

I. Model 172 (cont'd)

Propeller and Propeller Limits	1. Propeller			
	(a) McCauley 1A170/DM			
	Static rpm at maximum permissible throttle setting:			
	Not over 2360, not under 2230			
	No additional tolerance permitted			
	Diameter: not over 76 in., not under 74.5 in.			
	(b) Spinner, Dwg. 0550162			
	2. Propeller			
	(a) Sensenich M74DR or 74DR			
	Static rpm at maximum permissible throttle setting:			
	Not over 2430, not under 2300			
	No additional tolerance permitted			
	Diameter: not over 74 in., not under 72.0 in.			
	(b) Spinner, Dwg. 0550162			
	3. Propeller			
	(a) McCauley 1C172/MDM 7652, 53, or 55	30 lb. (-39.0)		
	Static rpm at maximum permissible throttle setting:			
	Not over 2350, not under 2250			
	No additional tolerance permitted			
	Diameter: not over 76 in., not under 74.5 in.			
	(b) Spinner, Dwg. 0550216			
*Airspeed Limits (CAS)	Maneuvering 115 mph (100 knots)			
	Maximum structural cruising	140 mph (122 knots)		
	Never exceed 160 mph (139 knots)			
	Flaps extended	100 mph (87 knots)		
C.G. Range	Normal	(+40.8) to (+46.4) at 2200 lbs.		
		(+36.4) to (+46.4) at 1733 lbs.		
	Utility category	(+38.4) to (+40.3) at 1950 lbs.		
		(+36.4) to (+40.3) at 1733 lbs. or less		
	Straight line variation between points given.			
Empty Weight C.G. Range	None			
*Maximum Weight	Normal category	2200 lbs.		
	Utility category	1950 lbs.		
Number of Seats	4 (2 at +36, 2 at +70) (For child's optional jump seat, refer to Equipment List.)			
Maximum Baggage	120 lbs. (+95)			
Fuel Capacity	42 gal. total, 37 gal. usable (two 21 gal. tanks in wings at +48) <i>See Note 1 for weight of unusable fuel and oil.</i>			
Oil capacity	2 gal. (-20), includes 1 gal. unusable			
Control Surface Movements	Wing flaps	Takeoff	Retracted	0°
			1st notch	10°
		Landing	2nd notch	20°
			3rd notch	30°
			4th notch	40°
Control Surface Movements (cont'd)				
	Ailerons	Up 20°	Down	14°
	Elevator tab	Up 28°	Down	13°
	Elevator	Up 28°	Down	26°
	Rudder	Right 16°	Left	16°
Serial Numbers Eligible	610, 612, 615, 28000 through 29999, 36000 through 36999 and 46001 through 46754			

**II. Model 172A, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved July 16, 1959;
Model 172B, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved June 14, 1960**

Engine	Continental O-300-C or O-300-D	
*Fuel	80/87 minimum grade aviation gasoline	
*Engine Limits	For all operations, 2700 rpm (145 hp)	
Propeller and Propeller Limits	<p>1. Propeller</p> <p>(a) McCauley 1C172/EM 7652, 53, or 55 Static rpm at maximum permissible throttle setting: Not over 2350, not under 2230 No additional tolerance permitted Diameter: not over 76 in., not under 74.5 in.</p> <p>(b) Spinner, Dwg. 0550216, 0550221 or 0550228</p> <p>2. Propeller (seaplane only)</p> <p>(a) McCauley 1A175/SFC 8040 Static rpm at maximum permissible throttle setting: Not over 2480, not under 2380 No additional tolerance permitted Diameter: not over 80 in., not under 78.4 in.</p> <p>(b) Spinner, Dwg. 0550216 or 0550221</p> <p>3. Propeller</p> <p>(a) Sensenich 74DC-0-56 Static rpm at maximum permissible throttle setting: Not over 2420, not under 2300 No additional tolerance permitted Diameter: not over 74 in., not under 72.5 in.</p>	
*Airspeed Limits (CAS)	Maneuvering	115 mph (100 knots)
	Maximum structural cruising	140 mph (122 knots)
	Never exceed	160 mph (139 knots)
	Flaps extended	100 mph (87 knots)
C.G. Range	<p>Landplane (Model 172A):</p> <p>Normal category (+40.8) to (+46.4) at 2200 lbs. (+36.4) to (+46.4) at 1733 lbs. or less</p> <p>Utility category (+38.4) to (+40.3) at 1950 lbs. (+36.4) to (+40.3) at 1733 lbs. or less</p> <p>Straight line variation between points given.</p> <p>Landplane (Model 172B):</p> <p>Normal category (+40.4) to (+46.4) at 2200 lbs. (+36.4) to (+46.4) at 1850 lbs. or less</p> <p>Utility category (+37.4) to (+40.3) at 1950 lbs. (+36.4) to (+40.3) at 1850 lbs. or less</p> <p>Seaplane (Models 172A and 172B):</p> <p>Normal category (+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less</p> <p>Straight line variation between points given.</p>	
Empty Weight C.G. Range	None	
*Maximum Weight	<p>Landplane:</p> <p>Normal category 2200 lb.</p> <p>Utility category 1950 lb.</p> <p>Seaplane:</p> <p>Normal category 2220 lb.</p>	
Number of Seats	4 (2 at +36, 2 at +70) (For child's optional jump seat, refer to Equipment List.)	
Maximum Baggage	120 lb. (+95)	

II. Model 172A (cont'd)

Fuel Capacity	42 gal. total, 37 gal. usable (172A); 39 gal. usable (172B) (two 21 gal. tanks in wings at +48) <i>See Note 1 for weight of unusable fuel and oil.</i>		
Oil Capacity	2 gal. (-20), 1 gal. usable		
Control Surface Movements	Wing flaps	Takeoff	Retracted 0°
			1st notch 10°
	Landing		2nd notch 20°
			3rd notch 30°
			4th notch 40°
	Ailerons	Up 20°	Down 15°
	Elevator tab	Up 28°	Down 13°
	Elevator	Up 28°	Down 26°
	Rudder (landplane)	Right 16°	Left 16°
(seaplane)	Right 19°	Left 15°	
	(Measured parallel to W.L.)		
Serial Numbers Eligible	Model 172A: 622, 625, 46755 through 47746 Model 172B: 630, 17247747 through 17248734		

III. Model 172C, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved July 18, 1961

Engine	Continental O-300-C or O-300-D	
*Fuel	80/87 minimum grade aviation gasoline	
*Engine Limits	For all operations, 2700 rpm (145 hp)	
Propeller and Propeller Limits	1. Propeller	
	(a) McCauley 1C172/EM 7652, 53, or 55	
	Static rpm, at maximum permissible throttle setting:	
	Not over 2350, not under 2230	
	No additional tolerance permitted	
	Diameter: not over 76 in., not under 74.5 in.	
	(b) Spinner, Dwg. 0550216, 0550221 or 0550228	
	2. Propeller (seaplane only)	
	(a) McCauley 1A175/SFC 8040	
	Static rpm, at maximum permissible throttle setting:	
Not over 2480, not under 2380		
No additional tolerance permitted		
Diameter: not over 80 in., not under 78.4 in.		
(b) Spinner, Dwg. 0550216 or 0550221		
3. Propeller		
(a) Sensenich 74DC-0-56		
Static rpm at maximum permissible throttle setting:		
Not over 2420, not under 2300		
No additional tolerance permitted		
Diameter: not over 74 in., not under 72.5 in.		
*Airspeed Limits (CAS)	Maneuvering	115 mph (100 knots)
	Maximum structural cruising	140 mph (122 knots)
	Never exceed	160 mph (139 knots)
	Flaps extended	100 mph (87 knots)

III. Model 172C (cont'd)

C.G. Range	Landplane		
	Normal category	(+40.5) to (+46.4) at 2250 lbs.	
		(+36.4) to (+46.4) at 1850 lbs. or less	
	Utility category	(+37.4) to (+40.3) at 1950 lbs.	
		(+36.4) to (+40.3) at 1850 lbs. or less	
	Seaplane		
	Normal category	(+39.8) to (+45.5) at 2220 lbs.	
		(+36.4) to (+45.5) at 1825 lbs. or less	
	Straight line variation between points given.		
Empty Weight C.G. Range	None		
*Maximum Weight	Landplane		
	Normal category	2250 lbs.	
	Utility category	1950 lbs.	
	Seaplane		
	Normal category	2220 lbs.	
Number of Seats	4 (2 at +36, 2 at +70) (For child's optional jump seat, refer to Equipment List.)		
Maximum Baggage	120 lbs. (+95)		
Fuel Capacity	39 gal. total, 36 gal. usable (two 19.5 gal. tanks in wings at +48) <i>See Note 1 for weight of unusable fuel and oil.</i>		
Oil Capacity	2 gal. (-20), includes 1 gal. unusable		
Control Surface Movements	Wing flaps	Takeoff	Retracted 0°
			1st notch 10°
		Landing	2nd notch 20°
			3rd notch 30°
			4th notch 40°
	Ailerons	Up 20°	Down 15°
	Elevator tab	Up 28°	Down 13°
	Elevator	Up 28°	Down 26°
	Rudder (Landplane)	Right 16°	Left 16°
	(Seaplane)	Right 19°	Left 15°
	(Measured parallel to W.L.)		
Serial Numbers Eligible	17248735 through 17249544		

IV. Model 172D, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved June 19, 1962
Model 172E, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved June 27, 1963
Model 172F (USAF T-41A), 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved April 21, 1964
Model 172G, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved June 15, 1965
Model 172H (USAF T-41A), 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved June 7, 1966

Engine	Continental O-300-C or O-300-D
*Fuel	80/87 minimum octane aviation gasoline
*Engine Limits	For all operations, 2700 rpm (145 hp)

IV. Models 172D, 172E, 172F, 172G, 172H (cont'd)

Propeller and Propeller Limits	<p>1. Propeller</p> <p>(a) McCauley 1C172/EM 7652, 53 Static rpm at maximum permissible throttle setting: Not over 2420, not under 2230 No additional tolerance permitted Diameter: not over 76 in., not under 74.5 in.</p> <p>(b) Spinner Model 172D, E, F, Dwg. 0550216, 0550221 or 0550228 Model 172G, H, Dwg. 0550236</p> <p>2. Propeller (seaplane only)</p> <p>(a) McCauley 1A175/SFC 8040 Static rpm at maximum permissible throttle setting: Not over 2480, not under 2380 No additional tolerance permitted Diameter: not over 80 in., not under 78.4 in.</p> <p>(b) Spinner Model 172D, E, F, Dwg. 0550216, 0550221 Model 172G, H, Dwg. 0550236</p>																																				
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Rudder (landplane)	Right	Left	16° 16°																																		
(seaplane)	Right	Left	19° 15°																																		

IV. Models 172D, 172E, 172F, 172G, 172H (cont'd)

Serial Numbers Eligible	Model 172D:	17249545 through 17250572
	Model 172E:	639, 17250573 through 17251822
	Model 172F:	17251823 through 17253392
	Model 172G:	17253393 through 17254892
	Model 172H:	638, 17254893 through 17256512 (except 17256493)

**V. Model 172I, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved December 15, 1967
Model 172K, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved May 9, 1968**

Engine	Lycoming O-320-E2D								
*Fuel	80/87 minimum grade aviation gasoline								
*Engine Limits	For all operations, 2700 rpm (150 hp)								
Propeller and Propeller Limits	<ol style="list-style-type: none"> 1. Propeller <ol style="list-style-type: none"> (a) McCauley 1C172/MTM 7653 <ul style="list-style-type: none"> Static rpm at maximum permissible throttle setting: Not over 2360, not under 2260 No additional tolerance permitted (see Note 3) Diameter: not over 76 in., not under 74 in. (b) Spinner, Dwg. 0550320 2. Propeller (seaplane only) <ol style="list-style-type: none"> (a) McCauley 1A175/ATM 8042 <ul style="list-style-type: none"> Static rpm at maximum permissible throttle setting: Not over 2480, not under 2380 No additional tolerance permitted (see Note 3) Diameter: not over 80 in., not under 78.4 in. (b) Spinner, Dwg. 0550320 3. Propeller <ol style="list-style-type: none"> (a) McCauley 1C160/CTM 7553 <ul style="list-style-type: none"> Static rpm at maximum permissible throttle setting: Not over 2370, not under 2270 No additional tolerance permitted (see Note 3) Diameter: not over 75 in., not under 74 in. (b) Spinner, Dwg. 0550320 4. Propeller (seaplane only) <ol style="list-style-type: none"> (a) McCauley 1A175/ETM 8042 <ul style="list-style-type: none"> Static rpm at maximum permissible throttle setting: Not over 2480, not under 2380 No additional tolerance permitted (see Note 3) Diameter: not over 80 in., not under 78.4 in. (b) Spinner, Dwg. 0550321 5. Propeller <ol style="list-style-type: none"> (a) McCauley 1C160/DTM 7553 <ul style="list-style-type: none"> Static rpm at maximum permissible throttle setting: Not over 2370, not under 2270 No additional tolerance permitted (see Note 3) Diameter: not over 75 in., not under 74 in. (b) Spinner, Dwg. 0550320 								
*Airspeed Limits (CAS)	<table> <tr> <td>Maneuvering</td> <td>122 mph (106 knots)</td> </tr> <tr> <td>Maximum structural cruising</td> <td>140 mph (122 knots)</td> </tr> <tr> <td>Never exceed</td> <td>174 mph (151 knots)</td> </tr> <tr> <td>Flaps extended</td> <td>100 mph (87 knots)</td> </tr> </table>	Maneuvering	122 mph (106 knots)	Maximum structural cruising	140 mph (122 knots)	Never exceed	174 mph (151 knots)	Flaps extended	100 mph (87 knots)
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Maximum structural cruising	140 mph (122 knots)								
Never exceed	174 mph (151 knots)								
Flaps extended	100 mph (87 knots)								

V. **Model 172I, Model 172K** (cont'd)

C.G. Range	Landplane		
	Normal category	(+38.5) to (+47.3) at 2300 lbs.	
		(+35.0) to (+47.3) at 1950 lbs. or less	
	Utility category	(+35.5) to (+40.5) at 2000 lbs.	(+35.0) to (+40.5) at 1950 lbs. or less
	Seaplane (Edo 89-2000 or 89A2000 floats)		
	Normal category	(+39.8) to (+45.5) at 2220 lbs.	(+36.4) to (+45.5) at 1825 lbs. or less
	Straight line variation between points given.		
Empty Weight C.G. Range	None		
*Maximum Weight	Landplane:		
	Normal category	2300 lbs.	
	Utility category	2000 lbs.	
	Seaplane:		
	Normal category	2220 lbs.	
Number of Seats	4 (2 at +34 to +46, 2 at +73) (Occupant on child's optional jump seat at +93)		
Maximum Baggage	120 lb. at +95		
Fuel Capacity	42 gal. total, 38 gal. usable (two 21 gal. tanks in wings at +48) <i>See Note 1 for weight of unusable fuel and oil.</i>		
Oil Capacity	2 gal. (-14.0), 1-1/2 gal. usable		
Control Surface Movements	Wing flaps	Takeoff	0° - 10°
		Landing	0° - 40° ±2°
	Ailerons	Up	20° ±1°
		Down	15° ±1°
	Elevator tab	Up	28° +1°, -0°
		Down	13° +1°, -0°
	Elevator	Up	28° +1°, -0°
	Down	23° +1°, -0°	
	(Neutral position is with bottom of balance area flush with bottom of stabilizer.)		
	Rudder (landplane)	Right	16° ±1°
		Left	16° ±1°
	(seaplane)	Right	19° ±1°
		Left	15° ±1°
	(Measured parallel to W.L.)		
Serial Numbers Eligible	Model 172I:	17256513 through 17257161	
	Model 172K:	17257162 through 17258486 (1969 model)	
		17258487 through 17259223 (1970 model)	

VI. **Model 172L, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved May 13, 1970**

Engine	Lycoming O-320-E2D
*Fuel	80/87 minimum grade aviation gasoline
*Engine Limits	For all operations, 2700 rpm (150 hp)

VI. Model 172L (cont'd)Propeller and
Propeller Limits

1. Propeller
 - (a) McCauley 1C172/MTM 7653
Static rpm at maximum permissible throttle setting:
Not over 2360, not under 2260
No additional tolerance permitted (see Note 3)
Diameter: not over 76 in., not under 74 in.
 - (b) Spinner, Dwg. 0550320
2. Propeller (seaplane only)
 - (a) McCauley 1A175/ATM 8042
Static rpm at maximum permissible throttle setting:
Not over 2480, not under 2380
No additional tolerance permitted (see Note 3)
Diameter: not over 80 in., not under 78.4 in.
 - (b) Spinner, Dwg. 0550320
3. Propeller
 - (a) McCauley 1C160/CTM 7553
Static rpm at maximum permissible throttle setting:
Not over 2370, not under 2270
No additional tolerance permitted (see Note 3)
Diameter: not over 75 in., not under 74 in.
 - (b) Spinner, Dwg. 0550320
4. Propeller
 - (a) McCauley 1C160/DTM 7553
Static rpm at maximum permissible throttle setting:
Not over 2370, not under 2270
No additional tolerance permitted (see Note 3)
Diameter: not over 75 in., not under 74 in.
 - (b) Spinner, Dwg. 0550320
5. Propeller (Seaplane only)
 - (a) McCauley 1A175/ETM 8042
Static rpm at maximum permissible throttle setting:
Not over 2480, not under 2380
No additional tolerance permitted (see Note 3)
Diameter: not over 80 in., not under 78.4 in.
 - (b) Spinner, Dwg. 0550321

*Airspeed Limits
(CAS)

Maneuvering 122 mph (106 knots)
 Maximum structural cruising 140 mph (122 knots)
 Never exceed 174 mph (151 knots)
 Flaps extended 100 mph (87 knots)

C.G. Range

Landplane
 Normal category (+38.5) to (+47.3) at 2300 lbs.
 (+35.0) to (+47.3) at 1950 lbs. or less
 Utility category (+35.5) to (+40.5) at 2000 lbs.
 (+35.0) to (+40.5) at 1950 lbs. or less
 Straight line variation between points given.

Seaplane (Edo 89-2000 or 89A2000 floats)

Normal category (+39.8) to (+45.5) at 2220 lbs.
 (+36.4) to (+45.5) at 1825 lbs. or less
 Straight line variation between points given.

Empty Weight C.G. Range

None

*Maximum Weight

Landplane:
 Normal category 2300 lbs.
 Utility category 2000 lbs.
 Seaplane:
 Normal category 2220 lbs.

Number of Seats

4 (2 at +34 to +46, 2 at +73) (Occupant on child's optional jump seat at +96)

VI. Model 172L, (cont'd)

Maximum Baggage	120 lb. at +95			
Fuel Capacity	42 gal. total, 38 gal. usable (two 21 gal. tanks in wings at +48) <i>See Note 1 for weight of unusable fuel.</i>			
Oil Capacity	2 gal. (-14.0), 1-1/2 gal. usable <i>See Note 1 for data on undrainable oil.</i>			
Control Surface Movements	Wing flaps	Takeoff	0° - 10°	
		Landing	0° - 40° ±2°	
	Ailerons	Up	20° ±1°	Down 15° ±1°
	Elevator tab	Up	28° +1°, -0°	Down 13° +1°, -0°
	Elevator	Up	28° +1°, -0°	Down 23° +1°, -0°
	(Neutral position is with bottom of balance area flush with bottom of stabilizer.)			
	Rudder (landplane)	Right	16° ±1°	Left 16° ±1°
	(seaplane)	Right	19° ±1°	Left 15° ±1°
(Measured parallel to W.L.)				
Serial Numbers Eligible	Model 172L: 17259224 through 17259903 (1971 model) Model 172L: 17259904 through 17260758 (1972 model)			

VII. Model 172M, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category, approved May 12, 1972)

Engine	Lycoming O-320-E2D
*Fuel	80/87 minimum grade aviation gasoline
*Engine Limits	For all operations, 2700 rpm (150 hp)
Propeller and Propeller Limits	1. Propeller
	(a) McCauley 1C160/CTM 7553
	Static rpm at maximum permissible throttle setting:
	Not over 2370, not under 2270
	No additional tolerance permitted (see Note 3)
	Diameter: not over 75 in., not under 74 in.
	(b) Spinner: Dwg. 0550320
	2. Propeller
	(a) McCauley 1C160/DTM 7553
	Static rpm at maximum permissible throttle setting:
	Not over 2370, not under 2270
	No additional tolerance permitted (see Note 3)
	Diameter: not over 75 in., not under 74 in.
	(b) Spinner, Dwg. 0550320
	3. Propeller (seaplane only)
	(a) McCauley 1A175/ATM 8042
Static rpm at maximum permissible throttle setting:	
Not over 2545, not under 2445	
No additional tolerance permitted (see Note 3)	
Diameter: not over 80 in., not under 78.4 in.	
(b) Spinner, Dwg. 0550320	
4. Propeller (seaplane only)	
(a) McCauley 1A175/ETM 8042	
Static rpm at maximum permissible throttle setting:	
Not over 2545, not under 2445	
No additional tolerance permitted (see Note 3)	
Diameter: not over 80 in., not under 78.4 in.	
(b) Spinner, Dwg. 0550320	

VII. Model 172M (cont'd)

*Airspeed Limits (CAS)	17256493, 17260759 through 17265684
	Maneuvering 112 mph (97 knots)
	Maximum structural cruising 145 mph (126 knots)
	Never exceed 182 mph (158 knots)
	Flaps extended 100 mph (87 knots)
	17265685 through 17267584
	Maneuvering 97 knots
(See Note 4 on use of CAS)	Maximum structural cruising 128 knots
	Never exceed 160 knots
	Flaps extended 85 knots
C.G. Range	Landplane:
	Normal category (+38.5) to (+47.3) at 2300 lbs. (+35.0) to (+47.3) at 1950 lbs. or less
	Utility category (+35.5) to (+40.5) at 2000 lbs. (+35.0) to (+40.5) at 1950 lbs. or less
	Seaplane: (Edo 89-2000 or 89A2000 floats)
	Normal category (+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less
	Straight line variation between points given.
Empty Weight C.G. Range	None
*Maximum Weight	Normal category: 2300 lb. (landplane); 2220 lb. (seaplane) Utility category: 2000 lb. (landplane)
Number of Seats	4 (2 at +34 to +46, 2 at +73) (Occupant on child's optional jump seat at +96)
Maximum Baggage	120 lb. at +95
Fuel Capacity	42 gal. total, 38 gal. usable (two 21 gal. tanks in wings at +48) <i>See Note 1 for data on unusable fuel.</i>
Oil Capacity	2 gal. (-14.0), 1-1/2 gal. usable <i>See Note 1 for data on undrainable oil.</i>
Control Surface Movements	Wing flaps Takeoff 0° - 10° (landplane) (seaplane) Landing 0° - 40° +0°, -2° (landplane) 0° - 30° ±2° (seaplane)
	Ailerons Up 20° ±1° Down 15° ±1°
	Elevator tab Up 28° +1°, -0° Down 13° +1°, -0°
	Elevator Up 28° +1°, -0° Down 23° +1°, -0°
	(Neutral position is with bottom of balance area flush with bottom of stabilizer.)
	Rudder (landplane) Right 16° ±1° Left 16° ±1° (landplane)
	(seaplane) Right 19° ±1° Left 15° ±1° (seaplane)
	(Measured parallel to W.L.)
Serial Numbers Eligible	17256493, 17260759 through 17261898 (1973 model) (except 17261445 and 17261578) 17261899 through 17263458 (1974 model) 17263459 through 17265684 (1975 model) 17265685 through 17267584 (1976 model)

VIII. Model 172N, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved
May 17, 1976

Engine	Lycoming O-320-H2AD	
*Fuel	100/130 minimum grade aviation gasoline (S/N 17261445, 17267585 through 17269309)	
	100LL/100 minimum grade aviation gasoline (S/N 17261578, 17269310 through 17274009)	
*Engine Limits	For all operations, 2700 rpm (160 hp)	
Propeller and Propeller Limits	<ol style="list-style-type: none"> 1. Propeller <ol style="list-style-type: none"> (a) McCauley 1C160/DTM 7557 Static rpm at maximum permissible throttle setting: Not over 2400, not under 2280 No additional tolerance permitted Diameter: not over 75 in., not under 74 in. (b) Spinner: Dwg. 0550320 2. Propeller (seaplane only) <ol style="list-style-type: none"> (a) McCauley 1A175/ETM 8042 Static rpm at maximum permissible throttle setting: Not over 2570, not under 2470 No additional tolerance permitted Diameter: not over 80 in., not under 78.5 in. (b) Spinner: Dwg. 0550320 	
*Airspeed Limits (CAS) (See Note 4 on use of CAS)	1977 Model through 1979 Model:	
	Maneuvering	97 knots
	Maximum structural cruising	128 knots
	Never exceed	160 knots
	Flaps extended	85 knots
	1980 Model:	
	Maneuvering	97 knots
	Maximum structural cruising	127 knots
	Never exceed	158 knots
	Flaps extended	85 knots
C.G. Range	Landplane:	
	Normal category	(+38.5) to (+47.3) at 2300 lbs. (+35.0) to (+47.3) at 1950 lbs. or less
	Utility category	(+35.5) to (+40.5) at 2000 lbs. (+35.0) to (+40.5) at 1950 lbs. or less
	Seaplane: (Edo 89-2000 or 89A2000 floats)	
	Normal category	(+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less
	Straight line variation between points given.	
Empty Weight C.G. Range	None	
*Maximum Weight	Normal category: 2300 lb. (landplane); 2220 lb. (seaplane) Utility category: 2000 lb. (landplane)	
Number of Seats	4 (2 at +34 to +46, 2 at +73) (Occupant on child's optional jump seat at +96)	

VIII. Model 172N (cont'd)

Maximum Baggage	120 lb. at +95		
Fuel Capacity	42 gal. total, 40 gal. usable (two 21.5 gal. tanks in wings at +48) <i>See Note 1 for data on unusable fuel.</i>		
Oil Capacity	1.5 gal. (-14.0), 1.0 gal. usable		
Control Surface Movements	Wing flaps	Takeoff	0° - 10° (landplane) (seaplane)
		Landing	0° - 40° +0°, -2° (landplane) 0° - 30° ±2° (seaplane)
	Ailerons	Up	20° ±1° Down 15° ±1°
	Elevator tab	Up	28° +1°, -0° Down 13° +1°, -0°
	Elevator	Up	28° +1°, -0° Down 23° +1°, -0°
	(Neutral position is with bottom of balance area flush with bottom of stabilizer.)		
	Rudder (landplane)	Right	16° ±1° Left 16° ±1° (landplane)
	(seaplane)	Right	19° ±1° Left 15° ±1° (seaplane)
	(Measured parallel to W.L.)		
Serial Numbers Eligible	17261445, 17267585 through 17269309 (1977 model) 17261578, 17269310 through 17271034 (1978 model) (except 17270050) 17271035 through 17272884 (1979 model) 17270050, 17272885 through 17274009 (1980 model)		

**IX. Model 172P, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category), approved
May 13, 1980**

Engine	Lycoming O-320-D2J	
*Fuel	100LL/100 minimum grade aviation gasoline	
*Engine Limits	For all operations, 2700 rpm (160 hp)	
Propeller and Propeller Limits	1. Propeller	
	(a) McCauley 1C160/DTM 7557	Static rpm at maximum permissible throttle setting: Not over 2420, not under 2300 No additional tolerance permitted Diameter: not over 75 in., not under 74 in.
	(b) Spinner: Dwg. 0550320	
	2. Propeller (floatplane only)	
	(a) McCauley 1A175/ETM 8043	Static rpm at maximum permissible throttle setting: Not over 2570, not under 2470 No additional tolerance permitted Diameter: not over 80 in., not under 78.5 in.
	(b) Spinner: Dwg. 0550320	
*Airspeed Limits (CAS) (See Note 4 on use of CAS)	Maneuvering	99 knots (landplane) 96 knots (floatplane)
	Maximum structural cruising	127 knots
	Never exceed	158 knots
	Flaps extended	85 knots

IX. Model 172P (cont'd)

C.G. Range	Landplane:			
	Normal category		(+39.5) to (+47.3) at 2400 lbs. (+35.0) to (+47.3) at 1950 lbs. or less	
	Utility category		(+36.5) to (+40.5) at 2100 lbs. (+35.0) to (+40.5) at 1950 lbs. or less	
	Seaplane: (Edo 89-2000 or 89A2000 floats)			
	Normal category		(+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less	
	Straight line variation between points given.			
Empty Weight C.G. Range	None			
*Maximum Weight	Normal category:	2400 lb. (landplane); 2220 lb. (seaplane)		
	Utility category:	2100 lb. (landplane)		
Number of Seats	4 (2 at +34 to +46, 2 at +73) (Occupant on child's optional jump seat at +96)			
Maximum Baggage	120 lb. at +95			
Fuel Capacity	42 gal. total, 40 gal. usable (two 21.5 gal. tanks in wings at +48) <i>See Note 1 for data on unusable fuel.</i>			
Oil Capacity	2 gal. (-13.1), 1.5 gal. usable			
Control Surface Movements	Wing flaps	Takeoff	0° - 10°	
		Landing	0° - 30° +0°, -2°	
	Ailerons	Up	20° ±1°	Down 15° ±1°
	Elevator tab	Up	28° +1°, -0°	Down 13° +1°, -0° (floatplane)
		Up	22° +1°, -0°	Down 19° +1°, -0° (landplane)
	Elevator	Up	28° +1°, -0°	Down 23° +1°, -0°
		(Neutral position is with bottom of balance area flush with bottom of stabilizer.)		
	Rudder (landplane)	Right	16° ±1°	Left 16° ±1° (landplane)
	(seaplane)	Right	19° ±1°	Left 15° ±1° (seaplane)
	(Measured parallel to W.L.)			
Serial Numbers Eligible	17274010 through 17275034 (1981 model) 17275035 through 17275759 (1982 model) 17275760 through 17276079 (1983 model) 17276080 through 17276259 (1984 model) 17276260 through 17276516 (1985 model) 17276517 through 17276654 (1986 model)			

X. Model 172Q, Cutlass, 4 PCLM (Normal Category), approved October 15, 1982

Engine	Lycoming O-360-A4N
*Fuel	100LL/100 minimum grade aviation gasoline
*Engine Limits	For all operations, 2700 rpm (180 hp)

X. Model 172Q (cont'd)

Propeller and Propeller Limits	1. Propeller (a) McCauley 1A170E/JFA 7658 Static rpm at maximum permissible throttle setting: Not over 2450, not under 2350 No additional tolerance permitted Diameter: not over 76 in., not under 74.5 in. (b) Spinner: Dwg. 0509077
*Airspeed Limits	Maneuvering 105 knots Maximum structural cruising 127 knots Never exceed 158 knots Flaps extended 85 knots
C.G. Range	Normal category (+41.0) to (+47.3) at 2550 lbs. (+35.0) to (+47.3) at 1950 lbs. or less Straight line variation between points given.
Empty Weight C.G. Range	None
*Maximum Weight	Normal category: 2550 lb.
Number of Seats	4 (2 at +34 to +46, 2 at +73) (Occupant on optional child's seat at +96)
Maximum Baggage	120 lbs. at +95
Fuel Capacity	54 gal. total, 50 gal. usable (two 27 gal. tanks in wings at +48) <i>See Note 1 for data on unusable fuel.</i>
Oil Capacity	9 qt. at -15.5, 2 qt. unusable
Control Surface Movements	Wing flaps Takeoff 0° - 10° Landing 0° - 30° +0°, -2° Ailerons Up 20° ±1° Down 15° ±1° Elevator tab Up 22° +1°, -0° Down 19° +1°, -0° Elevator Up 28° +1°, -0° Down 23° +1°, -0° (Neutral position is with bottom of balance area flush with bottom of stabilizer.) Rudder Right 16° ±1° Left 16° ±1° (Measured parallel to W.L.)
Serial Numbers Eligible	17275869 through 17276054 (1983 model) 17276101 through 17276211 (1984 model)

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q

Datum	Front face of firewall (28000 through 47746) Lower front face of firewall (17247747 through 17276654)
Leveling Means	Upper doorsill

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)**Certification Basis:**Models 172 through 172P

Part 3 of the Civil Air Regulations effective November 1, 1949, as amended by 3-1 through 3-12. In addition, effective S/N 17271035 and on, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-5 for Model 172N; FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-12 for Model 172P through 172Q. In addition, effective S/N 17276260 and on, FAR 23.1545(a), Amendment 23-23 dated December 1, 1978.

<u>Equivalent Safety Items</u>	17261445, 17261578, 17265685
Airspeed Indicator	CAR 3.757 (see Note 4 on use of CAS) (17261445, 17261578, 17265685 through 17276259)
Operating Limitations	CAR 3.778(a)

Model 172Q

Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12. In addition, FAR 23.1559 effective March 1, 1978; FAR 23.951(b)(2), Amendment 23-15 effective October 31, 1974; and FAR 23.1545(a), Amendment 23-23 effective December 1, 1978. FAR 36 dated December 1, 1969, plus amendments 36-1 through 36-12.

Application for Type Certificate dated July 11, 1955. Type Certificate No. 3A12 issued November 4, 1955, obtained by the manufacturer under Delegation Option Procedures.

Production Basis:

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

Equipment:

The basic required equipment as prescribed in the applicable airworthiness requirements (see Certification Basis) must be installed in the aircraft for certification. This equipment must include a current Airplane Flight Manual (AFM) effective S/N 17271035 and on.

1. Model 172 through 172G: Stall warning indicator, Dwg. 0511062.
2. Model 172H and on: Stall warning indicator, Dwg. 0523112.

The equipment portion of Aircraft Specification 3A12, Revision 17, or Cessna Publication TS1000-13 should be used for equipment references on all aircraft prior to the Model 172E.

Refer to applicable equipment list for the Model 172E and subsequent models.

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

Serial Nos. 28000 through 29999, 36000 through 36999 and 46001 through 47746, 17247747 through 17265684

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lbs. at (+46) on Models 172 and 172A, or 18 lbs. at (+46) for Models 172B through 172H, or 24 lbs. at (+46) for Models 172I through 172M (17265684) and undrainable oil of (0) lb. at -20) for 172 through 172H and (0) lb. at (-14) for 172I through 172M (17265684).

Serial Nos. 17261578, 17261445, 17265685 through 17274009

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lbs. at (+46) through 172M (17267584) or 18 lbs. at (+46) 17267585 and on and full oil of 11.3 lb. at (-14).

Serial Nos. 17274010 through 17276654: (Model 172P)

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 18 lb. at (+46) and full oil of 15 lb. at (-13.1).

Serial Nos. 17275869 through 17276211; (Model 172Q)

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. at (+46) and full oil of 16.88 lb. at (-15.5).

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

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

A. In full view of the pilot:

(1) Models 172, 172A and 172B

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

NORMAL CATEGORY

Maximum design weight 2200 lbs.
 Refer to weight and balance data for loading instructions.
 Flight maneuvering load factors Flaps up +3.8 -1.52
 Flaps down +3.5
 No acrobatic maneuvers including spins approved.

UTILITY CATEGORY

Maximum design weight 1950 lbs.
 Baggage compartment and rear seat must not be occupied
 Flight maneuvering load factors Flaps up +4.4 -1.76
 Flaps down +3.5

No acrobatic maneuvers approved except those listed below.

<u>Maneuver</u>	<u>Entry speed</u>
Chandelles	115 mph (100 knots)
Lazy eights	115 mph (100 knots)
Steep turns	115 mph (100 knots)
Spins	Slow deceleration
Stalls (except whip stalls)	Slow deceleration"

A. (2) Model 172C

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

NORMAL CATEGORY

Maximum design weight 2250 lbs.
 Refer to weight and balance data for loading instructions.
 Flight maneuvering load factors Flaps up +3.8 -1.52
 Flaps down +3.5
 No acrobatic maneuvers including spins approved.

UTILITY CATEGORY

Maximum design weight 1950 lbs.
 Baggage compartment and rear seat must not be occupied.
 Flight maneuvering load factors Flaps up +4.4 -1.76
 Flaps down +3.5

No acrobatic maneuvers approved except those listed below.

<u>Maneuver</u>	<u>Entry speed</u>
Chandelles	115 mph (100 knots)
Lazy eights	115 mph (100 knots)
Steep turns	115 mph (100 knots)
Spins	Slow deceleration
Stalls (except whip stalls)	Slow deceleration"

(3) Models 172D, 172E, 172F, 172G, 172H, 172I, and 172K

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

NORMAL CATEGORY

Maximum design weight 2300 lbs.
 Refer to weight and balance data for loading instructions.
 Flight maneuvering load factors Flaps up +3.8 -1.52
 Flaps down +3.5
 No acrobatic maneuvers including spins approved.

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 2 (cont'd)

UTILITY CATEGORY

Maximum design weight	2000 lbs.		
Baggage compartment and rear seat must not be occupied.			
Flight maneuvering load factors	Flaps up	+4.4	-1.76
	Flaps down	+3.5	

No acrobatic maneuvers except those listed below.

<u>Maneuver</u>	<u>Max. Entry speed</u>
Chandelles	122 mph (106 knots)
Lazy eights	122 mph (106 knots)
Steep turns	122 mph (106 knots)
Spins	Slow deceleration
Stalls (except whip stalls)	Slow deceleration"

A. (4) Model 172L (1971 model)

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

MAXIMUMS

	<u>Normal Category</u>	<u>Utility Category</u>
Maneuvering speed (CAS)	122 mph (106 knots)	122 mph (106 knots)
Gross weight	2300 lbs.	2000 lbs.
Flight load factor		
Flaps up	+3.8 -1.52	+4.4 -1.76
Flaps down	+3.5	+3.5

Normal category - No acrobatic maneuvers including spins approved

Utility category - Baggage compartment and rear seat must not be occupied.

No acrobatic maneuvers approved except those listed below.

<u>Maneuver</u>	<u>Entry speed</u>
Chandelles	122 mph (106 knots)
Lazy eights	122 mph (106 knots)
Steep turns	122 mph (106 knots)
Spins	Slow deceleration
Stalls (except whip stalls)	Slow deceleration"

Spin recovery: opposite rudder - forward elevator - neutralize controls

Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY NIGHT VFR IFR)" (as applicable)

(5) Model 172L (1972 model)

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

MAXIMUMS

	<u>Normal Category</u>	<u>Utility Category</u>
Maneuvering speed (CAS)	122 mph (106 knots)	122 mph (106 knots)
Gross weight	2300 lbs.	2000 lbs.
Flight load factor		
Flaps up	+3.8 -1.52	+4.4 -1.76
Flaps down	+3.5	+3.5

Normal category - No acrobatic maneuvers including spins approved

Utility category - Baggage compartment and rear seat must not be occupied.

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 2 (cont'd)

No acrobatic maneuvers approved except those listed below.

<u>Maneuver</u>	<u>Max. Entry speed</u>
Chandelles	122 mph (106 knots)
Lazy eights	122 mph (106 knots)
Steep turns	122 mph (106 knots)
Spins	Slow deceleration
Stalls (except whip stalls)	Slow deceleration"

Spin recovery: opposite rudder - forward elevator - neutralize controls.
Intentional spins with flaps extended are prohibited. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY NIGHT VFR IFR)" (as applicable)

- A. (6) Model 172M (Landplane) 17256493, 17260759 through 17265684 except 17261445 and 17261578

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

	<u>MAXIMUMS</u>			
	<u>Normal Category</u>		<u>Utility Category</u>	
Maneuvering speed (CAS)	112 mph (97 knots)		112 mph (97 knots)	
Gross weight	2300 lbs.		2000 lbs.	
Flight load factor				
Flaps up	+3.8	-1.52	+4.4	-1.76
Flaps down	+3.0		+3.0	

Normal category - No acrobatic maneuvers including spins approved
Utility category - Baggage compartment and rear seat must not be occupied.
No acrobatic maneuvers approved except those listed below.

<u>Maneuver</u>	<u>Recommended</u>	<u>Recommended</u>	<u>Entry Speed</u>
	<u>Entry speed</u>	<u>Maneuver</u>	
Chandelles	120 mph (104 knots)	Spins	Slow deceleration
Lazy eights	120 mph (104 knots)	Stalls (except	Slow deceleration
Steep turns	112 mph (97 knots)	whip stalls)	

Altitude loss in stall recovery -- 180 feet.

Abrupt use of the controls prohibited above 112 mph

Spin recovery: opposite rudder -- forward elevator -- neutralize controls

Intentional spins with flaps extended are prohibited. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate:

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

- Model 172M (Floatplane) 17256493, 17260759 through 17265684 except 17261445 and 17261578

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

<u>MAXIMUMS</u>			
Maneuvering speed	110 mph (96 knots) (CAS)		
Gross weight	2220 lbs.		
Flight load factor	Flaps up	+3.8, -1.52	
	Flaps down		+3.0

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 2 (cont'd)

WATER RUDDER: Extend for taxi; retract for takeoff, flight, and landing.

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

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

- A. (7) Model 172M and 172N (Landplane) (17261445, 17261578, 17265685 through 17271034 except 17270050)

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

	<u>MAXIMUMS</u>			
	<u>Normal Category</u>		<u>Utility Category</u>	
Maneuvering speed (CAS)	97 knots		97 knots	
Gross weight	2300 lbs.		2000 lbs.	
Flight load factor				
Flaps up	+3.8	-1.52	+4.4	-1.76
Flaps down	+3.0		+3.0	

Normal category - No acrobatic maneuvers including spins approved.

Utility category - Baggage compartment and rear seat must not be occupied.

NO ACROBATIC MANEUVERS EXCEPT THOSE LISTED BELOW:

<u>Maneuver</u>	<u>Recommended Entry speed</u>	<u>Recommended Maneuver</u>	<u>Recommended Entry Speed</u>
Chandelles	105 knots	Spins	Slow deceleration
Lazy eights	105 knots	Stalls (except	Slow deceleration
Steep turns	95 knots)	whip stalls)	

Altitude loss in stall recovery - 180 feet.

Abrupt use of the controls prohibited above 97 knots

Spin recovery: opposite rudder - forward elevator - neutralize controls.

Intentional spins with flaps extended are prohibited. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate.

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

Model 172M and 172N (Floatplane) (17265685 through 17271034)

FLOATPLANE

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

	<u>MAXIMUMS</u>	
	Maneuvering speed (CAS)	96 knots
Gross weight	2220 lbs.	
Flight load factor	Flaps up	+3.8, -1.52
	Flaps down	+3.0

Water Rudder: Extend for taxi; retract for takeoff, flight and landing.

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

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

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 2 (cont'd)

- B. Forward of fuel selector valve: (All models through S/N 17265684 except 17261445 and 17261578)
- "Both tanks on for takeoff and landing."
- C. On the fuel selector valve (at appropriate location)
- (1) Model 172 and 172A
- | | | |
|-------|---|-----------|
| "Both | - | 37 gal. |
| Left | - | 18.5 gal. |
| Right | - | 18.5 gal. |
| Off" | | |
- (2) Model 172B
- | | | |
|-------|---|-----------|
| "Both | - | 39 gal. |
| Left | - | 19.5 gal. |
| Right | - | 19.5 gal. |
| Off" | | |
- (3) Model 172C, 172D, 172E, 172F, 172G, and 172H
- | | | |
|-------|---|---------|
| "Both | - | 36 gal. |
| Left | - | 18 gal. |
| Right | - | 18 gal. |
| Off" | | |
- (4) Model 172I through 172M (except 17261445 and 17261578)
- | | | |
|-------|---|--------------------------------|
| "Both | - | 38 gal. (all flight attitudes) |
| Left | - | 19 gal. (level flight only) |
| Right | - | 19 gal. (level flight only) |
| Off" | | |
- (5) Model 172N (17261445, 17261578, 17267585 through 17271034, excluding 17270050)
- | | | |
|-------|---|--|
| "Both | - | 40 gal. (all flight attitudes) (Takeoff-landing) |
| Left | - | 20 gal. (level flight only) |
| Right | - | 20 gal. (level flight only) |
| Off" | | |
- D. On flap handle, Models 172 through 172E
- (1) "Flaps - Pull to extend
- | | | |
|---------|-----------|-----|
| Takeoff | Retract | 0° |
| | 1st notch | 10° |
| Landing | 0° - 40° | |
- (2) "Avoid slips with flaps down."
- E. Near flap indicator Models 172F (electric flaps) through 17271034, excluding 17270050)
- "Avoid slips with flaps extended."
- F. In baggage compartment:
- (1) Models 172 through 172B
- "Maximum baggage 120 lb. For additional loading instructions, see weight and balance data."
- (2) Model 172C through 172M (1973 model)
- "120 lb. maximum baggage and/or auxiliary seat passenger. For additional loading instructions see weight and balance data."
- (3) 17261899 through 17271034, excluding 17270050
- "120 lb. maximum baggage and/or auxiliary passenger forward of baggage door latch."
"50 lb. maximum baggage aft of baggage door latch maximum 120 lb. combined.
For additional loading instructions see weight and balance data."

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 2 (cont'd)

- G. Near ammeter (Models 17258487 through 17259903)
"Do not turn off alternator in flight except in emergency."

- H. Additional placards required in seaplane.
(1) Model 172A through 172I in full view of the pilot.

"Operate as normal category airplane except:
Maximum weight 2220 lbs.
Maximum altitude loss in stall recovery 120 ft.
Flaps - takeoff - 1st notch -10°
Water rudder - pull to extract
Retract - takeoff, flight and landing
Extend - taxi."

- (2) Model 172K in full view of the pilot:

THIS AIRPLANE MUST BE OPERATED IN COMPLIANCE WITH THE
OPERATING LIMITATIONS AS STATED IN THE FORM OF PLACARDS, MARKINGS, AND
MANUALS

NORMAL CATEGORY - FLOATPLANE

Maximum weight	2220 lb.
Refer to weight and balance data for loading instructions.	
Flight maneuvering load factors	Flaps up +3.8, -1.52 Flaps down +3.5

No acrobatic maneuvers including spins approved.
Maximum altitude loss in stall recovery - 120 ft.
Flaps: Takeoff - 10° . . . Water rudder: Pull to retract . . .
Retract: Takeoff, flight and landing . . . Extend: Taxi."

- (3) Model 172F through 17271034, excluding 17270050, in full view of the pilot.
"Floatplane Max. Flaps - 30°."

- (4) Model 172L in full view of the pilot:

"FLOATPLANE

THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE
IN COMPLIANCE WITH THE OPERATING LIMITATIONS AS STATED IN THE
FORM OF PLACARDS, MARKINGS, AND MANUALS.

"MAXIMUMS

Maneuvering speed	122 mph CAS (106 knots)
Gross weight	2220 lbs.
Flight load factor	Flaps up +3.8, -1.52 Flaps down +3.5

WATER RUDDER: Extend for taxi; retract for takeoff, flight and landing.

FLAPS: 10° for takeoff

No acrobatic maneuvers, including spins, approved. Altitude loss in stall recovery - 120 ft.
Known icing conditions to be avoided. This airplane is certified for the following flight
operations as of date of original airworthiness certificate:

DAY NIGHT VFR IFR" (as applicable)

- I. Near tachometer on Models 172I, 172K and 172L (with IC172/MTM propeller):
"Avoid continuous operation
1. Above 75 percent power in cruise
2. Above 2500 rpm in full throttle climb."

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 2 (cont'd)

- J. Near ammeter and adjacent to overvoltage light:
 (1) Model 172L (1972) through Model 172N (1978)
 "High Voltage"
- K. Near fuel selector valve on models with serial numbers 28000 through 17258855, except those with Cessna Kit No. SK-172-31B or SK-172-32 installed:
 "SWITCH TO SINGLE TANK OPERATION IMMEDIATELY UPON REACHING CRUISE ALTITUDES ABOVE 5000 FEET."
- L. Near fuel tank filler
 (1) Model 172, 172A and 172B
 "FUEL
 80/87 min. grade aviation gasoline
 Cap. 21 U.S. gal."
 (2) Model 172C, 172D, 172E, 172F, 172G, and 172H
 "FUEL
 80/87 min. grade aviation gasoline
 Cap. 19.5 U.S. gal."
 (3) Model 172I through 172M (except 17261445 and 17261578)
 "FUEL
 80/87 min. grade aviation gasoline
 Cap. 21 US. gal."
 (4) Model 172N (17261445, 17267585 through 17269309)
 "FUEL
 100/130 min. grade aviation gasoline
 Cap. 21.5 US. gal."
 (5) Model 172N (17261578, 17269310 through 17271034, excluding 17270050)
 "FUEL
 100LL/100 min. grade aviation gasoline
 Cap. 21.5 US. gal."
- M. Effective 17270050, 17271035 through 17276654
 All placards required in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual must be installed in the appropriate locations.

NOTE 3. Compliance with Service Letter SE74-16 - Carburetor Nozzle Replacement - allows rpm's as follows:

Landplane: not over 2420, not under 2300
 Seaplane: not over 2570, not under 2445

NOTE 4. The marking of the airspeed indicator in CAS provides an equivalent level of safety to CAR 3.757 when approved airspeed calibration data presented in Section V of the Pilot's Operating Handbooks listed below is available to the pilot (TIAS is exactly equal to CAS):

172M, Cessna P/N D1057-13	(S/N 17265685 through 17267584)
172N, Cessna P/N D1082-13	(S/N 17261445, 17267585 through 17269309)
172N, Cessna P/N D1109-13	(S/N 17261578, 17269310 through 17271034 except 17270050)
172N, Cessna P/N D1138-13PH	(S/N 17271035 through 17272884)
172N, Cessna P/N D1172-13PH	(S/N 17270050, 17272885 through 17274009)
172P, Cessna P/N D1192-13PH	(S/N 17274010 through 17275034)
172P, Cessna P/N D1212-13PH	(S/N 17275035 through 17275759)
172P, Cessna P/N D1231-13PH	(S/N 17275760 through 17276079)
172P, Cessna P/N D1251-13PH	(S/N 17276080 through 17276259)

DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

NOTE 5. 14-volt electrical system
(172 series through S/N 17269309, except 17258105 through 17258112 and 17261578)

28-volt electrical system
(S/N 17258105 through 17258112, 17261578 and 17269310 through 17276654)

NOTE 6: Special Ferry Flight Authorization. Flight Standards District Offices are authorized to issue Special overweight ferry flight authorizations. These airplanes are structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (V_{NE}) and Maximum Structural Cruising Speed (V_C) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5 g. to -1.0 g. may not be exceeded. Requirements for any additional oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the increased weights have not been evaluated. Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC21-4B

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

**XI. Model 172R, Skyhawk, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved
June 21, 1996**

Engine	Lycoming IO-360-L2A, Rated 160 Horsepower <u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> Lycoming IO-360-L2A, Rated 180 Horsepower												
Fuel	100/100LL minimum grade aviation gasoline												
Engine Limits	For all operations, 2,400 RPM <u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> For all operations, 2,700 RPM												
Propeller (a)	McCaughey Model 1C235/LFA7570 (b) Spinner: Drawing No. 0550236 <u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> (a) McCaughey Model 1A170E/JHA7660 (b) Spinner: Drawing No. 0550236												
Propeller Limits	Static RPM at full throttle: Not over 2,165; Not Under 2,065 No Additional Tolerance Permitted Diameter: Not over 75 inches; not under 74 inches <u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> Static RPM at full throttle: Not over 2,400; Not Under 2,300 No Additional Tolerance Permitted Diameter: Not over 76 inches; not under 75 inches												
Airspeed Limits	<table border="0"> <tr> <td>Maneuvering</td> <td>99 Knots IAS</td> <td>(97 Knots CAS)</td> </tr> <tr> <td>Max Structural Cruising</td> <td>129 Knots IAS</td> <td>(126 Knots CAS)</td> </tr> <tr> <td>Never Exceed</td> <td>163 Knots IAS</td> <td>(160 Knots CAS)</td> </tr> <tr> <td>Flaps Extended</td> <td>85 Knots IAS</td> <td>(84 Knots CAS)</td> </tr> </table>	Maneuvering	99 Knots IAS	(97 Knots CAS)	Max Structural Cruising	129 Knots IAS	(126 Knots CAS)	Never Exceed	163 Knots IAS	(160 Knots CAS)	Flaps Extended	85 Knots IAS	(84 Knots CAS)
Maneuvering	99 Knots IAS	(97 Knots CAS)											
Max Structural Cruising	129 Knots IAS	(126 Knots CAS)											
Never Exceed	163 Knots IAS	(160 Knots CAS)											
Flaps Extended	85 Knots IAS	(84 Knots CAS)											
Airspeed Limits (cont'd)	<u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> <table border="0"> <tr> <td>Maneuvering</td> <td>105 Knots IAS</td> <td>(102 Knots CAS)</td> </tr> <tr> <td>Max Structural Cruising</td> <td>129 Knots IAS</td> <td>(126 Knots CAS)</td> </tr> <tr> <td>Never Exceed</td> <td>163 Knots IAS</td> <td>(160 Knots CAS)</td> </tr> <tr> <td>Flaps Extended</td> <td>85 Knots IAS</td> <td>(84 Knots CAS)</td> </tr> </table>	Maneuvering	105 Knots IAS	(102 Knots CAS)	Max Structural Cruising	129 Knots IAS	(126 Knots CAS)	Never Exceed	163 Knots IAS	(160 Knots CAS)	Flaps Extended	85 Knots IAS	(84 Knots CAS)
Maneuvering	105 Knots IAS	(102 Knots CAS)											
Max Structural Cruising	129 Knots IAS	(126 Knots CAS)											
Never Exceed	163 Knots IAS	(160 Knots CAS)											
Flaps Extended	85 Knots IAS	(84 Knots CAS)											

XI. Model 172R (cont'd)

C.G. Range	<p><u>When Using POH.AFM 172RPHUS-00 or later rev or 172RPHAUS-00 thru -03</u></p> <p>Normal Category</p> <p>(1) Aft Limits 47.3 inches aft of datum at 2,450 pounds or less.</p> <p>(2) Forward Limits Linear variation from 40.0 inches aft of datum at 2,450 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</p> <p>Utility Category</p> <p>(1) Aft Limits 40.5 inches aft of datum at 2,100 pounds or less.</p> <p>(2) Forward Limits Linear variation from 36.5 inches aft of datum at 2,100 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</p> <p><u>When Using POH.AFM 172RPHAUS-04 or later rev or 172RPHBUS-00 or later rev</u></p> <p>Normal Category</p> <p>(1) Aft Limits 47.3 inches aft of datum at 2,450 pounds or less.</p> <p>(2) Forward Limits Linear variation from 40.0 inches aft of datum at 2,450 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</p> <p>Utility Category</p> <p>(1) Aft Limits 40.5 inches aft of datum at 2,200 pounds or less.</p> <p>(2) Forward Limits Linear variation from 37.5 inches aft of datum at 2,200 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</p> <p><u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u></p> <p>Normal Category</p> <p>(1) Aft Limits 47.3 inches aft of datum at 2,550 pounds or less.</p> <p>(2) Forward Limits Linear variation from 41.0 inches aft of datum at 2,550 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</p> <p>Utility Category</p> <p>(1) Aft Limits 40.5 inches aft of datum at 2,200 pounds or less.</p> <p>(2) Forward Limits Linear variation from 37.5 inches aft of datum at 2,200 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</p>
Empty Wt. C.G. Range	None
Reference Datum	Lower portion of front face of firewall
MAC	58.8 inches; Leading edge of MAC 25.9 inches aft of datum
Leveling Means	Left side of Tailcone at 108.0 inches and 142.0 inches aft of datum

XI. Model 172R (cont'd)

Maximum Weights	<u>When Using POH.AFM 172RPHUS-00 or later rev or 172RPHAUS-00 thru -03</u>			
	<u>Normal Category</u>			
	Maximum Ramp		2,457 pounds	
	Maximum Takeoff and Landing		2,450 pounds	
	<u>Utility Category</u>			
	Maximum Ramp		2,107 pounds	
	Maximum Takeoff and Landing		2,100 pounds	
	<u>When Using POH.AFM 172RPHAUS-04 or later rev or 172RPHBUS-00 or later rev</u>			
	<u>Normal Category</u>			
	Maximum Ramp		2,457 pounds	
	Maximum Takeoff and Landing		2,450 pounds	
	<u>Utility Category</u>			
	Maximum Ramp		2,207 pounds	
	Maximum Takeoff and Landing		2,200 pounds	
	<u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u>			
<u>Normal Category</u>				
Maximum Ramp		2,558 pounds		
Maximum Takeoff and Landing		2,550 pounds		
<u>Utility Category</u>				
Maximum Ramp		2,208 pounds		
Maximum Takeoff and Landing		2,200 pounds		
No. of Seats	4 (2 at 34.0 to 46.0 inches aft of datum; 2 at 73.0 inches aft of datum)			
Maximum Baggage	120 pounds at 95.0 inches aft of datum			
	<u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> 120 pounds at 82.0 to 108.0 inches aft of datum 50 pounds at 108.0 to 142.0 inches aft of datum (Maximum combined weight capacity for baggage areas is 120 pounds.)			
Fuel Capacity (Gal.)	56 gallons total; 53 gallons usable (Two 28 gallon tanks in wings at 48.0 inches aft of datum) See NOTE 1 for data on unusable fuel.			
Oil Capacity (Gal.)	2.0 gallons at 13.1 inches forward of datum 3.5 quarts usable			
	<u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> 2.0 gallons at 13.1 inches forward of datum 3.0 quarts usable			
Control Surface Movements	Wing flaps	Takeoff	0° - 10°	
		Landing	0° - 30° + 0°/-2°	
	Ailerons	Up	20° ± 1°	Down 15° ± 1°
	Elevator tab	Up	22° + 1°/-0°	Down 19° + 1°/-0°
	Elevator	Up	28° + 1°/-0°	Down 23° + 1°/-0°
	(Neutral position is with bottom of balance area flush with bottom of stabilizer)			
	Rudder (Measured parallel to W.L.): Right 16° 10' ± 1° Left 16° 10' ± 1° Rudder (Measured perpendicular to Hinge: Right 17° 44' ± 1° Left 17° 44' ± 1°			

XI. Model 172R (cont'd)**Data Pertinent to Model 172R:****Certification Basis:**

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6, except as follows: FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323; and 23.1563 as amended by Amendment 23-7. FAR 23.807 and 23.1524 as amended by Amendment 23-10. FAR 23.507; 23.771; 23.853(a),(b) and (c); and 23.1365 as amended by Amendment 23-14. FAR 23.951 as amended by Amendment 23-15. FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 and 23.1322 as amended by Amendment 23-17. FAR 23.1301 as amended by

Amendment 23-20. FAR 23.1353; and 23.1559 as amended by Amendment 23-21. FAR 23.603; 23.605; 23.613; 23.1329 and 23.1545 as amended by Amendment 23-23. FAR 23.441 and 23.1549 as amended by Amendment 23-28. FAR 23.779 and 23.781 as amended by Amendment 23-33. FAR 23.1; 23.51 and 23.561 as amended by Amendment 23-34. FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735; and 23.831 as amended by Amendment 23-42. FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 and 23.1385 as amended by Amendment 23-43. FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)3, and 23.562(c)4 as amended by Amendment 23-44. FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 and 23.731 as amended by Amendment 23-45.

FAR 36 dated December 1, 1969, as amended by Amendments 36-1 through 36-21.

Additions for the Garmin G1000 Integrated Cockpit System (ICS) Only:

14 CFR 23.303; 23.307; 23.601; 23.1163(a); 23.1367 and 23.1381 as amended by Amendment 23- N/C. 14 CFR 23.1589 as amended by Amendment 23-13. 14 CFR 23.771(a) as amended by Amendment 23-14. 14 CFR 23.607 and (Electrical System) 23.1309(a)(1)(2), (c) as amended by Amendment 23-17. 14 CFR 23.1301; 23.1327 and 23.1547(e) as amended by Amendment 23-20. 14 CFR 23.1501 and 23.1541(a)(1), (a)(2), (b)(1), (b)(2) as amended by Amendment 23-21. 14 CFR 23.603 and 23.605 as amended by Amendment 23-23. 14 CFR 23.1529 as amended by Amendment 23-26. 14 CFR 23.561(e); 23.1523; 23.1581(a)(2); and 23.1583(a), (c), (d), (f); and 23.1585(a)(b)(d) as amended by Amendment 23-34. 14 CFR 23.301 as amended by Amendment 23-42. 14 CFR 23.1322; 23.1331 and 23.1357(a)(b)(c)(d) as amended by Amendment 23-43. 14 CFR 23.305; 23.773(a)(1), (a)(2); 23.1525 and 23.1549 as amended by Amendment 23-45. 14 CFR 23.1303(a)(b)(c)(f); 23.1309(a)(1)(i), (a)(1)(ii), (a)(2), (b)(1), (b)(2)(i), (b)(2)(ii), (b)(3), (b)(4)(i), (b)(4)(ii), (b)(4)(iii), (b)(4)(iv), (c)(1), (c)(2)(iii), (c)(3), (d), (e), (f)(1); 23.1311; 23.1321 (a)(c)(d)(e); 23.1323(a), (b)(1), (b)(2), (c); 23.1329 (g)(h); 23.1351(a)(1), (a)(2)(i), (b)(1)(iii), (b)(2)(3), (c)(4), (d)(1); 23.1353(a)(b)(c)(d)(e); 23.1359(c); 23.1361; 23.1365(a)(b)(d)(e)(f) and 23.1431(a)(b)(d)(e) as amended by Amendment 23-49. 14 CFR 23.1325(a), (b)(1), (b)(2)(i), (b)(3), (c)(d)(e); 23.1543(b)(c); 23.1545(a), (b)(1), (b)(2), (b)(3), (b)(4); 23.1553; 23.1555(a)(b); 23.1563(a) and 23.1567(a) as amended by Amendment 23-50. 14 CFR 23.777(a)(b); 23.955(a)(2); 23.1337(a)(1), (a)(2), (b)(1), (c) as amended by Amendment 23-51. 14 CFR 23.1305(a)(1), (a)(2), (a)(3), (b)(2), (b)(3)(i), (b)(4)(i), (b)(5), (b)(6)(i) as amended by Amendment 23-52. 14 CFR 23.901(a)(b) as amended by Amendment 23-53.

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

14 CFR 23.1335 as amended by Amendment 23-20, 14 CFR 23.1329 (a)(c)(d)(e)(f) as amended by Amendment 23-49.

Equivalent Safety Items

(1)	Induction System Icing Protection	FAR § 23.1093; Refer to FAA letter dated 5/3/96
(2)	Throttle Control	FAR § 23.1143(g); Refer to FAA letter dated 3/22/96
(3)	Mixture Control	FAR § 23.1147(b); Refer to FAA letter dated 3/22/96
(4)	Anti-Collision Light System	14 CFR § 23.1401(d); Refer to ACE-07-09, FAA letter dated 10/12/07
(5)	Aviation White Color Reqmt	14 CFR § 23.1397(c); Refer to ACE-07-10, FAA letter dated 11/29/07

Date of Application for Amended Type Certificate was September 25, 1995.
Type Certificate No. 3A12 was amended June 21, 1996.

Serial Numbers Eligible 17280001 and On

Special Conditions as follows:

No. 23-159-SC, "Special Conditions: Cessna Aircraft Company; Cessna Model 172R Airplane; Installation of Electronic Flight Instrument System and and the Protection of the System From High Intensity Radiated Fields (HIRF).

Production Basis

Production Certificate No. PC-4 issued March 28, 1997. Applies to airplane serial numbers 17280014, 17280015, 17280017, 17280021 through 17280029, and 17280031 and on. Airplane serial numbers not listed were produced under Type Certificate only. Cessna is authorized to issue airworthiness certificates under the delegation provisions of Delegation Option Authorization No. CE-1 in accordance with Part 21 of the Federal Aviation Regulations.

XI. Model 172R (cont'd)**Data Pertinent to Model 172R** (cont'd)**Equipment**

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.

NOTE 1: Weight and Balance:

Serial Nos. 17280001 and On

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 18 pounds at 46.0 inches aft of datum, and full oil of 15.0 pounds at 13.1 inches forward of datum.

NOTE 2: The airplane must be operated according to the appropriate Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (POH/AFM). POH/AFM part number 172RPHUS00 (or later approved revision) is applicable to Production Model 172R. POH/AFM part number 172R180PH00 (or later approved revision) is applicable to Production Model 172R airplanes when modified by Cessna Modification Kit MK172-72-01. All POH/AFM Supplements approved for part number 172RPHUS00, are also applicable to part number 172R180PH00, unless specifically noted otherwise in the Supplement. All FAA required placards are included in Section 2 of the applicable POH/AFM. Placards may also be found in the Maintenance Manual, part number 172RMM00 (or later revision), Chapter Eleven (11), "Placards and Markings."

FAA Approved Airplane Flight Manual (AFM): Part Number 172RPHAUS-00 (or later FAA approved revisions) is applicable to the Model 172R equipped with Garmin G1000 Integrated Cockpit System. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM.

FAA Approved Airplane Flight Manual (AFM): Part Number 172RPHBUS-00 (or later FAA approved revisions) are applicable to the Model 172R equipped with Garmin G1000 Integrated Cockpit System and Garmin GFC-700 AFCS. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM.

NOTE 3: Special Ferry Flight Authorization. Flight Standards District Offices are authorized to issue Special overweight ferry flight authorizations. This airplane is structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (V_{NE}) and Maximum Structural Cruising Speed (V_C) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5 g. to -1.0 g. may not be exceeded. Requirements for any additional oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the increased weights have not been evaluated. Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC21-4B.

NOTE 4: Only certain Model 172R airplane serial numbers are eligible for modification by Cessna Modification Kit MK172-72-01. Applicable serial numbers are as follows:

17280159	17280242	17280251	17280253	17280257
17280262	17280281	17280292	17280301	17280305
17280426	17280488	17280606	17280607	17280608
17280609	17280610	17280613	17280614	17280616
17280621	17280622	17280623	17280624	17280631
17280632	17280633	17280634	17280638	17280639
17280640	17280646	17280647	17280648	17280652
17280653	17280659	17280660	17280661	17280662
17280664	17280667	17280668	17280669	17280670
17280672	17280673	17280674	17280675	17280701
17280707				

NOTE 5: The following serials are manufactured under the name Cessna Aircraft Company: 17280001 thru 17281622.

NOTE 6: Company name change effective 7/29/15. The following serial numbers are manufactured under the name Textron Aviation Inc.: 17281623 and On.

XII. Model 172S, Skyhawk SP, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved
May 1, 1998

Engine	Lycoming IO-360-L2A, Rated 180 Horsepower		
Fuel	100/100LL minimum grade aviation gasoline		
Engine Limits	For all operations, 2,700 RPM		
Propeller	(a) McCauley Model 1A170E/JHA7660 (b) Spinner: Drawing No. 0550236		
Propeller Limits	Static RPM at full throttle: Not over 2400; not under 2300 Diameter: Not over 76 inches; not under 75 inches		
Airspeed Limits	Maneuvering	105 Knots IAS	(102 Knots CAS)
	Max Structural Cruising	129 Knots IAS	(126 Knots CAS)
	Never Exceed	163 Knots IAS	(160 Knots CAS)
	Flaps Extended	85 Knots IAS	(85 Knots CAS)
C.G. Range	Normal Category		
	(1) Aft Limits	47.3 inches aft of datum at 2,550 pounds or less.	
	(2) Forward Limits	Linear variation from 41.0 inches aft of datum at 2,550 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.	
	Utility Category		
	(1) Aft Limits	40.5 inches aft of datum at 2,200 pounds or less.	
	(2) Forward Limits	Linear variation from 37.5 inches aft of datum at 2,200 pounds to 35.0 inches aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.	
Empty Wt. C.G. Range	None		
Reference Datum	Lower portion of front face of firewall		
MAC	58.8 inches; Leading edge of MAC 25.9 inches aft of datum		
Leveling Means	Left side of Tailcone at 108.0 inches and 142.0 inches aft of datum		
Maximum Weights	<u>Normal Category</u>		
	Maximum Ramp	2,558 pounds	
	Maximum Takeoff and Landing	2,550 pounds	
	<u>Utility Category</u>		
	Maximum Ramp	2,208 pounds	
	Maximum Takeoff and Landing	2,200 pounds	
No. of Seats	4 (2 at 34.0 to 46.0 inches aft of datum; 2 at 73.0 inches aft of datum)		
Maximum Baggage	120 pounds at 82.0 to 108.0 inches aft of datum 50 pounds at 108.0 to 142.0 inches aft of datum (Max. combined weight capacity for baggage areas is 120 pounds)		
Fuel Capacity (Gal.)	56 gallons total; 53 gallons usable (Two 28 gallon tanks in wings at 48.0 inches aft of datum) See NOTE 1 for data on unusable fuel.		
Oil Capacity (Gal.)	8.0 quarts at 13.1 inches forward of datum 3.0 quarts usable		

XII. Model 172S (cont'd)

Control Surface Movements	Wing flaps	Takeoff	0° - 10°	
		Landing	0° - 30° + 0°/-2°	
	Ailerons	Up	20° ± 1°	Down 15° ± 1°
	Elevator tab	Up	22° + 1°/-0°	Down 19° + 1°/-0°
	Elevator	Up	28° + 1°/-0°	Down 23° + 1°/-0°
	(Neutral position is with bottom of balance area flush with bottom of stabilizer)			
	Rudder (Measured parallel to W.L.): Right 16° 10' ± 1° Left 16° 10' ± 1°			
	Rudder (Measured perpendicular to Hinge: Right 17° 44' ± 1° Left 17° 44' ± 1°			

Data Pertinent to Model 172S:**Certification Basis:**

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6, except as follows: FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323; and 23.1563 as amended by Amendment 23-7. FAR 23.807 and 23.1524 as amended by Amendment 23-10. FAR 23.507; 23.771; 23.853(a),(b) and (c); and 23.1365 as amended by Amendment 23-14. FAR 23.951 as amended by Amendment 23-15. FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 and 23.1322 as amended by Amendment 23-17. FAR 23.1301 as amended by Amendment 23-20. FAR 23.1353; and 23.1559 as amended by Amendment 23-21. FAR 23.603; 23.605; 23.613; 23.1329 and 23.1545 as amended by Amendment 23-23. FAR 23.441 and 23.1549 as amended by Amendment 23-28. FAR 23.779 and 23.781 as amended by Amendment 23-33. FAR 23.1; 23.51 and 23.561 as amended by Amendment 23-34. FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735; and 23.831 as amended by Amendment 23-42. FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 and 23.1385 as amended by Amendment 23-43. FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)3, and 23.562(c)4 as amended by Amendment 23-44. FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 and 23.731 as amended by Amendment 23-45.

FAR 36 dated December 1, 1969, as amended by Amendments 36-1 through 36-21.

Additions for the Garmin G1000 Integrated Cockpit System (ICS) Only: Additions for the Garmin G1000 Integrated Cockpit System (ICS) Only:

14 CFR 23.303; 23.307; 23.601; 23.1163(a); 23.1367 and 23.1381 as amended by Amendment 23- N/C. 14 CFR 23.1589 as amended by Amendment 23-13. 14 CFR 23.771(a) as amended by Amendment 23-14. 14 CFR 23.607 and (Electrical System) 23.1309(a)(1)(2), (c) as amended by Amendment 23-17. 14 CFR 23.1301; 23.1327 and 23.1547(e) as amended by Amendment 23-20. 14 CFR 23.1501 and 23.1541(a)(1), (a)(2), (b)(1), (b)(2) as amended by Amendment 23-21. 14 CFR 23.603 and 23.605 as amended by Amendment 23-23. 14 CFR 23.1529 as amended by Amendment 23-26. 14 CFR 23.561(e); 23.1523; 23.1581(a)(2); and 23.1583(a), (c), (d), (f) and 23.1585(a)(b)(d) as amended by Amendment 23-34. 14 CFR 23.301 as amended by Amendment 23-42. 14 CFR 23.1322; 23.1331 and 23.1357(a)(b)(c)(d) as amended by Amendment 23-43. 14 CFR 23.305; 23.773(a)(1), (a)(2); 23.1525 and 23.1549 as amended by Amendment 23-45. 14 CFR 23.1303(a)(b)(c)(f); 23.1309(a)(1)(i), (a)(1)(ii), (a)(2), (b)(1), (b)(2)(i), (b)(2)(ii), (b)(3), (b)(4)(i), (b)(4)(ii), (b)(4)(iii), (b)(4)(iv), (c)(1), (c)(2)(iii), (c)(3), (d), (e), (f)(1); 23.1311; 23.1321 (a)(c)(d)(e); 23.1323(a), (b)(1), (b)(2), (c); 23.1329 (g)(h); 23.1351(a)(1), (a)(2)(i), (b)(1)(iii), (b)(2)(3), (c)(4), (d)(1); 23.1353(a)(b)(c)(d)(e); 23.1359(c); 23.1361; 23.1365(a)(b)(d)(e)(f) and 23.1431(a)(b)(d)(e) as amended by Amendment 23-49. 14 CFR 23.1325(a), (b)(1), (b)(2)(i), (b)(3), (c)(d)(e); 23.1543(b)(c); 23.1545(a), (b)(1), (b)(2), (b)(3), (b)(4); 23.1553; 23.1555(a)(b); 23.1563(a) and 23.1567(a) as amended by Amendment 23-50. 14 CFR 23.777(a)(b); 23.955(a)(2); 23.1337(a)(1), (a)(2), (b)(1), (c) as amended by Amendment 23-51. 14 CFR 23.1305(a)(1), (a)(2), (a)(3), (b)(2), (b)(3)(i), (b)(4)(i), (b)(5), (b)(6)(i) as amended by Amendment 23-52. 14 CFR 23.901(a)(b) as amended by Amendment 23-53.

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

14 CFR 23.1335 as amended by Amendment 23-20, 14 CFR 23.1329 (a)(c)(d)(e)(f) as amended by Amendment 23-49.

Equivalent Safety Items

(1)	Induction System Icing Protection	FAR § 23.1093; Refer to FAA letter dated 5/1/98
(2)	Throttle Control	FAR § 23.1143(g); Refer to FAA letter dated 5/1/98
(3)	Mixture Control	FAR § 23.1147(b); Refer to FAA letter dated 5/1/98
(4)	Anti-Collision Light System	14 CFR § 23.1401(d); Refer to ACE-07-09, FAA letter dated 10/12/07
(5)	Aviation White Color Reqmt	14 CFR § 23.1397(c); Refer to ACE-07-10, FAA letter dated 11/29/07

Date of Application for Amended Type Certificate for the 172S was November 13, 1997.
Type Certificate No. 3A12 was amended May 1, 1998 for the Model 172S.

XII. Model 172S (cont'd)**Data Pertinent to Model 172S:**

Serial Numbers Eligible 172S8001 and On

Special Conditions as follows:

No. 23-159-SC, "Special Conditions: Cessna Aircraft Company; Cessna Model 172S Airplane; Installation of Electronic Flight Instrument System and the Protection of the System From High Intensity Radiated Fields (HIRF)."

Production Basis

Production Certificate No. PC-4 issued August 27, 1998. Applies to airplane serial numbers 172S8003 and on. Airplane serial numbers not listed were produced under Type Certificate only. Cessna is authorized to issue airworthiness certificates under the delegation provisions of Delegation Option Authorization No. CE-1 in accordance with Part 21 of the Federal Aviation Regulations.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.

- NOTE 1: Weight and Balance:
Serial Nos. 172S8001 and On
The certificated empty weight and corresponding center of gravity location must include unusable fuel of 18 pounds at 46.0 inches aft of datum, and full oil of 15.0 pounds at 13.1 inches forward of datum.
- NOTE 2: Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (POH/AFM): part number 172SPHUS-00 (or later approved revision) is applicable to the Model 172S. The airplane must be operated according to the appropriate POH/AFM. All FAA required placards are included in Section 2 of the POH/AFM. Placards may also be found in the Maintenance Manual, part number 172RMM02 (or later revision) for the Model 172S, Chapter 11, Placards and Markings."
- FAA Approved Airplane Flight Manual (AFM): Part Number 172SPHAUS-00 (or later FAA approved revisions) is applicable to Model 172S equipped with Garmin G1000 Integrated Cockpit System. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM.
- FAA Approved Airplane Flight Manual (AFM): Part Number 172SPHBUS-00 (or later FAA approved revisions) are applicable to the Model 172S equipped with Garmin G1000 Integrated Cockpit System and Garmin GFC-700 AFCS. The airplane must be operated according to the appropriate AFM. Required placards are included in the AFM.
- NOTE 3: Special Ferry Flight Authorization. Flight Standards District Offices are authorized to issue Special overweight ferry flight authorizations. This airplane is structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (V_{NE}) and Maximum Structural Cruising Speed (V_C) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5 g. to -1.0 g. may not be exceeded. Requirements for any additional oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the increased weights have not been evaluated. Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC21-4B
- NOTE 4: The following serials are manufactured under the name Cessna Aircraft Company: 172S8001 thru 172S11614.
- NOTE 5: Company name change effective 7/29/15. The following serials are manufactured under the name Textron Aviation Inc.: 172S11615 and On.

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