

<u>I. Model 185, Model 185A, Model 185B, Model 185C, Model 185D</u> (cont'd)	
*Airspeed limits (CAS)	Never exceed 206 mph (179 knots) Maximum structural cruising 165 mph (143 knots) Maneuvering 136 mph (118 knots) Flaps extended 110 mph (96 knots)
C.G. range	<u>Landplane:</u> (+41.0) to (+46.5) at 3200 lbs. (+34.5) to (+46.5) at 2100 lbs. or less <u>Floatplane:</u> EDO 249A-2870 (+41.0) to (+46.5) at 3190 lbs. (+34.8) to (+46.5) at 2150 lbs. or less EDO 628-2960 (+41.6) to (+46.5) at 3290 lbs. (+34.8) to (+46.5) at 2150 lbs. or less <u>Amphibian</u> (+40.5) to (+46.5) at 3100 lbs. (+36.0) to (+46.5) at 2500 lbs. or less Straight line variation between points given.
Empty weight C.G. range	None
*Maximum weight	<u>Landplane:</u> 3200 lb. <u>Floatplane:</u> EDO 249A-2870 3190 lbs. EDO 628-2960 3290 lbs. <u>Amphibian:</u> 3100 lb.
Number of seats (maximum)	6 (reference weight and balance data)
Maximum baggage	Reference weight and balance data.
Fuel capacity	65 gal. (62 gal. usable, two 32.5 gal. tanks in wings at +48)
Oil capacity	12 qt. (-17.5) (6 qt. usable) <i>See Note 1 for data on system fuel and oil.</i>
Control surface movements	Wing flaps Down 38° +2° -1° Ailerons Up 20° ± 2° Down 14° ± 2° Stabilizer Up 0° 45' +45° -15' Down 8° 30' ± 15° Elevator (with stabilizer full down) Up 25° ± 1° Down 23° ± 1° Rudder (parallel to W.L. or perpendicular to hinge line) Right 24° +0° -1° Left 24° +0° -1°
Serial numbers eligible	Model 185: 632, 185-0001 through 185-0237 (1961 model) Model 185A: 185-0238 through 185-0512 (1962 model) Model 185B: 185-0513 through 185-0653 (1963 model) Model 185C: 185-0654 through 185-0776 (1964 model) Model 185D: 185-0777 through 185-0967 (1965 model)

II. Model 185E, Skywagon, 6 PCL-SM (Normal Category), approved September 24, 1965

Engine	Continental IO-470-F
*Fuel	100/130 minimum grade aviation gasoline

II. Model 185E (cont'd)***Engine limits**

For all operations, 2625 rpm (260 hp)

Propeller and propeller limits

1. McCauley constant speed propeller installation
 - (a) McCauley D2A34C49 hub with 90A-2 blades
Diameter: not over 88 in., not under 80.5 in.
Pitch settings at 36 in. sta.:
Low 9.2°, high 22°
 - (b) Cessna spinner 0752004 or 0752040
 - (c) Governor, Woodward 210340, 210345, or A210452.
Garwin 34-828-01. McCauley C290D2/T1 or C290D3/T1
2. McCauley constant speed propeller installation
 - (a) McCauley D2A34C48 hub or D2A34C48-0 (oil filled) hub with 90AT-2 blades
Diameter: not over 88 in., not under 80.5 in.
Pitch settings at 36 in. sta.:
Low 9.2°, high 22°
 - (b) Cessna spinner 0752004 or 0752040
 - (c) Governor, Woodward 210340, 210345, or A210452.
Garwin 34-828-01. McCauley C290D2/T1 or C290D3/T1

***Airspeed limits (CAS)**Landplane, 628-2960 Floatplane and 597-2790 Amphibian:

Never exceed	210 mph (182 knots)
Maximum structural cruising	170 mph (148 knots)
Maneuvering	138 mph (120 knots)
Flaps extended	110 mph (96 knots)

249A-2870 Floatplane:

Never exceed	206 mph (179 knots)
Maximum structural cruising	165 mph (143 knots)
Maneuvering	136 mph (118 knots)
Flaps extended	110 mph (96 knots)

C.G. rangeLandplane:

(+41.6) to (+46.5) at 3300 lbs.
(+34.5) to (+46.5) at 2100 lbs. or less

Floatplane:

EDO 249A-2870
(+41.0) to (+46.5) at 3190 lbs.
(+34.8) to (+46.5) at 2160 lbs. or less

EDO 628-2960

(+41.6) to (+46.5) at 3290 lbs.
(+34.8) to (+46.5) at 2150 lbs. or less

Amphibian:

(+40.5) to (+46.5) at 3100 lbs.
(+36.0) to (+46.5) at 2500 lbs. or less
Straight line variation between points given.

Empty weight C.G. range

None

***Maximum weight**

Landplane:	3300 lbs.	
Floatplane:	EDO 249A-2870	3190 lbs.
	EDO 628-2960	3290 lbs.
Amphibian:	3100 lbs.	

II. Model 185E (cont'd)

Number of seats (maximum)	6 (reference weight and balance data)		
Maximum baggage	Reference weight and balance data.		
Fuel capacity	65 gal. (62 gal. usable, two 32.5 gal. tanks in wings at +48)		
Oil capacity	12 qt. (-17.5) (6 qt. usable) <i>See Note 1 for data on system fuel and oil.</i>		
Control surface movements	Wing flaps		Down 38° + 2° -1°
	Ailerons	Up 20° ± 2°	Down 14° ± 2°
	Stabilizer	Up 0° 45' +45' -15'	Down 8° 30' ± 15'
	Elevator (with stabilizer full down)	Up 25° ± 1°	Down 23° ± 1°
	Rudder (parallel to W.L. or perpendicular to hinge line)	Right 24° +0° -1°	Left 24° +0° -1°
Serial numbers eligible	185-0968 through 185-1149 (1966 model)		

III. Model A185E, Skywagon and AGcarryall, 6 PCL-SM (Normal Category), approved September 24, 1965

Engine	Continental IO-520-D		
*Fuel	100/130 minimum grade aviation gasoline		
*Engine limits	Takeoff (5 min.) at	2850 rpm (300 hp)	
	Maximum continuous	2700 rpm (285 hp)	
Propeller and propeller limits	<u>Landplane - Skiplane</u>		
	1. (a)	McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-4 blades Diameter: not over 86 in., not under 84.5 in. Pitch settings at 36 in. sta.: Low 8°, high 25°	
		(b) Cessna spinner 0752004 or 0752040	
		(c) Governor, Garwin 34-828-01. Woodward A210462. McCauley C290D2/T9 or C290D3/T9	
	2. (a)	McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-8 blades Diameter: not over 82 in., not under 80.5 in. Pitch settings at 36 in. sta.: Low 9.5°, high 25.8°	
		(b) Cessna spinner 0752042	
		(c) Governor, Edo-Aire 34-828-01-1. Woodward A210462. McCauley C290D2/T9 or C290D3/T9	
	3. (a)	McCauley D3A34C403/80VA-0 (See Note 9.) Diameter: not over 80 in., not under 78.5 in. Pitch settings at 30 in. sta.: Low 10.6°, high 25.6°	
		(b) Cessna spinner 0750286	
		(c) Governor, McCauley C290D2/T9 or C290D3/T9	

III. Model A185E (cont'd)Floatplane - Amphibian

1. (a) McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-4 blades
Diameter: not over 86 in., not under 84.5 in.
Pitch settings at 36 in. sta.:
Low 8°, high 25°
- (b) Cessna spinner 0752004 or 0752040
- (c) Governor, Garwin 34-828-01. Woodward A210462. McCauley C290D2/T9 or C290D3/T9
2. (a) McCauley D3A34C403/80VA-0 (see Note 9)
Diameter: not over 80 in., not under 78.5 in.
Pitch settings at 30 in. sta.:
Low 10.6°, high 25.6°
- (b) Cessna spinner 0750286
- (c) Governor, McCauley C290D2/T9 or C290D3/T9

*Airspeed Limits
(CAS)Landplane, 628-2960 Floatplane and 597-2790 Amphibian:

Never exceed	210 mph (182 knots)
Maximum structural cruising	170 mph (148 knots)
Maneuvering (S/N 185-0968 through 185-1235)	138 mph (120 knots)
Maneuvering (S/N 185-1236 and up)	139 mph (121 knots)
Flaps extended	110 mph (96 knots)

249A-2870 Floatplane:

Never exceed	206 mph (179 knots)
Maximum structural cruising	165 mph (143 knots)
Maneuvering	136 mph (118 knots)
Flaps extended	110 mph (96 knots)

C.G. Range

Landplane:

(+41.9) to (+46.5) at 3350 lb. (S/N 185-1236 and up)
 (+41.6) to (+46.5) at 3300 lb. (S/N 185-0968 through 185-1235)
 Eligible for 3350 lb., see NOTE 3.
 (+34.5) to (+46.5) at 2100 lbs. or less

Floatplane:

EDO 249A-2870 (S/N 185-0968 and up)
 (+41.0) to (+46.5) at 3190 lbs.
 (+34.8) to (+46.5) at 2150 lbs. or less

EDO 628-2960 (S/N 185-0968 and up)

(+41.7) to (+46.5) at 3320 lbs.
 (+34.8) to (+46.5) at 2150 lbs. or less

S/N 185-0968 through 185-1235 are required to be modified in accordance with NOTE 3.

Amphibian: (S/N 185-0968 and up)

(+41.7) to (+46.5) at 3265 lb. (wheels, takeoff only)

(+40.5) to (+46.5) at 3100 lbs.

(+36.0) to (+46.5) at 2500 lbs. or less

Straight line variation between points given.

Empty weight C.G. range

None

III. Model A185E (cont'd)

*Maximum weight	<u>Landplane:</u> 3350 lb. S/N 185-1236 and up 3300 lb. S/N 185-0968 through 185-1235, see Note 3.																				
	<u>Floatplane:</u> EDO 249A-2870 - 3190 lb. EDO 628-2960 - 3320 lb. S/N 185-0968 and up, see Note 3.																				
	<u>Amphibian:</u> 3265 lb. (wheels, takeoff only) 3100 lb. (all other configurations)																				
Number of seats (maximum)	6 (2 at +36 to +50, 2 at +65 or +73, 2 at +97)																				
Maximum baggage	Reference weight and balance data.																				
Fuel capacity	65 gal. (62 gal. usable, two 32.5 gal. tanks in wings at +48)																				
Oil capacity	12 qt. (-17.5) (6 qt. usable) <i>See Note 1 for data on system fuel and oil.</i>																				
Control surface movements	<table border="0" style="width: 100%;"> <tr> <td>Wing flaps</td> <td></td> <td>Down</td> <td>38° +2° -1°</td> </tr> <tr> <td>Ailerons</td> <td>Up 20° ± 2°</td> <td>Down</td> <td>14° ± 2°</td> </tr> <tr> <td>Stabilizer</td> <td>Up 0° 45' +45' -15'</td> <td>Down</td> <td>8° 30' ± 15'</td> </tr> <tr> <td>Elevator (with stabilizer full down)</td> <td>Up 25° ± 1°</td> <td>Down</td> <td>23° ± 1°</td> </tr> <tr> <td>Rudder (parallel to W.L. or perpendicular to hinge line)</td> <td>Right 24° +0° -1°</td> <td>Left</td> <td>24° +0° -1°</td> </tr> </table>	Wing flaps		Down	38° +2° -1°	Ailerons	Up 20° ± 2°	Down	14° ± 2°	Stabilizer	Up 0° 45' +45' -15'	Down	8° 30' ± 15'	Elevator (with stabilizer full down)	Up 25° ± 1°	Down	23° ± 1°	Rudder (parallel to W.L. or perpendicular to hinge line)	Right 24° +0° -1°	Left	24° +0° -1°
Wing flaps		Down	38° +2° -1°																		
Ailerons	Up 20° ± 2°	Down	14° ± 2°																		
Stabilizer	Up 0° 45' +45' -15'	Down	8° 30' ± 15'																		
Elevator (with stabilizer full down)	Up 25° ± 1°	Down	23° ± 1°																		
Rudder (parallel to W.L. or perpendicular to hinge line)	Right 24° +0° -1°	Left	24° +0° -1°																		
Serial numbers eligible	185-0968 through 185-1149 (1966 model) 185-1150 through 185-1300 (1967 model) 185-1301 through 185-1447 (1968 model) 185-1448 through 185-1599 (1969 model) 18501600 through 18501934 (1970 and 1971 models) 18501935 through 18502090 (1972 model)																				

**IV. Model A185F, Skywagon and AGcarryall, 6 PCL-SM (Normal Category), approved October 6, 1972,
(See Note 6), 2 PCLM (Restricted Category), approved October 16, 1973**

Engine	Continental IO-520-D
*Fuel	100/130 minimum grade aviation gasoline (S/N 18502091 through 18503153) 100LL/100 minimum grade aviation gasoline (S/N 18503154 and up)
*Engine limits	Takeoff (5 min.) at 2850 rpm (300 hp) Maximum continuous 2700 rpm (285 hp)
Propeller and propeller limits	<u>Landplane - Skiplane</u> 1. (a) McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-4 blades (S/N 652, 18502091 through 18503938) Diameter: not over 86 in., not under 84.5 in. Pitch settings at 36 in. sta.: Low 8°, high 25° (b) Cessna spinner 0752042 (c) Governor, Edo-Aire 34-828-01-1. Woodward A210462. McCauley C290D2/T9 or C290D3/T9

IV. Model A185F (cont'd)Propeller and Propeller Limits
(cont'd)

2. (a) McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-8 blades (S/N 652, 18502091 through 18503938)
Diameter: not over 82 in., not under 80.5 in.
Pitch settings at 36 in. sta.:
Low 9.5°, high 25.8°
 - (b) Cessna spinner 0752042
 - (c) Governor, Edo-Aire 34-828-01-1. Woodward A210462.
McCauley C290D2/T9 or C290D3/T9
 3. (a) McCauley D3A34C403/80VA-0 (*see Note 9*)
Diameter: not over 80 in., not under 78.5 in.
Pitch settings at 30 in. sta.:
Low 10.6°, high 25.6°
 - (b) Cessna spinner 0750286
 - (c) Governor, McCauley C290D2/T9 or C290D3/T9
- Floatplane - Amphibian
1. (a) McCauley D2A34C58 hub or D2A34C48-0 (oil filled) hub with 90AT-4 blades (S/N 652, 18502091 through 18503938)
Diameter: not over 86 in., not under 84.5 in.
Pitch settings at 36 in. sta.:
Low 8°, high 25°
 - (b) Cessna spinner 0752042
 - (c) Governor, Edo-Aire 34-828-01-1. Woodward A210462.
McCauley C290D2/T9 or C290D3/T9
2. (a) McCauley D3A34C403/80VA-0 (*See Note 9*)
Diameter: not over 80 in., not under 78.5 in.
Pitch settings at 30 in. sta.:
Low 10.6°, high 25.6°
 - (b) Cessna spinner 0750286
 - (c) Governor, McCauley C290D2/T9 or C290D3/T9

*Airspeed Limits
(CAS)

(Normal Category)

S/N 18502091 through 18502838 except 18502300

Landplane, 628-2960 Floatplane and 597-2790 Amphibian:

(See additional limitation for restricted category.)

Never exceed	210 mph (182 knots)
Maximum structural cruising	170 mph (148 knots)
Maneuvering (landplane)	135 mph (117 knots)
(Floatplane with EDO 628-2960)	134 mph (116 knots)
(Amphibian with EDO 597-2790)	133 mph (115 knots)
Flaps extended	110 mph (96 knots)

(IAS)

S/N 18502300, 18502839 through 18503938

Landplane, 628-2960 Floatplane and 597-2790 Amphibian:

(See additional limitation for restricted category.)

Never exceed	182 knots (209 mph)
Maximum structural cruising	146 knots (168 mph)
Maneuvering (landplane)	118 knots (136 mph)
(Floatplane with EDO 628-2960)	114 knots (131 mph)
(Amphibian with EDO 597-2790)	115 knots (132 mph)
Flaps extended	10° 120 knots (138 mph)
	20° - 40° 90 knots (104 mph)

IV. Model A185F (cont'd)
(IAS) (cont'd)

	S/N 18503939 and on		
	Landplane, 628-2960 Floatplane and 597-2790 Amphibian: (See additional limitation for restricted category.)		
	Never exceed	184 knots (212 mph)	
	Maximum structural cruising	149 knots (171 mph)	
	Maneuvering (landplane)	117 knots (135 mph)	
	(Floatplane wit EDO 628-2960)	117 knots (135 mph)	
	(Amphibian with EDO 597-2790)	117 knots (135 mph)	
	Flaps extended	10°	120 knots (138 mph)
		20°	110 knots (127 mph)
		30° - 40°	90 knots (104 mph)
C.G. range	<u>Landplane, Skiplane, Restricted Category:</u> (+41.9) to (+46.5) at 3350 lbs. (+34.5) to (+46.5) at 2100 lbs. or less		
	<u>Floatplane with EDO 628-2960 (Normal Category Only)</u> (+41.7) to (+46.5) at 3320 lbs. (+34.8) to (+46.5) at 2150 lbs. or less		
	<u>Amphibian with EDO 597-2790 (Normal Category Only)</u> (+41.7) to (+46.5) at 3265 lbs. (wheels, takeoff only) (+40.5) to (+46.5) at 3100 lbs. (+36.0) to (+46.5) at 2500 lbs. or less Straight line variation between points given.		
Empty weight C.G. range	None		
*Maximum weight	<u>Landplane or Skiplane:</u>	3350 lb.	
	<u>Floatplane:</u>	EDO 628-2960 - 3320 lbs.	
	<u>Amphibian:</u>	3265 lb. (wheels, takeoff only) 3100 lbs. (all other configurations)	
Number of seats (maximum)	6 (2 at +36 to +50, 2 at +65 or +73, 2 at +97) (Normal Category) See additional limitations for restricted category.		
Maximum baggage	Reference weight and balance data.		
Fuel capacity	65 gal. (62 gal. usable, two 32.5 gal. tanks in wings at +48) through S/N 18502262 61 gal. (58 gal. usable, two 30.5 gal. tanks in wings at +48) S/N 18502263 through 18502838 except 18502300 61 gal. (55 gal. usable, two 30.5 gal. tanks in wings at +48) S/N 18502839 through 18503683 88 gal. (84 gal. usable, two 44.0 gal. tanks in wings at +46.5) S/N 18502300, 18503684 and on		
Oil capacity	12 qt. (-17.5) (6 qt. usable) (S/N 652, 18502091 through 18504328) 13 qt. (-16.0) (6 qt. usable) (S/N 18504329 and on) See Note 1 for data on system fuel and oil.		
Control surface movements	Wing flaps		Down 40° +0° -2°
	Ailerons	Up 20° ± 2°	Down 14° ± 2°
	Stabilizer	Up 0° 45' +45' -15'	Down 8° 30' ± 15'
	Elevator (with stabilizer full down)	Up 25° ± 1°	Down 23° ± 1°
	Rudder (parallel to W.L. or perpendicular to hinge line)	Right 24° +0° -1°	Left 24° +0° -1°

Additional Limitations for Restricted Category when 0701062 installation is installed

*Airspeed limits (CAS)	S/N 18502091 through 18502838 except 18502300 Maximum operating speed	150 mph (130 knots)
(IAS) <i>See Note 7 on use of IAS.</i>	S/N 18502300, 18502839 and on Maximum operating speed	135 knots
Maximum weight and C.G. range	Same as for the landplane	
Number of seats	6 (only two at +36 may be occupied during restricted category operation)	
Serial numbers eligible	652, 18502091 through 18502310 except 18502300 (1973) (Normal) 18502311 through 18502565 (1974) (Normal and/or Restricted) 18502566 through 18502838 (1975) (Normal and/or Restricted) 18502839 through 18503153 (1976) (Normal and/or Restricted) 18503154 through 18503458 (1977) (Normal and/or Restricted) 18503459 through 18503683 (1978) (Normal and/or Restricted) 18502300, 18503684 through 18503938 (1979) (Normal and/or Restricted) 18503939 through 18504138 (1980) (Normal and/or Restricted) 18504139 through 18504328 (1981) (Normal and/or Restricted) 18504329 through 18504394 (1982) (Normal and/or Restricted) 18504395 through 18504415 (1983) (Normal and/or Restricted) 18504416 through 18504424 (1984) (Normal and/or Restricted) 18504425 through 18504448 (1985) (Normal and/or Restricted)	

Data Pertinent to All Models

Datum	Fuselage station 0.0 (front face of firewall)	
Leveling means	Upper door sill	
Certification basis	<p>Part 3 of the Civil Air Regulations effective May 15, 1956, as amended by 3-1 through 3-5 (Normal Category). In addition, effective S/N 18502300, 18503684 and on, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-6 for S/N 18502300, 18503459 and on. Part 21.25 of the Federal Aviation Regulations dated February 1, 1965, (Restricted Category). In addition, effective S/N 18504425 and on, FAR 23.1545(a) of Amendment 23-23 dated December 1, 1978.</p> <p>Application for Type Certificate dated April 22, 1960.</p> <p>Type Certificate No. 3A24 issued January 31, 1961.</p>	
	<u>Equivalent Safety Items</u>	S/N 18502300, 18502839 and on
	Airspeed Indicator	CAR 3.757 (<i>See Note 7</i>) (S/N 18502300, 18502839 through 18504424)
	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.	

Data Pertinent to All Models (cont'd)

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 18502300, 18503684 and on, and in addition the following item of equipment is required:

1. Stall warning indicator, Cessna Dwg. 0511062 through S/N 185-1197, and 185-1200.
2. Stall warning indicator, Cessna Dwg. 0700185 effective S/N 185-1198, 185-1199, and 185-1201 and on.

NOTE 1. Current weight and balance report including list of equipment included in the 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 center of gravity locations must include unusable fuel of 36 lb. at +46 with three-way valve (18 lb. with the on-off valve only) and undrainable oil of 0.0 lb. at -17.5 through S/N 18502566 except 18502300.

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 36 lb. at +46 and undrainable oil of 0.0 lb. at -17.5. (S/N 18502567 through 18502838).

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 36 lb. at +46 and full engine oil of 22.5 at -17.5 (S/N 18502839 through 18503683 and aircraft with bladder fuel tanks 18504139 through 18504328).

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 24 lb. at +48 and full engine oil of 22.5 lb. at -17.5 (S/N 18502300, 18503684 through 18504328).

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 24 lb. at +48 (integral fuel cells) or 36 lb. at +46 (bladder fuel tanks) and full engine oil of 24.4 lbs. at -16.4 (S/N 18504329 and on).

- NOTE 2. A. On Models 185, 185A, 185B, 185C, 185D, 185E, and A185E:
- (1) The following placards must be displayed in full view of the pilot:
 - (a) "This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings, and manuals."
 - (b) "No acrobatic maneuvers, including spins, approved."
 - (c) Model 185, 185A, 185B, 185C and 185D
"Maximum maneuvering speed 136 mph - TIAS."
Model 185E and A185E
"Maximum maneuvering speed 138 mph - TIAS" (S/N 185-0968 through 185-1235)
"Maximum maneuvering speed 139 mph - TIAS" (S/N 185-1236 and up)
 - (d) Model 185, 185A, 185B, 185C and 185D
"Maximum design weight - 3200 lb."
Model 185E and A185E
"Maximum design weight - (Insert 3300 or 3350 lb. dependent on S/N reference NOTE 3)"
 - (e) "Maximum altitude loss in stall recovery 150 ft."
 - (f) "Maximum flight maneuvering load factors

Flaps Up	+3.8	-1.52
Flaps Down	+3.5"	

Data Pertinent to All Models (cont'd)

- NOTE 2. A. On Models 185, 185A, 185B, 185C, 185D, 185E, and A185E (cont'd):
- (2) The following additional placard must be displayed in full view of the pilot when floats are installed:
 - (a) "Maximum design weight - 3190 lb. (amphibian 3100 lb.)" (*See Note 3*)
 - (b) "Maximum altitude loss in stall recovery - 130 ft."
 - (c) "Avoid sideslips with flaps extended."
 - (3) The following placard must be installed on the flap extension handle:
 - (a) "Flaps - Pull to extend

Retracted	0°
Takeoff - 1st Notch	10°
2nd Notch	20°
Landing - 3rd Notch	30°
4th Notch	40°
 - (4) The following placard must be installed on the control lock:
 - (a) "Control lock - Remove before starting engine."
 - (5) The following placard must be installed adjacent to the fuel valve:
 - (a) Models 185 and 185A "Fuel on-off 62 gals."
 - (b) Models 185B and 185C "Fuel Push On Capacity 62 gals."
 - (c) Models 185D, 185E and A185E "Fuel Valve 62 gals.
Usable Push On"
 - (6) The following placard must be installed on or adjacent to the fuel filler cap:
 - (a) "Fuel tank capacity 32.5 U.S. gal."
 - (7) When floats are installed, the following placards must be installed adjacent to the water rudder retraction control:
 - (a) "Water Rudder - Extend."
 - (b) "Water Rudder - Retract Takeoff and Landing."
 - (8) When amphibian floats are installed, the following placards must be installed adjacent to the landing gear control:
 - (a) "Gear up on water and in air."
 - (b) "Gear down on land."
 - (c) "Emergency operation:
 1. "Do not land on water unless gear is fully retracted."
 2. "If engine driven hydraulic pump when installed fails, use hand-operated hydraulic pump to retract and extend gear. Land on sod if gear position is unknown."

Data Pertinent to All Models (cont'd)

- NOTE 2. A. On Models 185, 185A, 185B, 185C, 185D, 185E, and A185E (cont'd):
- (9) The following placard must be located in the baggage compartment:
"Refer to weight and balance data for baggage/cargo loading."
 - (10) The following placard must be located adjacent to the ammeter on the Model 185E and A185E, S/N 18501600 and up:
"Do not turn off alternator in flight except in emergency."
 - (11) The following placard must be installed in full view of the pilot on the Models 185E and A185E, S/N 18501833 and up:
"Known icing conditions to be avoided."

Data Pertinent to All Models (cont'd)

NOTE 2. (cont'd):

B. On Models A185F and on:

(1) The following placards must be displayed as indicated:

(a) In full view of the pilot (S/N 652, 18502091 through 18502310 except 18502300)

1. "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		
	Landplane	Amphibian EDO 597-2790	Floatplane EDO 628-2960
Maneuvering speed (CAS)	135 mph (117 knots)	133 mph (115 knots)	134 mph (116 knots)
Gross weight			
Takeoff	3350 lb.	3100 lb. (water) 3265 lb. (land)	3320 lb.
Landing	3350 lb.	3100 lb. (both)	3320 lb.
Flight load factor	Flaps Up +3.8, -1.52		Flaps Down +2.0

Avoid slips with flaps extended on amphibian or floatplane. 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 date of original airworthiness certificate:

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

2. (S/N 18502311 through 18502838)

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. For restricted category operations refer to additional placards and limitations."

	MAXIMUMS		
	Landplane	Amphibian EDO 597-2790	Floatplane EDO 628-2960
Maneuvering speed (CAS)	135 mph (117 knots)	133 mph (115 knots)	134 mph (116 knots)
Gross weight			
Takeoff	3350 lb.	3100 lb. (water) 3265 lb. (land)	3320 lb.
Landing	3350 lb.	3100 lb. (both)	3320 lb.
Flight load factor	Flaps Up +3.8, -1.52		Flaps Down +2.0

Avoid slips with flaps extended on amphibian or floatplane. 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 date of original airworthiness certificate:

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

Data Pertinent to All Models (cont'd)

NOTE 2. B. On Models A185F and on (cont'd):

- 3. (S/N 18502839 through 18503683)
 "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. For restricted category operations refer to additional placards and limitations.

	MAXIMUMS		
	Landplane	Amphibian EDO 597-2790	Floatplane EDO 628-2960
Maneuvering speed (CAS)	118 knots	115 knots	114 knots
Gross weight			
Takeoff	3350 lb.	3100 lb. (water) 3265 lb. (land)	3320 lb.
Landing	3350 lb.	3100 lb. (both)	3320 lb.
Flight load factor	Flaps Up +3.8, -1.52		Flaps Down +2.0

Avoid slips with flaps extended on amphibian or floatplane. No acrobatic maneuvers, including spins, approved. Altitude loss in stall recovery 200 feet. 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)

- 4. (S/N 18502300, 18503684 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) Upper right hand corner of instrument panel (through S/N 18503153 except 18502300):
 "Fuel flow at full throttle

	<u>2850 rpm</u>	<u>2700 rpm</u>
S.L.	24	23
4000 ft.	22	21
8000 ft.	20	19"

Lower left hand edge of instrument panel (S/N 18503154 through 18503683)

"Maximum power settings and fuel flow
 Takeoff (5 min. only) 2850 rpm, maximum continuous power 2700 rpm,
 Fuel flows at full throttle

R.P.M.	S.L.	4000	8000	12000
2700	23 g.p.h.	21 g.p.h.	19 g.p.h.	17 g.p.h.
2850	24 g.p.h.	22 g.p.h.	20 g.p.h.	18 g.p.h."

Data Pertinent to All Models (cont'd)NOTE 2. B. On Models A185F and on (cont'd):

Near fuel flow/manifold pressure gauge (S/N 18502300, 18503684 and on):

R.P.M.	Minimum fuel flows at full throttle			
	S.L.	4000	8000	12000
2700	23 g.p.h.	21 g.p.h.	19 g.p.h.	17 g.p.h.
2850	24 g.p.h.	22 g.p.h.	20 g.p.h.	18 g.p.h."

- (c) On the flap lever: "Flaps - Pull to extend
- | | |
|-------------------|-----|
| Retracted | 0° |
| Takeoff 1st Notch | 10° |
| 2nd Notch | 20° |
| Landing 3rd Notch | 30° |
| 4th Notch | 40° |
- (d) Adjacent to the fuel valve:
- (Standard range tanks without tank selector): "Fuel valve 62 gal. usable push on" through S/N 18502262.
- (Standard range tanks without tank selector): "Fuel valve 58 gal. usable push on" effective S/N 18502263 through 18503154 except 18502300.
- (Standard range tanks with tank selector): "Fuel valve 59 gal. usable push on" through S/N 18502262.
- (Standard range tanks with tank selector): "Fuel valve 55 gal. usable push on" effective S/N 18502263 through 18503683 except 18502300; S/N 18504139 and on.
- (Long range tanks): "Fuel valve 78 gal. usable push on" through S/N 18502262.
- (Long range tanks): "Fuel valve 74 gal. usable push on" effective S/N 18502263 through 18503683 except 18502300; S/N 18504139 and on.
- (Integral fuel cells): "Fuel valve 84 gal. usable push on" S/N 18502300, 18503684 and on.
- (e) On fuel selector plate:
- (Standard range tanks): "Both on, 59 gal., use both tanks for takeoff and landing; right tank 29.5 gal.; left tank 29.5 gal." through S/N 18502262.
- (Standard range tanks): "Both on, 55 gal, use both tanks for takeoff and landing; right tank 27.5 gal.; left tank 27.5 gal." effective S/N 18502263 through 18503683 except 18502300; S/N 18504139 and on.
- (Long range tanks): "Both on, 78 gal., use both tanks for takeoff and landing; right tank 39 gal.; left tank 39 gal." through S/N 18502262.
- (Long range tanks): "Both on, 74 gal., use both tanks for takeoff and landing; right tank 37 gal.; left tank 37 gal." effective S/N 18502263 through 18503683 except 18502300; S/N 18504139 and on.
- (Integral fuel cells): "Both, 84 gal., use both tanks for takeoff and landing; right tank 40 gal., left tank 40 gal." effective S/N 18502300, 18503684 through 18504328.
- (Integral fuel cells): "Both, 84 gal., takeoff, landing, left 40 gal., right 40 gal.," effective S/N 18504329 and on.

Data Pertinent to All Models (cont'd)

NOTE 2.

B. On Models A185F and on (cont'd):

- (f) Forward of fuel selector: (S/N 652, 18502191 through 18502310 except 18502300)
 "When switching from dry tank turn pump on 'HI' momentarily"
 (S/N 18502300, 18502311 and up)
 "When switching from dry tank turn aux. fuel pump 'ON' momentarily"
- (g) Forward of fuel tank filler cap:
 (Standard range tanks): "Service this airplane with 100/130 min. aviation grade gasoline - capacity 32.5 gal." Through S/N 18502262.
 (Standard range tanks): "Service this airplane with 100/130 min. aviation grade gasoline - capacity 30.5 gal." effective S/N 18502263 through S/N 18503458 except 18502300.
 (Standard range tanks): "Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 30.5 gal." effective S/N 18503459 through 18503683; S/N 18504139 and on.
 (Standard range tanks): "Fuel cap. fwd. - arrow alignment, cap must not rotate during closing." effective S/N 18502300, 18503684 and on:
 (Long range tanks): "Service this airplane with 100/130 min. aviation grade gasoline - capacity 42.0 gal." through S/N 18502262.
 (Long range tanks): "Service this airplane with 100/130 min. aviation grade gasoline - capacity 40.0 gal." effective S/N 18502263 through S/N 18503458 except 18502300.
 (Long range tanks): "Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 40.0 gal." effective S/N 18503459 through 18503683; S/N 18504139 and on.
 (Long range tanks): "Fuel cap fwd. - arrow alignment, cap must not rotate during closing." effective S/N 18502300, 18503684 and on.
 (Integral fuel cells): "Fuel - 100LL/100 Min. grade aviation gasoline - cap. 44.0 U.S. gal. - cap. 34.5 U.S. gal. to bottom of filler collar" effective S/N 18502300, 18503684 and on.
 (Integral fuel cells): "Fuel cap fwd. - arrow alignment, cap must not rotate during closing." effective S/N 18502300, 18503684 and on.
- (h) On control lock: "Control lock - remove before starting engine." through S/N 18504328.
 On control lock: "Caution! Control Lock Remove before Starting Engine" effective S/N 18504329 and on.
- (i) On inside of baggage door: "Refer to weight and balance data for baggage/cargo loading."
- (j) Additional placards if floats are installed:
 1. Applicable to floatplanes with long range fuel tanks:
 (at inbd fuel filler cap) "Service this airplane with 100/130 min. aviation grade gasoline - capacity 37.0 gal." through S/N 18502262.
 (at inbd fuel filler cap) "Service this airplane with 100/130 min. aviation grade gasoline - capacity 35.0 gal." through 18503458 except 18502300.
 (at inbd fuel filler cap) "Service this airplane with 100LL/100 min. aviation grade gasoline - capacity 35.0 gal." effective S/N 18503459 through 18503683; S/N 18504139 and on.
 (at inbd fuel filler cap) "Fuel cap fwd. - arrow alignment, cap must not rotate during closing." effective S/N 18502300, 18503684 and on.
 (at outbd fuel filler cap) "Service this airplane with 100/130 min. aviation grade gasoline - capacity 42.0 gal." through S/N 18502262.
 (at outbd fuel filler cap) "Service this airplane with 100/130 min. aviation grade gasoline - capacity 40.0 gal." effective S/N 18502263 through 18503683 except 18502300.

Data Pertinent to All Models (cont'd)

NOTE 2.

B. On Models A185F and on (cont'd):

2. Near water rudder control:
 - "Water rudder extend"
 - "Retract water rudder"
 - "Water rudder always up except water taxiing."
3. Applicable to amphibian floatplanes:
 - a. 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."
 - b. 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."
4. On instrument panel for floatplane and amphibian:
(S/N 18502566 and on and aircraft modified by Service Kit SK185-16)
 - Through S/N 18502718
except 18502300
 - WARNING
 - "In floatplane and amphibian retract flaps to 20° immediately after applying power for balked landing go around."
 - S/N 18502719 and on
 - "In floatplane, amphibian and skiplane retract flaps to 20° immediately after applying power for balked landing go around."
5. On instrument panel for floatplane and amphibian:
S/N 18502300,
18503684 and on
 - "In floatplane, amphibian and skiplane avoid slips with flaps extended."
6. On instrument panel for floatplane and amphibian:
S/N 18502300,
18503684 through
18503938 and minimum fuel. Check weight and balance."
 - "CAUTION: When floats are installed it is possible to exceed max. gross weight with all seats occupied"

Data Pertinent to All Models (cont'd)

NOTE 2.

B. On Models A185F and on (cont'd):

- (k) Additional placards if skis are installed:
1. On instrument panel: "Avoid slips with flaps extended while on skis."
 2. Applicable to skiplane with retractable skis:
(on instrument panel) (S/N 18502311 through 18502838)
"Do not extend or retract skis at speeds above 140 mph."
"Do not extend or retract skis while in motion on the ground."
(S/N 18502839 and on)
"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: (S/N 18502566 and on, and aircraft modified by Service Kit SK185-16)
Through S/N 18502718
except 18502300
S/N 18502719 and on
WARNING
"In floatplane and amphibian retract flaps to 20° immediately after applying power for balked landing go around."
"In floatplane, amphibian and skiplane retract flaps to 20° immediately after applying power for balked landing go around."
 4. On instrument panel:
S/N 18502300,
18503684 and on
"In floatplane, amphibian and skiplane avoid slips with flaps extended."
- (l) Near airspeed indicator:
(S/N 18502839 through 18503683)
"Maximum speed IAS
Flaps 10° 120 knots
Flaps 20° - 40° 90 knots"

(S/N 18502300, 18503684 through 18503938)
"Maximum Speed"
Maneuver 116 KIAS
Flaps 10° 120 KIAS
Flaps 20° - 40° 90 KIAS

(S/N 18503939 and on)
"Maximum Speed"
Maneuver 117 KIAS
Flaps 10° 120 KIAS
Flaps 20° 110 KIAS
Flaps 30° - 40° 90 KIAS"
- (m) On instrument panel near RNAV 511 when installed:
(S/N 18502300, 18503684 through 18504328)
"RNAV for VFR flight only. Tune DME and NAV 1 to same vortac for RNAV operation."

Data Pertinent to All Models (cont'd)

NOTE 3. Model A185E Landplanes, S/N 185-1236 and on, are approved at maximum weight of 3350 lb. Model A185E Floatplanes, S/N 185-1236 and on, equipped with Model EDO 628-2960 floats are approved at maximum weight of 3320 lb.

Model A185E Landplanes, S/N 185-0968 through 185-1235, are eligible for maximum weights increase from 3300 lb. to 3350 lb. by accomplishing items A., B., and C. below. Model A185E Floatplanes, S/N 185-0968 through 185-1235, equipped with Model EDO 628-2960 floats are approved at 3320 lb. and must be modified in accordance with items A., B., and C. below.

- A. Install Operational Limitations Placard Cessna P/N 1205001-59; and
- B. The airplane Weight and Balance form and loading information must be changed to include the increased maximum weight; and
- C. Incorporate appropriate markings in the Owner's Manual.
 - (1) Appropriate markings for Landplanes include:
 - a. Change all of the maximum weight figures in the Owner's Manual to 3350 lbs.
 - b. Extend the Center of Gravity Moment Envelope to 3350 lbs. by projecting the sides of the illustrated envelope.
 - c. The effect of the weight increase on performance is as follows:
 - Take-Off Distance = Increase by 4%
 - Rate Of Climb = Reduce by 30 FPM
 - Speed Change = Negligible
 - (2) Appropriate markings for Floatplanes equipped with Model EDO 628-2960 floats include:
 - a. Change all of the maximum weight figures in the Owner's Manual to 3320 lbs.
 - b. Extend the Center of Gravity Moment Envelope to 3320 lbs. by projecting the sides of the illustrated envelope.
 - c. The effect of the weight increase on performance is as follows:
 - Take-Off Distance = Increase by 4%
 - Rate Of Climb = Reduce by 20 FPM
 - Speed Change = Negligible

NOTE 4. Cylinder head temperature probe location
 No. 2 Cylinder, S/N 185-0001 through 185-0744
 No. 1 Cylinder, S/N 185-0745 through 18503458 except 18502300
 No. 3 Cylinder, S/N 18502300, 18503459 and on

NOTE 5. Restricted category placards, (S/N 18502311 and on)

- A. (On instrument panel near airspeed indicator) (S/N 18502311 through 18502838)
 "Maximum speed with spray booms installed is 150 mph (130 knots)."
 (S/N 18502300, 18502839 and up)
 "Maximum speed with spray booms installed is 135 KIAS."
 "With spray tank installed, stall speeds are 5 KIAS higher than shown on airspeed indicator."
- B. (On instrument panel near spray controls) operations with either spray booms installed or with material in the spray tank. During restricted category operations only the front seats may be occupied."
 "This aircraft is not certified for normal category operations with either spray booms installed or with material in the spray tank. During restricted category operations only the front seats may be occupied."
- C. (On side window) "RESTRICTED"

Data Pertinent to All Models (cont'd)

NOTE 5.

(cont'd)

- D. (In full view of pilot)
(Replaces Normal Category
Operations & Limitations Placard)
- (S/N 18502300, 18503684 and up)
"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 or in the Restricted Category are contained in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

Refer to Weight and Balance data for loading instructions.

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

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

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

NOTE 6. The cargo pod is not eligible for installation on A185F airplanes with the factory installed float installation. Each STC for float approval must be evaluated for float/cargo pod compatibility.

NOTE 7. 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:

A185F, Cessna P/N D1063-13	(S/N 18502839 through 18503153)
A185F, Cessna P/N D1088-13	(S/N 18503154 through 18503458)
A185F, Cessna P/N D1116-13	(S/N 18503459 through 18503683)
A185F, Cessna P/N D1144-13PH	(S/N 18502300, 18503684 through 18503938)
A185F, Cessna P/N D1179-13PH	(S/N 18503939 through 18504138)
A185F, Cessna P/N D1200-13PH	(S/N 18504139 through 18504328)
A185F, Cessna P/N D1219-13PH	(S/N 18504329 through 18504394)
A185F, Cessna P/N D1237-13PH	(S/N 18504395 through 18504415)
A185F, Cessna P/N D1258-13PH	(S/N 18504416 through 18504424)

NOTE 8. 14-volt Electrical System
(185 series through S/N 18503458 except 18502300)

28-volt Electrical System
(185 series S/N 18502300, 18503459 and on)

NOTE 9. D3A34C403/80VA-O propeller must be installed per Cessna Service Letter SE79-62.

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

.....END.....