470-L

*Fuel 80 minimum octane aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

IV - Model 182C, Model 182D (cont'd)

Propeller and Propeller Limits 1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low 12°, high 24°

- (b) Cessna spinner 0752006
- (c) Woodward governor 210065, 210105, 210155, or 210340
- 2. McCauley constant speed
 - (a) Hub 2A36C with 90M-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 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1
- 3. Hartzell constant speed
 - (a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 13°, high 24°

- (b) Cessna spinner 0752619
- (c) Woodward governor 210105AF, 210340, or 210451
- 4. McCauley constant speed
 - (a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1
- 5. Aircraft reworked per Cessna Service Kit SK182-121:

McCauley constant speed (Threadless)

(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 25.0°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits (CAS)

Maneuvering 122 m.p.h. (106 knots) Maximum structural cruising 160 m.p.h. (139 knots) Never exceed 184 m.p.h. (160 knots) Flaps extended 100 m.p.h. (87 knots)

C.G. Range

*Maximum Weight

(+40.0) to (+45.8) at 2650 lb. (+33.5) to (+45.8) at 2100 lb. or less Straight line variation between points given

Empty Wt. C.G. Range

None

No. of Seats 4 (2 at +36, 2 at +70)

Maximum Baggage 120 lb. (+95)

65 gal. (55 gal. usable); two 32.5 gal. tanks in wings at +48 Fuel Capacity

2650 lb.

See NOTE 1 for data on unusable fuel

12 qt. (-15) (6 qt. usable) Oil Capacity

See NOTE 1 for data on undrainable oil

Rev. 66 Page 7 of 37 3A13

IV - Model 182C, Model 182D (cont'd)

Control Surface	Wing flaps	Takeoff			$0^{\circ}, 10^{\circ}, 20^{\circ}$
Movements		Landing			$30^{\circ}, 40^{\circ}$
	Ailerons	Up	20° <u>+</u> 2°	Down	14° <u>+</u> 2°
	Adj. stabilizer	Up	0° 45' <u>+</u> 15'	Down	8° 45' <u>+</u> 15'
	Elevator	Up	25° <u>+</u> 1°	Down	22° 50' <u>+</u> 1°
	(With stabilizer full of	down)			
	Rudder	Right	24° <u>+</u> 1°	Left	24° <u>+</u> 1°

(measured parallel to 0.0.W.L.)

Serial Nos. Eligible Model 182C: 631, 52359 through 53007 (1960 Model)

Model 182D: 51623, 18253008 through 18253598 (1961 Model)

V - Model 182E, Skylane, 4 PCLM (Normal Category), Approved June 27, 1961 Model 182F, Skylane, 4 PCLM (Normal Category), Approved August 1, 1962 Model 182G, Skylane, 4 PCLM (Normal Category), Approved July 19, 1963

Engine Continental O-470-L or 0-470-R

*Fuel 80/87 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits 1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 12°, high 24°

(b) Cessna spinner 0752006

(c) Woodward governor 210065, 210105, 210155, or 210340

(Not eligible on O-470-R engine installation)

2. McCauley constant speed

(a) Hub 2A36C with 90M-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 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452,

or McCauley C290D2/T1 or C290D3/T1

3. Hartzell constant speed

(a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 13°, high 24°

(b) Cessna spinner 0752619

(c) Woodward governor 210105AF, 210340, or 210451

4. McCauley constant speed

(a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1 3A13 Page 8 of 37 Rev. 66

<u>V - Model 182E, Model 182F, Model 182G</u> (cont'd)

5. Aircraft reworked per Cessna Service Kit SK182-121:

McCauley constant speed (Threadless)

(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 25.0° (b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits Maneuvering 128 m.p.h. (111 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 193 m.p.h. (168 knots)

Never exceed 193 m.p.h. (168 knots) Flaps extended 110 m.p.h. (96 knots)

C.G. Range (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 2800 lb.

No. of Seats 4 (2 at +36, 2 at +71)

Maximum Baggage 120 lb. (+97)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps $40^{\circ} + 1^{\circ}, -2^{\circ}$

Elevator tab Down 15° <u>+</u>1° Movements Up 25° ±2° Ailerons 20° <u>+</u>2° Down $15^{\circ} \pm 2^{\circ}$ Up 26° <u>+</u>1° Down 17° <u>+</u>1° Elevator (relative to stabilizer) Up Rudder Left 24° ±1° Right 24° ±1°

Serial Nos. Eligible Model 182E: 18253599 through 18254423 (1962 Model)

Model 182F: 18254424 through 18255058 (1963 Model) Model 182G: 18255059 through 18255844 (1964 Model)

VI - Model 182H, Skylane, 4 PCLM (Normal Category), Approved September 17, 1964

Model 182J, Skylane, 4 PCLM (Normal Category), Approved October 20, 1965 Model 182K, Skylane, 4 PCLM (Normal Category), Approved August 3, 1966

Model 182L, Skylane, 4 PCLM (Normal Category), Approved July 28, 1967

Engine Continental O-470-R

*Fuel 80/87 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Rev. 66 Page 9 of 37 3A13

VI - Model 182H, Model 182J, Model 182K, Model 182L (cont'd)

Propeller and

1. McCauley constant speed

Propeller Limits

(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, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

2. Aircraft reworked per Cessna Service Kit SK182-121:

McCauley constant speed (Threadless)
(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 25.0° (b) Cessna spinner 0752637

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits Maneuvering 128 m.p.h. (111 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 193 m.p.h. (168 knots)

Never exceed 193 m.p.h. (168 knots) Flaps extended 110 m.p.h. (96 knots)

C.G. Range (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less

Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 2800 lb.

No. of Seats 4(2 at +36, 2 at +71)

Maximum Baggage 120 lb. (+97)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps $40^{\circ} + 1^{\circ}, -2^{\circ}$ Movements Elevator tab Up $25^{\circ} \pm 2^{\circ}$ Down $15^{\circ} \pm 1^{\circ}$

Ailerons Up $20^{\circ}\pm2^{\circ}$ Down $15^{\circ}\pm2^{\circ}$ Elevator(relative to stabilizer) Up $26^{\circ}\pm1^{\circ}$ Down $17^{\circ}\pm1^{\circ}$ Rudder Right $24^{\circ}+1^{\circ}$ Left $24^{\circ}+1^{\circ}$

Serial Nos. Eligible Model 182H: 634, 18255846 through 18256684 (1965 Model)

Model 182J: 18256685 through 18257625 (1966 Model)

Model 182K: 18255845, 18257626 through 18257698, 18257700 through 18258505

(1967 Model)

Model 182L: 18258506 through 18259305 (1968 Model)

VII - Model 182M, Skylane, 4 PCLM (Normal Category), Approved September 19, 1968

Engine Continental O-470-R

*Fuel 80/87 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

VII - Model 182M (cont'd)

Propeller and Propeller Limits

- 1. 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, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1
- 2. McCauley constant speed
 - (a) Hub 2A34C201/90DA-8 blades

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, 210155, 210345, or 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, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits	Maneuvering	128 m.p.h. (111 knots)
(CAS)	Maximum structural cruising	160 m.p.h. (139 knots)
	Never exceed	193 m.p.h. (168 knots)
	Flaps extended	110 m.p.h. (96 knots)

C.G. Range (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less

Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 2800 lb.

No. of Seats 4 (2 at +36, 2 at +71)

Maximum Baggage 120 lb. (+97)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface	Wing flaps				$40^{\circ} + 1^{\circ}, -2^{\circ}$
Movements	Elevator tab	Up	25° <u>+</u> 2°	Down	15° <u>+</u> 1°
	Ailerons	Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°
	Elevator(relative to stabilizer)	Up	26° <u>+</u> 1°	Down	17° <u>+</u> 1°
	Rudder	Right	24° +1°	Left	24° +1°

Serial Nos. Eligible Model 182M: 18257699, 18259306 through 18260055 (1969 Model)

Rev. 66 Page 11 of 37 3A13

VIII - Model 182N, Skylane, 4 PCLM (Normal Category), Approved September 17, 1969

Engine Continental O-470-R

Continental O-470-S (See NOTE 4)

*Fuel 80/87 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits

1. McCauley constant speed

(a) Hub 2A34C201/90DA-8 blades

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, 210155, 210345, or 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, or 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, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits Maneuvering 131 m.p.h. (114 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 198 m.p.h. (172 knots)
Flaps extended 110 m.p.h. (96 knots)

C.G. Range (+39.9) to (+47.4) at 2950 lb. (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 2950 lb. takeoff only, 2800 lb. landing

No. of Seats 4 Front standard (2 at +36 to +49)

Optional (2 at +32 to +44)

Rear (2 at +74)

Maximum Baggage 120 lb. (+97) (S/N 18260056 through 18260445)

120 lb. (+97) and 80 lb. (+117) (S/N 18260446 and up)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

VIII - Model 182N (cont'd)

Control Surface Wing flaps Down $40^{\circ} + 1^{\circ}, -2^{\circ}$ Up 25° <u>+</u>2° Elevator tab Down 15° ±1° Movements Ailerons Up 20° <u>+</u>2° Down 15° <u>+</u>2° Elevator(rel. to stabilizer) Up 26° ±1° Down 17° <u>+</u>1° Rudder (parallel to 0.00 W.L.) Right $24^{\circ} \pm 1^{\circ}$ Left $24^{\circ} \pm 1^{\circ}$ Left 27° 13' <u>+</u>1° (Perpendicular to hinge line) Right $27^{\circ} 13' \pm 1^{\circ}$

Serial Nos. Eligible Model 182N: 18260056 through 18260445 (1970 Model) 18260446 through 18260825

(1971 Model)

IX - Model 182P, Skylane, 4 PCLM (Normal Category), Approved October 8, 1971

Engine Continental O-470-R, Aircraft S/N 18260826 through 18263475

Continental O-470-S, Aircraft S/N 18260826 and up (See NOTE 4)

*Fuel 80/87 minimum grade aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits

1. McCauley constant speed

(a) Hub 2A34C201/90DA-8 blades

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, 210155, 210345, or 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, or 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, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits (S/N 675, 18260826 through 18264295)

(CAS) Maneuvering 126 m.p.h. (109 knots)
Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 198 m.p.h. (172 knots)
Flaps extended 110 m.p.h. (96 knots)

*Airspeed Limits (S/N 18264296 through 18265175)

(IAS) Maneuvering 110 knots (See NOTE 5 on use of IAS) Maximum structural cruising 141 knots

Never exceed 176 knots
Flaps extended 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 Rev. 66 Page 13 of 37 3A13

IX - Model 182P, Skylane (Cont'd)

Empty Wt. C.G. Range None

*Maximum Weight 2950 lb.

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74)

Maximum Baggage Serial Numbers 18260826 through 18263475

200 lb. (120 lb. at + 82.0 to +108.0) (80 lb. at +108.0 to +124.0)

Serial Numbers 675 and 18263476 through 18265175

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

Fuel Capacity (S/N 675, 18260826 through 18262250)

Standard Range Tanks:

65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

Long Range Tanks:

84 gal. (79 gal. usable); two 42.0 gal. tanks in wings at +48

(S/N 18262251 through 18265175)

Standard Range Tanks:

61 gal. (56 gal. usable); two 29 gal. tanks in wings at +48

Long Range Tanks:

80 gal. (75 gal. usable); two 37 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Down $40^{\circ} + 1^{\circ}$, -2° Down 15° <u>+</u>1° Movements Elevator tab Up 25° <u>+</u>2° Up 20° <u>+</u>2° Ailerons Down 15° <u>+</u>2° Up 26° +1° Elevator (rel. to stabilizer) Down $17^{\circ} + 1^{\circ}$ Rudder(parallel to 0.00 W.L.) Right $24^{\circ} \pm 1^{\circ}$ Left 24° <u>+</u>1° Right $27^{\circ} 13' \pm 1^{\circ}$ Left 27° 13' <u>+</u>1° (perpendicular to hinge line)

Serial Nos. Eligible Model 182P: 18260826 through 18261425 (1972 Model)

18261426 through 18262465 (1973 Model) 18262466 through 18263475 (1974 Model)

675, 18263476 through 18264295 except 18263479 (1975 Model)

18264296 through 18265175 (1976 Model)

X - Model 182Q, Skylane, 4 PCLM (Normal Category), Approved July 28, 1976

Engine Continental O-470-U

*Fuel 100/130 minimum aviation grade gasoline (S/N 18265176 through 18265965)

100LL/100 aviation grade gasoline (S/N 18265966 through 18267715)

*Engine Limits For all operations, 2400 r.p.m. (230 hp.)

Propeller and McCauley constant speed

Propeller Limits (a) Hub C2A34C204/90DCB-8 blades

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

Page 14 of 37 3A13 Rev. 66

X - Model 182Q (cont'd)

*Airspeed Limits 111 knots Maneuvering Maximum structural cruising 143 knots (IAS) (See NOTE 5 on use of IAS) Never exceed 179 knots

Flaps extended 95 knots

(+39.5) to (+48.5) at 2950 lb. C.G. Range

> (+33.0) to (+48.5) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

2950 lb. *Maximum Weight

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74)

Maximum Baggage 200 lb. (120 lb. at +82.0 to +108.0)

(80 lb. at +108.0 to +136.0)

Standard Range Tanks: Fuel Capacity

61 gal. (56 gal. usable); two 30.5 gal. tanks in wings at +48

(S/N 18263479, 18265176 through 18266590)

Long Range Tanks:

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

(S/N 18263479, 18265176 through 18266590)

92 gal. (88 gal. usable); two 46.0 gal. integral tanks in wings at +46.5

(S/N 18266591 through 18267715)

See NOTE 1 for data on unusable fuel

12 qt. (-15.0) (6 qt. usable) Oil Capacity

See NOTE 1 for data on undrainable oil

Control Surface Down $40^{\circ} + 1^{\circ}, -2^{\circ}$ Wing flaps Movements Elevator tab Up 25° ±2° Down 15° ±1° Ailerons Up 20° <u>+</u>2° Down 15° <u>+</u>2° Elevator (rel. to stabilizer) 26° <u>+</u>1° Down 17° <u>+</u>1° Up Rudder (parallel to 0.00 W.L.) Right 24° <u>+</u>1° Left 24° <u>+</u>1° (perpendicular to hinge line) Right 27° 13' <u>+</u>1° Left 27° 13' <u>+</u>1°

Model 182Q: 18265176 through 18265965 Serial Nos. Eligible (1977 Model)

18263479, 18265966 through 18266590 (1978 Model) 18266591 through 18267300 (1979 Model) 18267301 through 18267715, except 18267302 (1980 Model)

XI - Model R182, Skylane RG, 4 PCLM (Normal Category), Approved July 7, 1977 Model TR182, Turbo Skylane RG, 4 PCLM (Normal Category), Approved September 12, 1978

Model R182

Lycoming O-540-J3C5D, rated at 235 hp. Engine

*Fuel 100LL/100 aviation grade gasoline

*Engine Limits Full throttle for all operations, 2400 r.p.m. Rev. 66 Page 15 of 37 3A13

XI - Model R182, Model TR182, Turbo Skylane RG (cont'd)

Propeller and Propeller Limits

- 1. McCauley constant speed (S/N R18200002 through R18201313)
 - (a) Hub B2D34C214/90DHB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.:

low 15.8°, high 29.4°

(b) Cessna prop & spinner installation 2250003

Cessna spinner installation 1750050

- (c) McCauley governor C290D3/T16
- 2. McCauley constant speed (S/N R18201314 and on)
 - (a) Hub B2D34C218/90DHB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.:

low 15.8°, high 29.4°

(b) Cessna prop & spinner installation 2250124

Cessna spinner installation 2250123

- (c) McCauley governor C290D3/T22
- (d) McCauley governor DC290D1/T8
- McCauley constant speed (S/N R18201629 through R18202041 and aircraft reworked per SK182-71)
 - (a) Hub B3D32C407/82NDA-3 blades

Diameter: not over 79 in., not under 78 in.

Pitch settings at 30 in. sta.: low 16.0°, high 31.7°

- (b) Cessna prop & spinner installation 2252076 Cessna spinner installation 2252074
- (c) McCauley governor C290D3/T22
- (d) McCauley governor DC290D1/T8

Model TR182

Engine

Lycoming O-540-L3C5D, rated at 235 hp.

(Turbocharged in accordance with Cessna Drawing No. 2250065)

*Fuel

100LL/100 aviation grade gasoline

*Engine Limits

For all operations, 2400 r.p.m., 31 in. hg. mp.

Propeller and Propeller Limits

- 1. McCauley constant speed (S/N R18200001, R18200584 through R18201313)
 - (a) Hub B2D34C217/90DHB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.:

- low 15.8°, high 31.9°
 (b) Cessna prop & spinner installation 2250003
 Cessna spinner installation 1750050
- (c) McCauley governor C290D3/T21
- McCauley constant speed (S/N R18201314 and on)
- (a) Hub B2D34C219/90DHB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15.8°, high 31.9°

- (b) Cessna prop & spinner installation 2250124 Cessna spinner installation 2250123
- (c) McCauley governor C290D3/T22
- (d) McCauley governor DC290D1/T8

Model TR182 (cont'd)

Propeller and

Propeller Limits (cont'd)

- McCauley constant speed (S/N R18201315, R18201629 and on and aircraft reworked per SK182-71 or SK182-72)
 - (a) Hub B3D32C407/82NDA-3 blades

Diameter: not over 79 in., not under 78 in.

Pitch settings at 30 in. sta.: low 16.0°, high 31.7°

- (b) Cessna prop & spinner installation 2252076 Cessna spinner installation 2252074
- (c) McCauley governor C290D3/T22
- (d) McCauley governor DC290D1/T8

Models R182, TR182

Miduels K102, 1 K102			
*Airspeed Limits	1978 Model R182	Maneuvering	112 knots
(IAS)		Maximum structural cruising	143 knots
(See NOTE 5 on use of IAS	5)	Never exceed	182 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
	1979 Model R182	Maneuvering	112 knots
		Maximum structural cruising	160 knots
		Never exceed	182 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
	Model TR182	Maneuvering	112 knots
		Maximum structural cruising	157 knots
		Never exceed	179 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
	1980 and up Model R182	Maneuvering	112 knots
		Maximum structural cruising	159 knots
		Never exceed	181 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
	Model TR182	Maneuvering	112 knots
		Maximum structural cruising	157 knots
		Never exceed	178 knots
		Flaps extended	95 knots

C.G. Range

(a) <u>S/N R18200001 through R18201628 except R18200975 & R18201315</u>

140 knots

Landing gear extension

(+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 Moment change due to retracting gear (+3052 in.-lb.)

(b) <u>S/N R18200975, R18201315, R18201629 through R18202041</u>

(+40.9) to (+46.0) at 3100 lb. (+35.5) to (+46.0) at 2700 lb. (+33.0) to (+46.0) at 2250 lb. or less Straight line variation between points given

Moment change due to retracting gear (+3052 in.-lb.)

Empty Wt. C.G. Range None

*Maximum Weight

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74.0)

200 lb. (120 lb. at +82.0 to +110.0) Maximum Baggage

3100 lb.

(80 lb. at +110.0 to +134.0)

Rev. 66 Page 17 of 37 3A13

XI - Model R182, Model TR182 (cont'd)

Fuel Capacity

a) <u>S/N R18200002 through R18200583</u>

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

(b) <u>S/N R18200001, R18200584 through R18202041</u>

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. (-14.8)

See NOTE 1 for data on oil

Control Surface Movements

(a) <u>S/N R18200001 through R18201628 except R18200975 & R18201315</u>

Wing flaps			Down	$40^{\circ} + 1^{\circ}, -2^{\circ}$
Elevator tab	Up	25° <u>+</u> 2°	Down	15° <u>+</u> 1°
Ailerons	Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°
Elevator (rel. to				
stabilizer)	Up	28° <u>+</u> 1°	Down	17° <u>+</u> 1°
Rudder (parallel to 0.00 W.L.)	Right	24° <u>+</u> 1°	Left	24° <u>+</u> 1°
(Perpendicular to hinge line)	Right	27° 13' <u>+</u> 1°	Left	27° 13' <u>+</u> 1°

(b) S/N R18200975, R18201629 through R18201798

Wing flaps			Down	$40^{\circ} + 1^{\circ}, -2^{\circ}$
Elevator tab	Up	24° <u>+</u> 2°	Down	15° <u>+</u> 1°
Ailerons	Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°
Elevator (rel. to stabilizer)	Up	28° <u>+</u> 1°	Down	21° <u>+</u> 1°
Rudder (parallel to 0.00 W.L.)	Right	$24^{\circ} + 0^{\circ}, -1^{\circ}$	Left	24° +0°, -1°
(Perpendicular to hinge line)	Right	$27^{\circ} 13' + 0^{\circ}, -1^{\circ}$	Left	27° 13′ +0°, -1°

(c) S/N R18201315, R18201799 through R18202041

Wing flaps			Down	$38^{\circ} + 0^{\circ}, -1^{\circ}$
Elevator tab	Up	24° <u>+</u> 2°	Down	15° <u>+</u> 1°
Ailerons	Up	20° <u>+</u> 1°	Down	15° <u>+</u> 2°
Elevator (rel. to stabilizer)	Up	28° <u>+</u> 1°	Down	21° <u>+</u> 1°
Rudder (parallel to 0.00 W.L.)	Right	$24^{\circ} + 0^{\circ}, -1^{\circ}$	Left	24° +0°, -1°
(Perpendicular to hinge line)	Right	$27^{\circ} 13' + 0^{\circ}, -1^{\circ}$	Left	27° 13′ +0°, -1°

Serial Nos. Eligible

Model	R182:	R18200002 through R18200583	(1978 Model)
Model	R182/TR182:	R18200001, R18200584 through R18201313	(1979 Model)
Model	R182/TR182:	R18201314 through R18201628	
		except R18201315	(1980 Model)
Model	R182/TR182:	R18201629 through R18201798	(1981 Model)
Model	R182/TR182:	R18201799 through R18201928	(1982 Model)
Model	R182/TR182:	R18201929 through R18201973	(1983 Model)
Model	R182/TR182:	R18201974 through R18201999	(1984 Model)
Model	R182/TR182:	R18201315, R18202000 through R18202031	(1985 Model)
Model	R182/TR182:	R18202032 through R18202041	(1986 Model)

XII - Model 182R, 4 PCLM (Normal Category), Approved August 29, 1980 Model T182, 4 PCLM (Normal Category), Approved August 15, 1980

Model 182R

Engine Continental O-470-U

*Fuel 100LL/100 aviation grade gasoline

*Engine Limits For all operations, 2400 r.p.m. (230 hp.)

Model 182R ((cont'd)
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Propeller and McCauley constant speed
Propeller Limits (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

Model T182

Engine Lycoming 0-540-L3C5D, rated at 235 hp.

(Turbocharged in accordance with Cessna Drawing No. 2250065)

*Fuel 100LL/100 aviation grade gasoline

*Engine Limits For all operations, 2400 r.p.m., 31 in. Hg. mp.

Propeller and Propeller Limits 1. McCauley constant speed

(a) Hub B2D34C219/90DHB-8

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15.8°, high 31.9° (b) Cessna spinner 2250124

(c) McCauley governor C290D3/T22

2. McCauley constant speed

(a) Hub B3D32C407/82NDA-3

Diameter: not over 79 in., not under 78 in.

Pitch settings at 30 in. sta.: low 16.0°, high 31.7° (b) Cessna spinner 2252076

(c) McCauley governor C290D3/T22

*Airspeed	Limits
(IAS)	

(See NOTE 5 on Use of IAS)

Model 182R	Maneuvering
	Maximum structural cruising

Maximum structural cruising 143 knots Never exceed 179 knots Flaps extended 95 knots

111 knots

Model T182 Maneuvering 111 knots
Maximum structural cruising 140 knots

Maximum structural cruising 140 knots Never exceed 178 knots Flaps extended 95 knots

C.G. Range Model 182R (+40.9) to (+46.0) at 3100 lb.

(+33.0) to (+46.0) at 2250 lb. or less

Straight line variation between points given

Model T182 (+40.9) to (+46.0) at 3100 lb.

(+35.5) to (+46.0) at 2700 lb. (+33.0) to (+46.0) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 3100 lb. takeoff/flight

2950 lb. landing

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74.0)

Maximum Baggage 200 lb. (120 lb. at +92.0 to +108.0)

(80 lb. at +108.0 to +136.0)

Fuel Capacity 92 gal. (88 gal. usable); two 46 gal. integral tanks in wings at +46.5

See NOTE 1 for data on unusable fuel

Rev. 66 Page 19 of 37 3A13

XII - Model 182R, Model T182 (cont'd)

Oil Capacity	Model 182R 12 qt. (-15.0) (6 qt. usable) (through S/N 18268055) 12 qt. (-14.1) (6 qt. usable) (S/N 18268056 and on) See NOTE 1 for data on oil	Model T182 9 qt (-14.8) (6 qt. usable) See NOTE 1 for data on oil	
Control Surface	(a) <u>S/N 18267716 through 1826</u>	8055	
Movements	Wing flaps		$40^{\circ} + 1^{\circ}, -2^{\circ}$
	Elevator tab	Up 24° <u>+</u> 2° Down	
	Ailerons	Up 20° <u>+</u> 2° Down	15° <u>+</u> 2°
	Elevator (rel. to		
	stabilizer)	Up $28^{\circ} \pm 1^{\circ}$ Down	1 21° <u>+</u> 1°
	Rudder (parallel to		
	0.00 W.L.)	Right $24^{\circ} + 0^{\circ}, -1^{\circ}$ Lef	$124^{\circ} + 1^{\circ}, -0^{\circ}$
	(Perpendicular to		
	hinge line)	Right $27^{\circ} 13' + 0^{\circ}, -1^{\circ}$ Lef	t 27° 13′ +0°, -1°
	(b) C/N 19269056 through 192	Z050Z	
	(b) <u>S/N 18268056 through 182</u>		200 100 10
	Wing flaps Elevator tab		1 38° +0°, -1° 1 15° +1°
	Ailerons	Up 24° <u>+</u> 2° Down Up 20° <u>+</u> 2° Down	_
	Elevator (rel. to	Op 20 <u>+</u> 2 Down	1 13 <u>+</u> 2
	stabilizer)	Up 28° <u>+</u> 1° Down	1 21° <u>+</u> 1°
	Rudder (parallel to	op 20 <u>+</u> 1	21 <u>-</u> 1
	0.00 W.L.)		t 24° +0°, -1°
(Perpendicular to		Right $24^{\circ} + 0^{\circ}$, -1° Lef	21 10, 1
	hinge line)	Right 27° 13' +0°, -1° Lef	t 27° 13' +0°, -1°
Serial Nos. Eligible	Model 182R/T182: 18267302	, 18267716 through 18268055	(1981 Model)
_	Model 182R/T182: 18268056	through 18268293	(1982 Model)
	Model 182R/T182: 18268294	through 18268368	(1983 Model)
	Model 182R/T182: 18268369	through 18268434	(1984 Model)
	Model 182R/T182: 18268435		(1985 Model)
	Model 182R: 18268542	through 18268586	(1986 Model)
(1986 Model)			

Data Pertinent to Model Items I through XII

Datum Front face of firewall

Leveling Means Upper door sill. Top surface centerline of tailcone (S/N 18253599 through 18265965)

Jig located nutplates and screws on left of tailcone (S/N 18263479, 18265966 through

18268586) (S/N R18200001 through 18202041)

Certification Basis <u>182 Series</u>

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, for the Model 182E and on. In addition, effective S/N 18266591 through 18268586, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-6 for Model 182Q and on. In addition, effective S/N 18268435 through 18268586, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

3A13 Page 20 of 37 Rev. 66

Data Pertinent to Model Items I through XII, continued

Model T182

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 23.901, 23.909, 23.1041, 23.1043, 23.1143, and 23.1305 of the Federal Aviation Regulations dated February 1, 1965, as amended February 14, 1975; FAR 23.1559 effective March 1, 1978; FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-10. In addition, effective S/N 18268435 through 18268541, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

Model R182

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 S/N R18200001, R18200584 and up, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-6. In addition, effective S/N R18202000 through R18202041, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

Model TR182

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, 1969; and Sections 23.729, 23.777(e), 23.781, 23.901, 23.909, 23.1041, 23.1043, 23.1143, 23.1305, 23.1555(e)(1) and (2), and 23.1563 of the Federal Aviation Regulations dated February 1, 1965, as amended February 14, 1975; FAR 23.1559 effective March 1, 1978; FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-9. In addition, effective S/N R18202000 through R18202041, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

Application for Type Certificate dated July 11, 1955.

Type Certificate No. 3A13 issued March 2, 1956, obtained by the manufacturer under delegation option procedures.

Equivalent Safety Items:

S/N 18263479, 18264296 through 18267715

Airspeed Indicator CAR 3.757 (See NOTE 5 on use of IAS)

Operating Limitations CAR 3.778(a)

S/N 18267716 through 18268586

Airspeed Indicator CAR 3.757 (See NOTE 5 on use of IAS)

(S/N 18267716 through 18268434)

Operating Limitations CAR 3.778(a) Fuel System CAR 3.430

S/N R18200001 through R18202041

Airspeed Indicator CAR 3.757 (See NOTE 5 on use of IAS)

(S/N R18200001 through R18201999)

Operating Limitations CAR 3.778(a) Fuel System CAR 3.430

Production Basis

Production Certificate No. 4. Delegation Option Manufacturer No. CE-1 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

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 S/N 18266591 through 18268586 and R18200584 through R18202041. In addition, the following item of equipment is required:

Rev. 66 Page 21 of 37 3A13

Data Pertinent to Model Items I through XII, continued

1. Stall warning indicator, Cessna Dwg. S1672-5.

The equipment portion of Aircraft Specification 3A13, Revision 15, or Cessna Publication TS3000-13 should be used for equipment references on all aircraft prior to the Model 182G. Refer to the applicable Equipment List for the Model 182G and subsequent models.

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.

Serial Numbers 613 and 33000 through 34999

631 and 51001 through 53007

18253008 through 18264295 except 18263479

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lb. (+46) on Models 182, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N and 182P through 18264295 and 60 lb. (+46) on Models 182A, 182B, 182C and 182D and undrainable oil of 0 lb.

Serial Numbers 18263479, 18264296 through 18266590

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lb. (+46) and full oil of 22.5 lb. at (-15.0).

Serial Numbers 18266591 through 18268055

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. at (+48) and full oil of 22.5 lb. at (-15.0) for the 182Q, 182R Model, and include oil of 16.9 lb. at (-14.8) for the T182 Model.

Serial Numbers 18268056 through 18268586

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. at (+48) and full oil of 24.4 lb. at (-14.1) for the 182R, and include oil of 16.9 lb. at (-14.8) for the T182.

Serial Numbers R18200002 through R18200583

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lb. (+46) and include oil of 16.9 lb. (-15.7).

Serial Numbers R18200001, R18200584 through R18202041

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. (+48) and include oil of 16.9 lb. (-14.8).

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

A. Applicable to Model 182 only:

- (1) In full view of the pilot:
 - (a) "This airplane must be operated as a normal category airplane in compliance with operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers including spins approved.

Flight Maneuvering Load Factors

Flaps Up +3.8 -1.52 Flaps Down +3.5 Maximum design weight 2550 lb.

Reference weight and balance data for loading instructions."

- (b) "Both tanks on for takeoff and landing."
- (c) "Flaps Pull to extend

Takeoff	Retracted	0°
	1st Notch	10°
	2nd Notch	20°
Landing	3rd Notch	30°
	4th Notch	40°

3A13 Page 22 of 37 Rev. 66

Data Pertinent to Model Items I through XII, continued

(2) In baggage compartment

"Maximum baggage 120 lb. For additional loading instructions see weight and balance data."

B. Applicable to Models 182A, 182B, 182C and 182D

- (1) In full view of the pilot:
 - (a) "This airplane must be operated as a normal category airplane in compliance with operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers including spins approved.

Flight Maneuvering Load Factors

Flaps Up +3.8 -1.52 Flaps Down +3.5 Maximum design weight 2650 lb.

Reference weight and balance data for loading instructions."

4th Notch 40°"

- (b) "Both tanks on for takeoff and landing."
- (c) "Flaps Pull to extend

 $\begin{array}{ccc} Takeoff & Retracted & 0^{\circ} \\ & 1st\ Notch & 10^{\circ} \\ & 2nd\ Notch & 20^{\circ} \\ Landing & 3rd\ Notch & 30^{\circ} \end{array}$

(2) In baggage compartment

"Maximum baggage 120 lb. For additional loading instructions see weight and balance data."

C. Applicable to Models 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M

(1) In full view of the pilot:

(a) "This airplane must be operated as a normal category airplane in compliance with operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers including spins approved.

Flight Maneuvering Load Factors

Flaps Up +3.8 -1.52 Flaps Down +3.5

Maximum design weight 2800 lb.

Reference weight and balance data for loading instructions."

(2) On the fuel selector valve plate:

"Both off. Left tank level flight only 31 gal. Both on for landing and takeoff all flight attitudes 60 gal. Right tank level flight only 31 gal."

(3) On the control lock:

"Control lock - Remove before starting engine."

(4) On the baggage door:

"120 lb. maximum baggage and/or auxiliary seat passengers. For additional loading instructions, see weight and balance data."

D. Applicable to Models 182N:

- (1) In full view of the pilot:
 - (a) Serial Numbers 18260056 through 18260445

"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.

No acrobatic maneuvers, including spins, approved

<u>Maximums</u>

Design weight 2950 lb. takeoff Alt. loss in stall recovery-160 ft.
2800 lb. landing Flight Maneuvering Load Factors
Maneuvering speed 131 m.p.h.-CAS Flaps up +3.8, -1.52, Flaps down +3.5

Reference weight and balance data for loading instructions"

(b) Serial Numbers 182670446 through 18260825

"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.

Rev. 66 Page 23 of 37 3A13

Data Pertinent to Model Items I through XII, continued

D. Applicable to Models 182N, continued:

Maximums

Maneuvering speed 131 m.p.h. CAS (114 knots)

Gross weight Takeoff 2950 lb.

Landing 2800 lb.

Flight load factor Flaps up +3.8, -1.52

Flaps down +3.5

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

(2) On the fuel selector valve plate:

"Both off. Left tank level flight only 31 gal. Both on for landing and takeoff all flight attitudes, 60 gal. Right tank level flight only 31 gal."

(3) On the control lock:

"Control lock - Remove before starting engine."

- (4) On the baggage door:
 - (a) "120 lb. maximum baggage and/or auxiliary seat passengers. For additional loading instructions, see weight and balance data."

Applicable to Models 182N, S/N 18260056 through 18260445.

- (b) "120 lb. maximum baggage and/or auxiliary passenger forward of baggage door latch, and 80 pounds maximum baggage aft of baggage door latch. Maximum 200 lb. combined. For additional loading instructions see weight and balance data." Applicable to Models 182N, S/N 18260446 and up.
- (5) On flap control indicator:
 - (a) " 0° to 20° T.O."
 - (b) "10° 20° Full.

(Indices at these positions with blue color code and 160 m.p.h. callout, and white color code with 110 m.p.h. callout; mechanical detent at 10° and 20°)"

E. Applicable to Models 182P:

(1) In full view of the pilot:

(S/N 675, 18260826 through 18264295)

(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 126 m.p.h. CAS (109 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. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable)

(S/N 18264296 through 18265175)

(b) "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.

3A13 Page 24 of 37 Rev. 66

Data Pertinent to Model Items I through XII, continued

E. Applicable to Models 182P, continued:

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 date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable)

(2) On the fuel selector valve plate: (S/N 675, 18260826 through 18262250)

Standard range tanks: "Off. Left tank level flight only 31 gal. Both on for landing and takeoff

all flight attitudes, 60 gal. Right tank level flight only 31 gal."

Long range tanks: "Off. Left tank level flight only 39 gal. Both on for landing and takeoff

all flight attitudes, 79 gal. Right tank level flight only 39 gal."

On the fuel selector valve plate: (S/N 182622251 through 18265175)

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: (S/N 18260826 through 18263475)

"120 lb. maximum baggage and/or auxiliary passenger forward of baggage door latch, and 80 lb. maximum baggage aft of baggage door latch. Maximum 200 lb. combined. For additional loading instructions, see weight and balance data."

On the baggage door: (S/N 675, 18263476 through 18265175)

"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: (S/N 675, 18260826 through 18264295)
 - "(a) 0° to 10° (Blue color code and 160 m.p.h. callout;

also, mechanical detent at 10°)

(b) 10° to 20° - Full (Indices at these positions with white color code and

110 m.p.h. callout; also, mechanical detent at 10° and 20°)"

On flap control indicator (S/N 18264296 through 18265175)

"(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: (S/N 675, 18260826 through 18262250)

Standard range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline.

Capacity 32.5 gal."

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

Capacity 42.0 gal."

Rev. 66 Page 25 of 37 3A13

Data Pertinent to Model Items I through XII, continued

E. Applicable to Models 182P, continued:

Forward of the filler cap on the wing surface: (S/N 18262251 through 18265175)

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."

(Model 182P, S/N 18260826 through 18261425)

F. Applicable to Models 182Q:

(1) In full view of the pilot:

(a) S/N 18263479, 18265176 through 18266590

"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)

S/N 18266591 through 18267715

"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)

(b) Near airspeed indicator:

S/N 18266591 through 18267715

"Maneuver Speed 111 KIAS"

(2) On the fuel selector valve plate:

S/N 18263479, 18265176 through 18266590

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."

S/N 18266591 through 18267715

"Take Off - Both - Landing, All Flight - 88.0 Gal. - Attitudes Left - 44.0 Gal. Level Flight Only Right - 44.0 Gal. Level Flight Only

Off."

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

(4) On the baggage door: "Forward of baggage door latch, 120 pounds maximum baggage and/or

auxiliary passenger. Aft of baggage door latch, 80 pounds maximum baggage including 25 pounds maximum in baggage wall hat shelf. 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:

S/N 18265176 through 18265965

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."

S/N 18263479, 18265966 through 18266590

Standard range tanks: "Service this airplane with 100LL/100 aviation

grade gasoline. Capacity 30.5 gal."

Long range tanks: "Service this airplane with 100LL/100 aviation grade

gasoline. Capacity 40.0 gal."

S/N 18266591 through 18267715

"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:

S/N 18263479, 18265176 through 18266590

"High Voltage"

S/N 18266591 through 18267715

"Low Voltage"

Rev. 66 Page 27 of 37 3A13

Data Pertinent to Model Items I through XII, continued

G. Applicable to Models R182 and TR182, S/N R18200001 through R18201928:

(1) In full view of the pilot:

(a) <u>S/N R18200002 through R18200583</u>

"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.

<u>Maximums</u>

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) S/N R18200001, R18200584 through R18202041

"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"

(2) On the fuel selector valve plate:

(a) <u>S/N R18200002 through R18200583</u>

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) <u>S/N R18200001</u>, <u>R18200584</u> through R18201798

"Take Off - Both - Landing, All Flight - 88.0 Gal. - Attitudes Left - 44.0 Gal. Level Flight Only Right - 44.0 Gal. Level Flight Only Off."

(c) S/N R18201799 through R18202041

"Both - 88.0 Gal. - Take Off - Landing - All Flight Attitudes; Left - 44.0 Gal. - Level Flight Only Right - 44.0 Gal. - Level Flight Only Off - Off."

- (3) On the control lock:
 - (a) S/N R18200001 through R18201798

"Control lock - Remove before starting engine."

S/N R18201799 through R18202041

"Caution! Control Lock - Remove before starting engine."

G. Applicable to Models R182 and TR182, S/N R18200001 through R18201928, continued:

"120 Pounds Maximum (4) On the baggage door:

> 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 the 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) S/N R18200002 through R18200583

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

Capacity 30.5 gal."

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

Capacity 40.0 gal."

(b) S/N R18200001, R18200584 through R18202041

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 overvoltage light:
 - S/N R18200002 through R18200583

"High Voltage"

S/N R18200001, R18200584 through R18202041

"Low Voltage"

(8) Near gear hand pump:

"Manual Gear Extension

- 1. Select Gear Down
- Pull Handle Fwd. 2.
- Pump Vertically

CAUTION

Do Not Pump With Gear

Up Selected"

(9) Forward of each fuel filler cap:

"Fuel Cap Forward - Arrow Alignment, Cap Must Not Rotate During Closing."

Rev. 66 Page 29 of 37 3A13

Data Pertinent to Model Items I through XII, continued

H. Applicable to Models 182R and T182, S/N 18267302, 18267716 through 18268293: (continued)

- (1) In full view of the pilot:
 - (a) "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).

(b) Near airspeed indicator:

"Maneuver Speed

111 KIAS"

- (2) On the fuel selector valve plate:
 - (a) S/N 18267716 through 18268055

"Take Off - Both - Landing, -

All Flight - 88.0 Gal. - Attitudes

Left - 44.0 Gal. Level Flight Only

Right - 44.0 Gal. Level Flight Only

Off."

(b) <u>S/N 18268056 through 18268586</u>

"Both - 88.0 Gal. - Takeoff - Landing - All Flight Attitudes

Left - 44.0 Gal. - Level Flight Only

Right - 44.0 Gal. - Level Flight Only

Off - Off."

- (3) On the control lock:
 - (a) S/N 18267716 through 18268055

"Control Lock - Remove before starting engine."

(b) <u>S/N 18268056 through 18268586</u>

"Caution! Control Lock - Remove before starting engine."

(4) On 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

calout; also mechanical detent at 10° and 20°)"

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

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

(7) Forward of each fuel filler cap:

"Fuel cap fwd - arrow alignment, cap must not rotate during closing."

(8) Adjacent to overvoltage light:

"Low Voltage"

Data Pertinent to Model Items I through XII, continued

I. Applicable to Models R182 and TR182, S/N R18201929 through R18202041:

All placards required in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual must be installed in the appropriate locations.

Applicable to Models 182R and T182, S/N 18268294 through 18268586:

All placards required in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual must be installed in the appropriate locations.

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

<u>Model</u>	Engine and Cylinder Head Number				
	O-470-R	O-470-S	O-470-U	O-540-J	O-540-L
182N (1970 and 1971 Model)	3	3	N/A	N/A	N/A
182P (1972 and 1973 Model)	2	3	N/A	N/A	N/A
182P (1974 Model)	1	3	N/A	N/A	N/A
182P (1975 and 1976 Model)	N/A	3	N/A	N/A	N/A
182Q (1977 through 1980 Model)	N/A	N/A	3	N/A	N/A
182R (1981 Model through 18268160)	N/A	N/A	5	N/A	N/A
182R (18268161 through 18268586)	N/A	N/A	3	N/A	N/A
T182 (1981 Model through 1985 Model)	N/A	N/A	N/A	N/A	1
R182 (1978 and 1979 Model)	N/A	N/A	N/A	5	N/A
R182 (1980 Model through 1986 Model)	N/A	N/A	N/A	4	N/A
TR182 (1979 Model)	N/A	N/A	N/A	N/A	3
TR182 (1980 Model through 1986 Model)	N/A	N/A	N/A	N/A	5

- NOTE 4. The installation of the 0-470-S engine in Model 182N and Model 182P (1970 through 1974) will require a change of the oil temperature gauge. Reference Cessna Service Letter SE75-2 for information and instructions for this change.
- NOTE 5. 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 Pilot's Operating Handbooks listed below is available to the pilot:

182P, Cessna P/N D1062-13	(S/N 18264296 through 18265175)
182Q, Cessna P/N D1087-13	(S/N 18265176 through 18265965)
182Q, Cessna P/N D1114-13	(S/N 18263479, 18265966 through 18266590)
182Q, Cessna P/N D1141-13PH	(S/N 18266591 through 18267300)
182Q, Cessna P/N D1176-13PH	(S/N 18267301 through 18267715)
182R, Cessna P/N D1196-13PH	(S/N 18267716 through 18268055)
182R, Cessna P/N D1215-13PH	(S/N 18268056 through 18268293)
182R, Cessna P/N D1233-13PH	(S/N 18268294 through 18268368)
182R, Cessna P/N D1254-13PH	(S/N 18268369 through 18268434)
T182, Cessna P/N D1197-13PH	(S/N 18267302, 18267716 through 18268055)
T182, Cessna P/N D1216-13PH	(S/N 18268056 through 18268293)
T182, Cessna P/N D1234-13PH	(S/N 18268294 through 18268368)
T182, Cessna P/N D1234R1-13PH	(Special) (S/N 18268365)
T182, Cessna P/N D1255-13PH	(S/N 18268369 through 18268434)
R182, Cessna P/N D1115-13	(S/N R18200002 through R18200583)
R182, Cessna P/N D1142-13PH	(S/N R18200584 through R18201313)
R182, Cessna P/N D1177-13PH	(S/N R18201314 through R18201628)
R182, Cessna P/N D1198-13PH	(S/N R18201629 through R18201798)
R182, Cessna P/N D1217-13PH	(S/N R18201799 through R18201928)
R182, Cessna P/N D1235-13PH	(S/N R18201929 through R18201973)
R182, Cessna P/N D1256-13PH	(S/N R18201974 through R18201999)
R182, Cessna P/N D1277-13PH	(S/N R18202000 through R18202031)
R182, Cessna P/N D1299-13PH	(S/N R18202032 through R18202041)
TR182, Cessna P/N D1143-13PH	(S/N R18200001, R18200584 through R18201313
	except R18200975)
TR182, Cessna P/N D1143-2-13PH	(Special) (S/N R18200975)
TR182, Cessna P/N D1178-13PH	(S/N R18201314 through R18201628 except R182013

Rev. 66 Page 31 of 37 3A13

TR182, Cessna P/N D1199-13PH	(S/N R18201629 through R18201798)
TR182, Cessna P/N D1218-13PH	(S/N R18201799 through R18201928)
TR182, Cessna P/N D1236-13PH	(S/N R18201929 through R18201973)
TR182, Cessna P/N D1257-13PH	(S/N R18201974 through R18201999)
TR182, Cessna P/N D1278-13PH	(S/N R18201315, R18202000 through R18202031)
TR182, Cessna P/N D1300-13PH	(S/N R18202032 through R18202041)

NOTE 6. 14-volt electrical system

(182 series through S/N 18265965 except 18263479)

28-volt electrical system

(182 series S/N 18263479, 18265966 through 18268586) (R182 and TR182 series S/N R18200001 through R18202041)

NOTE 7:

Special Ferry Flight Authorization. Flight Standards District Offices are authorized to issue Special overweight ferry flight authorizations. These airplanes are 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 +2.5 g. to -1.0 g. 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 AC21-4B

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

XIII - Model 182S, Skylane, 4 PCLM (Normal Category), Approved 03 October 1996. Model 182T, Skylane, 4 PCLM (Normal Category), Approved 23 February 2001.

Engine Lycoming IO-540-AB1A5. Rated 230 Horsepower

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits For all operations, 2400 RPM

Propeller Limits: (1) McCauley Constant Speed (182S)

(1) McCauley Constant Speed

(a) Propeller: B2D34C235/90DKB-8 (2 blades)
Diameter: not over 82 in., not under 80.5 in.
Pitch settings at 30 in. sta.: Low 17.0°, High 31.8°

(b) McCauley Spinner: D-7267-2(c) McCauley Governor: DC290D1/T8

(2) McCauley Constant Speed (182S, 182T)

(a) Propeller: B3D36C431/80VSA-1 (3 blades)
Diameter: not over 79 in., not under 77.5 in.
Pitch settings at 30 in. sta.: Low 14.9°, High 31.7°

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

Propeller limits: Static RPM at full throttle: Not over 2400; Not Under 2300

Airspeed Limits (182S): Maneuvering 110 Knots IAS (108 Knots CAS)

Max Structural Cruising 140 Knots IAS (138 Knots CAS)

Never Exceed 175 Knots IAS (170 Knots CAS)
Flaps Extended 100 Knots IAS (99 Knots CAS)

3A13 Page 32 of 37 Rev. 66

XIII - Models 182S and 182T Cont.

Airspeed Limits (182T): Maneuvering 110 Knots IAS (108 Knots CAS)

Max Structural Cruising 140 Knots IAS (136 Knots CAS) Never Exceed 175 Knots IAS (171 Knots CAS) Flaps Extended 100 Knots IAS (99 Knots CAS)

C.G. Range (182S): Normal Category

(1) Aft Limits: 46.0 inches aft of datum at 3100 lbs. or less.

(2) Forward Limits: Linear variation from 40.9 inches aft of datum at 3100

pounds to 33.0 inches aft of datum at 2250 lbs.; 33.0

inches aft of datum at 2250 lbs. or less.

C.G. Range (182T): Normal Category

(1) Aft Limits 46.0 inches aft of datum at 3,100 pounds or less.

(2) Forward Limits Linear variation from 40.9 inches aft of datum at 3,100

pounds, to 35.5 inches aft of datum at 2,700 pounds, to 33.0 inches aft of datum at 2,250 pounds; 33.0 inches aft

of datum at 2,250 pounds or less.

Empty Wt. C.G. Range None

Reference Datum Lower portion of front face of firewall

MAC 58.8 inches; Leading edge of MAC 25.98 inches aft of datum

Leveling Means Left side of Tailcone at 139.65 inches and 171.65 inches aft of datum

Maximum Weights (see Note 5) Normal Category

Maximum Ramp 3,110 pounds Maximum Takeoff 3,100 pounds Maximum Landing 2,950 pounds

No. of Seats 4 (2 at 32.0 to 50.0 inches aft of datum; 2 at 74.0 inches aft of datum)

Maximum Baggage 120 pounds at 82.0 to 109.0 inches aft of datum

80 pounds at 109.0 to 134.0 inches aft of datum

(Max. combined weight capacity for baggage areas is 200 pounds)

Fuel Capacity (Gal.) 182S: 92 gallons total: 88 gallons usable

182T: 92 gallons total; 87 gallons usable

(Two 46 gallon tanks in wings at 46.5 inches aft of datum)

See NOTE 1 for data on usable fuel.

Oil Capacity (Gal.) 9.0 quarts at 14.8 inches forward of datum

5.0 quarts usable

Control surface movements Wing flaps Down $38^{\circ} + 0^{\circ}, -1^{\circ}$

Elevator tab Up $24^{\circ} \pm 2^{\circ}$ Down $15^{\circ} \pm 1^{\circ}$ Ailerons Up $20^{\circ} \pm 2^{\circ}$ Down $15^{\circ} \pm 2^{\circ}$ Elevator Up $28^{\circ} \pm 1^{\circ}$ Down $21^{\circ} \pm 1^{\circ}$

(Relative to stabilizer)

Rudder: Right: $24^{\circ} + 0^{\circ}, -1^{\circ}$ Left: $24^{\circ} + 0^{\circ}, -1^{\circ}$

(Parallel to 0.00 W.L.)

Right: $27^{\circ}13' + 0^{\circ}, -1^{\circ}$ Left: $27^{\circ}13' + 0^{\circ}, -1^{\circ}$

(Perpendicular to hinge line)

Serial numbers eligible 182S: 18280001 through 18280944

182T: 18280945 and On

Rev. 66 Page 33 of 37 3A13

Data Pertinent to Model 182S and 182T

Certification Basis

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) and (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
 (2) Throttle Control
 (3) Mixture Control
 FAR § 23.1143(g)
 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
(3) (2) Throttle Control
(5) (3) Mixture Control
(7) (4) Anti-collision Lights

FAR § 23.1093; Refer to FAA letter dated 12/19/00
FAR § 23.1143(g); Refer to FAA letter dated 12/19/00
FAR § 23.1147(b); Refer to FAA letter dated 12/19/00
FAR § 23.1401(d); Refer to FAA letter dated 2/20/01

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 23.1329(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 23.1309 (a)(3), (a)(4), (f)(2); 23.1329 (a)(c)(d)(e)(f); 23.1351 (a)(2)(ii); 23.1431 (c) as amended by Amendment 23-49.

3A13 Page 34 of 37 Rev. 66

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 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. Cessna 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. 4 issued March 8, 2001. Applies to airplane serial numbers 18280945 and on. Cessna 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.

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 24 lbs. at 48 inches aft of datum, and full oil of 16.2 lb. at 14.8 inches forward of datum.

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

The certificated basic empty weight and corresponding center of gravity location must include unusable fuel of 30 lbs. at 48 inches aft of datum, and full oil of 16.2 lb. at 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.

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.

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

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.

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

NOTE 4:

Special Ferry Flight Authorization. Flight Standards 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 +2.5 g. to -1.0 g. 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

Rev. 66 Page 35 of 37 3A13

increased weights have not been evaluated. Procedures for issuing a Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC21-4B

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 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.

XIV - Model T182T, Skylane, 4 PCLM (Normal Category), Approved 23 February 2001.

Engine Lycoming TIO-540-AK1A. Rated 235 Horsepower

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits For all operations, 2,400 RPM

Propeller McCauley Constant Speed

(a) McCauley Model B3D36C442/80VSB-1

Diameter: not over 79 inches; not under 77.5 inches Pitch settings at 30 in. sta.: Low 15.1°, High 35.4°

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

Propeller limits Static RPM at full throttle: Not over 2400; Not Under 2300

Airspeed Limits Maneuvering 110 Knots IAS (110 Knots CAS)
Max Structural Cruising 140 Knots IAS (137 Knots CAS)
Never Exceed 175 Knots IAS (170 Knots CAS)
Flaps Extended 100 Knots IAS (100 Knots CAS)

Normal Category
(1) Aft Limits
46.0 inches aft of datum at 3,100 pounds or less.
(2) Forward Limits
Linear variation from 40.9 inches aft of datum at 3,100

pounds, to 35.5 inches aft of datum at 2,700 pounds, to 33.0 inches aft of datum at 2,250 pounds; 33.0 inches aft

of datum at 2,250 pounds or less.

Empty Wt. C.G. Range None

C.G. Range

Reference Datum Lower portion of front face of firewall

MAC 58.8 inches; Leading edge of MAC 25.98 inches aft of datum

Leveling Means Left side of Tailcone at 139.65 inches and 171.65 inches aft of datum

Maximum Weights <u>Normal Category</u>

Maximum Ramp 3,110 pounds Maximum Takeoff 3,100 pounds Maximum Landing 2,950 pounds

No. of Seats 4 (2 at 32.0 to 50.0 inches aft of datum; 2 at 74.0 inches aft of datum)

Maximum Baggage 120 pounds at 82.0 to 109.0 inches aft of datum

80 pounds at 109.0 to 134.0 inches aft of datum

(Max. combined weight capacity for baggage areas is 200 pounds)

Fuel Capacity (Gal.) 92 gallons total; 87 gallons usable

(Two 46 gallon tanks in wings at 46.5 inches aft of datum)

See NOTE 1 for data on usable fuel.

Oil Capacity (Qts.) 9.0 quarts at 14.8 inches forward of datum 5.0 quarts usable

Control surface movements Wing flaps

38° +0°, -1° Wing flaps Down Elevator tab $24^{\circ} \pm 2^{\circ}$ Down $15^{\circ} \pm 1^{\circ}$ Up Ailerons $20^{\circ} \pm 2^{\circ}$ $15^{\circ} \pm 2^{\circ}$ Up Down Elevator $28^{\circ} \pm 1^{\circ}$ Down $21^{\circ} \pm 1^{\circ}$ Up

(Relative to stabilizer)

Rudder: Right: $24^{\circ} + 0^{\circ}$, -1° Left: $24^{\circ} + 0^{\circ}$, -1°

(Parallel to 0.00 W.L.) Right: $27^{\circ}13' + 0^{\circ}$, -1° Left: $27^{\circ}13' + 0^{\circ}$, -1°

(Perpendicular to hinge line)

Serial numbers eligible T18208001 and On

Data Pertinent to Model T182T

Certification Basis

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) and (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:

(1) Throttle Control FAR § 23.1143(g); Refer to FAA letter dated 12/19/00 (3) (2) Mixture Control FAR § 23.1147(b); Refer to FAA letter dated 12/19/00 (5) (3) Anti-collision Lights FAR § 23.1401(d); Refer to FAA letter dated 02/20/01

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 (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.

Rev. 66 Page 37 of 37 3A13

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

14 CFR 23.1335 as amended by Amendment 23-20, 14 CFR 23.1309 (a)(3), (a)(4), (f)(2); 23.1329 (a)(c)(d)(e)(f); 23.1351 (a)(2)(ii); 23.1431 (c) 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. Cessna 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.

Equipment

NOTE 4:

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 30 lbs. at 48 inches aft of datum, and full oil of 16.2 lb. at 14.8 inches forward of datum.

NOTE 2: Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (AFM): part number T182TPHUS00 (or later 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.

FAA Approved Airplane Flight Manual (AFM): Part Number T182TPHAUS-00 (or later FAA 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.

FAA Approved Airplane Flight Manual (AFM): Part Number T182TPHBUS-00 (or later FAA approved revisions) 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.

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

Special Ferry Flight Authorization. Flight Standards 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 +2.5 g. to -1.0 g. 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 AC21-4B.

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