

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

	5A6
	Revision 63
	CESSNA
180	180E
180A	180F
180B	180G
180C	180H
180D	180J
	180K
	February 15, 2000

TYPE CERTIFICATE DATA SHEET NO. 5A6

This data sheet which is part of Type Certificate No. 5A6 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

I. Model 180, 4 PCL-SM (Normal Category), approved December 23, 1952

- | | |
|--------------------------------|--|
| Engine | Continental O-470-A, O-470-J or O-470-K |
| *Fuel | 80/87 minimum grade aviation gasoline |
| *Engine limits | For all operations, O-470-A, 2600 rpm (225 hp)
O-470-J, 2550 rpm (225 hp)
O-470-K, 2600 rpm (230 hp) |
| Propeller and propeller limits | <ol style="list-style-type: none"> 1. Hartzell constant speed propeller <ol style="list-style-type: none"> (a) Hub HC82XF-1 or HC82XF-6, blades 8833
Diameter: not over 88 in., not under 86 in.
Pitch settings at 30 in. sta.:
 Low 12°, high 24° or 28° (b) Spinner, Hartzell HC82XF-1 or Cessna 0752006 (c) Governor, Woodward 4M12V, 210065 or 210340 or 210105 2. McCauley constant speed propeller <ol style="list-style-type: none"> (a) Hub 2A36C, blades 90M-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
 Low 10.5°, high 22° (b) Spinner, Cessna 0752004 (c) Governor, Woodward 4M12-V, 210105, 210065, 210345 or A210452. Garwin 34-828-01
 McCauley C290D2/T-1 or C290D3/T1 3. Hartzell constant speed propeller (seaplane installation approved by Cessna DOA) <ol style="list-style-type: none"> (a) Hub HC82XF-1 or HC82XF-6, blades 8433
Diameter: not over 84 in., not under 82-1/2 in.
Pitch settings at 30 in. sta.:
 Low 12°, high 24° or 28° (b) Spinner, Hartzell HC82XF-1 or Cessna 0752006 (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340 |

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I. Model 180 (cont'd)

4. McCauley constant speed propeller
 - (a) Hub 2A36C, blades 90M-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1.
5. Hartzell constant speed propeller
 - (a) Hub HCA2XF-1 blades 8433 or 8833
Diameter:
(For 8433 blades) - not over 84 in., not under 82 in.
(For 8833 blades) - not over or under 88 in.
Pitch settings at 30 in. sta.:
Low 12°, high 24°
 - (b) Spinner, Cessna 07502006
 - (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340
6. McCauley constant speed propeller
 - (a) Hub 2A34C, blades 90A-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1.
7. McCauley constant speed propeller
 - (a) Hub 2A34C, blades 90A-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T1 or 290D3/T1.
8. McCauley constant speed propeller
 - (a) Hub 2A34C66, blades 90AT-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1.
9. McCauley constant speed propeller
 - (a) Hub 2A34C66, blades 90AT-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1.

*Airspeed Limits (TIAS)

	<u>Landplane & Floatplane</u>	<u>Amphibian</u>
Never exceed	184 mph (160 knots)	164 mph (143 knots)
Maneuvering	122 mph (106 knots)	129 mph (112 knots)
Max. structural cruising	160 mph (139 knots)	130 mph (113 knots)
Flaps extended	100 mph (87 knots)	100 mph (87 knots)

I. Model 180 (cont'd)

C.G. Range

Landplane	(+39.5) to (+45.8) at 2550 lbs. (+35.0) to (+45.8) at 2050 lbs. or less
Floatplane with Edo 44-2425	(+39.3) to (+43.9) at 2700 lbs. (+35.0) to (+43.9) at 2040 lbs. or less
Floatplane with Edo 249-2870	(+40.2) to (+43.9) at 2820 lbs. (+35.0) to (+43.9) at 2125 lbs. or less
Amphibian with Edo 289-2700	(+38.3) to (+43.9) at 2850 lbs. (+36.0) to (+43.9) at 2400 lbs. or less

Straight line variation between points given.

Empty weight C.G. Range

None

*Maximum weight

Landplane	2550 lb.
Floatplane	Edo 44-2425 2700 lb. Edo 249-2870 2820 lb.
Amphibian	2850 lb.

Number of seats

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

Maximum baggage

120 lb. (+95)

Fuel capacity

60 gal. total, 55 gal. usable (two 30 gal. tanks in wings at +48)
See Note 1 for weight of unusable fuel.

Oil capacity

12 qt. (-15) includes 6 qt. usable
See Note 1 for data on undrainable oil.

Control surface movements

Wing flaps	Takeoff	0° & 20°
	Landing	30° & 40°
Ailerons	Up 20°	Down 15°
Stabilizer	Up 1° 30'	Down 8° 30'
Elevators (with stabilizer full down)	Up 25°	Down 23°
Rudder	Right 24°	Left 24°

Serial numbers eligible

604, 614, 30000 through 32661. Under delegation option provisions of Part 21 of the Federal Aviation Regulations, Delegation Option Manufacturer No. CE-1 is authorized to issue airworthiness certificates for airplanes S/N 30938 and up, and approve repairs and alterations of airplanes S/N 604, 614, 30000 through 32661.

II. Model 180A, 4 PCL-SM (Normal Category), approved December 17, 1956**Model 180B, 4 PCL-SM (Normal Category), approved August 22, 1958**

Engine

Continental O-470-K

*Fuel

80/87 minimum grade aviation gasoline

*Engine limits

For all operations, 2600 rpm (230 hp)

Propeller and propeller limits

1. Hartzell constant speed propeller
 - (a) Hub HC82XF-1 or HC82XF-6, blades 8833
Diameter: not over or under 88 in.
Pitch settings at 30 in. sta.:
Low 12°, high 24° or 28°
 - (b) Spinner, Hartzell HC82XF-1 or Cessna 0752006
 - (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340

II. Model 180A, Model 180B (cont'd)

2. McCauley constant speed propeller
 - (a) McCauley hub 2A36C, blades 90M-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 4M12-V, 210065, 210105, 210345 or A210452. Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
3. Hartzell constant speed propeller (seaplane installation approved by DOA)
 - (a) Hub HC82XF-1 or HC82XF-6, blades 8433
Diameter: not over 84 in., not under 82-1/2 in.
Pitch settings at 30 in. sta.:
Low 12°, high 24° or 28°
 - (b) Spinner, Hartzell HC82XF-1 or Cessna 0752006
 - (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340
4. McCauley constant speed propeller
 - (a) McCauley hub 2A36C, blades 90M-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
5. Hartzell constant speed propeller
 - (a) Hub HCA2XF-1, blades 8433 or 8833
Diameter:
(For 8833 blades) not over or under 88 in.
(For 8433 blades) not over 84 in., not under 82 in.
Pitch settings at 30 in. sta.:
Low 12°, high 24°
 - (b) Spinner, Cessna 0752006
 - (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340
6. McCauley constant speed propeller
 - (a) McCauley hub 2A34C, blades 90A-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
7. McCauley constant speed propeller
 - (a) McCauley hub 2A34C, blades 90A-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01.
McCauley C290D2/T1 or C290D3/T-1
8. McCauley constant speed propeller
 - (a) Hub 2A34C66, blades 90AT-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004

I. Model 180A, Model 180B (cont'd)

- (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01.
McCaughey C290D2/T-1 or C290D3/T-1
9. McCaughey constant speed propeller
- (a) Hub 2A34C66, blades 90AT-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
- (b) Spinner, Cessna 0752004
- (c) Governor, Woodward 210065, 210105, 210345 or A210452.
Garwin 34-828-01.
McCaughey C290D2/T-1 or C290D3/T-1.

***Airspeed Limits (TIAS)**

	<u>Landplane & Floatplane</u>	<u>Amphibian</u>
Never exceed	184 mph (160 knots)	164 mph (143 knots)
Maneuvering	122 mph (106 knots)	129 mph (112 knots)
Max. structural cruising	160 mph (139 knots)	130 mph (113 knots)
Flaps extended	100 mph (87 knots)	100 mph (87 knots)

C.G. Range

Landplane	(+40.0) to (+45.8) at 2650 lbs. (+34.5) to (+45.8) at 2100 lbs. or less
Floatplane with Edo 44-2425	(+39.3) to (+43.9) at 2700 lbs. (+35.0) to (+43.9) at 2050 lbs. or less
Floatplane with Edo 249-2870	(+40.2) to (+43.9) at 2820 lbs. (+35.0) to (+43.9) at 2125 lbs. or less
Amphibian with Edo 289-2700	(+38.3) to (+43.9) at 2850 lbs. (+36.0) to (+43.9) at 2400 lbs. or less

Straight line variation between points given.

Empty weight C.G. Range

None

***Maximum weight**

Landplane	2650 lb.
Floatplane	Edo 44-2425 2700 lb. Edo 249-2870 2820 lb.
Amphibian	2850 lb.

Number of seats

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

Maximum baggage

120 lb. (+95)

Fuel capacity60 gal. total, 55 gal. usable (two 32-1/2 gal. tanks in wings at +48)
*See Note 1 for weight of unusable fuel.***Oil capacity**12 qt. (-15) includes 6 qt. usable
*See Note 1 for data on undrainable oil.***Control surface movements**

Wing flaps	Takeoff	0° & 20°
	Landing	30° & 40°
Ailerons	Up 20°	Down 15°
Stabilizer	Up 1° 30'	Down 8° 30'
Elevators (with stabilizer full down)	Up 25°	Down 23°
Rudder	Right 24°	Left 24°

Serial numbers eligible

Model 180A: 32662 through 32999, 50001 through 50355
Model 180B: 50356 through 50661

III. Model 180C, 4 PCL-SM (Normal Category), approved July 8, 1959
Model 180D, 4 PCL-SM (Normal Category), approved June 14, 1960
Model 180E, 4 PCL-SM (Normal Category), approved September 21, 1961
Model 180F, 4 PCL-SM (Normal Category), approved June 25, 1962

Engine	Continental O-470-L or O-470-R
*Fuel	80/87 minimum grade aviation gasoline
*Engine limits	For all operations, 2600 rpm (230 hp)
Propeller and propeller limits	<ol style="list-style-type: none"> 1. McCauley constant speed propeller <ol style="list-style-type: none"> (a) Hub 2A36C, blades 90M-8 Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: Low 10.5°, high 22° (b) Spinner, Cessna 0752004 (c) Governor, Woodward 4M12-V, 210065, 210105, 210345 or A210452. Garwin 34-328-01. McCauley C290D2/T-1 or D290D3/T-1 2. McCauley constant speed propeller <ol style="list-style-type: none"> (a) Hub 2A36C, blades 90M-2 Diameter: not over 88 in., not under 86 in. Pitch settings at 36 in. sta.: Low 8°, high 22° (b) Spinner, Cessna 0752004 (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1 3. McCauley constant speed propeller <ol style="list-style-type: none"> (a) Hub 2A34C, blades 90A-8 Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: Low 10.5°, high 22° (b) Spinner, Cessna 0752004 (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1 4. McCauley constant speed propeller <ol style="list-style-type: none"> (a) Hub 2A34C, blades 90A-2 Diameter: not over 88 in., not under 86 in. Pitch settings at 36 in. sta.: Low 10.5°, high 22° (b) Spinner, Cessna 0752004 (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1 5. McCauley constant speed propeller <ol style="list-style-type: none"> (a) Hub 2A34C66, blades 90AT-8 Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: Low 10.5°, high 22° (b) Spinner, Cessna 0752004 (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1

III. Model 180C, Model 180D, Model 180E, Model 180F (cont'd)

- 6. McCauley constant speed propeller
 - (a) Hub 2A34C66, blades 90AT-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
 - (b) Spinner, Cessna 0752004
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452.
Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
- 7. Hartzell constant speed propeller (not eligible on the O-470-R engine installation)
 - (a) Hub HC82XF-1 or -6, blades 8433 or 8833
Diameter:
(For blade 8433) not over 84 in., not under 82.5 in.
(For blade 8833) not over or under 88 in.
Pitch setting at 30 in. sta.:
Low 12°, high 24° or 28°
 - (b) Spinner, Hartzell HC82XF-1 or Cessna 0752006
 - (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340
- 8. Hartzell constant speed propeller (not eligible on the O-470-R engine installation)
 - (a) Hub HCA2XF-1 or BHCA2XF-1, blades 8433 or 8833
Diameter:
(For blade 8433) not over 84 in., not under 82 in.
(For blade 8833) not over or under 88 in.
Pitch setting at 30 in. sta.:
Low 12°, high 24°
 - (b) Spinner, Cessna 0752006
 - (c) Governor, Woodward 4M12-V, 210065, 210105 or 210340

*Airspeed Limits (TIAS)

	<u>Landplane & Floatplane</u>	<u>Amphibian</u>
Never exceed	184 mph (160 knots)	164 mph (143 knots)
Maneuvering	122 mph (106 knots)	129 mph (112 knots)
Max. structural cruising	160 mph (139 knots)	130 mph (113 knots)
Flaps extended	100 mph (87 knots)	100 mph (87 knots)

C.G. Range

Landplane	(+40.0) to (+45.8) at 2650 lbs. (+34.5) to (+45.8) at 2100 lbs. or less
Floatplane with Edo 44-2425	(+39.3) to (+43.9) at 2700 lbs. (+35.0) to (+43.9) at 2050 lbs. or less
Floatplane with Edo 249-2870	(+40.2) to (+43.9) at 2820 lbs. (+35.0) to (+43.9) at 2125 lbs. or less
Amphibian with Edo 289-2700	(+38.3) to (+43.9) at 2850 lbs. (+36.0) to (+43.9) at 2400 lbs. or less

Straight line variation between points given.

Empty weight C.G. Range

None

*Maximum weight

Landplane	2650 lb.
Floatplane	Edo 44-2425 2700 lb. Edo 249-2870 2820 lb.
Amphibian	2850 lb.

Number of seats

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

Maximum baggage

120 lb. (+95)

Fuel capacity

65 gal total, 55 gal. usable 180C, 180D; 60 gal. usable 180E, 180F
(two 32-1/2 gal. tanks in wings at +48)
See Note 1 for weight of unusable fuel.

III. Model 180C, Model 180D, Model 180E, Model 180F (cont'd)

Oil capacity	12 qt. (-15) includes 6 qt. usable <i>See Note 1 for data on undrainable oil.</i>		
Control surface movements	Wing flaps	Takeoff	0° & 20°
		Landing	30° & 40°
	Ailerons	Up 20°	Down 15°
	Stabilizer	Up 1°	Down 8° 45'
	Elevators (with stabilizer full down)	Up 25°	Down 23°
	Rudder	Right 24°	Left 24°
Serial numbers eligible	Model 180C:	624, 50662 through 50911	
	Model 180D:	18050912 through 18051063	
	Model 180E:	18051064 through 18051183	
	Model 180F:	18051184 through 18051312	

IV. Model 180G, 6 PCL-SM (Normal Category), approved July 19, 1963
Model 180H, Skywagon, 6 PCL-SM (Normal Category), approved June 17, 1964

Engine	Continental O-470-L or O-470-R
*Fuel	80/87 minimum grade aviation gasoline
*Engine limits	For all operations, 2600 rpm (230 hp)
Propeller and propeller limits	1. McCauley constant speed propeller
	(a) Hub 2A36C, blades 90M-8
	Diameter: not over 82 in., not under 80 in.
	Pitch settings at 36 in. sta.:
	Low 10.5°, high 22°
	(b) Spinner, Cessna 0752004 (through S/N 18051774)
	Spinner, Cessna 0752042-1 and Fillet 0752044-1 (S/N 18051775 and on)
	(c) Governor, Woodward 4M12-V, 210065, 210105, 210345 or A210452. Garwin 34-328-01. McCauley C290D2/T-1 or D290D3/T-1
	2. McCauley constant speed propeller
	(a) Hub 2A36C, blades 90M-2
	Diameter: not over 88 in., not under 86 in.
	Pitch settings at 36 in. sta.:
	Low 8°, high 22°
	(b) Spinner, Cessna 0752004 (through S/N 18051774)
	Spinner, Cessna 0752042-1 and Fillet 0752044-1 (S/N 18051775 and on)
(c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1	
3. McCauley constant speed propeller	
(a) Hub 2A34C, blades 90A-8	
Diameter: not over 82 in., not under 80 in.	
Pitch settings at 36 in. sta.:	
Low 10.5°, high 22°	
(b) Spinner, Cessna 0752004 (through S/N 18051774)	
Spinner, Cessna 0752042-1 and Fillet 0752044-1 (S/N 18051775 and on)	
(c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01. McCauley C290D2/T-1 or C290D3/T-1	

IV. Model 180G, Model 180H (cont'd)

4. McCauley constant speed propeller
 - (a) Hub 2A34C, blades 90A-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004 (through S/N 18051774)
Spinner, Cessna 0752042-1 and Fillet 0752044-1 (S/N 18051775 and on)
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452. Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
5. McCauley constant speed propeller
 - (a) Hub 2A34C66, blades 90AT-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752004 (through S/N 18051774)
Spinner, Cessna 0752042-1 and Fillet 0752044-1 (S/N 18051775 and on)
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452.
Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
6. McCauley constant speed propeller
 - (a) Hub 2A34C66, blades 90AT-2
Diameter: not over 88 in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
 - (b) Spinner, Cessna 0752004 (through S/N 18051774)
Spinner, Cessna 0752042-1 and Fillet 0752044-1 (S/N 18051775 and on)
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452.
Garwin 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
7. Hartzell constant speed propeller (O-470-R engine only)
 - (a) Hub 2A34C201, blade 90DA-8 (Cessna P/N C161009-0101)
Diameter: not over 82 in., not under 80 in.
Pitch settings at 30 in. sta.:
Low 13.0°, high 24.5°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452. Garwin 34-828-01,
McCauley C290D2/T-1 or C290D3/T-1
8. Hartzell constant speed propeller (O-470-R engine only)
 - (a) Hub 2A34C201, blade 90DA-2 (Cessna P/N C161009-0102)
Diameter: not over 88 in., not under 86.5 in.
Pitch setting at 30 in. sta.:
Low 10.5°, high 24.5°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452, Garwin 34-828-01,
McCauley C290D2/T-1 or C290D3/T1.
9. McCauley constant speed propeller (O-470-R engines only)
 - (a) Hub 2A34C203, blade 90DCA-8 (Cessna P/N C161009-0104)
Diameter: not over 82 in., not under 80.5 in.
Pitch settings at 30 in. sta.:
Low 12.5°, high 25.0°
 - (b) Spinner, Cessna 0752042-5 and fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452, Garwin 34-828-01,
McCauley C290D2/T-1 or C290D3/T-1.
10. McCauley constant speed propeller (O-470-R engines only)
 - (a) Hub 2A34C203, blade 90DCA-2 (Cessna P/N C161009-0105)
Diameter: not over 88 in., not under 86.5 in.
Pitch settings at 30 in. sta.:
Low 10.0°, high 24.5°

IV. Model 180G, Model 180H (cont'd)

- (b) Spinner, Cessna 0752042-5 and fillet 0752044-3
(c) Governor, Woodward 210345 or A210452, Garwin 34-828-01, McCauley C290D2/T-1 or C290D3/T-1.

*Airspeed Limits (TIAS)	<u>Landplane & 249A-2870</u>	<u>597-2790 Amphibian &</u>
	<u>Floatplane</u>	<u>628-2960 Floatplane</u>
Never exceed	192 mph (167 knots)	164 mph (143 knots)
Maneuvering	128 mph (111 knots)	130 mph (113 knots)
Max. structural cruising	160 mph (139 knots)	130 mph (113 knots)
Flaps extended	110 mph (96 knots)	110 mph (96 knots)
 C.G. Range	 	
	Landplane	(+38.5) to (+47.0) at 2800 lbs. (+33.5) to (+47.0) at 2100 lbs. or less
	Floatplane with Edo 249A-2870	(+40.2) to (+43.9) at 2820 lbs. (+35.0) to (+43.9) at 2125 lbs. or less
	Floatplane with Edo 628-2960	(+41.2) to (+43.9) at 2950 lbs. (+35.0) to (+43.9) at 2125 lbs. or less
	Amphibian with Edo 597-2790	(+38.8) to (+43.9) at 2950 lbs. (+36.0) to (+43.9) at 2400 lbs. or less
	Straight line variation between points given.	
 Empty weight C.G. Range	 None	
 *Maximum weight	Landplane	2800 lb.
	Floatplane	Edo 249A-2870 2820 lb. Edo 628-2960 2950 lb.
	Amphibian	2950 lb.
 Number of seats	6 (2 at +36 to +50, 2 at +65 or +73, 2 at +97)	
 Maximum baggage	Refer to weight and balance data.	
 Fuel capacity	65 gal. total, 60 gal. usable (two 32.5 gal. tanks in wings at +48) <i>See Note 1 for weight of unusable fuel.</i>	
 Oil capacity	12 qt. (-15) includes 6 qt. usable <i>See Note 1 for data on undrainable oil.</i>	
 Control surface movements	Wing flaps	Down 38° +2°, -1°
	Ailerons	Up 20° ±2° Down 14° ±2°
	Stabilizer	Up 0° 45' ±15' Down 8° 45' ±15'
	Elevators (with stabilizer full down)	Up 25° ±1° Down 23° ±1°
	Rudder (parallel to W.L. or perpendicular to hinge)	Right 24° ±1° Left 24° ±1°
 Serial numbers eligible	Model 180G:	18051313 through 18051445
	Model 180H:	645, 18051446 through 18052284

V. Model 180J, Skywagon, 6 PCL-SM (Normal Category), approved October 13, 1972

Engine	Continental O-470-R, S/N 18052285 through 18052500 Continental O-470-S, S/N 18052501 and up (see Note 5)
*Fuel	80/87 minimum grade aviation gasoline
*Engine limits	For all operations, 2600 rpm (230 hp)

V. Model 180J (cont'd)

Propeller and propeller limits

1. McCauley constant speed propeller (landplane-skiplane)
 - (a) Hub 2A34C66, Blades 90AT-8
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 10.5°, high 22°
 - (b) Spinner, Cessna 0752042-1 and Fillet 0752044-1
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452.
Edo-Aire 34-828-01. McCauley C290D2/T-1 or C290D3/T-1
2. McCauley constant speed propeller
(Floatplane, Amphibian, Landplane, Skiplane)
 - (a) Hub 2A34C66, Blades 90AT-2
Diameter: not over 8° in., not under 86 in.
Pitch settings at 36 in. sta.:
Low 8°, high 22°
 - (b) Spinner, Cessna 0752042-1 and Fillet 0752044-1
 - (c) Governor, Woodward 210065, 210105, 210345 or A210452.
Edo-Aire 34-828-01. McCauley C290D2/T-1 or C290D3/T-1
3. McCauley constant speed propeller (threadless) (Landplane, Skiplane)
 - (a) Hub 2A34C201, blade 90DA-8 (C161009-0101)
Diameter: not over 82 in., not under 80 in.
Pitch settings at 30 in. sta.:
Low 13.0°, high 24.5°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452. Edo-Aire 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
4. McCauley constant speed propeller (threadless)
(Floatplane, Amphibian, Landplane, Skiplane)
 - (a) Hub 2A34C201, Blade 90DA-2 (C161009-0102)
Diameter: not over 88 in., not under 86.5 in.
Pitch settings at 30 in. sta.:
Low 10.5°, high 24.5°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452. Edo-Aire 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
5. McCauley constant speed propeller (threadless) (Landplane, Skiplane)
 - (a) Hub 2A34C203, Blade 90DCA-8
Diameter: not over 82 in., not under 80.5 in.
Pitch settings at 30 in. sta.:
Low 12.5°, high 25.0°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452. Edo-Aire 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1
6. McCauley constant speed propeller (threadless)
(Floatplane, Amphibian, Landplane, Skiplane)
 - (a) Hub 2A34C203, Blade 90DCA-2
Diameter: not over 88 in., not under 86.5 in.
Pitch settings at 30 in. sta.:
Low 10.0°, high 24.5°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, Woodward 210345 or A210452. Edo-Aire 34-828-01.
McCauley C290D2/T-1 or C290D3/T-1

*Airspeed Limits (CAS)

S/N 18052285 through 18052620	
Landplane, 628-2960 Floatplane and 597-2790 Amphibian	
Never exceed	192 mph (167 knots)
Maneuvering	123 mph (107 knots)
Maximum structural cruising	160 mph (139 knots)
Flaps extended	110 mph (96 knots)

V. Model 180J (cont'd)
(IAS)

(See Note 6 for use of IAS.)

	S/N 18052621 and up		
	Landplane, 628-2960 Floatplane and 597-2790 Amphibian		
	Never exceed		169 knots (194 mph)
	Maneuvering (landplane)		108 knots (124 mph)
	(Floatplane with Edo 628-2960)		106 knots (122 mph)
	(Amphibian with Edo 597-2790)		106 knots (122 mph)
	Maximum structural cruising		139 knots (160 mph)
	Flaps extended	10°	120 knots (138 mph)
		20° - 40°	90 knots (104 mph)
C.G. Range	Landplane	(+38.5) to (+47.0) at 2800 lbs. (+33.5) to (+47.0) at 2100 lbs. or less	
	628-2960 Floatplane	(+38.8) to (+43.9) at 2950 lbs.	
	and 597-2790 Amphibian	(+36.0) to (+43.9) at 2400 lbs. or less	
		Straight line variation between points given.	
Empty weight C.G. Range	None		
*Maximum weight	Landplane	2800 lbs.	
	Seaplane	2950 lbs.	
	Amphibian	2950 lbs.	
Number of seats (max.)	6	(2 at +36 to +50, 2 at +65 or +73, 2 at +97)	
Maximum baggage	Refer to weight and balance data.		
Fuel capacity	65 gal. total, 60 gal. usable (two 32.5 gal. tanks in wings at +48) Through S/N 18052363. 61 gal. total, 56 gal. usable (two 30.5 gal. tanks in wings at +48) S/N 18052364 and on. <i>See Note 1 for unusable fuel.</i>		
Oil capacity	12 qt. (-15) includes 6 qt. usable <i>See Note 1 for data on undrainable oil.</i>		
Control surface movements	Wing flaps		Down 40° +0°, -2°
	Ailerons	Up 20° ±2°	Down 14° ±2°
	Stabilizer	Up 0° 45' ±15'	Down 8° 45' ±15'
	Elevators (with stabilizer full down)	Up 25° ±1°	Down 23° ±1°
	Rudder (parallel to W.L. or perpendicular to hinge)	Right 24° ±1°	Left 24° ±1°
Serial numbers eligible	Model 180J: 18052285 through 18052770, except 18052490		

VI. Model 180K, Skywagon, 6 PCL-SM (Normal Category), approved August 19, 1976

Engine	Continental O-470-U
*Fuel	100/130 minimum grade aviation gasoline (S/N 18052771 through 18052905) 100LL/100 minimum grade aviation gasoline (S/N 18052906 and on)
*Engine limits	For all operations, 2400 rpm (230 hp)

VI. Model 180K (cont'd)

Propeller and propeller limits

1. McCauley constant speed propeller (threadless) (landplane, skiplane)
 - (a) Hub C2A34C204, blade 90DCB-8
Diameter: not over 82 in., not under 80.5 in.
Pitch settings at 30 in. sta.:
Low 15.0°, high 29.4°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, McCauley C290D3/T-14 or C290D3B/T-14
2. McCauley constant speed propeller (threadless) (Floatplane, Amphibian, Landplane, Skiplane)
 - (a) Hub C2A34C204, blade 90DCB-0
Diameter: not over 90 in., not under 88.5 in.
Pitch settings at 30 in. sta.:
Low 12.9°, high 26.0°
 - (b) Spinner, Cessna 0752042-5 and Fillet 0752044-3
 - (c) Governor, McCauley C290D3/T-14 or C290D3B/T-14

*Airspeed Limits (IAS)

(See Note 6 for use of IAS)

Effective S/N 18052771 through 18053115

Landplane, 628-2960 Floatplane and 597-2790 Amphibian

Never exceed		169 knots (194 mph)
Maneuvering (Landplane)		109 knots (125 mph)
	(Floatplane with Edo 628-2960)	109 knots (125 mph)
	(Amphibian with Edo 597-2790)	109 knots (125 mph)
Maximum structural cruising		139 knots (160 mph)
Flaps extended	10°	120 knots (138 mph)
	20° - 40°	90 knots (104 mph)

S/N 18053116 and on

Landplane, 628-2960 Floatplane and 597-2790 Amphibian

Never exceed		169 knots (194 mph)
Maneuvering (landplane)		109 knots (125 mph)
	(Floatplane with Edo 628-2960)	109 knots (125 mph)
	(Amphibian with Edo 597-2790)	109 knots (125 mph)
Maximum structural cruising		139 knots (160 mph)
Flaps extended	10°	120 knots (138 mph)
	20°	110 knots (127 mph)
	30° - 40°	90 knots (104 mph)

C.G. Range

	Landplane	(+38.5) to (+47.0) at 2800 lbs. (+33.5) to (+47.0) at 2100 lbs. or less
	628-2960 Floatplane	(+38.8) to (+43.9) at 2950 lbs.
and	597-2790 Amphibian	(+36.0) to (+43.9) at 2400 lbs. or less
		Straight line variation between points given.

Empty weight C.G. Range

None

*Maximum weight

Landplane	2800 lbs.
Seaplane	2950 lbs.
Amphibian	2950 lbs.

Number of seats (max.)

6 (2 at +36 to +50, 2 at +65 or +73, 2 at +97)

Maximum baggage

Refer to weight and balance data.

Fuel capacity

61 gal. total, 56 gal. usable (two 30.5 gal. tanks in wings at +48)
Through S/N 18053000.
88 gal., (84 gal. usable, two 44.0 gal. tanks in wings at +46.5)
S/N 18053001 and on.
See Note 1 for unusable fuel.

VI. Model 180K (cont'd)

Oil capacity	12 qt. (-15) includes 6 qt. usable <i>See Note 1 for data on undrainable oil.</i>			
Control surface movements	Wing flaps		Down 40° +0°, -2°	
	Ailerons	Up 20° ±2°	Down 14° ±2°	
	Stabilizer	Up 0° 45' ±15'	Down 8° 45' ±15'	
	Elevators (with stabilizer full down)	Up 25° ±1°	Down 23° ±1°	
	Rudder (parallel to W.L. or perpendicular to hinge)	Right 24° ±1°	Left 24° ±1°	
Serial numbers eligible	Model 180K:	18052771 through 18052905	(1977)	
		18052906 through 18053000	(1978)	
		18052490, 18053001 thru 18053115	(1979)	
		18053116 through 18053167	(1980)	
		18053168 through 18053203	(1981)	

DATA PERTINENT TO ALL MODELS

Datum Front face of firewall

Leveling means Upper door sill

Certification basis Models 180, 180A and 180B: Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-8 except Paragraphs 3.265 and 3.668 of 3-7.

Models 180C, 180D, 180E, 180F, 180G and 180H: Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 except Paragraph 3.265 of 3-7; Part 3 of the Civil Air Regulations dated May 15, 1956, paragraph 3.668 only, as amended by 3-3.

Models 180J and 180K: Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 except Paragraphs 3.265 and 3.668 and Subpart B; Subpart B of Part 3 of the Civil Air Regulations dated May 15, 1956, as amended by 3-1 through 3-5. In addition, effective S/N 18052490, 18053001 and on, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-4 for S/N 18052771 and on.

Application for Type Certificate dated December 11, 1951.
Type Certificate No. 5A6 issued December 23, 1952. Model 180A and subsequent certificated under delegation option procedures.

Equivalent Safety Items 18052621 and on
Airspeed Indicator CAR 3.757 (*See Note 6 on use of IAS*)
Operating Limitations CAR 3.778(a)

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 regulations (see Certification Basis) must be installed in the aircraft for certification. This equipment must include a current Airplane Flight Manual effective S/N 18052490, 18053001 and on. In addition, the following item of equipment is required.

1. Stall Warning Indicator, Cessna Dwg. 0511062 through S/N 18051823.
2. Stall Warning Indicator, Cessna Dwg. 0700185 effective S/N 18051824 and on.

DATA PERTINENT TO ALL MODELS (cont'd)

The equipment portion of Aircraft Specification 5A6, Revision 34, or Cessna Publication TS2000-12 should be used for equipment references on all aircraft prior to the Model 180G. Refer to the applicable Equipment List for the Model 180G and subsequent models.

NOTE 1. Current weight and balance report together with list of equipment included in certificated empty weight and loading instructions when necessary must be provided for each aircraft at the time of original certification. The certificated empty weight and corresponding C.G. location must include unusable fuel of 30 lb. at (+46) on Models 180, 180E, 180F, 180G, 180H, 180J, and 180K through S/N 18053000, and 60 lbs. at (+48) on Models 180A, 180B, 180C and 180D, and undrainable oil of 0.0 lbs. at -15.0 through S/N 1805260; full oil of 22.0 lbs. at -15.0 S/N 18052621 and on.

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 24 lb. at +48 (S/N 18052490, 18053001 and on).

Specific floatplane gross weights are those shown with float models under C.G. range.

- NOTE 2. A. The following placards must be displayed in front of and in full view of the pilot:
- (1) On Models 180, 180A and 180B
 - (a) "This airplane must be operated as a normal category airplane in compliance with the Flight Manual."
 - (b) "No acrobatic maneuvers, including spins, approved."
 - (c) "Both tanks on for takeoff and landing."
 - (d) As floatplane: "Retract water rudder during takeoff and landing."
 - (e) When wheel skis are installed, "Do not extend or retract while in motion on the ground."
 - (2) On Models 180C, 180D, 180E and 180F
 - (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 lbs."
 - (b) "Both tanks on for takeoff and landing."
 - (c) "Flaps - Pull to extend

	Retracted	0°
Takeoff	1st notch	10°
	2nd notch	20°
Landing	3rd notch	30°
	4th notch	40°
 - (d) As seaplane or amphibian: "Retract water rudder during takeoff and landing."
 - (3) On Models 180G and 180H
 - (a) Operational Limitations Placards
 Serials 18051313 through 18052175
 "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 lbs.
 Maximum maneuvering speed, 128 mph - CAS
 Maximum altitude loss in stall recovery, 200 ft.
 Avoid sideslips with flaps extended."

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

(a) Serials 18052176 and on

"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>		
Maneuvering speed		128 mph CAS (111 knots)
Gross weight		2800 lb.
Flight load factor	Flaps up	+3.8, -1.52
	Flaps down	+3.5

Avoid sideslips with flaps extended. No acrobatic maneuvers, including spins, approved. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certification.

DAY - NIGHT - VFR - IFR" (as applicable)

(b) "Reference weight and balance data for loading instructions.

(c) "Flaps - Pull to extend

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

(d) "Both tanks on for takeoff and landing."

(e) As floatplane or amphibian: "Retract water rudder during takeoff and landing."

(4) Model 180J

(a) In full view of pilot

(aa) Serial 18052285 through 18052620

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

	<u>MAXIMUMS</u>		
	Landplane	Amphibian	Floatplane
Maneuvering speed (CAS)	123 mph	Edo 597-2790 123 mph	Edo 628-2960 123 mph
Gross Weight	2800 lb.	2950 lb.	2950 lb.
Flight load factor	Flaps Up +3.8, -1.52	Flaps Down +2.0	

Avoid slips with flaps extended. No acrobatic maneuvers, including spins, approved. Altitude loss in stall recovery - 200 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of the date of original airworthiness certificate.

DAY - NIGHT - VFR - IFR" (as applicable)

(bb) Serial 18052621 and on

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

	<u>MAXIMUMS</u>		
	Landplane	Amphibian	Floatplane
Maneuvering speed (IAS)	108 knots	Edo 597-2790 106 knots	Edo 628-2960 106 knots
Gross Weight	2800 lb.	2950 lb.	2950 lb.
Flight load factor	Flaps Up +3.8, -1.52	Flaps Down +2.0	

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

- (bb) Avoid slips with flaps extended. No acrobatic maneuvers, including spins, approved. Altitude loss in stall recovery - 200 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of the date of original airworthiness certificate: DAY - NIGHT - VFR - IFR" (as applicable)
- (b) On the flap lever: "FLAPS - PULL TO EXTEND
- | | |
|-------------------|------|
| Retracted | 0° |
| Takeoff 1st notch | 10° |
| 2nd notch | 20° |
| Landing 3rd notch | 30° |
| 4th notch | 40°" |
- (c) On fuel selector plate:
- (Standard range tanks): "Take-off, landing, both on, 60 gal., all flight attitudes; right on, 31 gal., level flight only; left on, 31 gal., level flight only; both off; fuel." (Through S/N 18052363)
- (Standard range tanks): "Take-off, landing, both on, 56 gal., all flight attitudes; right on 29 gal., level flight only; left on 29 gal., level flight only; both off; fuel." (S/N 18052364 and on)
- (Long range tanks): "Take-off, landing, both on, 79 gal., all flight attitudes; right on, 39 gal., level flight only; left on, 39 gal., level flight only; both off; fuel." (Through S/N 18052363).
- (Long range tanks): "Take-off, landing, both on, 75 gal., all flight attitudes; right on, 37 gal., level flight only; left on, 37 gal., level flight only; both off; fuel." (S/N 18052364 and on)
- (d) Forward of fuel tank filler cap:
- (Standard range tanks) "Service this airplane with 80/87 min. aviation grade gasoline - capacity 32.5 gal." (Through S/N 18052363)
- (Standard range tanks) "Service this airplane with 80/87 min. aviation grade gasoline - capacity 30.5 gal." (S/N 18052364 and on)
- (Long range tanks) "Service this airplane with 80/87 min. aviation grade gasoline - capacity 42.0 gal." (Through S/N 18052363)
- (Long range tanks) "Service this airplane with 80/87 min. aviation grade gasoline - capacity 40.0 gal." (S/N 18052364 and on)
- (e) On control lock: "Control lock - remove before starting engine."
- (f) On inside of baggage door:
"Refer to weight and balance data for baggage/cargo loading."
- (g) Additional placards if floats are installed:
- (aa) Applicable to floatplanes with long range fuel tanks:
- (At inbd fuel filler cap)
"Service this airplane with 80/87 min. aviation grade gasoline - capacity 37.0 gal." (through S/N 18052363)
- (At inbd fuel filler cap)
"Service this airplane with 80/87 min. aviation grade gasoline - capacity 35.0 gal." (S/N 18052364 and on)
- (At outbd fuel filler cap)
"Service this airplane with 80/87 min. aviation grade gasoline - capacity 42.0 gal." (through S/N 18052363)
- (At outbd fuel filler cap)
"Service this airplane with 80/87 min. aviation grade gasoline - capacity 40.0 gal." (S/N 18052364 and on)
- (At inbd fuel filler cap)
"To fill tanks to max. capacity use outboard fillers."

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

- (bb) Near water rudder control:
 "Water rudder extend"
 "Retract water rudder"
 "Water rudder always up except water taxiing"
- (cc) Applicable to amphibian floatplanes:
1 With Edo amphibian float installation 597-11
 (Engine driven hydraulic gear system)
 (Adjacent to the landing gear control):
 "Up on water/in air"
 "Wheels"
 "Down on land"
 (Forward of hydraulic hand pump): "Emergency operation
 If engine driven hydraulic pump (when installed)
 fails, use hand-operated hydraulic pump to retract
 and extend landing gear. Land on sod if gear position
 is unknown. Do not land on water unless gear is fully
 retracted."
 (On hydraulic hand pump handle): "Landing gear hydraulic pump"
- 2 With Edo amphibian float installation 597-12
 (Electro-hydraulic gear system)
 (In plain view of the pilot): "Emergency landing gear operation
 If electric driven hydraulic pump fails, use hand
 operated pump to retract and extend landing gear
 (see instructions). Land on sod if gear position is
 unknown. Do not land on water unless gear is fully
 retracted."
 (Near the emergency gear hand pump): "Emergency hand pump
operating instructions
 1. Pull landing gear motor circuit breaker.
 2. Move landing gear position switch to
 desired position.
 3. Rotate emergency gear selector valve to
 desired position.
 4. Pump emergency gear hydraulic pump until
 gear locks in desired position.
 Always keep gear selector valve in off position
 (detent engaged) except for emergency operation."
- (dd) On instrument panel for floatplane and amphibian: (S/N 18052501 and on
 and aircraft modified by Service Kit SK180-33 or SK180-34)
"WARNING
 IN FLOATPLANE AND AMPHIBIAN RETRACT FLAPS TO
 20° IMMEDIATELY AFTER APPLYING POWER FOR
 BALKED LANDING GO AROUND."
- (h) Additional placard if skis are installed:
 (aa) On instrument panel: "Avoid slips with flaps extended while on skis"
 (bb) Applicable to skiplane with retractable skis: (On instrument panel)
 (S/N 18052285 through 18052620) "Do not extend or retract skis at speeds over 140 mph."
 "Do not extend or retract skis while in motion on the ground."
 (S/N 18052621 and up) "Do not extend or retract skis at speeds over 125 knots."
 "Do not extend or retract skis while in motion on the ground."
 (cc) On instrument panel: (S/N 18052501 and on and aircraft modified by
 Service Kit SK180-33 or SK180-34)
"WARNING
 IN SKIPLANE RETRACT FLAPS TO 20° IMMEDIATELY
 AFTER APPLYING POWER FOR BALKED LANDING GO AROUND."

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

- (i) Near airspeed indicator: (S/N 18052621 and up)
 - “Maximum Speed (IAS)
 - Flaps 10° 120 knots
 - Flaps 20° - 40° 90 knots

(5) Model 180K

- (a) In full view of pilot

1 S/N 18052771 through 18053000

“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>		
	Landplane	Amphibian	Floatplane
		Edo 597-2790	Edo 628-2960
Maneuvering speed (IAS)	109 knots	109 knots	109 knots
Gross Weight	2800 lb.	2950 lb.	2950 lb.
Flight load factor	Flaps Up +3.8, -1.52	Flaps Down +2.0	

Avoid side slip with flaps extended. No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. Altitude loss in stall recovery - 200 ft. This airplane is certified for the following flight operations as of date of original airworthiness certificate.

DAY - NIGHT - VFR - IFR (as applicable)”

2 S/N 18052490, 18053001 and on

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

No acrobatic maneuvers, including spins, approved.
Flight into known icing conditions prohibited.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

DAY - NIGHT - VFR - IFR (as applicable)

- (b) On the flap lever:

“FLAPS - PULL TO EXTEND
 Retracted 0°
 Takeoff 1st notch 10°
 2nd notch 20°
 Landing 3rd notch 30°
 4th notch 40°”

- (c) On fuel selector plate:
(Standard range tanks)

“Takeoff, landing, both on, 56 gal., all flight attitudes; right on 29 gal., level flight only; left on 29 gal., level flight only; both off; fuel.”
(through S/N 18053000; 18053168 and on)

- (Long range tanks)

“Takeoff, landing, both on, 75 gal., all flight attitudes; right on, 37 gal., level flight only; left on, 37 gal., level flight only; both off; fuel.”
(through S/N 18053000; 18053168 and on)

- (Integral fuel cells)

“Takeoff, landing, both on, 84 gal., all flight attitudes; right on 40 gal., level flight only; left on 40 gal., level flight only; off; fuel.”
(S/N 18052490, 18053001 and on)

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

- (d) Forward of fuel tank filler cap:
- 1 (Standard range tanks)
- a "Service this airplane with 100/130 min. aviation grade gasoline - capacity 30.5 gal." (through S/N 18052905)
- b "Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 30.5 gal." (effective S/N 18052906 through S/N 18053000; 18053168 and on)
- c "Fuel cap fwd. - arrow alignment, cap must not rotate during closing." effective S/N 18052490, 18053001 and on)
- 2 (Long range tanks)
- a "Service this airplane with 100/130 min. aviation grade gasoline, capacity 40.0 gal." (through S/N 18052905)
- b "Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 40.0 gal." (effective S/N 18052906 through 18053000; 18053168 and on)
- c "Fuel cap fwd. - arrow alignment, cap must not rotate during closing." (effective S/N 18052490, 18053001 and on)
- 3 (Integral fuel cells)
- a "Fuel, 100LL/100 min. grade aviation gasoline, capacity 44.0 U.S. gal., capacity 34.5 U.S. gal. to bottom of filler collar." (effective S/N 18052490, 18053001 and on)
- b "Fuel cap fwd. - arrow alignment, cap must not rotate during closing." (effective S/N 18052490, 18053001 and on)
- (e) On control lock: "Control lock - remove before starting engine."
- (f) On inside of baggage door: "Refer to weight and balance data for baggage/cargo loading."
- (g) Additional placards if floats are installed:
- 1 Applicable to floatplane with long range fuel tanks:
(At inbd. fuel filler cap)
"Service this airplane with 100/130 min. aviation grade gasoline - capacity 35.0 gal." (through S/N 18052905)
"Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 35.0 gal." (effective S/N 18052906 through S/N 18053000; 18053168 and on)
(At outbd. fuel filler cap)
"Service this airplane with 100/130 min. aviation grade gasoline - capacity 40.0 gal." (through S/N 18052905)
"Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 40.0 gal." (effective S/N 18052906 through S/N 18053000; 18053168 and on)
(At inbd. fuel filler cap)
"To fill tanks to maximum capacity use outboard fillers." (through S/N 18053000; S/N 18053168 and on)
- 2 Near water rudder control: "Water rudder extend"
"Retract water rudder"
"Water rudder always up except water taxiing."
- 3 Applicable to amphibian floatplanes with electric driven hydraulic system:
(Near the emergency landing gear pump handle):

EMERGENCY

LANDING GEAR OPERATION

If electric driven hydraulic pump fails, use hand operated pump to retract and extend landing gear.

(See instructions.)

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

Land on sod if gear position is unknown.

DO NOT LAND ON WATER UNLESS
GEAR IS FULLY RETRACTED

(Near the emergency gear hand pump):

EMERGENCY HAND PUMP
OPERATING INSTRUCTIONS

1. Pull landing gear motor circuit breaker.
2. Move landing gear position switch to desired position.
3. Rotate emergency gear selector valve to desired position.
4. Pump emergency gear hydraulic pump until gear locks in desired position.

Always keep gear selector valve in OFF position (detent engaged) except for emergency operation.”

(On instrument panel in view of pilot):

“In floatplane, amphibian, and skiplane retract flaps 20° immediately after applying power for balked landing go-around.”

(Near water rudder control):

“Water rudder always up except water taxiing.”

- 4 On instrument panel for floatplane and amphibian:

“IN FLOATPLANE, AMPHIBIAN, AND SKIPLANE RETRACT FLAPS TO 20° IMMEDIATELY AFTER APPLYING POWER FOR BALKED LANDING GO AROUND.”

- 5 On instrument panel: (S/N 18052490, 18053001 through 18053115)

“Caution, when floats are installed, it is possible to exceed maximum gross weight with all seats occupied and minimum fuel. Check weight and balance.”

(h) Additional placards if skis are installed:

- 1 On instrument panel: (effective through S/N 18053000)

“Avoid slips with flaps extended while on skis.”

- 2 Applicable to skiplane with retractable skis: (On instrument panel)

“Do not extend or retract skis at speeds above 125 knots.”

“Do not extend or retract skis while in motion on the ground.”

- 3 On instrument panel: “IN FLOATPLANE, AMPHIBIAN, AND SKIPLANE RETRACT FLAPS TO 20° IMMEDIATELY AFTER APPLYING POWER FOR BALKED LANDING GO AROUND.”

(i) Near airspeed indicator: (effective through S/N 18053000)

“Maximum speed (IAS)

Flaps 10° 120 knots

Flaps 20° - 40° 90 knots”

(effective S/N 18052490, 18053001 through 18053115)

“Maximum Speed

Maneuver 109 KIAS

Flaps 10° 120 KIAS

Flaps 20° - 40° 90 KIAS”

(effective S/N 18053116 and on)

“Maximum speed

Maneuver 109 KIAS

Flaps 10° 120 KIAS

Flaps 20° 110 KIAS

Flaps 30° - 40° 90 KIAS”

DATA PERTINENT TO ALL MODELS (cont'd)

NOTE 2. (cont'd)

(j) On instrument panel above horizon gyro: (Effective S/N 18052490, 18053001 and on)
 "Avoid slips with flaps extended."

(k) On instrument panel near RNAV when installed: (Effective S/N 18052490, 18053001 and on)
 "RNAV for VFR flight only. Tune DME and NAV 1 to same Vortac for RNAV operation."

B. The following placard must be displayed on the baggage compartment door:
 "Maximum baggage 120 lb. for additional loading instructions see weight and balance data."

Models 180G and on:

"Refer to weight and balance data for baggage/cargo loading."

C. Models 180H, S/N 18052104 and on:

Adjacent to ammeter: "Do not turn off alternator in flight except in emergency."

NOTE 3. Reserved.

NOTE 4. The cylinder head temperature probe location is No. 2 cylinder through S/N 18051445, No. 1 cylinder S/N 18051446 through S/N 18052500, No. 3 cylinder S/N 18052501 and up.

NOTE 5. The installation of the O-470-S engine in Model 180J (1973 and 1974) will require a change of the oil temperature gauge and the cylinder head temperature probe location. Reference Cessna Service Letter 75-2 for information and instructions for this change.

NOTE 6. 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:

180J, Cessna P/N D1061-13	
180K, Cessna P/N D1086-13	(S/N 18052771 through 18052905)
180K, Cessna P/N D1113-13	(S/N 18052906 through 18053000)
180K, Cessna P/N D1140-13PH	(S/N 18052490, 18053001 through 18053115)
180K, Cessna P/N D1175-13PH	(S/N 18053116 through 18053167)
180K, Cessna P/N D1195-13PH	(S/N 18053168 through 18053203)

NOTE 7. 14 volt electrical system
 (180 series through S/N 18052905)

28 volt electrical system
 (180 series through S/N 18052906 and on)

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

....END....