

I. Model 172 (cont'd)

| | | | |
|--|---|--|---------------|
| Propeller and Propeller Limits (cont'd) | 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° |
| | 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) |

II. Model 172A, Model 172B (cont'd)

| | | |
|-----------------------------------|---|---------------------|
| Propeller and Propeller Limits | <div>1. Propeller</div> <div>(a) McCauley 1C172/EM 7652, 53, or 55</div> <div>Static rpm at maximum permissible throttle setting:</div> <div>Not over 2350, not under 2230</div> <div>No additional tolerance permitted</div> <div>Diameter: not over 76 in., not under 74.5 in.</div> <div>(b) Spinner, Dwg. 0550216, 0550221 or 0550228</div> <div>2. Propeller (seaplane only)</div> <div>(a) McCauley 1A175/SFC 8040</div> <div>Static rpm at maximum permissible throttle setting:</div> <div>Not over 2480, not under 2380</div> <div>No additional tolerance permitted</div> <div>Diameter: not over 80 in., not under 78.4 in.</div> <div>(b) Spinner, Dwg. 0550216 or 0550221</div> <div>3. Propeller</div> <div>(a) Sensenich 74DC-0-56</div> <div>Static rpm at maximum permissible throttle setting:</div> <div>Not over 2420, not under 2300</div> <div>No additional tolerance permitted</div> <div>Diameter: not over 74 in., not under 72.5 in.</div> | |
| *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 | <div>Landplane (Model 172A):</div> <div>Normal category</div> <div>(+40.8) to (+46.4) at 2200 lbs.</div> <div>(+36.4) to (+46.4) at 1733 lbs. or less</div> <div>Utility category</div> <div>(+38.4) to (+40.3) at 1950 lbs.</div> <div>(+36.4) to (+40.3) at 1733 lbs. or less</div> <div>Straight line variation between points given.</div> <div>Landplane (Model 172B):</div> <div>Normal category</div> <div>(+40.4) to (+46.4) at 2200 lbs.</div> <div>(+36.4) to (+46.4) at 1850 lbs. or less</div> <div>Utility category</div> <div>(+37.4) to (+40.3) at 1950 lbs.</div> <div>(+36.4) to (+40.3) at 1850 lbs. or less</div> <div>Seaplane (Models 172A and 172B):</div> <div>Normal category</div> <div>(+39.8) to (+45.5) at 2220 lbs.</div> <div>(+36.4) to (+45.5) at 1825 lbs. or less</div> <div>Straight line variation between points given.</div> | |
| Empty Weight C.G. Range | None | |
| *Maximum Weight | <div>Landplane:</div> <div>Normal category</div> <div>2200 lb.</div> <div>Utility category</div> <div>1950 lb.</div> <div>Seaplane:</div> <div>Normal category</div> <div>2220 lb.</div> | |
| 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) | |
| Fuel Capacity | 42 gal. total, 37 gal. usable (172A); 39 gal. usable (172B) (two 21 gal. tanks in wings at +48) See Note 1 for weight of unusable fuel and oil. | |
| Oil Capacity | 2 gal. (-20), 1 gal. usable | |

II. Model 172A, Model 172B (cont'd)

| | | | | |
|-----------------------------|--------------------|-----------|-----------|-----|
| 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.) | | | | |

(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) |
| 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. | |
| | | |

III. Model 172C (cont'd)

| | | | | | |
|---------------------------|---|-----------|-----------|------|-----|
| 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) | | | |
| Propeller and Propeller Limits | 1. Propeller | | | |
| | (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. | | | |
| | (b) Spinner | | | |
| | Model 172D, E, F, Dwg. 0550216, 0550221 or 0550228 | | | |
| | Model 172G, H, Dwg. 0550236 | | | |
| | 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. | | | |

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 | <div><div><div>1. Propeller</div><div><div>(a) McCauley 1C172/MTM 7653</div><div>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.</div></div><div><div>(b) Spinner, Dwg. 0550320</div></div></div><div><div>2. Propeller (seaplane only)</div><div><div>(a) McCauley 1A175/ATM 8042</div><div>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.</div></div><div><div>(b) Spinner, Dwg. 0550320</div></div></div><div><div>3. Propeller</div><div><div>(a) McCauley 1C160/CTM 7553</div><div>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.</div></div><div><div>(b) Spinner, Dwg. 0550320</div></div></div><div><div>4. Propeller (seaplane only)</div><div><div>(a) McCauley 1A175/ETM 8042</div><div>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.</div></div><div><div>(b) Spinner, Dwg. 0550321</div></div></div><div><div>5. Propeller</div><div><div>(a) McCauley 1C160/DTM 7553</div><div>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.</div></div><div><div>(b) Spinner, Dwg. 0550320</div></div></div></div> | |
| *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 |
| | 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. | |

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

| | | | | |
|---------------------------|--|--|--|--|
| 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) |
| 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 |

VI. Model 172L (cont'd)

| | | | | | | | | | |
|--|--|-----------------|--|-----------------------------|--|-----------------|--|----------------|---------------------|
| Propeller and Propeller Limits (cont'd) | <ol style="list-style-type: none"> 3. Propeller <ol style="list-style-type: none"> (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 <ol style="list-style-type: none"> (a) McCauley 1A160/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) <ol style="list-style-type: none"> (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 6. Propeller <ol style="list-style-type: none"> (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 | | | | | | | | |
| *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) |
| 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 | <p>Landplane</p> <table> <tr> <td>Normal category</td><td>(+38.5) to (+47.3) at 2300 lbs. (+35.0) to (+47.3) at 1950 lbs. or less</td></tr> <tr> <td>Utility category</td><td>(+35.5) to (+40.5) at 2000 lbs. (+35.0) to (+40.5) at 1950 lbs. or less</td></tr> </table> <p>Straight line variation between points given.</p> <p>Seaplane (Edo 89-2000 or 89A2000 floats)</p> <table> <tr> <td>Normal category</td><td>(+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less</td></tr> </table> <p>Straight line variation between points given.</p> | 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 | Normal category | (+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less | | |
| 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 | | | | | | | | |
| Normal category | (+39.8) to (+45.5) at 2220 lbs. (+36.4) to (+45.5) at 1825 lbs. or less | | | | | | | | |
| Empty Weight C.G. Range | None | | | | | | | | |
| *Maximum Weight | <p>Landplane:</p> <table> <tr> <td>Normal category</td><td>2300 lbs.</td></tr> <tr> <td>Utility category</td><td>2000 lbs.</td></tr> </table> <p>Seaplane:</p> <table> <tr> <td>Normal category</td><td>2220 lbs.</td></tr> </table> | Normal category | 2300 lbs. | Utility category | 2000 lbs. | Normal category | 2220 lbs. | | |
| Normal category | 2300 lbs. | | | | | | | | |
| Utility category | 2000 lbs. | | | | | | | | |
| 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) | | | | | | | | |
| 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> | | | | | | | | |

VI. Model 172L (cont'd)

| | | | | |
|-----------------------------|---|--|---------|--------------|
| 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 | | | |
| *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) | | |

VII. Model 172M (cont'd)

| | |
|---|--|
| *Airspeed Limits (CAS) (See Note 4 on use of CAS) | 17265685 through 17267584 Maneuvering 97 knots 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) |

VIII. Model 172N (cont'd)

| | | |
|---|--|--|
| *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 <p>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.</p> (b) Spinner: Dwg. 0550320 2. Propeller (seaplane only) <ol style="list-style-type: none"> (a) McCauley 1A175/ETM 8042 <p>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.</p> (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) | |
| 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 | |

VIII. Model 172N (cont'd)

| | | | | |
|--|--------------------|---------|--|--------------------------|
| 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: | | |
| *Airspeed Limits (CAS) (See Note 4 on use of CAS) | Not over 2570, not under 2470 | | |
| | No additional tolerance permitted | | |
| | Diameter: not over 80 in., not under 78.5 in. | | |
| | (b) Spinner: Dwg. 0550320 | | |
| | Maneuvering | 99 knots (landplane) | |
| C.G. Range | | 96 knots (floatplane) | |
| | Maximum structural cruising | 127 knots | |
| | Never exceed | 158 knots | |
| | Flaps extended | 85 knots | |
| 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 | |

IX. Model 172P (cont'd)

| | | | | |
|---------------------------|--|--|---------|---------------------------|
| *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), 3.5 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) | | |
| 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 | | |
| *Airspeed Limits | Diameter: not over 76 in., not under 74.5 in. | | |
| | (b) Spinner: Dwg. 0509077 | | |
| | Maneuvering | 105 knots | |
| | Maximum structural cruising | 127 knots | |
| | Never exceed | 158 knots | |
| C.G. Range | Flaps extended | 85 knots | |
| | Normal category (+41.0) to (+47.3) at 2550 lbs. | | |
| | (+35.0) to (+47.3) at 1950 lbs. or less | | |
| Empty Weight C.G. Range | Straight line variation between points given. | | |
| *Maximum Weight | None | | |
| | Normal category: | 2550 lb. | |

Straight line variation between points given.

X. Model 172Q (cont'd)

| | | | |
|--|---|---------|-------------------|
| 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.) | | | |
| Serial Numbers Eligible | Rudder | Right | 16° ±1° |
| | | Left | 16° ±1° |
| (Measured parallel to W.L.) | | | |
| 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 | | |
| Certification Basis | <u>Models 172 through 172P</u> 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) | |
| | <u>Model 172Q</u> | 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. | | |

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

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

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" |

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

NOTE 2. (cont'd)

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. | | | |

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" |

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

NOTE 2. (cont'd)

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.

| | <u>MAXIMUMS</u> | | | |
|-------------------------|------------------------|-------|-------------------------|-------|
| | <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:

| | <u>MAXIMUMS</u> | | | |
|-------------------------|------------------------|-------|-------------------------|-------|
| | <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>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)

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

NOTE 2. (cont'd)

- 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>Recommended</u> | | <u>Recommended</u> | |
|--------------------|---------------------|--------------------|--------------------|
| <u>Maneuver</u> | <u>Entry speed</u> | <u>Maneuver</u> | <u>Entry Speed</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 | |

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)

- 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>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)

- B. Forward of fuel selector valve: (All models through S/N 17265684 except 17261445 and 17261578)

"Both tanks on for takeoff and landing."

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

NOTE 2. (cont'd)

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

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

NOTE 2. (cont'd)

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 takeoffNo 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."

J. Near ammeter and adjacent to overvoltage light:

(1) Model 172L (1972) through Model 172N (1978)

"High Voltage"

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

NOTE 2. (cont'd)

- 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) |

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)

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

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) McCauley Model IC235/LFA7570 | | |
| | (b) Spinner: Drawing No. 0550236 | | |
| | <u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> | | |
| | (a) McCauley 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 | 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) |
| | <u>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</u> | | |
| | 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

Normal Category

- (1) Aft Limits 47.3 inches aft of datum at 2,450 pounds or less.
 (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.

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.

When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)

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

Normal Category

Maximum Ramp 2,457 pounds
 Maximum Takeoff and Landing 2,450 pounds

Utility Category

Maximum Ramp 2,207 pounds
 Maximum Takeoff and Landing 2,200 pounds

When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)Normal Category

Maximum Ramp 2,558 pounds
 Maximum Takeoff and Landing 2,550 pounds

Utility Category

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

When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)

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.

XI - Model 172R (cont'd)

Oil Capacity (Gal.)

2.0 gallons at 13.1 inches forward of datum
3.5 quarts usable

When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)

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°

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) 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.

XI - Model 172R (cont'd)

Certification Basis (cont'd) 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)."

Data Pertinent to Model 172R:**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.

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.

Data Pertinent to Model 172R: (cont'd)

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 | | | | |

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 | | |

XII - Model 172S (cont'd)

| | | | |
|---|--|--------------|-------------------|
| 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 | | |
| 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° | | | |
| 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. | | |

XII - Model 172S (cont'd)

Certification Basis (cont'd)

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) 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.

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)."

Data Pertinent to Model 172S:**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.

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

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

.....END.....