DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	3A10
Rev	rision 62
C	ESSNA
310	310J
310A(USAF U-3A)	310J-1
310B	E310J
310C	310K
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310E(USAF U-3B)	310N
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	T310R
February 2	22, 2005

TYPE CERTIFICATE DATA SHEET NO. 3A10

This data sheet which is part of Type Certificate No. 3A10 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 310 (Normal Category), Approved March 22, 1954

Engines 2 Continental O-470-B or O-470-M (installed per Cessna Dwg. 0850000, 0951560,

0851000 and 0851755)

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (240 hp.)

Propeller and (a) Hartzell hub HC82XF or HC-A2XF-2 68 lb. ea. (-25)

Propeller Limits with 8433 blades

Diameter: not over 84 in., not under 78 in.

Pitch settings at 30 in. sta.:

low 12.5° , high 22.0° , feathered 82.0°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17)

210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Hartzell C-888 dome with 4 lb. ea. (-23)

C-807-1 bulkhead or

Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead

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I - Model 310 (cont'd)

*Airspeed Limits Maneuvering 159 m.p.h. (138 knots)
(TIAS) Maximum structural cruising 200 m.p.h. (173 knots)
Never exceed 246 m.p.h. (214 knots)
Flaps extended 130 m.p.h. (113 knots)

Landing gear extended 130 m.p.h. (113 knots)

*C.G. Range (Landing (+36.0) to (+41.5) at 4600 lb. Gear Extended) (+33.9) to (+42.1) at 4240 lb.

(+32.0) to (+42.1) at 3900 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight 4600 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for

optional seating arrangements.

Maximum Baggage 200 lb. (+96)

See NOTE 2G for placard.

Anti-Icing Fluid

Capacity

4-1/2 qt. (7 lb. at +47)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35)

See NOTE 1 for data on system fuel

Oil Capacity 24 qt. (12 qt. in each engine at (0), 6 qt. unusable per engine)

See NOTE 1 for data on system oil

Control Surface Down 45° Wing flaps Movements Main surfaces Aileron 20° Up 20° Down Elevator 15° Up 25° Down Rudder Right 25° Left 25° Tabs (main surface in neutral) Aileron 20° 20° Up Down

Elevator Up 20° Down 28° Rudder Right 20° Left 26°

Serial Nos. Eligible 35000 through 35546. Delegation Option Manufacturer No. CE-1 authorized to issue

airworthiness certificates for S/N 35216 through 35546 and approve repairs and alterations of airplanes S/N 35000 through 35546 under delegation option provisions of

Part 21 of the Federal Aviation Regulations.

II - Model 310A (USAF U-3A) (Normal Category), Approved April 9, 1957

Engines 2 Continental O-470-M

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (240 hp.)

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II - Model 310A (cont'd)						
Propeller and Propeller Limits	 (a) Hartzell hub HC82 with 8433 blades Diameter: not ove Pitch settings at 30 low 12.5°, high 2. (b) Hydraulic governo 210280, 210444, A McCauley DCFU2 (c) Propeller spinner, l C-807-1 bulkhead Cessna 0752006 do Cessna 0850311 do 	ceathering propeller installations Hartzell hub HC82XF-2 or HC-A2XF-2 with 8433 blades Diameter: not over 84 in., not under 78 in. Pitch settings at 30 in. sta.: low 12.5°, high 22.0°, feathered 82.0° Hydraulic governor, Woodward 210105, 210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2 Propeller spinner, Hartzell C-888 dome with C-807-1 bulkhead or Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead				
*Airspeed Limits (TIAS)	Maneuvering Maximum structural cruising Never exceed Flaps extended Landing gear extended		164 m.p.h 200 m.p.h 248 m.p.h 140 m.p.h	. (173 kı . (215 kı . (122 kı	nots) nots) nots)	
*C.G. Range (Landing Gear Extended)	(+37.3) to (+42.1) at 4830 lb (+32.0) to (+42.1) at 3900 lb Straight line variation between	or less	given			
Empty Wt. C.G. Range	None					
*Maximum Weight	Landing 4600 lb., takeoff 48	30 lb.				
No. of Seats	5 (Std.) (2 at +37, 3 at +71) optional seating arrangement		ıfacturer's V	Veight an	nd Balance data sheet for	
Maximum Baggage	200 lb. (+96) See NOTE 2G for placard					
Anti-Icing Fluid Capacity	4-1/2 qt. (7 lb.) (+47)					
Fuel Capacity	102 gal. (2 wing tip tanks, 51 See NOTE 1 for data on unu					
Oil Capacity	24 qt. (12 qt. in each engine see NOTE 1 for data on und			per engir	ne)	
Control Surface Movements	Wing flaps Main surfaces Aileron Elevator Rudder Tabs (main surface in neutra Aileron Elevator	Up Up Right) Up Up	20° 20°	Down Down Left Down Down Loft	45° 20° 15° 25° 20° 28° 26°	

Serial Nos. Eligible 38001 through 38161. Production Certificate No. 4 effective. Prior to civil certification U-3A airplanes must be modified in accordance with Cessna Dwg. 0800203 or Service Kit SK310-85, which may be obtained from the manufacturer. An FAA representative upon determination of compliance with the above mentioned modification drawing may issue an airworthiness certificate.

Left 26°

Right 20°

Rudder

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III - Model 310B (Normal Category), Approved May 23, 1957

Engines 2 Continental O-470-M

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2600 r.p.m. (240 hp.)

Propeller and 2 full-feathering propeller installations 68 lb. ea. (-25)

Propeller Limits (a) Hartzell hub HC82XF-2 or HC-A2XF-2

with 8433 blades

Diameter: not over 84 in., not under 78 in.

Pitch settings at 30 in. sta.:

low 12.5°, high 22.0°, feathered 82.0°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17)

210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Hartzell C-888 dome with 4 lb. ea. (-23)

C-807-1 bulkhead or

Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead

*Airspeed Limits Maneuvering 164 m.p.h. (143 knots) (TIAS) Maximum structural cruising 200 m.p.h. (173 knots)

Never exceed 248 m.p.h. (215 knots)
Flaps extended 140 m.p.h. (122 knots)
Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing (+36.6) to (+42.1) at 4700 lb. Gear Extended) (+32.0) to (+42.1) at 3900 lb. or less

Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 4600 lb., takeoff 4700 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for

optional seating arrangements.

Maximum Baggage 200 lb. (+96)

See NOTE 2G for placard

Anti-Icing Fluid 4-1/2 qt. (7 lb.) (+47) Capacity

Capacity

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (0), 6 qt. unusable per engine)

See NOTE 1 for data on undrainable oil

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III - Model 310B (cont'd)

Control Surface Wing flaps 45° Down Movements Main surfaces Aileron 20° 20° Up Down Elevator 25° Down 15° Up Rudder Right 25° Left 25° Tabs (main surface in neutral) 20° Aileron 20° Down Up Down 28° Elevator 20° Up Rudder Left 26° Right 20°

Serial Nos. Eligible 607, 35547, 35548, 35549, 35551 through 35771. Production Certificate No. 4 effective.

IV - Model 310C (Normal Category), Approved October 22, 1958

Engines 2 Continental IO-470-D

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and Propeller Limits

. 2 full-feathering propeller installations 68 lb. ea. (-25)

(a) Hartzell hub HC82XF-2 or HC-A2XF-2

with 8433 blades

Diameter: not over 84 in., not under 78 in.

Pitch settings at 30 in. sta.:

low 13.5°, high 22.0°, feathered 82.0°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17) 210280, 210444, A210438, 210290 or C210355;

McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Hartzell C-888 dome 4 lb. ea. (-23)

with C-807-1 bulkhead or

Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead

2. 2 full feathering propeller installations 68 lb. ea. (-25)

(a) McCauley hub D2AF36C48 with 90MF-10 blades

Diameter: not over 80 in., not under 78 in.

Pitch settings at 36 in. sta.: low 11°, feathered 77°

(b) Hydraulic governor, Woodward 210105,

210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, McCauley Model D2840 with D2878 bulkhead or

spinner, McCauley Model 4 lb. ea. (-23)

4 lb. ea. (-17)

Cessna 0850258 spinner with Cessna 0850257 bulkhead

0830237 bulk

*Airspeed Limits Maneuvering 164 m.p.h. (143 knots)
(TIAS) Maximum structural cruising 210 m.p.h. (183 knots)
Never exceed 248 m.p.h. (215 knots)
Flaps extended 140 m.p.h. (122 knots)
Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing Gear Extended) (+37.3) to (+42.1) at 4830 lb. (+32.0) to (+42.1) at 3900 lb. or less Straight line variation between points given 3A10 Page 6 of 42

IV - Model 310C (cont'd)

Empty Wt. C.G. Range None

*Maximum Weight Landing 4600 lb., takeoff 4830 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for

optional seating arrangements.

Maximum Baggage 200 lb. (+96)

See NOTE 2G for placard

Anti-Icing Fluid

Capacity

4-1/2 qt. (7 lb.) (+47)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Down 45°
Movements Main surfaces

Movements Main surfaces
Aileron Up 20° Down 20°

Elevator Up 25° Down 15° Rudder Right 25° Left 25° Tabs (main surface in neutral)

Serial Nos. Eligible 35550, 35772 through 35999, 39001 through 39031. Production Certificate No. 4 effective.

V - Model 310D (Normal Category), Approved July 8, 1959

Engines 2 Continental IO-470-D

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 1. 2 full-feathering propeller installations 68 lb. ea. (-25)

Propeller Limits (a) Hartzell hub HC82XF-2 or HC-A2XF-2

with 8433 blades

Diameter: not over 84 in., not under 78 in.

Pitch settings at 30 in. sta.:

low 13.5°, high 22.0°, feathered 82.0°

(b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17)

210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2,

DCFU290D2/T2

(c) Propeller spinner, Hartzell C-888 dome 4 lb. ea. (-23)

with C-807-1 bulkhead or

Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead Page 7 of 42 3A10

V - Model 310D (cont'd) Propeller (cont'd)	 2 full-feathering propeller installations (a) McCauley hub D2AF36C48 with 90N Diameter: not over 80 in., not under Pitch settings at 36 in. sta.: low 11°, feathered 77° (b) Hydraulic governor, Woodward 2101 210155, 210280, 210444, A210438, 2 or G210355; McCauley DCFU290D1 DCFU290D2/T2 (c) Propeller spinner, McCauley Model I with D2878 bulkhead or Cessna 0850258 spinner with Cessna 0850257 bulkhead 	78 in. 05, 210290 1/T2, 02840 4 lb. ea. (-17) 4 lb. ea. (-23)				
*Airspeed Limits (TIAS)	Maximum structural cruising 210 m.j Never exceed 248 m.j Flaps extended 140 m.j	p.h. (143 knots) p.h. (183 knots) p.h. (215 knots) p.h. (122 knots) p.h. (122 knots)				
*C.G. Range (Landing Gear Extended)	(+37.3) to (+42.1) at 4830 lb. (+32.0) to (+42.1) at 4060 lb. or less Straight line variation between points given					
Empty Wt. C.G. Range	None					
Maximum Weight	Landing 4600 lb., takeoff 4830 lb.					
No. of Seats	5 (Std.) (2 at +37, 3 at +71). See Manufacturer for optional seating arrangements.	's Weight and Balance data sheet				
Maximum Baggage	200 lb. (+96) See NOTE 2G for placard					
Anti-Icing Fluid Capacity	4-1/2 qt. (7 lb.) (+47)					
Fuel Capacity	102 gal. (2 wing tip tanks, 51 gal. each at +35.0 See NOTE 1 for data on unusable fuel))				
Oil Capacity	24 qt. (12 qt. in each engine at (-3.5), unusable See NOTE 1 for data on undrainable oil	6 qt. per engine)				
Control Surface Movements	Wing flaps Main surfaces Aileron Up 20° Elevator Up 25° Rudder Right 25° (Parallel to W.L.) Tabs (main surface in neutral) Aileron Up 20° Elevator Up 10° Rudder Right 17° (Parallel to W.L.)	Down 45° Down 20° Down 15° Left 25° Down 20° Down 26° Left 22°				
Serial Nos Eligible	39032 through 39264 Production Certificate N	Jo 4 effective. Prior to original c				

Serial Nos. Eligible
39032 through 39264. Production Certificate No. 4 effective. Prior to original certification of S/N 39265 through 39299 a Federal Aviation Agency representative must perform a detailed inspection for workmanship, materials and conformity with the approved technical data and a check of the flight characteristics

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Maximum Baggage

VI - Model 310E (USAF U-3B) (Normal Category), Approved September 21, 1959

2 Continental IO-470-D Engines *Fuel Grade 100 or 100LL aviation gasoline *Engine Limits For all operations, 2625 r.p.m. (260 hp.) Propeller and 2 full-feathering propeller installations 68 lb. ea. (-25) **Propeller Limits** (a) Hartzell hub HC82XF-2 or HC-A2XF-2 with 8433 blades Diameter: not over 84 in., not under 78 in. Pitch settings at 30 in. sta.: low 13.5°, high 22.0°, feathered 82.0° (b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17) 210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2 (c) Propeller spinner, Hartzell C-888 dome 4 lb. ea. (-23) with C-807-1 bulkhead or Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead 2 full-feathering propeller installations 68 lb. ea. (-25) (a) McCauley hub D2AF36C48 with 90MF-10 blades Diameter: not over 80 in., not under 78 in. Pitch settings at 36 in. sta.: low 11°, feathered 77° (b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17) 210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2 4 lb. ea. (-23) (c) Propeller spinner, McCauley Model D2840 with D2878 bulkhead or Cessna 0850258 spinner with Cessna 0850257 bulkhead *Airspeed Limits Maneuvering 167 m.p.h. (145 knots) (TIAS) Maximum structural cruising 210 m.p.h. (183 knots) Never exceed 252 m.p.h. (218 knots) Flaps extended 140 m.p.h. (122 knots) Landing gear extended 140 m.p.h. (122 knots) *C.G. Range (Landing (+38.3) to (+41.6) at 4990 lb. Gear Extended) (+35.6) to (+42.1) at 4600 lb. (+32.0) to (+42.1) at 4060 lb. or less Straight line variation between points given Empty Wt. C.G. Range None *Maximum Weight Landing 4750 lb., takeoff 4990 lb. No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for optional seating arrangements.

200 lb. (+96). See NOTE 2G for placard

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VI - Model 310E (cont'd)

Anti-Icing Fluid Capacity 4-1/2 qt. (7 lb.) (+47)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on undrainable oil

Control Surface Down 45° Wing flaps Movements Main surfaces 20° Aileron Up 20° Down 15° Elevator 25° Up Down 25° Rudder 25° Right Left (Parallel to W.L.) Tabs (main surface in neutral) Aileron Up 20° 20° Down Elevator 26° Up 10° Down

(Parallel to W.L.)

Rudder

Serial Nos. Eligible

35912A, 310M0001 through 310M0036. Production. Certificate No. 4 effective. Prior to original certification U-3B airplanes must be modified in accordance with Cessna Dwg. 0800203 or Service Kit SK310-85, which may be obtained from the manufacturer. An FAA representative upon determination of compliance with the above mentioned modification drawing may issue an airworthiness certificate.

Left 22°

VII - Model 310F (Normal Category), Approved July 25, 1960

2 Continental IO-470-D Engines

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and **Propeller Limits** 2 full-feathering propeller installations 68 lb. ea. (-25)

(a) Hartzell hub HC82XF-2 or HC-A2XF-2

with 8433 blades

Diameter: not over 84 in., not under 78 in. Pitch settings at 30 in. sta.:

low 13.5° , high 22.0° , feathered 82.0°

(b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17) 210155, 210280, 210444, A210438, 210290

Right 17°

or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Hartzell C888 dome 4 lb. ea. (-23)

with C-807-1 bulkhead or

Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead

2 full-feathering propeller installations

68 lb. ea. (-25)

(a) McCauley hub D2AF36C48 with 90MF-10 blades Diameter: not over 80 in., not under 78 in.

Pitch settings at 36 in. sta.:

low 11°, feathered 77°

VII - Model 310F (cont'd) Propeller (cont'd)	 (b) Hydraulic governor, W 210155, 210280, 21044 210290 or C210355; M DCFU290D2/T2 (c) Propeller spinner, McC with D2878 bulkhead o Cessna 0850258 spinne 0850257 bulkhead 	4 lb. ea. (-17) , 4 lb. ea. (-23)				
*Airspeed Limits (TIAS)	Maneuvering Maximum structural cruising Never exceed Flaps extended Landing gear extended	164 m.p.h. (143 knots) 210 m.p.h. (183 knots) 248 m.p.h. (215 knots) 140 m.p.h. (122 knots) 140 m.p.h. (122 knots)				
*C.G. Range (Landing Gear Extended)	(+37.3) to (+42.1) at 4830 lb. (+32.0) to (+42.1) at 4060 lb. or less Straight line variation between points given					
Empty Wt. C.G. Range	None					
*Maximum Weight	Landing 4600 lb., takeoff 4830 lb.					
No. of Seats	5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for optional seating arrangements.					
Maximum Baggage	200 lb. (+96) See NOTE 2G for	placards				
Anti-Icing Fluid Capacity	4-1/2 qt. (7 lb.) (+47)					
Fuel Capacity	102 gal. (2 wing tip tanks, 51 gal. each at +35.0) See NOTE 1 for data on unusable fuel					
Oil Capacity	24 qt. (12 qt. in each engine at (-3 See NOTE 1 for data on undraina		gine)			
Control Surface Movements	Wing flaps Main surfaces		n 45°			
	Aileron Elevator	Up 20° Dowr Up 25° Dowr				

	· · 8 F				
Movements	Main surfaces				
	Aileron	Up	20°	Down	20°
	Elevator	Up	25°	Down	15°
	Rudder	Right	25°	Left	25°
	(Parallel to W.L.)				
	Tabs (main surface in neutral)				
	A *1	т т	200	D .	200

(Parallel to W.L.)

Serial Nos. Eligible 310-0001 through 310-0016. Prior to original certification of each aircraft an FAA

representative must perform a detailed inspection for workmanship, materials and conformity with the approved technical data and a check of the flight characteristics.

310-0018 through 310-0156. Production Certificate No. 312 effective.

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VIII - Model 310G (Normal Category), Approved October 2, 1961

2 Continental IO-470-D Engines *Fuel Grade 100 or 100LL aviation gasoline *Engine Limits For all operations, 2625 r.p.m. (260 hp.) Propeller and 2 full-feathering propeller installations 68 lb. ea. (-25) **Propeller Limits** (a) Hartzell hub HC82XF-2 or HC-A2XF-2 with 8433 blades Diameter: not over 84 in., not under 78 in. Pitch settings at 30 in. sta.: low 13.5°, high 22.0°, feathered 82.0° (b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17) 210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2 (c) Propeller spinner, Hartzell C-888 dome 4 lb. ea. (-23) with C-807-1 bulkhead or Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead 2 full-feathering propeller installations 68 lb. ea. (-25) (a) McCauley hub D2AF36C48 with 90MF-10 blades Diameter: not over 80 in., not under 78 in. Pitch settings at 36 in. sta.: low 11°, feathered 77° (b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17) 210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2 4 lb. ea. (-23) (c) Propeller spinner, McCauley Model D2840 with D2878 bulkhead or Cessna 0850 spinner with Cessna 0850257 bulkhead *Airspeed Limits Maneuvering 167 m.p.h. (145 knots) Maximum structural cruising (TIAS) 210 m.p.h. (183 knots) Never exceed 252 m.p.h. (218 knots) Flaps extended 140 m.p.h. (122 knots) Landing gear extended 140 m.p.h. (122 knots) *C.G. Range (Landing (+38.3) to (+41.6) at 4990 lb. Gear Extended) (+35.6) to (+42.1) at 4600 lb. (+32.0) to (+42.1) at 4060 lb. or less Straight line variation between points given Empty Wt. C.G. Range None *Maximum Weight Landing 4750 lb., takeoff 4990 lb. No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for optional seating arrangements. Maximum Baggage 200 lb. (+96). See NOTE 2G for placard

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VIII - Model 310G (cont'd)

Anti-Icing Fluid Capacity 4-1/2 qt. (7 lb.) (+47)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on undrainable oil

Control Surface Down 45° Wing flaps Movements Main surfaces Up 20° 20° Aileron Down 15° Elevator 25° Up Down Rudder 25° Right 25° Left (Parallel to W.L.) Tabs (main surface in neutral) Aileron 20° 20° Up Down Elevator 26° Up 10° Down Right 17° Rudder Left 22°

(Parallel to W.L.)

Serial Nos. Eligible 310G0001 through 310G0156. Production Certificate No. 312 effective.

IX - Model 310H (Normal Category), Approved July 19, 1962

Engines 2 Continental IO-470-D

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and Propeller Limits 1. 2 full-feathering propeller installations 68 lb. ea. (-25)

(a) Hartzell hub HC82XF-2 or HC-A2XF-2

with 8433 blades

Diameter: not over 84 in., not under 78 in.

Pitch settings at 30 in. sta.:

low 13.5°, high 22.0°, feathered 82.0°

(b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17)

210155, 210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2,

DCFU290D2/T2

(c) Propeller spinner, Hartzell C-888 dome 4 lb. ea. (-23)

with C-807-1 bulkhead or

Cessna 0752006 dome with 0850300 bulkhead or Cessna 0850311 dome with 0850300 bulkhead or Cessna 0850313 dome with 0850300 bulkhead

2. 2 full-feathering propeller installations 68 lb. ea. (-25)

(a) McCauley hub D2AF36C48 with 90MF-10 blades

Diameter: not over 80 in., not under 78 in. Pitch settings at 36 in. sta.:

low 11°, feathered 77°

(b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17)

210155, 210280, 210444, A210438, 210290 or

C210355; McCauley DCFU290D1/T2,

DCFU290D2/T2

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IX - Model 310H

(c) Propeller spinner, McCauley Model D2840 Propeller (cont'd) 4 lb. ea. (-23)

with D2878 bulkhead or

Cessna 0850258 spinner with Cessna

0850257 bulkhead

Maneuvering *Airspeed Limits 167 m.p.h. (145 knots)

Maximum structural cruising (TIAS) 210 m.p.h. (183 knots)

Never exceed 254 m.p.h. (220 knots) Flaps extended 140 m.p.h. (122 knots) Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing (+37.3) to (+42.2) at 5100 lb. Gear Extended) (+34.7) to (+42.7) at 4700 lb.

(+32.0) to (+42.7) at 4300 lb. or less

Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 5100 lb., takeoff 5100 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance

data sheet for optional seating arrangements.

200 lb. (+96), 80 lb. per side on floor (+124) or 60 lb. in upper Maximum Baggage

rack (+124). See NOTE 2G for placard

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable in each

engine) See NOTE 1 for data on undrainable oil

Control Surface Down 45° Wing flaps

Movements Main surfaces Aileron Down 20° Up 20° Elevator Down 15° Up 25° Rudder Right 25° Left 25°

(Parallel to W.L.)

Tabs (main surface in neutral)

Aileron Up 20° Down 20° Elevator 26° Up 10° Down Rudder Right 17° Left 22°

(Parallel to W.L.)

310H0001 through 310H0148. Production Certificate No. 312 effective. Serial Nos. Eligible

X - Model E310H (Normal Category), Approved January 17, 1963

Engines 2 Continental IO-470-D

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

X - Model E310H (cont'd)				
Propeller and Propeller Limits	 2 full-feathering propeller installa (a) Hartzell hub HC82XF-2 or I with 8433 blades Diameter: not over 84 in., n Pitch settings at 30 in. sta.:	AC-A2XF-2 ot under 78 in. hered 82.0° rard 210105, 4 lb. ea. (-17) 210438, 210290 or 290D1/T2, 2-888 dome 4 lb. ea. (-23) 0850300 bulkhead or		
	Cessna 0850311 dome with			
	 2 full-feathering propeller installa (a) McCauley hub D2AF36C48 Diameter: not over 80 in., n Pitch settings at 36 in. sta.: low 11°, feathered 77° 	with 90MF-10 blades		
	(b) Hydraulic governor, Woodw 210155, 210280, 210444, A2 or C210355; McCauley DCF DCFU290D2/T2	210438, 210290		
	(c) Propeller spinner, McCauley with D2878 bulkhead or Cessna 0850258 spinner with 0850257 bulkhead			
*Airspeed Limits (TIAS)	Maneuvering Maximum structural cruising Never exceed Flaps extended Landing gear extended	167 m.p.h. (145 knots) 210 m.p.h. (183 knots) 254 m.p.h. (220 knots) 140 m.p.h. (122 knots) 140 m.p.h. (122 knots)		
*C.G. Range (Landing Gear Extended)	(+36.6) to (+42.3) at 4990 lb. (+34.7) to (+42.7) at 4700 lb. (+32.0) to (+42.7) at 4300 lb. or less Straight line variation between points	given		
Empty Wt. C.G. Range	None			
*Maximum Weight	Landing 4990 lb., takeoff 4990 lb.			
No. of Seats	5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for optional seating arrangements.			
Maximum Baggage	200 lb. (+96), 60 lb. upper rack (+124) See NOTE 2G for placard	, and 80 lb. per side on floor (+124).		
Fuel Capacity	102 gal. (2 wing tip tanks, 51 gal. each See NOTE 1 for data on unusable fuel	a at +35.0)		
Oil Capacity	24 qt. (12 qt. in each engine at (-3.5), 6 See NOTE 1 for data on undrainable of			

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X - Model E310H (cont'd)

Control Surface Wing flaps Down 45° Movements Main surfaces

Main surfaces

 $\begin{array}{ccccccc} \text{Aileron} & & \text{Up} & 20^{\circ} & & \text{Down} & 20^{\circ} \\ \text{Elevator} & & \text{Up} & 25^{\circ} & & \text{Down} & 15^{\circ} \\ \text{Rudder} & & \text{Right} & 25^{\circ} & & \text{Left} & 25^{\circ} \end{array}$

(Parallel to W.L.)

Tabs (main surface in neutral)

Aileron Up 20° Down 20° Elevator Up 10° Down 26° Rudder Right 17° Left 22°

(Parallel to W.L.)

Serial Nos. Eligible All Model 310H's (Section IX), 310H0001 through 310H0148. Production

Certificate No. 312 effective.

XI - Model 310I (Normal Category), Approved December 20, 1963

Engines 2 Continental IO-470-U

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations 60 lb. ea. (-25)

Propeller Limits (a) McCauley hub D2AF34C52, blades 80GF

Diameter: not over 80 in., not under 78 in.

Pitch settings at 30 in. sta.: low 13.8°, feathered 80.5°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17)

210280, 210444, A210438, 210290 or C210355; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Cessna 0850326 dome 4 lb. ea. (-23)

with 0850257 bulkhead and 0850330 support

*Airspeed Limits Maneuvering 170 m.p.h. (148 knots)
(TIAS) Maximum structural cruising 210 m.p.h. (183 knots)
Never exceed 254 m.p.h. (220 knots)

Flaps extended 140 m.p.h. (122 knots)
Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing (+37.3) to (+42.9) at 5100 lb.

Gear Extended) (+43.6) at 4700 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 5100 lb., takeoff 5100 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71)

See Manufacturer's Weight and Balance data sheet for optional seating arrangements.

Maximum Baggage 200 lb. (+96), 80 lb. per side on floor (+124), 120 lb. per nacelle (+63)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on system fuel

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XI - Model 310I (cont'd)

Propeller Limits

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on system oil

Control Surface Wing flaps Down 35°

Movements Main surfaces

(Parallel to W.L.)

Tabs (main surface in neutral)

 $\begin{array}{cccccc} Aileron & Up & 20^\circ & Down & 20^\circ \\ Elevator & Up & 10^\circ & Down & 26^\circ \\ Rudder & Right & 17^\circ & Left & 22^\circ \end{array}$

(Parallel to W.L.)

Serial Nos. Eligible 310I0001 through 310I0200. Production Certificate No. 312 effective.

XII - Model 310J (Normal Category), Approved September 3, 1964

Engines 2 Continental IO-470-U

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations 62 lb. ea. (-28)

(a) McCauley hub D2AF34C65, blades 84JF-3 McCauley hub D2AF34C81, blades 84JF-3 Diameter: not over 81 in., not under 79 in.

Pitch settings at 30 in. sta.: low 12.8°, feathered 82.6°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17)

210280, 210290, C210355, A210438, 210444; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Cessna 0855030-12 dome 4 lb. ea. (-23)

with 0855030-14 and -15 bulkhead and

0855030-3 support

*Airspeed Limits Maneuvering 170 m.p.h. (148 knots) (TIAS) Maximum structural cruising 210 m.p.h. (183 knots)

Never exceed 254 m.p.h. (220 knots) Flaps extended 140 m.p.h. (122 knots) Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing (+37.3) to (+43.1) at 5100 lb.

Gear Extended) (+43.6) at 4700 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 5100 lb., takeoff 5100 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71)

See Manufacturer's Weight and Balance data sheet for optional seating arrangements.

Maximum Baggage 200 lb. (+96), 80 lb. per side on floor (+124), 120 lb. per nacelle (+63)

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XII - Model 310J (cont'd)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Down 35°

Movements Main surfaces

Aileron Up 20° Down 20° Elevator Up 16.5° Down 15° Rudder Right 25° Left 25° (Parallel to W.L.)

Tabs (main surface in neutral)

 $\begin{array}{cccccc} Aileron & Up & 20^\circ & Down & 20^\circ \\ Elevator & Up & 10^\circ & Down & 26^\circ \\ Rudder & Right & 17^\circ & Left & 22^\circ \end{array}$

(Parallel to W.L.)

Serial Nos. Eligible 310J0001 through 310J0200. Production Certificate No. 312 effective.

XIII - Model 310J-1 (Utility Category), Approved November 30, 1964

Engines 2 Continental IO-470-U

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations 61 lb. ea. (-25)

Propeller Limits (a) McCauley hub D2AF34C71, blades 84JF-3

Diameter: not over 81 in., not under 79 in.

Pitch settings at 30 in. sta.: low 11.4°, feathered 83.0°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17)

210280, 210290, C210355, 210438, 210444; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Cessna 0850326 dome with 4 lb. ea. (-23)

0850257 bulkhead and 0855030 support

*Airspeed Limits Maneuvering 183 m.p.h. (159 knots) (TIAS) Maximum structural cruising 210 m.p.h. (183 knots)

Never exceed 272 m.p.h. (236 knots) Flaps extended 140 m.p.h. (122 knots) Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing (+37.7) to (+43.1) at 5150 lb.

Gear Extended) (+43.6) at 4750 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 5150 lb., takeoff 5150 lb.

No. of Seats 4 (2 at +37, 2 at +68)

Maximum Baggage 200 lb. (+96), 120 lb. per nacelle (+63)

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XIII - Model 310J-1 (cont'd)

Propeller Limits

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Down 35°

Movements Main surfaces

Aileron Up 20° Down 20° Elevator Up 16.5° Down 15° Rudder Right 25° Left 25°

(Parallel to W.L.)
Tabs (main surface in neutral)

 $\begin{array}{cccccc} Aileron & Up & 20^{\circ} & Down & 20^{\circ} \\ Elevator & Up & 10^{\circ} & Down & 26^{\circ} \\ Rudder & Right & 17^{\circ} & Left & 22^{\circ} \end{array}$

(Parallel to W.L.)

Serial Nos. Eligible 310J0001 through 310J0200. Production Certificate No. 312 effective.

XIV - Model E310J (Normal Category), Approved March 15, 1965

Engines 2 Continental IO-470-U

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations 62 lb. ea. (-28)

(a) McCauley hub D2AF34C65, blades 84JF-3 or McCauley hub D2AF34C81, blades 84JF-3 Diameter: not over 81 in., not under 79 in.

Pitch settings at 30 in. sta.: low 12.8°, feathered 82.6°

(b) Hydraulic governor, Woodward 210105, 210155, 4 lb. ea. (-17)

210280, 210290, C210355, A210438, 210444; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Cessna 0855030-12 dome 4 lb. ea. (-23)

with 0855030-14 and -15 bulkhead and

0855030-3 support

*Airspeed Limits Maneuvering 170 m.p.h. (148 knots) (TIAS) Maximum structural cruising 210 m.p.h. (183 knots)

Never exceed 254 m.p.h. (220 knots)
Flaps extended 140 m.p.h. (122 knots)
Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing (+36.6) to (+43.1) at 4990 lb.

Gear Extended) (+43.6) at 4700 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 4990 lb., takeoff 4990 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and

Balance data sheet for optional seating arrangements.

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XIV - Model E310J (cont'd)

Propeller Limits

Maximum Baggage 200 lb. (+96), 80 lb. per side on floor (+124)

120 lb. per nacelle (+63)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on unusable fuel

Oil Capacity 24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine).

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Down 35° Movements Main surfaces Aileron Up 20° 20° Down Elevator 15° Up 16.5° Down Rudder 25° Right 25° Left (Parallel to W.L.)

Tabs (main surface in neutral)

 $\begin{array}{cccccc} \text{Aileron} & & \text{Up} & 20^{\circ} & \text{Down} & 20^{\circ} \\ \text{Elevator} & & \text{Up} & 10^{\circ} & \text{Down} & 26^{\circ} \\ \text{Rudder} & & \text{Right} & 17^{\circ} & \text{Left} & 22^{\circ} \end{array}$

(Parallel to W.L.)

Serial Nos. Eligible 310J0001 through 310J0200 (same as Section XII). Production Certificate No. 312 effective.

XV - Model 310K (Normal Category), Approved October 20, 1965

Engines 2 Continental IO-470-V or IO-470-VO

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations 62 lb. ea. (-25)

1. (a) McCauley hub D2AF34C81, blades 84JF-3 Diameter: not over 81 in., not under 78 in.

Pitch settings at 30 in. sta.: low 12.8°, feathered 82.5°

(b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17)

210155, 210280, 210290, C210355, A210438, 210444; 210446, A210449; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Cessna 0855030-12 dome 4 lb. ea. (-23)

with 0855030-14 and -15 bulkhead and

0855030-3 support

or 2. (a) McCauley full-feathering 3-bladed propeller

installations 79 lb. ea. (-25)

McCauley hub D3AF32C80, blades 82NC-4 Diameter: not over 78 in., not under 74 in. Pitch settings at 30 in. sta.:

low 12.5°, feathered 81.3°

(b) Hydraulic governor, Woodward 210105, 4 lb. ea. (-17)

210155, 210280, 210290, C210355, A210438, 210444, 210446, A210449; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, 3-bladed, McCauley 4 lb. ea. (-23)

D-3651 dome with D-3652 bulkhead

XV - Model 310K (cont'd)

*Airspeed Limits Maneuvering 170 m.p.h. (148 knots) Maximum structural cruising 210 m.p.h. (183 knots) (CAS) Never exceed 257 m.p.h. (224 knots) Flaps extended 35° 140 m.p.h. (122 knots) Landing gear extended 140 m.p.h. (122 knots)

*C.G. Range (Landing

(+38.0) to (+43.1) at 5200 lb.

Gear Extended)

(+43.6) at 4800 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range

None

*Maximum Weight

Landing 5200 lb., takeoff 5200 lb.

No. of Seats

5 (Std.) (2 at +37, 3 at +71)

See Manufacturer's Weight and Balance data sheet for optional seating arrangements

Maximum Baggage

200 lb. (+96), 80 lb. per side on floor (+124)

120 lb. per nacelle (+63)

Fuel Capacity

102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

See NOTE 1 for data on system fuel

Oil Capacity

24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine)

See NOTE 1 for data on system oil

Control Surface Movements

Down 35° Wing flaps Main surfaces Aileron Up 20° 20° Down Up 16.5° Elevator Down 15° Rudder Right 25° Left 25° (Parallel to W.L.)

Tabs (main surface in neutral)

Aileron 20° 20° Down Up Elevator 26° Up 10° Down Rudder Right 17° 22° Left

(Parallel to W.L.)

Serial Nos. Eligible

310K0001 through 310K0245. Production Certificate No. 312 effective.

XVI - Model 310L (Normal Category), Approved September 20, 1966

2 Continental IO-470-V or IO-470-VO Engines

Grade 100 or 100LL aviation gasoline *Fuel

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations

(a) McCauley hub D2AF34C81, blades 84JF-3

Propeller Limits Diameter: not over 81 in., not under 78 in.

> Pitch settings at 30 in. sta.: low 12.8°, feathered 82.5°

(b) Hydraulic governor, Woodward A210438, 4 lb. ea. (-17)

62 lb. ea. (-25)

210444, 210446, A210449; McCauley DCFU290D1/T2, DCFU290D2/T2

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XVI - Model 310L (cont'd) Propeller (cont'd)	or	with 0855030-14 and -15 bulkhead and 0855030-3 support 2. 2 McCauley full-feathering 3-bladed propeller installations (a) McCauley hubs D3AF32C80, blades 82NC-4 Diameter: not over 78 in., not under 74 in. Pitch settings at 30 in. sta.:	4 lb. ea. (-23) 9 lb. ea. (-25)
		210444, 210446, A210449; McCauley DCFU290D1/T2, DCFU290D2/T2	4 lb. ea. (-17) 4 lb. ea. (-23)
*Airspeed Limits (CAS)		Maneuvering170 m.p.h. (148 knots)Maximum structural cruising210 m.p.h. (183 knots)Never exceed257 m.p.h. (224 knots)Flaps extended 35°160 m.p.h. (139 knots)Landing gear extended160 m.p.h. (139 knots)	
*C.G. Range (Landing Gear Extended)		(+38.0) to (+43.1) at 5200 lb. (+43.6) at 4800 lb. (+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given	
Empty Wt. C.G. Range		None	
*Maximum Weight		Landing 5200 lb., takeoff 5200 lb.	
No. of Seats		5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for optional seating arrangements	
Maximum Baggage		200 lb. (+96), 80 lb. per side on floor (+124), 120 lb. per nacelle (-	⊦63)
Fuel Capacity	or or	102 gal. (2 wing tip tanks, 51 gal. each at +35.0) 143 gal. (2 wing tip tanks, 51 gal. each at +35.0) and 2 auxiliary tanks 20.5 gal. each at +47.0) 183 gal. (2 wing tip tanks, 51 gal. each at +35.0, 2 auxiliary tanks, 20 gal. each at +47.0, and 2 wing locker transfer tanks, 20.0 gal. each at +49.0). See NOTE 1 for data on system fuel	
Oil Capacity		24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine) See NOTE 1 for data on system oil	
Control Surface Movements		Wing flaps Main surfaces Aileron Up 20° Down 20° Elevator Rudder Right 25° Left 25° (Parallel to W.L.) Tabs (main surface in neutral) Aileron Up 20° Down 20° Elevator Up 20° Down 20° Elevator Up 10° Down 26° Rudder Right 17° Left 22° (Parallel to W.L.)	
Serial Nos. Eligible		310L0001 through 310L0207. Production Certificate No. 312 effe	ective.

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XVII - Model 310N (Normal Category), Approved August 22, 1967

Engines 2 Continental IO-470-V or IO-470-VO

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and 2 full-feathering propeller installations

Propeller Limits
1. (a) McCauley hub D2AF34C81, blades 84JF-3
Diameter: not over 81 in., not under 78 in.

Pitch settings at 30 in. sta.: low 12.8°, feathered 82.5°

(b) Hydraulic governor, Woodward 210446, 210444, A210438 or A210449; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, Cessna 0855030-12 dome with 0855030-14 and -15 bulkhead and 0855030-3 support

or 2. 2 McCauley full-feathering 3-bladed propeller installations

(a) McCauley hubs D3AF32C80, blades 82NC-4 Diameter: not over 78 in., not under 74 in.

Pitch settings at 30 in. sta.: low 12.5°, feathered 81.3°

(b) Hydraulic governor, Woodward 210446, 210444, A210438 or A210449; McCauley DCFU290D1/T2, DCFU290D2/T2

(c) Propeller spinner, 3-blades, McCauley D-3651 dome with D-3652 bulkhead

*Airspeed Limits Maneuvering 170 m.p.h. (148 knots)
(CAS) Maximum structural cruising 210 m.p.h. (183 knots)
Navar avoid 257 m.p.h. (224 knots)

Never exceed 257 m.p.h. (224 knots) Flaps extended 35° 160 m.p.h. (139 knots) Landing gear extended 160 m.p.h. (139 knots)

*C.G. Range (Landing Gear Extended)

(+38.0) to (+43.1) at 5200 lb.

(+43.6) at 4800 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 5200 lb., takeoff 5200 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and

Balance data sheet for optional seating arrangements.

Maximum Baggage 200 lb. (+96), 80 lb. per side on floor (+124),

120 lb. per nacelle (+63)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

or 143 gal. (2 wing tip tanks, 51 gal. each at +35.0 and

2 auxiliary tanks 20.5 gal. each at +47.0)

or 183 gal. (2 wing tip tanks, 51 gal. each at +35.0 and 2 auxiliary tanks 20.5 gal. each at +47.0, and 2 wing locker

tanks, 20.0 gal. each at +49.0) See NOTE 1 for data on system fuel Page 23 of 42 3A10

XVII - Model 310N (cont'd)

24 qt. (12 qt. in each engine at (-3.5), 6 qt. unusable per engine) Oil Capacity

See NOTE 1 for data on system oil

Control Surface Wing flaps Down 35° Movements Main surfaces Aileron $Up 20^{\circ}$ 20° Down Up 16.5° Elevator 15° Down Rudder Left 25° Right 25° (Parallel to W.L.) Tabs (main surface in neutral) 20° Aileron Up 20° Down 26° Elevator Up 10° Down 22°

Rudder Right 17° Left

(Parallel to W.L.)

310N0001 through 310N0198. Production Certificate No. 312 effective. Serial Nos. Eligible

XVIII - Model 310P (Normal Category), Approved August 30, 1968

2 Continental IO-470-VO Engines

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and Propeller Limits 2 McCauley full-feathering 2-bladed propeller installations

(a) McCauley hubs D2AF34C71, blades 84JF-3 Diameter: not over 81 in., not under 78 in.

Pitch settings at 30 in. sta.: low 12.8°, feathered 82.6°

(b) Hydraulic governor, Woodward 210446, 210444, A210438 or A210499; McCauley DCF290D1/T2, DCFU290D1/T2, DCFS290D1/T2, DCFUS290D2/T2, DCF290D2/T2, DCFU290D2/T2, DCFS290D2/T2, DCFUS290D2/T2, DCFS290D7/T2, DCFUS290D7/T2 or DCFUS290D13/T2

(c) Propeller spinner, McCauley D3935 dome with D3923 bulkhead and 0855030-3 support

2 McCauley full-feathering 3-bladed propeller installations or

> (a) McCauley hubs 3AF32C87, blades 82NC-4. Diameter: not over 78 in., not under 74 in.

Pitch settings at 30 in sta.: Low 12.5°, feathered 81.3°

McCauley hubs 3AF32C504, with 82NEA-5.5 blades. or

Diameter: not over 76.5 in., not under 74 in.

Pitch settings at 30 in. sta.: low 13.0° , feathered 81.7°

(b) Hydraulic governor, Woodward 210446, 210444, A210438 or A210499; McCauley DCF290D1/T2, DCFU290D1/T2, DCFS290D1/T2, DCFUS290D2/T2, DCF290D2/T2, DCFU290D2/T2, DCFS290D2/T2, DCFUS290D2/T2, DCFS290D7/T2, DCFUS290D7/T2 or DCFUS290D13/T2

(c) Propeller spinner, McCauley D3651 dome and D3925 bulkhead with 3AF32C87 hub or McCauley D7185 spinner assembly with 3AF32C504 hub

*Airspeed Limits (CAS)

Maneuvering 170 m.p.h. (148 knots) Maximum structural cruising 210 m.p.h. (183 knots) Never exceed 257 m.p.h. (224 knots) Flaps extended 35° 160 m.p.h. (139 knots) Landing gear extended 160 m.p.h. (139 knots) 3A10 Page 24 of 42

XVIII - Model 310P (cont'd)

*C.G. Range (Landing (+38.0) to (+43.1) at 5200 lb.

Gear Extended) (+43.6) at 4800 lb.

(+32.0) to (+43.6) at 4300 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

*Maximum Weight Landing 5200 lb., takeoff 5200 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and

Balance data sheet for optional seating arrangements

Maximum Baggage 200 lb. (+96), 80 lb. per side on floor (+124)

120 lb. per nacelle (+63)

Fuel Capacity 102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

or 143 gal. (2 wing tip tanks, 51 gal. each at +35.0 and 2 auxiliary

tanks, 20.5 gal. each at +47.0)

or 183 gal. (2 wing tip tanks, 51 gal. each at +35.0, 2 auxiliary tanks, 20.5 gal. each at +47.0 and 2 wing locker tanks, 20.5 gal. each at +49.0)

See NOTE 1 for data on system fuel

Oil Capacity 6 gal. (3 gal. in each engine at (-3.5), unusable 1.5 gal. per engine)

See NOTE 1 for data on system oil

Control Surface 35° Wing flaps Down Movements Main surfaces Aileron 20° 20° Up Down Elevator 15° Up 16.5° Down Right 25° Rudder Left 25° (Parallel to W.L.) Tabs (main surface in neutral) Aileron Up 20° Down 20° Elevator Up 10° Down 26° Rudder Left 22° Right 17°

(Parallel to W.L.)

Serial Nos. Eligible 310P0001 through 310P00240. Production Certificate No. 312 effective.

XIX - Model T310P (Turbo-System 310P) (Normal Category), Approved August 30, 1968

Engines 2 Continental TSIO-520-B or TSIO-520-BB

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2700 r.p.m. (285 hp., 32 in. Hg MP)

(Critical altitude is 16,000 ft. in standard atmosphere)

Maximum Altitude Allowable MP Sea level 32.0 in. Hg 16,000 ft. 32.0 in. Hg 18,000 ft. 30.7 in. Hg 20,000 ft. 29.0 in. Hg 22,000 ft. 26.4 in. Hg 24,000 ft. 24.3 in. Hg 26,000 ft. 22.2 in. Hg 28,000 ft. 20.2 in. Hg 30,000 ft. 18.5 in. Hg 32,000 ft. 17.0 in. Hg

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XIX - Model T310P (cont'd)

Propeller and Propeller Limits 1. 2 McCauley full-feathering 2-bladed propeller installations

(a) Hub D2AF34C71 with 84JF-3 bladesDiameter: not over 81 in., not under 79 in.Pitch settings at 30 in. sta.:

low 13.3°, feathered 82.7°

(b) Hydraulic governor Woodward B210446, A210529, B210444 or C210439; McCauley DCFS290D1/T3, DCFUS290D1/T3, DCFS290D2/T3, DCFUS290D2/T3, DCFS290D7/T3, DCFUS290D7/T3 or DCFUS290D13/T3

(c) Propeller spinner McCauley D3800 dome with D3818 bulkhead

or 2. 2 McCauley full-feathering 3-bladed propeller installations

(a) McCauley hubs 3AF32C87 with 82NC-4 blades or McCauley hubs 3AF32C504 with 82NEA-4 blades

Diameter: not over 78 in., not under 74 in.

Pitch settings at 30 in. sta.: low 13.0°, feathered 82.6°

(b) Hydraulic governor Woodward B210446, A210529, B210444 or C210439; McCauley DCFS290D1/T3, DCFUS290D1/T3, DCFS290D2/T3, DCFUS290D2/T3, DCFS290D7/T3, DCFUS290D7/T3 or DCFUS290D13/T3

(c) Propeller spinner McCauley D3534 dome with D3796 bulkhead

*Airspeed Limits (CAS)

Maneuvering170 m.p.h. (148 knots)Maximum structural cruising210 m.p.h. (183 knots)Never exceed257 m.p.h. (224 knots)Flaps extended 35°160 m.p.h. (139 knots)Landing gear extended160 m.p.h. (139 knots)

*C.G. Range (Landing Gear Extended)

(+38.0) to (+43.1) at 5400 lb.

(+43.6) at 5000 lb.

(+32.0) to (+43.6) at 4500 lb. or less Straight line variation between points given

Empty Wt. C.G. Range

None

*Maximum Weight

Landing 5400 lb., takeoff 5400 lb.

No. of Seats

5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance

data sheet for optional seating arrangements.

Maximum Baggage

200 lb. (+96), 80 lb. per side on floor (+124)

120 lb. per nacelle (+63)

Fuel Capacity

102 gal. (2 wing tip tanks, 51 gal. each at +35.0)

or 143 gal. (2 wing tip tanks, 51 gal. each at +35.0 and 2 auxiliary tanks,

5 gal. each at +47.0)

or 183 gal. (2 wing tip tanks, 51 gal. each at +35.0, 2 auxiliary tanks 20.5 gal. each at .0 and 2 wing locker tanks, 20.5 gal. each at +49.0)

See NOTE 1 for data on system fuel

Oil Capacity

6.5 gal. (3.25 gal. in each engine at (-3.5), unusable 1.5 gal. per engine)

See NOTE 1 for data on system oil

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XIX - Model T310P (cont'd)

Control Surface Down 35° Wing flaps Main surfaces Movements Aileron Up 20° 20° Down Elevator Up 16.5° 15° Down Rudder Right 29.3° Left 29.3° (Parallel to W.L.) Tabs (main surface in neutral) Aileron 20° Up 20° Down Elevator Up 10° Down 26° Left 22° Rudder Right 17°

(Parallel to W.L.)

Serial Nos. Eligible 310P0001 through 310P0240. Production Certificate No. 312 effective.

XX - Model 310Q (Normal Category), Approved August 20, 1969

Engines 2 Continental IO-470-VO

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2625 r.p.m. (260 hp.)

Propeller and Propeller Limits

- 1. 2 McCauley full-feathering 2-bladed propeller installations
 - (a) McCauley hubs D2AF34C71, blades 84JF-3 Diameter: not over 81 in., not under 78 in.

Pitch settings at 30 in. sta.: low 12.8°, feathered 82.6°

- (b) Hydraulic governor, Woodward 210444, 210446, A210438, A210499; McCauley DCF290D1/T2, DCFU290D1/T2, DCFS290D1/T2, DCFUS290D1/T2, DCF290D2/T2, DCFU290D2/T2, DCFS290D2/T2, DCFUS290D2/T2, DCFS290D7/T2, DCFUS290D7/T2 or DCFUS290D13/T2
- (c) Propeller spinner, McCauley D3935 dome with D3923 bulkhead and 0855030-3 support
- or 2. 2 McCauley full-feathering 3-bladed propeller installations
 - (a) McCauley hubs 3AF32C87, blades 82NC-4

Diameter: Not over 78 in., not under 74 in.

Pitch settings at 30 in. sta.: Low 12.5°, feathered 81.3°

or McCauley hubs 3AF32C504, with 82NEA-5.5 blades

Diameter: not over 76.5 in., not under 74 in.

Pitch settings at 30 in. sta.: low 13.0°, feathered 81.7°

- (b) Hydraulic governor, Woodward 210444, 210446, A210438 or A210499; McCauley DCF290D1/T2, DCFU290D1/T2, DCFS290D1/T2, DCFUS290D1/T2, DCF290D2/T2, DCFU290D2/T2, DCFS290D2/T2, DCFUS290D2/T2, DCFS290D7/T2, DCFUS290D7/T2 or DCFUS290D13/T2
- (c) Propeller spinner, McCauley D3651 dome and D3925 bulkhead with 3AF32C87 hub or McCauley D7185 spinner assembly with 3AF32C504 hub

*Airspeed Limits (CAS)

S/N 310Q0001 through 310Q0845

Maneuvering	170 m.p.h. (148 knots)
Maximum structural cruising	210 m.p.h. (183 knots)
Never exceed	257 m.p.h. (224 knots)
Flaps extended 15°	180 m.p.h. (157 knots)
Flaps extended 35°	160 m.p.h. (139 knots)
Landing gear extended	160 m.p.h. (139 knots)

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XX - Model 310Q (cont'd)					
*Airspeed Limits (cont'd)	S/N 310Q0901 through 310Q Maneuvering	1	48 knots (1		
	Maximum structural cruise		.83 knots (2		
	Never exceed		224 knots (2		
	Flaps extended 15°		60 knots (1		
	Flaps extended 35°		40 knots (1		
	Landing gear extended	1	40 knots (1	ют ш.р.	11.)
*C.G. Range (Landing	(+37.3) to (+43.1) at 5300 lb.				
Gear Extended)	(+43.6) at 4900 lb.				
	(+32.0) to (+43.6) at 4500 lb.				
	Straight line variation between	n points giv	/en		
Empty Wt. C.G. Range	None				
*Maximum Weight	Landing 5300 lb Takeoff 53	300 lb.			
No. of Seats	5 (Std.) (2 at +37, 3 at +71) S				
	Balance data sheet for optiona	al seating a	rrangements	3	
Maximum Baggage	200 lb. (+96), 80 lb. per side of	on floor (+1	124)		
Maximum Bugguge	120 lb. per nacelle (+63)	M 11001 († 1	124),		
Fuel Capacity	Tank Capa	city (Gal.)	Usable((Gal.)	Moment Arm
	S/N 310Q0001 through 310Q	<u>1160</u>			
	LH tip tank	51	50		+35
	RH tip tank	51	50		+35
	LH aux. tank (40 gal. opt)	20.5	20		+47
	RH aux. tank (40 gal. opt)	20.5	20		+47
	LH wing locker tank	20.5	20		+49
	RH wing locker tank	20.5	20		+49
	S/N 310Q0601 through 310Q	1160			
	LH aux. tank (63 gal. opt)	32	31.5		+47
	RH aux. tank (63 gal. opt)	32	31.5	5	+47
	See NOTE 1 for data on unus	able fuel			
Oil Capacity	6 gallons (3 gal. in each engin See NOTE 1 for data on undra		unusable 1.	.5 gal. ea	ch engine)
Control Surface	Wing flaps			Down	35°
Movements	Main surfaces				
	Aileron	Up	20°	Down	20°
	Elevator	Up	16.5°	Down	15°
	Rudder	Right	25°	Left	25°
	(Parallel to W.L.)				
	Tabs (main surface in neutral))			
	Aileron	Up	20°	Down	20°
	Elevator	Up	10°	Down	26°
	Rudder (Parallel to W.L.)	Right	17°	Left	22°
Serial Nos. Eligible	310Q0001 through 310Q1160). Production	on Certifica	te No. 3	12 effective

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XXI - Model T310Q (Turbo-System 310Q) (Normal Category), Approved August 20, 1969

Engines 2 Continental TSIO-520-B or TSIO-520-BB

*Fuel Grade 100 or 100LL aviation gasoline

*Engine Limits For all operations, 2700 r.p.m. (285 hp., 32 in. Hg MP) Critical altitude is 16,000 ft. in standard atmosphere.

	Maximum
<u>Altitude</u>	Allowable MP
Sea level	32.0 in. Hg
16,000 ft.	32.0 in. Hg
18,000 ft.	30.7 in. Hg
20,000 ft.	29.0 in. Hg
22,000 ft.	26.4 in. Hg
24,000 ft.	24.3 in. Hg
26,000 ft.	22.2 in. Hg
28,000 ft.	20.2 in. Hg
30,000 ft.	18.5 in. Hg
32,000 ft.	17.0 in. Hg

Propeller and Propeller Limits

- 1. 2 McCauley full-feathering 2-bladed propeller installations
 - (a) Hub D2AF34C71 with 84JF-3 blades
 Diameter: not over 81 in., not under 79 in.
 Pitch settings at 30 in. sta.:
 low 13.3°, feathered 82.7°
 - (b) Hydraulic governor, Woodward B210446, A210529; McCauley DCFS290D1/T3, DCFUS290D1/T3, DCFS290D2/T3, DCFUS290D2/T3, DCFS290D7/T3, DCFUS290D7/T3 or DCFUS290D13/T3
 - (c) Propeller spinner, McCauley D3800 dome with D3818 bulkhead
- or 2. 2 McCauley full-feathering 3-bladed propeller installations
 - (a) McCauley hubs 3AF32C87 with 82NC-4 blades or McCauley hubs 3AF32C504 with 82NEA-4 blades

Diameter: not over 78 in., not under 74 in.

Pitch settings at 30 in. sta.: low 13.0° , feathered 82.6°

- (b) Hydraulic governor Woodward A210529, B210446; McCauley DCFS290D1/T3, DCFUS290D1/T3, DCFS290D2/T3, DCFUS290D2/T3, DCFS290D7/T3, DCFUS290D7/T3 or DCFUS290D13/T3
- (c) Propeller spinner McCauley D3534 dome with D3796 bulkhead

*Airspeed Limits (CAS)

S/N 310O0001 through 310O0845

B/11 D10 Q 0001 timough D10 Q 00 1D	
Maneuvering	172 m.p.h. (150 knots)
Maximum structural cruising	210 m.p.h. (183 knots)
Never exceed	261 m.p.h. (227 knots)
Flaps extended 15°	180 m.p.h. (157 knots)
Flaps extended 35°	160 m.p.h. (139 knots)
Landing gear extended	160 m.p.h. (139 knots)

S/N 310Q0901 through 310Q1160

Maneuvering	150 knots (172 m.p.h.)
Maximum structural cruising	183 knots (210 m.p.h.)
Never exceed	227 knots (261 m.p.h.)
Flaps extended 15°	160 knots (184 m.p.h.)
Flaps extended 35°	140 knots (161 m.p.h.)
Landing gear extended	140 knots (161 m.p.h.)

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XXI - Model T310Q (cont'd)

*C.G. Range (Landing Gear Extended)

(+38.7) to (+43.1) at 5500 lb. (takeoff) (+38.0) to (+43.2) at 5400 lb. (landing)

(+43.6) at 5100 lb.

(+32.0) to (+43.6) at 4500 lb. or less Straight line variation between points given

Landing gear retracted moment change: +848 in. lb.

Empty Wt. C.G. Range

None

*Maximum Weight

Landing 5400 lb., takeoff 5500 lb.

No. of Seats

Fuel Capacity

5 (Std.) (2 at +37, 3 at +71)

See Manufacturer's Weight and Balance data sheet for optional seating arrangements.

Maximum Baggage

200 lb. (+96), 80 lb. per side on floor (+124)

120 lb. per nacelle (+63)

<u>Tank</u>	Capacity (Gal.)	Usable (Gal.)	Moment Arm		
S/N 310Q0001 through 310Q1160					
LH tip tank	51	50	+35		
RH tip tank	51	50	+35		
LH aux. tank (40 gal. op	t) 20.5	20	+47		
RH aux. tank (40 gal. op	t) 20.5	20	+47		
LH wing locker tank	20.5	20	+49		
RH wing locker tank	20.5	20	+49		
S/N 310Q0601 through 310Q1160					
LH aux. tank (63 gal. op)		31.5	+47		
RH aux. tank (63 gal. op	-,	31.5	+47		
See NOTE 1 for data on unusable fuel					

Oil Capacity

6.5 gal. (3.25 gal. in each engine at (-3.5), usable 1.75 gal. ea. engine)

See NOTE 1 for data on undrainable oil

Control Surface	Wing flaps			Down	35°
Movements	Main surfaces				
	Aileron	Up	20°	Down	20°
	Elevator	Up	16.5°	Down	15°
	Rudder	Right	29.3°	Left	29.3°
	(Parallel to W.L.)	_			
	Tabs (main surface in neutra	al)			
	Aileron	Up	20°	Down	20°
	Elevator	Up	10°	Down	26°
	Rudder	Right	17°	Left	22°

(Parallel to W.L.)

Serial Nos. Eligible 310Q0001 through 310Q1160. Production Certificate No. 312 effective.

XXII - Model 310R (Normal Category), Approved August 15, 1974

Engines S/N 310R0001 through 310R1434

2 Continental IO-520-M or IO-520-MB

S/N 310R1501 through 310R2140

2 Continental IO-520-MB

*Fuel Grade 100 or 100LL aviation gasoline 3A10 Page 30 of 42

XXII - Model 310R (cont'd)

*Engine Limits

For all operations, 2700 r.p.m. (285 hp.)

Propeller and Propeller Limits 2 McCauley full-feathering 3-bladed propeller installations

(a) McCauley hubs 3AF32C87, blades 82NC-5.5 Diameter: Not over 76.5 in., not under 74.5 in.

Pitch settings at 30 in. sta.: Low 13.9°, feathered 81.7°

or

McCauley hubs 3AF32C504, with 82NEA-5.5 blades Diameter: not over 76.5 in., not under 76.0 in. Pitch settings at 30 in. sta.:

low 13.9°, feathered 81.7°

(b) <u>S/N 310R0001 through 310R0330</u>

Hydraulic governor Woodward A210529, B210444, B210446 or C210439; McCauley DCF290D2/T3, DCFS290D2/T3, DCFU290D2/T3, DCFUS290D2/T3, DCFUS290D7/T3, DCFUS290D7/T3, DCFUS290D7/T3, DCFUS290D13/T3 or DCFUS290D13/T3

S/N 310R0501 through 310R1004

Hydraulic governor Woodward B210444, C210439; McCauley DCF290D2/T3, DCFU290D2/T3, DCFS290D4/T3, DCFS290D5/T3, DCFUS290D4/T3, DCFUS290D5/T3, DCFUS290D7/T3, DCFUS290D7/T3, DCFUS290D7/T3, DCFUS290D8/T3, DCFUS290D13/T3, DCFUS290D13/T3 or DCFUS290D12/T3

S/N 310R01201 through 310R2140

Hydraulic governor Woodward B210444, C210439; McCauley DCF290D2/T3, DCFU290D2/T3, DCFS290D4/T3, DCFS290D5/T3, DCFUS290D4/T3, DCFUS290D6/T3, DCFUS290D7/T3, DCFUS290D7/T3, DCFS290D7/T3, DCFS290D8/T3, DCFUS290D13/T3, DCFUS290D13/T3 or DCFUS290D12/T3

Propeller (cont'd)

(c) Propeller spinner, McCauley D3534 dome with D3796 bulkhead or D-5212 dome with D-5214 bulkhead.

*Airspeed Limits	
(CAS)	

Maneuvering	150 knots (172 m.p.h.)
Maximum structural cruising	183 knots (210 m.p.h.)
Never exceed	227 knots (261 m.p.h.)
Flaps extended 15°	160 knots (184 m.p.h.)
Flaps extended 35°	140 knots (161 m.p.h.)
Landing gear extended	140 knots (161 m.p.h.)

(IAS)

S/N 310R0501 through 310R2140 Maneuvering 1

S/N 310R0001 through 310R0330

Maneuvering	148 KIAS (170 m.p.h.)
Maximum structural cruising	181 KIAS (208 m.p.h.)
Never exceed	223 KIAS (257 m.p.h.)
Flaps extended 15°	158 KIAS (182 m.p.h.)
Flaps extended 35°	139 KIAS (160 m.p.h.)
Landing gear extended	138 KIAS (159 m.p.h.)

*C.G. Range (Landing Gear Extended)

(+38.7) to (+43.1) at 5500 lb. (takeoff) (+38.0) to (+43.2) at 5400 lb. (landing)

(+43.6) at 5100 lb.

(+32.0) to (+43.6) at 4500 lb. or less Straight line variation between points given Landing gear retracted moment change: +782 in. lb. Page 31 of 42 3A10

XXII - Model 310R (cont'd)

Empty Wt. C.G. Range None

*Maximum Weight S/N 310R0001 through 310R1004

Landing 5400 lb., takeoff 5500 lb.

S/N 310R1201 through 310R2140

Landing 5400 lb., ramp 5535 lb., takeoff 5500 lb.

No. of Seats 5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and

Balance data sheet for optional seating arrangements

Maximum Baggage 200 lb. (+96), 80 lb. per side on floor (+124),

120 lb. per nacelle (+63), 350 lb. nose (-31)

Fuel Capacity

	Capacity	Usable	Moment
<u>Tank</u>	<u>(Gal)</u>	(Gal)	<u>Arm</u>
LH tip tank	51	50	+35
RH tip tank	51	50	+35
LH aux. tank (40 gal. opt)	20.5	20	+47
RH aux. tank (40 gal. opt)	20.5	20	+47
LH aux. tank (63 gal. opt)	32	31.5	+47
RH aux. tank (63 gal. opt)	32	31.5	+47
LH wing locker tank	20.5	20	+49
RH wing locker tank	20.5	20	+49

Right 17°

Left 22°

See NOTE 1 for data on unusable fuel

Oil Capacity 6.5 gal. (3.25 gal. in each engine at (-3.5), usable 1.75 gal. ea. engine)

See NOTE 1 for data on undrainable oil

Control Surface	Wing flaps			Down	35°
Movements	Main surfaces				
	Aileron	Up	20°	Down	20°
	Elevator	Up	16.5°	Down	15°
	Rudder	Right	29.3°	Left	29.3°
	(Parallel to W.L.)				
	Tabs (main surface in neutral)				
	Aileron	Up	20°	Down	20°
	Elevator	Up	10°	Down	26°

(Parallel to W.L.)

Serial Nos. Eligible 310R0001 through 310R2140. Production Certificate No. 312 effective.

XXIII - Model T310R (Turbo-System 310R) (Normal Category), Approved August 15, 1974

Rudder

Engines <u>S/N 310R0001 through 310R1434</u>

2 Continental TSIO-520-B or TSIO-520-BB

<u>S/N 310R1501 through 310R2140</u> 2 Continental TSIO-520-BB

*Fuel Grade 100 or 100LL aviation gasoline

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XXIII - Model T310R (cont'd)

*Engine Limits

For all operations, 2700 r.p.m. (285 hp. 32 in. Hg MP) Critical altitude is 16,000 ft. in standard atmosphere

	Maximum
Altitudo	
<u>Altitude</u>	Allowable MP
Sea level	32.0 in. Hg
16,000 ft.	32.0 in. Hg
18,000 ft.	30.7 in. Hg
20,000 ft.	29.0 in. Hg
22,000 ft.	26.4 in. Hg
24,000 ft.	24.3 in. Hg
26,000 ft.	22.2 in. Hg
28,000 ft.	20.2 in. Hg
30,000 ft.	18.5 in. Hg
32,000 ft.	17.0 in. Hg

Propeller and Propeller Limits

- 2 McCauley full-feathering 3-bladed propeller installations
 - (a) McCauley hubs 3AF32C87 with 82NC-4 blades or McCauley hubs

3AF32C504 with 82NEA-4 blades Diameter: not over 78 in., not under 74 in.

Pitch settings at 30 in. sta.: low 13.0°, feathered 82.6°

(b) S/N 310R0001 through 310R0330

Hydraulic governor Woodward A210529, B210446;

McCauley DCFS290D2/T3, DCFUS290D2/T3, DCFS290D7/T3,

DCFUS290D7/T3 or DCFUS290D13/T3

S/N 310R0501 through 310R1004

Hydraulic governor McCauley DCFS290D4/T3, DCFS290D5/T3, DCFUS290D4/T3, DCFUS290D5/T3, DCFS290D7/T3, DCFS290D8/T3, DCFUS290D7/T3, DCFUS290D13/T3 or DCFUS290D12/T3

S/N 310R1201 through 310R2140

Hydraulic governor McCauley DCFS290D4/T3, DCFS290D6/T3, DCFUS290D4/T3, DCFUS290D6/T3, DCFS290D7/T3, DCFS290D8/T3, DCFUS290D7/T3, DCFUS290D13/T3 or DCFUS290D12/T3

(c) Propeller spinner McCauley D3534 dome with D3796 bulkhead

*Airspeed Limits	S/N 310R0001 through 310R0330	
(CAS)	Maneuvering	150 knots (172 m.p.h.)
	Maximum structural cruising	183 knots (210 m.p.h.)
	Never exceed	227 knots (261 m.p.h.)
	Flaps extended 15°	160 knots (184 m.p.h.)
	Flaps extended 35°	140 knots (161 m.p.h.)
	Landing gear extended	140 knots (161 m.p.h.)
*Airspeed Limits	S/N 310R0501 through 310R2140	
(IAS)	Maneuvering	148 KIAS (170 m.p.h.)
	Maximum structural cruising	181 KIAS (208 m.p.h.)
	Never exceed	223 KIAS (257 m.p.h.)
	Flaps extended 15°	158 KIAS (182 m.p.h.)
	Flaps extended 35°	139 KIAS (160 m.p.h.)
	Landing gear extended	138 KIAS (159 m.p.h.)

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XXIII - Model T310R (cont'd)

*C.G. Range (Landing Gear Extended)

(+38.7) to (+43.1) at 5500 lb. (takeoff) (+38.0) to (+43.2) at 5400 lb. (landing)

(+43.6) at 5100 lb.

(+32.0) to (+43.6) at 4500 lb. or less Straight line variation between points given

Landing gear retracted moment change: +782 in. lb.

Empty Wt. C.G. Range

None

*Maximum Weight

S/N 310R0001 through 310R1004 Landing 5400 lb., takeoff 5500 lb.

S/N 310R1201 through 310R2140

Landing 5400 lb., ramp 5535 lb., takeoff 5500 lb.

No. of Seats

5 (Std.) (2 at +37, 3 at +71) See Manufacturer's Weight and Balance data sheet for optional seating arrangements.

Maximum Baggage

200 lb. (+96), 80 lb. per side on floor (+124) 120 lb. per nacelle (+63), 350 lb. nose (-31)

Fuel Capacity

	Capacity	Usable	Moment
<u>Tank</u>	(Gal)	<u>(Gal)</u>	<u>Arm</u>
LH tip tank	51	50	+35
RH tip tank	51	50	+35
LH aux. tank (40 gal. opt)	20.5	20	+47
RH aux. tank (40 gal. opt)	20.5	20	+47
LH aux. tank (63 gal. opt)	32	31.5	+47
RH aux. tank (63 gal. opt)	32	31.5	+47
LH wing locker tank	20.5	20	+49
RH wing locker tank	20.5	20	+49
See NOTE 1 for data on uni	usable fuel		

See NOTE 1 for data on unusable fuel

Oil Capacity

Movements

6.5 gal. (3.25 gal. in each engine at (-3.5), usable 1.75 gal. ea. engine) See NOTE 1 for data on undrainable oil

Control Surface

Wing flaps			Down	35°
Main surfaces				
Aileron	Up	20°	Down	20°
Elevator	Up	16.5°	Down	15°
Rudder	Right	29.3°	Left	29.3°
(Parallel to W.L.)				
Tabs (main surface in neutral)				
Aileron	Up	20°	Down	20°
Elevator	Up	10°	Down	26°
Rudder	Right	17°	Left	22°
(Parallel to W.L.)				

Serial Nos. Eligible

310R0001 through 310R2140. Production Certificate No. 312 effective.

Data Pertinent to All Models

Datum

Forward face of fuselage bulkhead forward of rudder pedals.

*Leveling Means

External splice plate on left side of fuselage under the windows.

External leveling screws at F.S. 59.10 and F.S. 88.90 additional for Models

310Q, 310R and T310R.

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Certification Basis

Models 310, 310A, 310B, 310C, 310D, 310E and 310F

CAR 3 dated November 1, 1949, as amended by 3-1 through 3-10.

Models 310G, 310H, E310H, 310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P and T310P

CAR 3 dated November 1, 1949, as amended by 3-1 through 3-10 and Sections 3.109, 3.111, 3.112, 3.115, 3.118 and 3.120 of CAR 3 dated May 15, 1956, as amended by 3-2 and 3-5.

Models 310Q and T310Q

CAR 3 dated November 1, 1949, as amended by 3-1 through 3-10, Sections 3.109, 3.111, 3.112, 3.115, 3.118, 3.118, 3.120 and 3.688 of CAR 3 dated May 15, 1956, as amended by 3-2, 3-5 and 3-8.

Models 310R and T310R

CAR 3 dated November 1, 1949, as amended by 3-1 through 3-10 and Sections 3.109, 3.111, 3.112, 3.115, 3.118, 3.120 and 3.688 of CAR 3 dated May 15, 1956, as amended by 3-2, 3-5 and 3-8; and Sections 23.161 and 23.171 through 23.181 of FAR 23 dated February 1, 1965, as amended by 23-1 through 23-7, and 23.1327 as amended through 23-23.

Model 310R/T310R, S/N 310R0801 through 310R2140

In addition to the above certification basis, compliance with ice protection has been demonstrated in accordance with FAR 23.1419 of Amendment 23-14 effective December 20, 1973, when ice protection equipment is installed in accordance with the Pilot's Operating Handbook and Factory Kit (FK) No. 194.

<u>S/N 310Q0901 through 310Q1160</u> - Markings, placards and manuals are primarily in knots instead of m.p.h. as required by CAR 3, but permitted by FAR 23, Amendment 23-7.

 $\underline{S/N\ 310R0501\ through\ 310R2140}$ - Findings of equivalent level of safety were made for CAR 3.757 and 3.778(a).

Model 310R/T310R, S/N 310R1801 through 310R2140

In addition to the above certification basis, compliance with noise certification requirements has been demonstrated in accordance with FAR 36 dated December 1, 1969, as amended through 36-10.

Application for type certificate dated April 9, 1952. Type Certificate No. 3A10 issued March 22, 1954. Model 310A and subsequent certificated under delegation option procedures.

Production Certificates Nos. 4 and 312 (refer to "S/N eligible for applicability"). Delegation Option Manufacturer Nos. CE-1 and CE-3 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations. Effective February 15, 1985, and on, Production Certificate No. 4 is applicable to all spares production.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

- (a) Airspeed Indicator, Cessna Dwg. 0813604 or CM 2640 or complying with TSO-C2, Models 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J, 310K.
 - (b) Airspeed Indicator, Cessna Dwg. CM 3301-4, Model 310L.
 - (c) Airspeed Indicator, Cessna Dwg. CM-3301-6, Models 310N, 310P.
 - (d) Airspeed Indicator, Cessna Dwg. CM 3301-2, Model T310P.
 - (e) Airspeed Indicator, Cessna Dwg. C661040-0102, Model 310Q, S/N 310Q0001

Production Basis

Equipment

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- through 310Q0845.
- (f) Airspeed Indicator, Cessna Dwg. C661040-0103, Model T310Q, S/N 310Q0001 through 310Q0845.
- (g) Airspeed Indicator, Cessna Dwg. C661040-0202, Model 310Q, S/N 310Q0901 through 310Q1160.
- (h) Airspeed Indicator, Cessna Dwg. C661040-0203, Model T310Q, S/N 310Q0901 through 310Q1160.
- Airspeed Indicator, Cessna Dwg. C661040-0208, Models 310R, S/N 310R0001 through 310R0330; T310R, S/N 310R0001 through 310R0330.
- (j) Airspeed Indicator, Cessna Dwg. C661040-0209, Models 310R,S/N 310R0501 through 310R2140; T310R, S/N 310R0501 through 310R2140
- (a) Safe Flight Stall Warning Indicator, Model 146-5, 24v., Models 310G, 310H, E310H, 310I, 310J, 310J-1, E310J.
 - (b) Safe Flight Stall Warning Indicator, Model 285, 24v., Models 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R.
 - (c) Safe Flight Stall Warning Indicator, Model 285 or Angle of Attack Indicator System, Cessna Dwg. 0800302, Models 310Q and T310Q.

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

The certificated empty weight and corresponding center of gravity location must include undrainable oil (not included in oil capacity) and unusable fuel (not included in fuel capacity) as follows:

Fuel	6 lb. at (+44)	310, 310A, 310B
Oil	1 lb. at (+ 0)	310, 310A, 310B
Fuel	12 lb. at (+44)	310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J,
		310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R
Oil	1 lb. at (-3.5)	310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J,
		310K, 310L, 310N, 310P, T310P, 310O, T310O, 310R, T310R

When two 15.5 gal. auxiliary fuel tanks are installed, an additional 6 lb. of unusable fuel at (+47) must be included. (Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, E310J, 310J-1, 310K).

When two 20.5 gal. auxiliary fuel tanks are installed, an additional 6 lb. of unusable fuel at (+47) must be included (310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R).

When two 20.5 gal. wing locker fuel tanks are installed, an additional 6 lb. of unusable fuel at (+58) must be included (310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R).

When two 32 gal. auxiliary fuel tanks are installed, an additional 6 lb. of unusable fuel at (+47) must be included (310Q and T310Q S/N 310Q0601 through 310Q1160, 310R and T310R).

NOTE 2. Model 310R/T310R, S/N 310R1501 through 310R2140

The placards specified in the FAA Approved Airplane Flight Manual must be displayed.

Models (310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R S/N 310R0001 through 310R1434, T310R S/N 310R0001 through 310R1434)

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The following placards must be displayed as indicated:

- A. "Operation Limits" (On Circuit Breaker Panel)
 - (1) (a) Models (310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, 310I, 310J, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R S/N 310R0001 through 310R1004, T310R S/N 310R0001 through 310R1004)
 - "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 (Pilot's Check List)."
 - (b) (310J-1) "This airplane must be operated as a normal or utility category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals (Pilot's Check List)."
 - (2) (a) Models (310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, 310I, 310J, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R S/N 310R0001 through 310R1004, T310R S/N 310R0001 through 310R1004)
 - "No acrobatic maneuvers including spins approved."
 - (b) (310J-1) "Intentional spins prohibited -

Approved Maneuvers	Maximum Safe Entry Speed
Lazy Eights	160 m.p.h. (CAS)
Steep Turns	160 m.p.h. (CAS)
Chandelles	160 m.p.h. (CAS)"

- (3) (a) (310) "Minimum speed for single engine operation 95 mph. (TIAS)"
 - (b) (310A, 310B)"Minimum speed for single engine operation 84 mph. (TIAS)"
 - (c) (310C) "Minimum speed for single engine operation 86 mph. (TIAS)"
 - (d) (310D, 310F) "Minimum speed for single engine operation 83 mph. (TIAS)"
 - (e) (310E) "Minimum speed for single engine operation 88 mph. (TIAS)"
 - (f) (310G) "Minimum speed for single engine operation 84 mph. (CAS)"
 - (g) (310H, E310H)"Minimum speed for single engine operation 90 mph. (CAS)"
 - (h) (310I, 310J, 310J-1, E310J, 310K, 310L)
 - "Minimum speed for single engine operation 85 mph. (CAS)"
 - (i) (310N, 310P)"Minimum speed for single engine operation 85 mph. (CAS)"
 - (j) (T310P) "Minimum single engine control speed 90 mph. (CAS)"
 - (k) (310Q S/N 310Q0001 through 310Q0845)
 - "Minimum single engine control speed 86 mph. (CAS)"
 - (l) (T310Q S/N 310Q0001 through 310Q0845)
 - "Minimum single engine control speed 94 mph. (CAS)"
 - (m) (310Q S/N 310Q0901 through 310Q1160)
 - "Minimum single engine control speed 75 knots (CAS)"
 - (n) (T310Q S/N 310Q0901 through 310Q1160, 310R, S/N 310R0001 through 310R0330, T310R
 S/N 310R0001 through 310R0330)
 - "Minimum single engine control speed 81 knots (CAS)"
 - (a) (310R S/N 310R0501 through 310R1004, T310R S/N 310R0501 through 310R1004)"Air Minimum Control Speed: 80 KIAS"
- (4) (a) (310) "Maximum gear extended speed 130 mph. (CAS)"
 - (b) (310A, 310B, 310C, 310D, 310E, 310F)
 - "Maximum gear extended speed 140 mph. (CAS)"
 - (c) (310G, 310H, E310H, 310I, 310J, 310J-1, E310J, 310K)
 - "Maximum gear extended speed 140 mph. (CAS)"
 - (d) (310L, 310N, 310P, T310P, 310Q S/N 310Q0001 through 310Q0845, T310Q S/N 310Q0001 through 310Q0845)
 - "Maximum gear extended speed 160 mph. (CAS)"
 - (e) (310Q S/N 310Q0901 through 310Q1160, T310Q S/N 310Q0901 through 310Q1160, 310R
 S/N 310R0001 through 310R0330, T310R S/N 310R0001 through 310R0330)
 "Maximum gear extended speed 140 knots (CAS)"
 - f) (310R S/N 310R0501 through 310R1004, T310R S/N 310R0501 through 310R1004) "Maximum Gear Operating Speed: 138 KIAS"
 - (g) (310R S/N 310R0501 through 310R1004, T310R S/N 310R0501 through 310R1004)"Maximum Gear Extended Speed: 138 KIAS"
- (5) (a) (310J-1) "Maximum maneuvering speed 183 mph. (CAS)"

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- (6) (a) (310R S/N 310R1201 through 310R2140, T310R S/N 310R1201 through 310R2140)
 - 1. "This airplane must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and handbooks (Pilot's Checklist)"
 - 2. "No acrobatic maneuvers, including spins, approved"
 - 3. "Air minimum control speed: 80 KIAS"
 - 4. "Maximum gear operating speed: 138 KIAS"
 - 5. "Maximum gear extended speed: 138 KIAS"
 - 6. "Maximum flap extended speed 15°: 158 KIAS"
 - 7. "Maximum flap extended speed 35°: 139 KIAS"
 - 8. "Maximum maneuvering speed: 148 KIAS"
 - "This airplane is approved for day/night VFR conditions. It is approved for day/night IFR
 conditions and flights into icing conditions if the proper optional equipment is installed and
 operational.

IDLE POWER STALL SPEEDS (KIAS)

	Angle of Bank			
Configuration	0°	20°	40°	60°
Gear Up - Flaps Up	79	82	91	112
Gear Down - Flaps Down 15°	77	79	88	109
Gear Down - Flaps Down 35°	72	74	82	101

B. On the Instrument Panel

- (1) "Open defrost or cabin air during heater operation."
- (2) "T & B Test" "Heater Overheat"
- (3) (a) (310)

"Flap	Max. Speed
Deflection	(TIAS) MPH.
15°	160
15° - 45°	130

(b) (310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H)

"Flap Max. Speed Deflection (TIAS) MPH.**
15° 160
15° - 45° 140"

(c) (310I, <u>310J</u>, 310J-1, E310J)

"171	M C1
"Flap	Max. Speed
Deflection**	(CAS) MPH.
15°	160
15° - 35°	140"

^{**(}as noted on position indicator)

(d) (310K)

"Flap	Max. Speed
Deflection**	(CAS) MPH.
15°	180
15° - 35°	140"

^{**(}as noted on position indicator)

(e) (310L, 310N, 310P, T310P, 310Q, S/N 310Q0001 through 310Q0845;

T310Q, S/N 310Q0001 through 310Q0845)

"Flap	Max. Speed
Deflection**	(CAS) MPH.
15°	180
15° - 35°	160"

^{**(}as noted on position indicator)

^{**}Substitute "CAS" for (TIAS) on 310G, 310H, E310H

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(f) (310Q, S/N 310Q0901 through 310Q1160; T310Q, S/N 310Q0901 through 310Q1160; 310R, S/N 310R0001 through 310R0330; T310R, S/N 310R0001 through 310R0330)

"Flap	Max. Speed
Deflection**	(CAS) knots
15°	160
15° - 35°	140"

**(as noted on position indicator)

(g) (310R, S/N 310R0501 through 310R2140; T310R, S/N 310R0501 through 310R2140)

"Flap	Max. Flap
Deflection**	Ext. Speed
15°	158 KIAS
15° - 35°	138 KIAS"
**(as noted on pos	sition indicator)

- (4) If nacelle fuel transfer tanks are installed -"20 gal. empty LH ON RH OFF fuel transfer 20 gal." (310L, 310N, 310P, T310P, 310Q, T310Q, 310R/T310R, S/N 310R0001 through 310R0735)
- (5) If AK 310-212 is installed: "Aircraft Gross Weight limited to 4990 lb. See Owner's Manual Supplement No. D919-13." (310I, 310J, 310K, 310L, 310N, 310P, 310Q)
- (6) If AK 310-233 is installed: "Aircraft Gross Weight limited to 4990 lb. See Owner's Manual Supplement No. D1524-13." (310R)
- (7) If AK 310-220 is installed: "Aircraft Gross Weight limited to 4990 lb. See Owner's Manual Supplement No. D1502-13." (T310P and T310Q)
- (8) If AK 310-234 is installed: "Aircraft Gross Weight limited to 4990 lb. See Owner's Manual Supplement No. D1525-13." (T310R)
- (9) If Oxygen System is installed: "Use Blue Oxygen connector only." (310Q and T310Q S/N 310Q0601 through 310Q1160; 310R, T310R)
- (10) If fuel low level warning is installed: "L Low Fuel R" (310R/T310R, S/N 310R0501 through 310R2140)
- (11) If propeller synchrophaser is installed -
 - (a) Near phasing knob and switch
 - "PHASING-SYNC-OFF" "MUST BE OFF FOR TAKEOFF, LDG AND ONE ENG. OPER."
 - (b) Near phasing light
 "PROP-SYNC" (310R/T310R S/N 310R0801 through 310R1004)
- (12) If propeller synchrophaser is installed (310R/T310R S/N 310R1201 through 310R2140)
 - (a) Near phasing knob and switch "PHASING OFF" "MUST BE OFF FOR TAKEOFF, LDG AND ONE ENGINE OPER"
 - (b) Near phasing light "PROP SYNC"

C. On Foul Weather Window

(Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J)

(1) "Do not open above 130 mph."

D. On Emergency Exits

- (1) On left emergency exit
 - (a) (310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P/T310P, 310Q/T310Q, S/N 310Q0001 through 310Q0291)

"Emergency exit - pull ring - push window out."

(310Q/T310Q, S/N 310Q0401 through 310Q1160; 310R/T310R, S/N 310R0001 through 310R0735)

"Emergency Exit - Pull Handle - Push Bottom of Window out with sustained force."

(310R/T310R, S/N 310R0801 through 310R2140)

"EMERGENCY EXIT - PULL HANDLE - PUSH WINDOW OUT"

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- (b) "Emergency window release pull." (310L, S/N 310L0075 through 310L0207; 310N, 310P, T310P, 310O, T310O, 310R/T310R, S/N 310R0001 through 310R0735)
- (2) On right emergency exit (310G, S/N 310G0080 through 310G0156; 310H, E310H, 310I, 310J, 310J-1, E310J)
 - (a) "Emergency exit force to open."

E. On Control Lock

(1) "Control Lock - remove before starting engines."

F. On Floor Between Front Seats

- (1) (a) "Left engine 50 gal. left on tank right on tank both off." (Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J)
 - (b) "Left main 50 gal. right main 50 gal. left engine off."(Models 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
- (2) (a) "Right engine 50 gal. left on tank right on tank both off." (Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J)
 - (b) "Left main 50 gal. right main 50 gal. right engine off." (Models 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
- (3) (a) "Set fuel selector valve to left main tank for left engine and right main tank for right engine for takeoff, landing and all normal operation."
 - (b) (310, 310A, 310B) "Takeoff and land with fuel boost pumps on. To extend gear manually, pull out crank to engage and turn clockwise to extend. Caution: push button and stow crank before operating electrically."
 - (c) (310C, 310D, 310E, 310F, 310G, 310H, E310H) "Takeoff and land with auxiliary pumps on. Use full rich mixture and auxiliary pumps when switching fuel pumps. To extend gear manually, pull out crank to engage and turn clockwise to extend. Caution: push button and stow crank before operating electrically."
 - (d) (310I, 310J, 310J-1, E310J) "Takeoff and land with auxiliary pumps on. Use full rich mixture and auxiliary pumps on 'low' when switching tanks. To extend gear manually, pull out crank to engage and turn clockwise to extend. Caution: push button and stow crank before operating electrically."
 - (e) (310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R) "Takeoff and land with auxiliary fuel pumps on. Use full rich mixture and auxiliary fuel pumps on 'low' when switching fuel tanks. (Feel for detent.) To extend gear manually, pull out crank to engage and turn clockwise. Caution:
 - (1) Gear switch should be in neutral before operating manual system.
 - (2) Push button and stow crank before operating electrically."
- (4) If optional nacelle transfer tanks are installed "Use main tank for takeoff, landing and emergency." "Takeoff and land with auxiliary fuel pumps on."
 - "Use full rich mixture and auxiliary fuel pumps on 'low' when switching fuel tanks."
 - (310L, S/N 310L0050 through 310L0207; 310N, 310P/T310P, 310R/T310R, S/N 310R0001 through 310R0330)
 - (a) "Operate on main tanks until fuel quantity is less than 30 gal. per tank."
 - (b) "Transfer wing locker fuel while operating on main tanks in straight and level flight."
 - (c) "Turn transfer pumps off when lights illuminate."
 - (d) "Use fuel crossfeed system to balance main fuel quantities if one wing locker tank does not transfer or if a single wing locker tank is installed."
 - (e) "Switch to auxiliary tanks when main fuel is again less than 30 gal. per tank." "To extend gear manually, pull out crank to engage and turn clockwise."
 - "Caution: (1) Gear switch should be in neutral before operating manual system.
 - (2) Push button and stow crank before operating electrically."
- (5) If optional nacelle transfer tanks are installed "Set fuel selector valves to left main tank for left engine and right main tank for right engine in takeoff, landing and emergency." "Takeoff and land with auxiliary fuel pumps ON." "Use full rich mixture and auxiliary fuel pumps on 'low' when switching fuel tanks."
 - (a) "Operate on main tanks until fuel quantity is less than 180 lbs/tank."
 - (b) "Transfer wing locker fuel to main tanks in straight and level flight only."
 - (c) "Turn transfer pumps OFF when lights illuminate."
 - (d) "Operate on auxiliary tanks only when main tank is again less than 180 lbs/ tank." "To extend gear manually pull out crank to engage and turn clockwise."
 - "CAUTION: (1) Gear switch should be in neutral before operating manual system.
 - (2) Push button and stow crank before operating electrically."

(310R/T310R, S/N 310R0501 through 310R2140)

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G. Baggage

- (1) On baggage door
 - (a) "Maximum capacity 200 lb. See weight and balance data for detailed loading instructions." (310A, 310B, 310C, 310D, 310E, 310F, 310G)
 - (b) "Maximum capacity 200 lb. Sta. 85 110 see weight and balance data for detailed loading instructions." (310H, E310H, 310I, 310J, 310J-1, E310J)
- (2) On upper baggage wall, Sta. 132 (310H, E310H)
 - (a) "Maximum baggage capacity 60 lb. see weight and balance data for detailed loading instructions."
- (3) On lower baggage wall, Sta. 132 (full width baggage area) (310H, 310I, 310J, 310J-1, E310J)
 - (a) "Maximum baggage capacity 160 lb. Sta. 110 132 see weight and balance data for detailed loading instructions."
- (4) On lower baggage wall, Sta. 132 (alternate baggage area) (310H, E310H)
 - (a) "Maximum baggage capacity 80 lb. Sta. 110 132 see weight and balance data for detailed loading instructions."
- (5) On each wing locker door (310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
 - (a) "Maximum baggage 120 lb."
 - (b) If wing locker transfer tanks are installed, "Maximum baggage 40 lb."
- (6) On baggage door (310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
 - (a) "Sta. 89 to Sta. 109 200 lb., Sta. 109 to Sta. 132 160 lb.See weight and balance data for detailed loading instructions."
- (7) On aft baggage retainer in nose (310R and T310R)
 - (a) "Maximum baggage XX.X. Maximum capacity 350 lbs. less XX.X optional equipment."

H. Adjacent to Fuel Strainer

(1) "Fuel strainer - drain daily - Note: if water is observed at the fuel strainer, fuel tank sumps and cross feed lines must be drained."

I. Omitted

NOTE 2.

- J. When auxiliary tanks are installed, replace placard 2F on floor between front seats with the following placard:
 - (1) (a) "Left engine 50 gal. left main 15 gal. left auxiliary 50 gal. right main left engine off." (Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J)
 - (b) "Left main 50 gal. left auxiliary 15 gal. right main 50 gal. left engine off." (Model 310K)
 - (c) "Left main 50 gal. left auxiliary 20 gal. right main 50 gal. left engine off." (Models 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
 - (2) (a) "Right engine 50 gal. left main 15 gal. right auxiliary 50 gal. right main right engine off." (Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J)
 - (b) "Left main 50 gal. right auxiliary 15 gal. right main 50 gal. right engine off." (Model 310K)
 - (c) "Left main 50 gal. right auxiliary 20 gal. right main 50 gal. right engine off." (Models 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
 - (3) (310, 310A, 310B)
 - (a) "Use main tanks for takeoff, landing and first 30 minutes of flight."
 - (b) "Set fuel selector valves to left tank for left engine and right tank for right engine in takeoff, landing and all normal operation."
 - (c) "Takeoff and land with fuel boost pump on."
 - (d) "To extend gear manually, pull out crank to engage and turn clockwise to extend. Caution: push button and stow crank before operating electrically."
 - (4) (310C, 310D, 310E, 310F, 310G, 310H, E310H)
 - (a) "Use main tanks for takeoff, landing and first 60 minutes of flight."
 - (b) "Set fuel selector valves to left engine and right tank for right engine in takeoff, landing and all normal operation."
 - (c) "Takeoff and land with auxiliary fuel pumps on. Use full rich mixture and auxiliary pumps when switching fuel tanks."
 - (d) "To extend gear manually, pull out crank to engage and turn clockwise to extend. Caution: push button and stow crank before operating electrically."
 - (5) (a) (310I, 310J, 310J-1, E310J)
 - "Set fuel selector valve to left main tank for left engine and right main tank for right engine for takeoff, landing and all normal operation."

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- (b) (310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)"Set fuel selector valve to left main tank for left engine and right main tank for right engine for takeoff, landing and emergency."
- (c) (310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R) "Use main tanks for takeoff, landing and first 60 minutes of flight."
- (d) (310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
 "Takeoff and load with auxiliary fuel pumps on. Use full rich mixture and auxiliary fuel pumps on 'low' when switching fuel tanks." (Feel for detent.)
- (e) (310I, 310J, 310J-1, E310J)
 - "To extend gear manually, pull out crank to engage and turn clockwise. Caution: push button and stow crank before operating electrically."
- (f) (310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R)
- "To extend gear manually, pull out crank to engage and turn clockwise.
 - Caution: (1) Gear switch should be in neutral before operating manual system.
 - (2) Push button and stow crank before operating electrically."
- (6) (310Q and T310Q S/N 310Q0601 through 310Q1160, 310R, T310R, 63 gal. auxiliary fuel system)
 - (a) "Left main 50 gal. left auxiliary 31.5 gal. right main 50 gal. left engine off."
 - (b) "Right main 50 gal. right auxiliary 31.5 gal. left main 50 gal. right engine off."
 - (c) "Set fuel selector valve to left main tank for left engine and right main tank for right engine in takeoff, landing and emergency."
 - (d) "Use main tanks for takeoff, landing and first 90 minutes of flight."
 - (e) "Takeoff and land with auxiliary fuel pumps on. Use full rich mixture on 'low' when switching fuel tanks. (Feel for detent.)"
 - (f) "To extend gear manually, pull out crank to engage and turn clockwise.
 - Caution: (1) Gear switch should be in neutral before operating manual system.
 - (2) Push button and stow crank before operating electrically."

K. On engine control pedestal:

- (1) If nacelle fuel transfer tanks are installed "FUEL TRANSFER -20 GAL L R L ON R EMPTY OFF" (310R/T310R, S/N 310R0801 through 310R2140)
- Note 3. The following information shall be provided in the form of markings, placards or manuals (Pilot's Check List):
 - A. Maximum takeoff flap setting 15°.
 - B. Maximum positive maneuvering load factor +3.8g, flaps up; +2.0g, flaps extended, except for Model 310J-1 which has a load factor of +4.8g, flaps up.
 - C. Maximum loss of altitude during normal stall recovery is 400 ft. and maximum pitch in power-off stall is 45°. Models 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, E310H, 310I, 310J, 310J-1, E310J, 310K, 310L, 310N, 310P, T310P.
 - D. Loading schedule for Cessna Model 310 airplane.
 - E. Maximum loss of altitude during normal stall recovery is 500 ft. for Model 310Q and 300 ft. for Model T310Q.
 - F. Maximum loss of altitude during normal stall recovery is 300 ft. for Model 310R and T310R.
- Note 4. Special Accessory Kits for foreign certification:
 - A. Aircraft with Accessory Kit AK 310-212 installed are restricted to operations at gross weights of 4990 lb. or less. The model designation will be altered by adding the prefix letter "E." (310I, 310J, 310K, 310L, 310N, 310P, 310Q).
 - B. Aircraft with Accessory Kit AK 310-233 installed are restricted to operations at gross weights of 4990 lb. or less. The model designation will be altered by adding the prefix letter "E." (310R)
 - C. Aircraft with Accessory Kit AK 310-220 installed are restricted to operations at gross weights of 4990 lb. or less. The model designation will be altered by adding the prefix letter "E." (T310P and T310Q).

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D. Aircraft with Accessory Kit AK 310-234 installed are restricted to operations at gross weights of 4990 lb. or less. The model designation will be altered by adding the prefix letter "E." (T310R)

Note 5. McCauley propellers with 3AF32C87 or 3AF32C504 hubs may be interchanged in any combination.

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

.....END.....