DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

TYPE CERTIFICATE DATA SHEET NO. 3A12

This data sheet which is part of Type Certificate No. 3A12 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Cessna Aircraft Company
P.O. Box 7704
Wichita, Kansas 67277

I. Model 172, 4 PCLM (Normal Category), approved November 4, 1955; 2 PCLM (Utility Category), approved December 14, 1956

Engine: Continental O-300-A or O-300-B

*Fuel: 80/87 minimum grade aviation gasoline

"WARNING: Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes."

*Engine limits: For all operations, 2700 rpm (145 hp)

Propeller and propeller limits

1. Propeller
   (a) McCauley 1A170
      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
I. Model 172, 4 PCLM (Normal Category) (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 Maneuvering  115 mph  (100 knots)
(CAS) Maximum structural cruising 140 mph (122 knots)
Never exceed160 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)
   See Note 1 for weight of unusable fuel and oil.

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)

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
II. Model 172A, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (cont'd)

Model 172B, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (cont'd)

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

\begin{tabular}{ll}
\hline
(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)  \\
\hline
\end{tabular}

C.G. range

\begin{tabular}{ll}
\hline
Landplane (Model 172A):  &  \\
Normal category & (+40.8) to (+46.4) at 2200 lbs.  \\
\hspace{1cm} & (+36.4) to (+46.4) at 1733 lbs. or less  \\
Utility category & (+38.4) to (+40.3) at 1950 lbs.  \\
\hspace{1cm} & (+36.4) to (+40.3) at 1733 lbs. or less  \\
\hline
\end{tabular}

Straight line variation between points given.

\begin{tabular}{ll}
\hline
Landplane (Model 172B):  &  \\
Normal category & (+40.4) to (+46.4) at 2200 lbs.  \\
\hspace{1cm} & (+36.4) to (+46.4) at 1850 lbs. or less  \\
Utility category & (+37.4) to (+40.3) at 1950 lbs.  \\
\hspace{1cm} & (+36.4) to (+40.3) at 1850 lbs. or less  \\
\hline
\end{tabular}

Seaplane (Models 172A and 172B):

\begin{tabular}{ll}
\hline
Normal category & (+39.8) to (+45.5) at 2220 lbs.  \\
\hspace{1cm} & (+36.4) to (+45.5) at 1825 lbs. or less  \\
\hline
\end{tabular}

Straight line variation between points given.

Empty weight C.G. range

None

*Maximum weight

\begin{tabular}{ll}
\hline
Landplane:  &  \\
Normal category & 2200 lb.  \\
Utility category & 1950 lb.  \\
\hline
Seaplane:  &  \\
Normal category & 2220 lb.  \\
\hline
\end{tabular}

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, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category)

Model 172B, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category)

<table>
<thead>
<tr>
<th>Control surface movements</th>
<th>Wing flaps</th>
<th>Takeoff</th>
<th>Retracted</th>
<th>0°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st notch</td>
<td>10°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2nd notch</td>
<td>20°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd notch</td>
<td>30°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4th notch</td>
<td>40°</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ailerons</th>
<th>Up 20°</th>
<th>Down 15°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevator tab</td>
<td>Up 28°</td>
<td>Down 13°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up 28°</td>
<td>Down 26°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rudder (landplane)</th>
<th>Right 16°</th>
<th>Left 16°</th>
</tr>
</thead>
<tbody>
<tr>
<td>(seaplane)</td>
<td>Right 19°</td>
<td>Left 15°</td>
</tr>
</tbody>
</table>

(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

<table>
<thead>
<tr>
<th>Engine</th>
<th>Continental O-300-C or O-300-D</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Fuel</em></td>
<td>80/87 minimum grade aviation gasoline</td>
</tr>
<tr>
<td><em>Engine limits</em></td>
<td>For all operations, 2700 rpm (145 hp)</td>
</tr>
</tbody>
</table>

#### 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.
  - Utility category: (+36.4) to (+46.4) at 1850 lbs. or less
- **Seaplane**
  - Normal category: (+39.8) to (+45.5) at 2220 lbs.
  - Utility category: (+36.4) to (+45.5) at 1825 lbs. or less

Straight line variation between points given.
III. Model 172C, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category)  (cont'd)

Empty weight C.G. range  None

*Maximum weight

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>2250 lbs.</td>
</tr>
<tr>
<td>Utility</td>
<td>1950 lbs.</td>
</tr>
<tr>
<td>Seaplane</td>
<td>2220 lbs.</td>
</tr>
</tbody>
</table>

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)

Oil capacity  2 gal. (-20), includes 1 gal. unusable

Control surface movements

<table>
<thead>
<tr>
<th></th>
<th>Wing flaps</th>
<th>Takeoff</th>
<th>Retracted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0°</td>
<td></td>
</tr>
<tr>
<td>1st notch</td>
<td></td>
<td>10°</td>
<td></td>
</tr>
<tr>
<td>2nd notch</td>
<td></td>
<td>20°</td>
<td></td>
</tr>
<tr>
<td>3rd notch</td>
<td></td>
<td>30°</td>
<td></td>
</tr>
<tr>
<td>4th notch</td>
<td></td>
<td>40°</td>
<td></td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>20°</td>
<td>Down 15°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator tab</td>
<td></td>
<td>28°</td>
<td>Down 13°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>28°</td>
<td>Down 26°</td>
</tr>
<tr>
<td>Rudder (Landplane)</td>
<td>Right</td>
<td>16°</td>
<td>Left 16°</td>
</tr>
<tr>
<td>(Seaplane) Rudder</td>
<td>Right</td>
<td>19°</td>
<td>Left 15°</td>
</tr>
</tbody>
</table>

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

(b) Spinner

Model 172D, E, F, Dwg. 0550216, 0550221
Model 172G, H, Dwg. 0550236

*Airspeed limits

<table>
<thead>
<tr>
<th>Maneuvering</th>
<th>122 mph (106 knots)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(CAS) Maximum structural cruising</td>
<td>142 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>
</tbody>
</table>

C.G. range

**Landplane**

| Normal category | (+38.5) to (+47.3) at 2300 lbs. |
| Utility category | (+35.0) to (+47.3) at 1950 lbs. or less |
| (+35.5) to (+40.5) at 2000 lbs. |
| (+35.0) to (+40.5) at 1950 lbs. or less |

**Seaplane**

| Normal category | (+39.8) to (+45.5) at 2220 lbs. |
| Utility category | (+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 +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)

See Note 1 for weight of unusable fuel and oil.

Oil capacity

2 gal. (-20), 1 gal. usable

Control surface movements

| Wing flaps | Takeoff 1st notch 0° | Retracted 10° |
| Landing 0° 40° |
| Ailerons | Up | 20° | Down 15° |
| Elevator tab | Up | 28° | Down 13° |
| Elevator | Up | 28° | Down 23° |

(Red position is with bottom of balance area flush with bottom of stabilizer.)

| Rudder (landplane) | Right | 16° | Left 16° |
| Rudder (seaplane) | Right | 19° | Left 15° |

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
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 (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

5. 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

*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

<table>
<thead>
<tr>
<th></th>
<th>Landplane:</th>
<th>Normal category</th>
<th>2300 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Utility category</td>
<td>2000 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

|          | 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)

See Note 1 for weight of unusable fuel and oil.

Oil capacity 2 gal. (-14.0), 1-1/2 gal. usable

Control surface movements

<table>
<thead>
<tr>
<th></th>
<th>Takeoff</th>
<th>0° - 10°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Landing</td>
<td>0° - 40° ±2°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wing flaps</th>
<th>Up 20° ±1°</th>
<th>Down 15° ±1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ailerons</td>
<td>Up 28° ±1°, -0°</td>
<td>Down 13° ±1°, -0°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up 28° ±1°, -0°</td>
<td>Down 23° ±1°, -0°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up 28° ±1°, -0°</td>
<td>Down 23° ±1°, -0°</td>
</tr>
</tbody>
</table>

(Note 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, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (cont’d)

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 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)
   (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
   (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
   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)

Maximum baggage 120 lb. at +95

Fuel capacity 42 gal. total, 38 gal. usable (two 21 gal. tanks in wings at +48)
*See Note 1 for weight of unusable fuel.
VI. Model 172L, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (cont’d)

Oil capacity 2 gal. (-14.0), 1-1/2 gal. usable

See Note 1 for data on undrainable oil.

Control surface movements

<table>
<thead>
<tr>
<th>Wing flaps</th>
<th>Takeoff</th>
<th>Landing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>20° ±1°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>28° ±1°, -0°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>28° ±1°, -0°</td>
</tr>
</tbody>
</table>

(Control surface movements (Neutral position is with bottom of balance area flush with bottom of stabilizer.)

Rudder (landplane) Right 16° ±1° Left 16° ±1°
(Rudder (seaplane) Right 19° ±1° Left 15° ±1°

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, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category)  (cont'd)

*Airspeed Limits  17265685 through 17267584
(CAS)  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)
*See Note 1 for data on unusable fuel.

Oil capacity  2 gal. (-14.0), 1-1/2 gal. usable
*See Note 1 for data on undrainable oil.

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)
VIII. Model 172N, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (cont'd)

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
1. Propeller
   (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)
   (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
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 (+35.0) 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)
   See Note 1 for data on unusable fuel.

Oil capacity 1.5 gal. (-14.0), 1.0 gal. usable
VIII. Model 172N, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (cont'd)

<table>
<thead>
<tr>
<th>Control surface movements</th>
<th>Wing flaps</th>
<th>Takeoff</th>
<th>Landing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0° - 10°</td>
<td>0° - 40°</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(landplane)</td>
<td>(seaplane)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0° - 30° ±2°</td>
<td>(seaplane)</td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>20° ±1°</td>
<td>Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15° ±1°</td>
<td></td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up</td>
<td>28° ±1°, -0°</td>
<td>Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13° ±1°, -0°</td>
<td></td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>28° ±1°, -0°</td>
<td>Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23° ±1°, -0°</td>
<td></td>
</tr>
</tbody>
</table>

(Neutral position is with bottom of balance area flush with bottom of stabilizer.)

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 IC160/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 IA175/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
Maneuvering 99 knots (landplane)
(CAS) 96 knots (floatplane)
(See Note 4 on use of CAS)
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, Skyhawk, 4 PCL-SM (Normal Category), 2 PCLM (Utility Category) (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)
See Note 1 for data on unusable fuel.

Oil capacity 2 gal. (-13.1), 3.5 gal. usable

Control surface movements

<table>
<thead>
<tr>
<th>Wing flaps</th>
<th>Takeoff</th>
<th>Landing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ailerons</td>
<td>Up 20° ±1°</td>
<td>Down 15° ±1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up 28° ±1°, -0°</td>
<td>Down 13° ±1°, -0° (floatplane)</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up 22° ±1°, -0°</td>
<td>Down 19° ±1°, -0° (landplane)</td>
</tr>
</tbody>
</table>

(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
   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.
X. Model 172Q, Cutlass, 4 PCL M (Normal Category) (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)
See Note 1 for data on unusable fuel.

Oil capacity 9 qt. at -15.5, 2 qt. unusable

Control surface movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Movement</th>
<th>Takeoff</th>
<th>Landing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>Up</td>
<td>0° - 10°</td>
<td>0° - 30° +0°, -2°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>15° ±1°</td>
<td>20° ±1°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>20° ±1°</td>
<td>19° +1°, -0°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>15° ±1°</td>
<td>23° ±1°, -0°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up</td>
<td>22° ±1°, -0°</td>
<td>28° ±1°, -0°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>19° +1°, -0°</td>
<td>23° +1°, -0°</td>
</tr>
</tbody>
</table>

(Neutral position is with bottom of balance area flush with bottom of stabilizer.) (Measured parallel to W.L.)

Rudder Right 16° ±1° Left 16° ±1°

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

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.

Equivalent Safety Items 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 25.951(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.


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.

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

(1) Models 172, 172A and 172B (cont'd)
No acrobatic maneuvers approved except those listed below.

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Entry speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandelles</td>
<td>115 mph (100 knots)</td>
</tr>
<tr>
<td>Lazy eights</td>
<td>115 mph (100 knots)</td>
</tr>
<tr>
<td>Steep turns</td>
<td>115 mph (100 knots)</td>
</tr>
<tr>
<td>Spins</td>
<td>Slow deceleration</td>
</tr>
<tr>
<td>Stalls (except whip stalls)</td>
<td>Slow deceleration</td>
</tr>
</tbody>
</table>

(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.

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Entry speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandelles</td>
<td>115 mph (100 knots)</td>
</tr>
<tr>
<td>Lazy eights</td>
<td>115 mph (100 knots)</td>
</tr>
<tr>
<td>Steep turns</td>
<td>115 mph (100 knots)</td>
</tr>
<tr>
<td>Spins</td>
<td>Slow deceleration</td>
</tr>
<tr>
<td>Stalls (except whip stalls)</td>
<td>Slow deceleration</td>
</tr>
</tbody>
</table>

*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.

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Max. Entry speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandelles</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Lazy eights</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Steep turns</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Spins</td>
<td>Slow deceleration</td>
</tr>
<tr>
<td>Stalls (except whip stalls)</td>
<td>Slow deceleration</td>
</tr>
</tbody>
</table>
DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont’d)

(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.

<table>
<thead>
<tr>
<th>MAXIMUMS</th>
<th>Normal Category</th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneuver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maneuver speed (CAS)</td>
<td>122 mph (106 knots)</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Gross weight</td>
<td>2300 lbs.</td>
<td>2000 lbs.</td>
</tr>
<tr>
<td>Flight load factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flaps up</td>
<td>+3.8</td>
<td>-1.52</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+3.5</td>
<td>+3.5</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Max. Entry speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandelles</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Lazy eights</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Steep turns</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Spins</td>
<td>Slow deceleration</td>
</tr>
<tr>
<td>Stalls (except whip stalls)</td>
<td>Slow deceleration</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>MAXIMUMS</th>
<th>Normal Category</th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneuver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maneuver speed (CAS)</td>
<td>122 mph (106 knots)</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Gross weight</td>
<td>2300 lbs.</td>
<td>2000 lbs.</td>
</tr>
<tr>
<td>Flight load factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flaps up</td>
<td>+3.8</td>
<td>-1.52</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+3.5</td>
<td>+3.5</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Max. Entry speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandelles</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Lazy eights</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Steep turns</td>
<td>122 mph (106 knots)</td>
</tr>
<tr>
<td>Spins</td>
<td>Slow deceleration</td>
</tr>
<tr>
<td>Stalls (except whip stalls)</td>
<td>Slow deceleration</td>
</tr>
</tbody>
</table>

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)

(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.

MAXIMUMS

<table>
<thead>
<tr>
<th></th>
<th>Normal Category</th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneuvering speed</td>
<td>112 mph (97 knots)</td>
<td>112 mph (97 knots)</td>
</tr>
<tr>
<td>Gross weight</td>
<td>2300 lbs.</td>
<td>2000 lbs.</td>
</tr>
<tr>
<td>Flight load factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flaps up</td>
<td>+3.8, -1.52</td>
<td>+4.4, -1.76</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+3.0</td>
<td>+3.0</td>
</tr>
</tbody>
</table>

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.

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

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.

MAXIMUMS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneuvering speed</td>
<td>110 mph (96 knots)</td>
</tr>
<tr>
<td>Gross weight</td>
<td>2220 lbs.</td>
</tr>
<tr>
<td>Flight load factor</td>
<td>Flaps up +3.8, -1.52</td>
</tr>
<tr>
<td></td>
<td>Flaps down +3.0</td>
</tr>
</tbody>
</table>

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)

(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.
DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q  

MAXIMUMS

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Normal Category</th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneuver speed (CAS)</td>
<td>97 knots</td>
<td>97 knots</td>
</tr>
<tr>
<td>Gross weight</td>
<td>2300 lbs.</td>
<td>2000 lbs.</td>
</tr>
<tr>
<td>Flight load factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flaps up</td>
<td>+3.8</td>
<td>+4.4</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+3.0</td>
<td>-1.76</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Entry Speed</th>
<th>Maneuver</th>
<th>Entry Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandelles</td>
<td>105 knots</td>
<td>Spins</td>
<td>Slow deceleration</td>
</tr>
<tr>
<td>Lazy eights</td>
<td>105 knots</td>
<td>Stalls (except whip stalls)</td>
<td></td>
</tr>
<tr>
<td>Steep turns</td>
<td>95 knots</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

MAXIMUMS

<table>
<thead>
<tr>
<th>Maneuver speed (CAS)</th>
<th>96 knots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross weight</td>
<td>2220 lbs.</td>
</tr>
<tr>
<td>Flight load factor</td>
<td>Flaps up</td>
</tr>
<tr>
<td></td>
<td>Flaps down</td>
</tr>
</tbody>
</table>

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."

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

(2) Model 172B
"Both - 39 gal. 
Left - 19.5 gal. 
Right - 19.5 gal. 
Off"

"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 altitudes) (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."

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."


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

H. (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.
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."

J. Near ammeter and adjacent to overvoltage light:

(1) Model 172L (1971) 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."
DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

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 U.S. 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 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)

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 (VNE) and Maximum Structural Cruising Speed
   (VC) 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
   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
DATA PERTINENT TO ALL MODELS 172 THROUGH 172Q (cont'd)

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

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

Lycoming IO-360-L2A, Rated 180 Horsepower

**Fuel**

100/100LL minimum grade aviation gasoline

**Engine Limits**

For all operations, 2,400 RPM

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

For all operations, 2,700 RPM

**Propeller**

(a) McCauley Model IC235/LFA7570

(b) Spinner: Drawing No. 0550236

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

(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

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

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)

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

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)

**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 2,100 pounds or less.

(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.
**XI - Model 172R**  (cont’d)  

<table>
<thead>
<tr>
<th>C.G. Range</th>
<th>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal Category</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Aft Limits</td>
<td>47.3 inches aft of datum at 2,550 pounds or less.</td>
</tr>
<tr>
<td>(2) Forward Limits</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Utility Category</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Aft Limits</td>
<td>40.5 inches aft of datum at 2,200 pounds or less.</td>
</tr>
<tr>
<td>(2) Forward Limits</td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Empty Wt. C.G. Range</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Datum</td>
<td>Lower portion of front face of firewall</td>
</tr>
<tr>
<td>MAC</td>
<td>58.8 inches; Leading edge of MAC 25.9 inches aft of datum</td>
</tr>
<tr>
<td>Leveling Means</td>
<td>Left side of Tailcone at 108.0 inches and 142.0 inches aft of datum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maximum Weights</th>
<th>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal Category</strong></td>
<td></td>
</tr>
<tr>
<td>Maximum Ramp</td>
<td>2,457 pounds</td>
</tr>
<tr>
<td>Maximum Takeoff and Landing</td>
<td>2,450 pounds</td>
</tr>
<tr>
<td><strong>Utility Category</strong></td>
<td></td>
</tr>
<tr>
<td>Maximum Ramp</td>
<td>2,107 pounds</td>
</tr>
<tr>
<td>Maximum Takeoff and Landing</td>
<td>2,100 pounds</td>
</tr>
</tbody>
</table>

| **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 |

<table>
<thead>
<tr>
<th><strong>Fuel Capacity (Gal.)</strong></th>
<th>56 gallons total; 53 gallons usable</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Two 28 gallon tanks in wings at 48.0 inches aft of datum)</td>
<td></td>
</tr>
<tr>
<td>See NOTE 1 for data on usable fuel.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oil Capacity (Gal.)</th>
<th>2.0 gallons at 13.1 inches forward of datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 quarts usable</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When Modified by Cessna Modification Kit MK172-72-01 (See NOTE 4)</th>
<th></th>
</tr>
</thead>
</table>
XI - Model 172R (cont’d)

Control surface movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Takeoff (0° - 10°)</th>
<th>Landing (0° - 30° + 0°/–2°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up: 20° ± 1° Down: 15° ± 1°</td>
<td></td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up: 22° ± 1° Down: 19° ± 1°</td>
<td></td>
</tr>
<tr>
<td>Elevator</td>
<td>Up: 28° ± 1° Down: 23° ± 1°</td>
<td></td>
</tr>
</tbody>
</table>

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), 23.562(c), 23.562(c), 23.562(c), 23.562(c), 23.562(c), 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.

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

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

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.
Data Pertinent to Model 172R (cont’d)

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.”

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  17280648  17280652  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 |
| Propeller | (b) Spinner: Drawing No. 0550236 |
| Propeller limits | Static RPM at full throttle: Not over 2400; Not Under 2300 |
| Airspeed Limits | Diameter: Not over 76 inches; not under 75 inches |
| 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) |
### XII - Model 172S (cont’d)

<table>
<thead>
<tr>
<th>C.G. Range</th>
<th>Normal Category</th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Aft Limits</td>
<td>47.3 inches aft of datum at 2,550 pounds or less.</td>
<td>(1) Aft Limits</td>
</tr>
<tr>
<td>(2) Forward Limits</td>
<td>Linear variation from 41.0 inches aft of datum at 2,550 pounds to 35.0 inches</td>
<td>Linear variation from 37.5 inches aft of datum at 2,200 pounds to 35.0 inches</td>
</tr>
<tr>
<td></td>
<td>aft of datum at 1,950 pounds; 35.0 inches aft of datum at 1,950 pounds or less.</td>
<td>aft of datum at 1,950 pounds or less.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th></th>
<th>Normal Category</th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Ramp</td>
<td>2,558 pounds</td>
<td>Maximum Ramp</td>
</tr>
<tr>
<td>Maximum Takeoff and</td>
<td>2,550 pounds</td>
<td>Maximum Takeoff and Landing</td>
</tr>
<tr>
<td>Landing</td>
<td>2,208 pounds</td>
<td>2,200 pounds</td>
</tr>
</tbody>
</table>

**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 usable fuel.

**Oil Capacity (Gal.)**  
8.0 quarts at 13.1 inches forward of datum  
3.0 quarts usable

**Control surface movements**

<table>
<thead>
<tr>
<th>Wing flaps</th>
<th>Takeoff 0° - 10°</th>
<th>Landing 0° - 30° + 0°/-2°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ailerons</td>
<td>Up 20° ± 1°</td>
<td>Down 15° ± 1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up 22° + 1°/-0°</td>
<td>Down 19° + 1°/-0°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up 28° + 1°/-0°</td>
<td>Down 23° + 1°/-0°</td>
</tr>
</tbody>
</table>

(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°
XII - Model 172S (cont’d)

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), 23.562(c), 23.562(c), 23.562(c), and 23.562(c) 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.

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

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

Data Pertinent to Model 172S:

Production Basis

Production Certificate No. PC-4 issued August 27, 1998. Applies to airplane serial numbers 172S80003 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 172SPHUS00 (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.”
Data Pertinent to Model 172S: (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

.....END....