

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

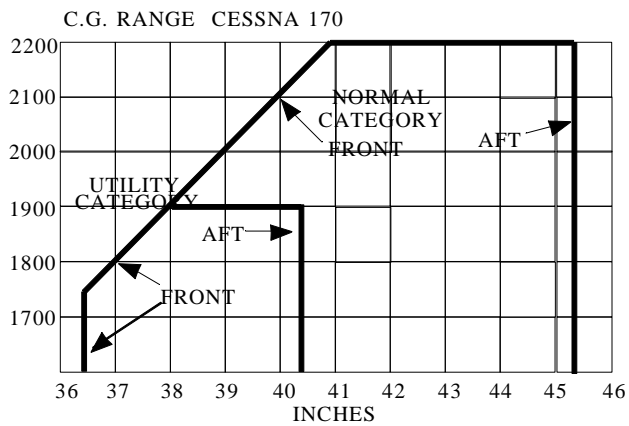
A-799
 Revision 51
 CESSNA
 170
 170A
 170B
 July 15, 1998

TYPE CERTIFICATE DATA SHEET NO. A-799

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

I - Model 170, 4 PCLM (Normal Category), Approved June 1, 1948; 2 PCLM (Utility Category), Approved July 12, 1948

| | | | | | | | | | |
|-----------------------------|--|-------------|----------------------------------|-----------------------------|----------------------------------|--------------|----------------------------------|----------------|---------------------------------|
| Engine | Continental C145-2 (See Item 112 for optional engine) | | | | | | | | |
| Fuel | 80 Min. octane aviation gasoline | | | | | | | | |
| Engine Limits | For all operations, 2700 r.p.m. (145 hp.) | | | | | | | | |
| Airspeed Limits | <table border="0" style="width: 100%;"> <tr> <td style="padding-right: 40px;">Maneuvering</td> <td>115 m.p.h. (100 knots) True Ind.</td> </tr> <tr> <td>Maximum structural cruising</td> <td>140 m.p.h. (122 knots) True Ind.</td> </tr> <tr> <td>Never exceed</td> <td>160 m.p.h. (139 knots) True Ind.</td> </tr> <tr> <td>Flaps extended</td> <td>90 m.p.h. (78 knots) True Ind.</td> </tr> </table> | Maneuvering | 115 m.p.h. (100 knots) True Ind. | Maximum structural cruising | 140 m.p.h. (122 knots) True Ind. | Never exceed | 160 m.p.h. (139 knots) True Ind. | Flaps extended | 90 m.p.h. (78 knots) True Ind. |
| Maneuvering | 115 m.p.h. (100 knots) True Ind. | | | | | | | | |
| Maximum structural cruising | 140 m.p.h. (122 knots) True Ind. | | | | | | | | |
| Never exceed | 160 m.p.h. (139 knots) True Ind. | | | | | | | | |
| Flaps extended | 90 m.p.h. (78 knots) True Ind. | | | | | | | | |
| C.G. Range | <p>Normal Category: (+40.9) to (+45.2) at 2200 lb. (+36.3) to (+45.2) at 1733 lb or less</p> <p>Utility Category: (+38.0) to (+40.3) at 1900 lb. (+36.3) to (+40.3) at 1733 lb. or less</p> <p>Straight line variation between points given</p> | | | | | | | | |



| | |
|----------------------|---|
| Empty Wt. C.G. Range | None |
| Maximum Weight | 2200 lb. Normal Category 1900 lb. Utility Category |

| | | | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
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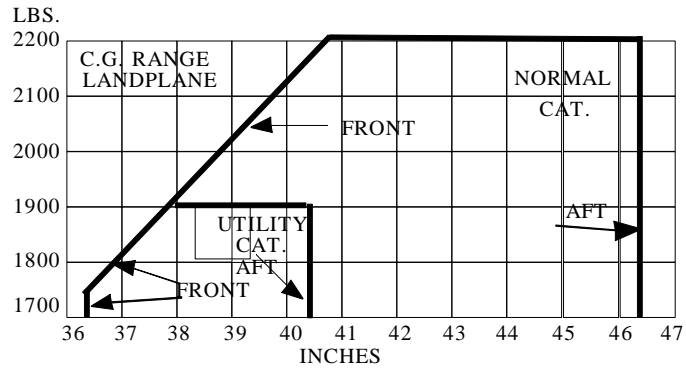
| | | | |
|---------------------------|---|-----------|----------|
| No. of Seats | 4 (2 at +36), (2 at +70) | | |
| Maximum Baggage | 120 lb. (+95) | | |
| Fuel Capacity | 37.5 gal. total, 33.5 gal. usable (three 12.5 gal. tanks in wings at +45). See NOTE 1 for weight of unusable fuel | | |
| Oil Capacity | 2 gal. (-20) | | |
| Control Surface Movements | Wing flaps | Up | Down 30° |
| | Ailerons | Up 22° | Down 14° |
| | Elevator tab | Up 10° | Down 27° |
| | Elevators | Up 28° | Down 17° |
| | Rudder | Right 16° | Left 16° |
| Serial Nos. Eligible | 18000 through 18729 | | |
| Required Equipment | In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed: | | |
| | Landplane: Items 1(a), 103, 104, 201(a), 202(a), 204(a), 402(a). | | |
| | Skiplane: Items 1(a), 103, 104, 204(a), 208(a), 402(a), and (e) or (d). | | |
| | Note: For night flying, cabin dome light and instrument lights or equivalent, to provide illumination of all placards and instruments are required in addition to equipment required by CAR 43. | | |

II - Model 170A, 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved December 15, 1948; 4 PCSM (Normal Category), 2 PCSM (Utility Category), Approved June 28, 1949.

(Same as Model 170 except for single strut all metal wing, revised ailerons and flaps and aileron, flap and elevator control systems, revised fuselage to adapt metal wing, dorsal fin and gravity fuel system and fuel tanks).

| | | | |
|-----------------|--|--|--|
| Engine | Continental C145-2 or -2H (See Item 112 for optional engine) | | |
| Fuel | 80 Min. octane aviation gasoline | | |
| Engine Limits | For all operations, 2700 r.p.m. (145 hp.) | | |
| Airspeed Limits | Landplane: | | |
| | Maneuvering | 115 m.p.h. (100 knots) True Ind. | |
| | Maximum structural cruising | 140 m.p.h. (122 knots) True Ind. | |
| | Never exceed | 160 m.p.h. (139 knots) True Ind. | |
| | Flaps extended | 100 m.ph. (87 knots) True Ind. | |
| | Seaplane: | | |
| | Maneuvering (Normal Category) | 105 m.p.h. (91 knots) True Ind. | |
| | (Utility Category) | 110 m.p.h. (96 knots) True Ind. | |
| | Maximum structural cruising | 110 m.p.h. (96 knots) True Ind. | |
| | Never exceed | 140 m.p.h. (122 knots) True Ind. | |
| | Flaps extended | 100 m.p.h. (87 knots) True Ind. | |
| C.G. Range | Landplane: | | |
| | Normal Category | (+40.8) to (+46.4) at 2200 lb. | |
| | | (+36.4) to (+46.4) at 1733 lb. or less | |
| | Utility Category: | (+38.0) to (+40.3) at 1900 lb. | |
| | | (+36.4) to (+40.3) at 1733 lb. or less | |

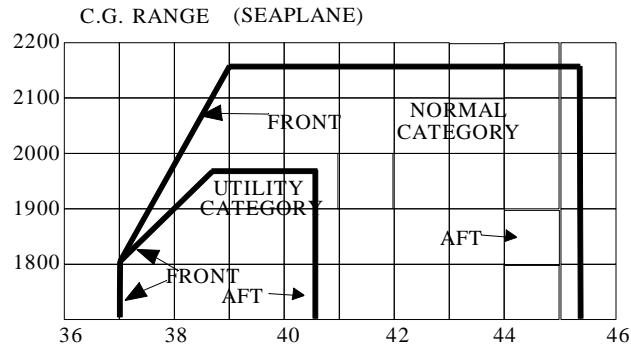
Straight line variation between points given.



Seaplane;

- Normal Category: (+38.8) to (+45.3) at 2106 lb.
(+37.0) to (+45.3) at 1800 lb. or less
- Utility Category: (+38.8) to (+40.6) at 1975 lb.
(+37.0) to (+40.6) at 1800 lb. or less

Straight line variation between points given.



Empty Weight C.G. range

None

Maximum Weight

- Landplane: 2200 lb. Normal Category
1900 lb. Utility Category
- Seaplane 2106 lb. Normal Category
1975 lb. Utility Category

No. seats

4 (2 at +36) (2 at +70)

Maximum baggage

120 lb. (+95)

Fuel capacity

42 gals. total, 37 gal. usable (Two 21 gal. tanks in wings at +48). See NOTE 1 for weight of unusable fuel

Oil Capacity

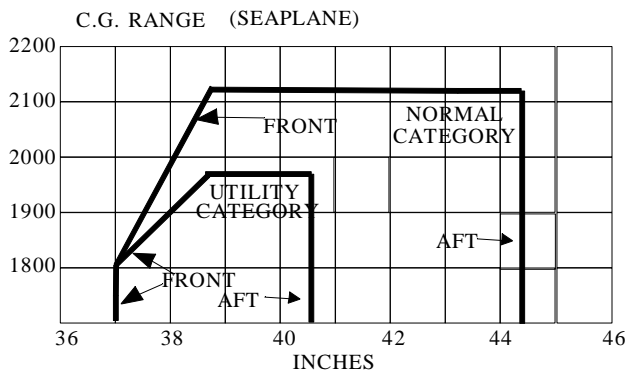
2 gals. (-20)

| | | | | |
|---------------------------|---|--|------|----------|
| Control Surface Movements | Wing flaps | | Down | 50° |
| | Ailerons | Up | 20° | Down 14° |
| | Elevator tab | Up | 10° | Down 27° |
| | Elevators | Up | 28° | Down 17° |
| | Rudder | Right | 16° | Left 16° |
| Serial Nos. eligible | 18730 through 20266 (except 19401). | | | |
| Required Equipment | In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed: | | | |
| | Landplane: | Items 1(a), 103, 201(a), 202(a), 204(a), 402(a). | | |
| | Skiplane: | Items 1(a), 103, 204(a), 208(a), 402(a) and (e) or (d). | | |
| | Seaplane: | Items 1(a), 103, 209(a), 402(a). | | |
| | Note: | For night flying cabin dome light and instrument lights or equivalent, to provide illumination of all placards and instruments are required in addition to equipment required by CAR 43. | | |

III - Model 170B: 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved September 28, 1950; 4 PCSM (Normal Category), 2 PCSM (Utility Category), Approved October 29, 1951.

(Same as Model 170A except for slotted flaps, revised horizontal tail, flap and aileron control systems, flap limiter, and numerous other minor changes.)

| | | | |
|-------------------|--|--|-----------|
| Engine | Continental C145-2 or -2H (See item 112 for optional engine) | | |
| Fuel | 80 Min. octane aviation gasoline | | |
| Engine limits | For all operations, 2700 r.p.m. (145 hp) | | |
| Airspeed Limits | Landplane: | | |
| | Maneuvering | 115 m.p.h. (100 knots) | True Ind. |
| | Maximum structural cruising | 140 m.p.h. (122 knots) | True Ind. |
| | Never exceed | 160 m.p.h. (139 knots) | True Ind. |
| | Flaps extended | 100 m.ph. (87 knots) | True Ind. |
| | Seaplane: | | |
| | Maneuvering (Normal Category) | 105 m.p.h. (91 knots) | True Ind. |
| | (Utility Category) | 110 m.p.h. (96 knots) | True Ind. |
| | Maximum structural cruising | 110 m.p.h. (96 knots) | True Ind. |
| | Never exceed | 140 m.p.h. (122 knots) | True Ind. |
| Flaps extended | 100 m.p.h. (87 knots) | True Ind. | |
| C.G. range | Landplane: | | |
| | | Same as Model 170A | |
| | Seaplane: | | |
| | Normal Category: | (+38.8) to (+44.4) at 2106 lb. | |
| | | (+37.0) to (+44.4) at 1800 lb. or less | |
| Utility Category: | (+38.8) to (+40.6) at 1975 lb. | | |
| | (+37.0) to (+40.6) at 1800 lb. or less | | |
| | Straight line variation between points given | | |



Empty Weight C.G. range

None

Maximum weight

Landplane: 2200 lb. Normal Category
 1900 lb. Utility Category
 Seaplane 2106 lb. Normal Category
 1975 lb. Utility Category

No. seats

4 (2 at +36) (2 at +70)

Maximum baggage

120 lb. (+95)

Fuel capacity

42 gals. total, 37 gals. usable (Two 21 gal. tanks in wings at +48)). See NOTE 1 for weight of unusable fuel

Oil Capacity

2 gals. (-20)

Wing Flaps

All Serials S/N 20267 and up eligible

| | | |
|---------|-----------|-----|
| Takeoff | Retracted | 0° |
| | 1st Notch | 10° |
| | 2nd Notch | 20° |
| Landing | 3rd Notch | 30° |
| | 4th Notch | 40° |

Note: S/N 20267 through 26504 were delivered without the 20° Notch.

Control surface movements

| | | | | | | | | |
|--------------|-------|-----|------|-----|-------|-----|------|-----|
| Ailerons | Up | 20° | Down | 14° | Up | 20° | Down | 14° |
| Elevator tab | Up | 12° | Down | 25° | Up | 12° | Down | 25° |
| Elevators | Up | 26° | Down | 20° | Up | 26° | Down | 20° |
| Rudder | Right | 16° | Left | 16° | Right | 16° | Left | 16° |

Serial Nos. eligible

609, 19401 20267 through 20999, and 25000 through 27169

Required Equipment

In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed:

- Landplane: Items 1(a), 110, 201(a), 202(a), 204(a), 402(f) and 607
- Skiplane: Items 1(a), 110, 204(a), 208(a), 402(e), 402(f) and 607.
- Seaplane: Items 1(a), 103, 209(b), 402(h).

Note: For night flying, cabin dome light and instrument lights or equivalent, to provide illumination of all placards and instruments are required in addition to equipment required by CAR 43.

Specifications Pertinent to All Models

| | |
|---------------------|---|
| Datum | Front face of firewall |
| Leveling Means | Upper door sill |
| Certification Basis | <p><u>Models 170</u>: Civil Air Regulations Part 03 dated December 15, 1946, as amended by 03-1 thru 03-3.</p> <p><u>Models 170A</u>: Civil Air Regulations Part 03 dated December 15, 1946, as amended by 03-1 thru 03-4.</p> <p><u>Model 170B</u>: Civil Air Regulations Part 3 dated November 1, 1949, as amended by 3-1 and 3-2.</p> <p>Type Certificate No. 799 issued June 1, 1948.</p> |
| Production Basis | Production Certificate No. 4. Delegation Option Manufacturer No. CE-1 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations. |

Equipment: A plus (+) or minus (-) sign preceding the weight of an item indicates net weight change when that item is installed.

Approval for the installation of all items of equipment listed herein has been obtained by the aircraft manufacturer except those items preceded by an asterisk (*). The asterisk denotes that approval has been obtained by someone other than the aircraft manufacturer. An item marked with an asterisk may not have been manufactured under a FAA monitored or approved quality control system, and therefore conformity must be determined if the item is not identified by a Form ACA-186, PMA, or other evidence of FAA production approval.

An item preceded by two asterisks (**) indicates approval under Part 21 of the Federal Aviation Regulations.

| | | <u>170</u> | <u>170A</u> | <u>170B</u> |
|--|--------|------------|-------------|-------------|
| <u>Propellers and Propeller Accessories</u> | | | | |
| 1. Propeller | | | | |
| (a) McCauley 1A170 | 33lb. | (-39) | (-39) | (-39) |
| Static r.p.m. at max. permissible throttle setting: | | | | |
| Landplane: Not over 2330, not under 2230 | | | | |
| Seaplane (Models 170A and 170B): Not over 2525, not under 2300. | | | | |
| No additional tolerance permitted. | | | | |
| Diameter: Not over 76 in., not under 74.5 in. | | | | |
| Propeller spinner, dwg. No. 0550101-3 | | | ←eligible→ | |
| Propeller spinner, dwg. No. 0550162 | 2 lb. | (-39) | (-39) | (-39) |
| (b) Sensenich 73BR-50 or any other fixed pitch wood | 15 lb. | (-39) | (-39) | (-39) |
| Static r.p.m. at max. permissible throttle setting: | | | | |
| Not over 2320, not under 2220 | | | | |
| No additional tolerance permitted | | | | |
| Diameter: Not over 74 in., not under 71.5 in. | | | | |
| (Not eligible on seaplane. Not eligible for new installations on Continental C-145-2 engines having undampened crankshafts after November 1, 1951) | | | | |
| Propeller spinner, dwg. No. 0550102-3 | | | ←eligible→ | |

Propeller and Propeller Accessories (Cont.)

| | | <u>170</u> | <u>170A</u> | <u>170B</u> |
|--|--------|------------|-------------|-------------|
| (c) Koppers Aeromatic F200-H/00-74E (Models 170A and 170B landplane and skiplane only) Parts List Assembly No. 4356H-1 Low pitch setting 13° measured at 24° in. sta. Static r.p.m. at max. permissible throttle setting: Not over 2700, not under 2620 No additional tolerance permitted Diameter: Not over 74 in., not under 72.5 in. | 41 lb. | _____ | (-38.5) | (-38.5) |
| <p>Installation of this item must be in accordance with Cessna dwg. No. 0550103 and adjustment and operation must be in accordance with Koppers "Adjustment Instructions and Operation Limitations No. 45." Item 108 with seaplane lip, Item 402(c), and C145-2H engine with dampered crankshaft are required when this propeller is installed. With this propeller installation the airplane performance has been demonstrated to equal or exceed that presented in the Airplane Flight Manual with a fixed pitch wood propeller over the altitude and temperature range shown. This item can only be used on C145-2H engine.</p> | | | | |
| * (d) McCauley two-position controllable, hub 2B36C7, blades 78K-2 (Models 170A and 170B landplane and skiplane with C-145-2H engine) Pitch settings at 30 in. sta.: low 13°, high 17.5° Diameter: Not over 76 in., not under 74.5 in. Item 108 with seaplane lip and Item 402(j) required. | 60 lb. | _____ | (-39) | (-39) |
| * (e) Sensenich M74DR, fixed pitch metal (landplane and skiplane only) Static r.p.m. at max. permissible throttle setting: Not over 2320, not under 2220. No additional tolerance permitted. Diameter: Not over 74 in., not under 72 in. Item 402(m) required. | 30 lb. | (-39) | (-39) | (-39) |
| (f) McCauley 1C172/MDM Static r.p.m. at maximum permissible throttle setting: Landplane: Not over 2350, not under 2250 Seaplane: (Models 170A and 170B): Not over 2525, not under 2300 Diameter: Not over 76 in., not under 74.5 in. No additional tolerance permitted. | 30 lb. | (-39) | (-39) | (-39) |

Engine and Engine Accessories - Fuel and Oil Systems

| | | | | |
|---|--------|-------|-------|-------|
| 101. Starter (Delco-Remy 1109656) | 16 lb. | (- 6) | (- 6) | (- 6) |
| 102. Carburetor air filter | 1 lb. | (-27) | (-27) | (-27) |
| 103. Carburetor air heater and mufflers | 10 lb. | (-23) | (-23) | _____ |

| <u>Engine and Engine Accessories - Fuel and Oil Systems (cont.)</u> | | <u>170</u> | <u>170A</u> | <u>170B</u> |
|---|---|------------|-----------------------|-------------------------|
| 104. | Fuel pump (Continental No. 40585) | 2 lb. | (-32) | _____ |
| 105. | Winterization equipment (Cessna dwgs. Nos. 0552104 and 0552101 or 0552106. 0552106 designed for use with 0552002 engine cowl). Item 402(b) or 402(i) required with this equipment. | | Neglect weight change | |
| 106. | Oil filter - Fram PB-5 | | | |
| | (1) Installed per Cessna dwg. 0550150 | 4 lb. | (-12) | (-12) (-12) |
| | * (2) Installed per Fram dwg. 62191 or 62574 | 4 lb. | (- 3) | (- 3) (- 3) |
| 107. | Engine cowl per Cessna dwg. 0552000 Includes 3"-40° lip on bottom cowl | | | Use actual weight |
| 108. | Engine cowl per Cessna dwg. 0552001 or 0552002 Includes 3/4"-45° lip on bottom cowl required for seaplane | | | Use actual weight |
| 109. | Oil dilution system (Cessna dwg. 0550151) | No wt. ch. | _____ | Elig. Elig. |
| 110. | Hanlon-Wilson exhaust manifolds and carburetor air heater (Cessna dwg. 0550157) | 15 lb. | (-22) | (-22) (-22) |
| *111. | Franklin 6A4-165-B3 engine Eligible on Model 170A and 170B landplane and seaplane with the following limits: Fuel 80 min. octane aviation gasoline Engine Limits For all operations, 2800 r.p.m. (165 hp.) Propeller McCauley 1A170 with the following limits: Static r.p.m. at max. permissible throttle setting: (landplane): Not over 2350, not under 2200 (seaplane): Not over 2500, not under 2400 No additional tolerance permitted Diameter: Not over 76 in., not under 74.5 in. Placard "Avoid continuous engine operation between required 2150 and 2250 r.p.m." Oil capacity 9 qt. (-20) When this item is installed the engine mount, cowling, baffles, exhaust system including carburetor air heater and cabin heater, oil system, power plant instruments and markings, battery location, and other items must be changed in accordance with the installation instructions, drawings, photographs, and parts list approved for Green Flying Service, Eugene Airpark, 1953 Chamgers Street, Eugene, Oregon. Airplane Flight Manual Supplement, Item 402(g), is required when this item is installed in landplanes. Airplane Flight Manual Supplement, Item 402(1), obtainable from Carl Millard, Ltd., 307 Riverside Drive, Ontario, Canada, required when this item installed in seaplanes. | | _____ | use actual wt. _____ |
| 112. | Continental 0-300-A engine (Same limits as for C-145-2 or-2H engine) | | | Use actual weight |

Engine and Engine Accessories - Fuel and Oil Systems (cont.) 170 170A 170B

*113. 18 gal. auxiliary tank installed in accordance with Javelin Aircraft Co., 1405 S. Oliver, Wichita, Kansas. Installation Instructions dated September 15, 1955, and dwgs. Nos. 782-1 and 787 for landplanes and dwgs. Nos. 782-1, 782-2, and 787 for seaplanes.
 (See NOTE 1 for data on unusable fuel)
 Item 402(k) required when this tank is installed
 Not eligible on aircraft equipped with Item 404(b)

Landing Gear

| | | | | | |
|------|--|--------|------------------|-----------------|--------------------------|
| 201. | 2 Main wheel-brake assemblies, 6.00-6, Type III | | | | |
| | (a) Goodyear Model LF6HBD Wheel Assembly No. 511960-M Brake Assembly No. 9521239 | 13 lb. | (+22) | (+22) | (+22) |
| | (b) Goodyear Model CL6HBM Wheel Assembly 9530243 L.H. 9530242 R.H. Brake Assembly 9530369 L.H. 9530368 R.H. | 30 lb. | (+22) | (+22) | (+22) |
| | Installed in accordance with Cessna dwg. No. 0541150 Note: Item 210 is not eligible with this item | | | | |
| 202. | (a) 2 Main wheel 4 ply-rating tires, 6.00-6, Type III (with reg. tubes) | 18 lb. | (+22) | (+22) | (+22) |
| | (b) 2 Main wheel 4 ply-rating tires, 7.00-6, Type III (with reg. tubes) | +1 lb. | (+22) | (+22) | (+22) |
| | (c) 2 Main wheel 4 ply-rating tires, 8.00-6, Type III (with reg. tubes) (Items 202(a), (b) and (c) eligible for use with Items 201(a) or (b)) | 10 lb. | (+22) | (+22) | (+22) |
| 204. | Tail wheel assembly | | | | |
| | (a) Scott Model 3-24B, steerable | 5 lb. | (+246) | (+246) | (+246) |
| | * (b) Scott Model 3200, steerable, swiveling installed in accordance with Scott Bulletin I-168) | 8 lb. | (+249) | (+249) | (+249) |
| | * (c) Maule SFS-1-2-P8 | 6 lb. | (+246) | (+246) | (+246) |
| | (d) Deleted June 22, 1951 | | | | |
| 208. | Two skis | | | | |
| | (a) Federal A-2500 according to Cessna dwg. No. 0541102 or Federal Instln. dwg. No. 11R170 | 53 lb. | (+16) | (+16) | (+16) |
| | * (b) Call S-5 per Call Aircraft dwg. No. 262 (not eligible with Items 201(b) and 202(a) or (c) installed) | 71 lb. | (+18) | (+18) | (+18) |
| | * (c) Federal A-2500A Federal Instln. dwg. 11R170 | | | | Use actual weight change |
| | * (d) Federal A-3500 Federal Instln. dwg. 11R170 | | | | Use actual weight change |
| | * (e) Federal A-3500A Federal Instln. dwg. 11R170 | | | | Use actual weight change |
| | * (f) Federal AWA 2500 wheel-ski, Federal Instln. | 78 | | | |
| | lb. (All Models) dwg. 11R395 (Eligible with mechanical conversion on ground only) | | | | |
| | Note: Weight and balance of aircraft shall be checked with ski in retracted and extended position. | | <u>Retracted</u> | <u>Extended</u> | |
| | Not eligible with Item 202(c) installed | | (+20) | (+24) | |

| <u>Landing Gear</u> (cont.) | <u>170</u> | <u>170A</u> | <u>170B</u> |
|--|------------|------------------|-----------------|
| * (g) Federal AWB 2500 wheel-ski, Federal Instn. dwg. 11R549 (Eligible with hydraulic conversion on ground and in flight) Note: Weight and balance of aircraft shall be checked with ski in retracted and extended position. Placard required: "Do not extend or retract skis while in motion on the ground." | 102 lb. | (All Models) | |
| | | <u>Retracted</u> | <u>Extended</u> |
| | | (+14.5) | (+18) |
| * (h) Federal AWB 2500A wheel-ski, Federal Instn. dwg. 11R549G (Effective on ski-gear shipped prior to January 31, 1952) and 11R889 (Effective on ski-gear shipped after January 31, 1952). (Eligible with hydraulic conversion on ground and in flight) Note: Weight and balance of aircraft shall be checked with ski in retracted and extended position. Placard required: "Do not extend or retract skis while in motion on the ground." | 108 lb. | (All Models) | |
| | | <u>Retracted</u> | <u>Extended</u> |
| | | (+14.5) | (+18.5) |
| * (i) Woychik R-1A, Woychik Aircraft Equipment (Middleton, Wisc.) dwgs. Nos. 1 thru 5 (32 psi tire pressure required). Airplane Flight Manual Supplement dated November 19, 1951, required | 58 lb. | (+17) | (+17) |
| | | (+17) | (+17) |
| * (j) Wesco, Western Aircraft Equipment Co. dwgs. Nos. 11 and 148 | | | |
| (1) A-25 | 69 lb. | (+15) | (+15) |
| (2) AS-2A | 62 lb. | (+15) | (+15) |
| (3) AS-2B | 64 lb. | (+15) | (+15) |
| 209. Two floats | | | |
| (a) Edo 89-2000 per Cessna dwg. No. 0541125 | 251 lb. | _____ | (+41) |
| (b) Edo 89-2000 per Cessna dwg. No. 0541125B | 245 lb. | _____ | (+40) |
| 210. Two wheel streamlines per Cessna dwg. No. 0441143 (not eligible when Items 201(b), 202(b) or (c) are installed) | 6 lb. | (+21) | (+21) |
| 211. Tail ski, Federal AT-2500 in accordance with Cessna dwg. No. 0542103 | 6 lb. | (+245) | (+245) |
| *212. Geisse Safety Gear installed according to St. Louis Machine Co. dwgs. Nos. 1 and 2 and instructions dated May 5, 1953 (revised October 8, 1953). May be used with Item 210 provided St. Louis Machine Co. conversion kit installed per instructions dated February 4, 1954. Not eligible with Items 201(b), 208, 209, 211, or 213 installed. | 12 lb. | (+20) | (+20) |
| *213. Whitaker Model L-19 Tandum Gear | | | |
| (a) With Item 202(a) | +64 lb. | (+22) | (+22) |
| (b) With Item 202(b) | +67 lb. | (+22) | (+22) |
| Installed in accordance with A.W. Whitaker, P.O. Box 1811, Portland, Ore., Installation Instructions and dwg. CTG-5 dated October 11, 1952. When this item is installed, performance information in the Airplane Flight Manual does not apply. | | | |
| *214. Two "No drag" wheel fenders per Liquid Tool Co., Box 299, Morrow, Ohio, dwg. No. 105 | 8 lb. | (+23) | (+23) |

| <u>Electrical Equipment</u> | | <u>170</u> | <u>170A</u> | <u>170B</u> |
|---|--------|----------------|-------------|-------------|
| 301. Generator (Delco-Remy 1101876) | 10 lb. | (-6) | (-6) | (-6) |
| 302. Battery - 12 volt 24 amp. hr. | 23 lb. | (-3) | (-3) | (-3) |
| 303. Landing light - Grimes D-3040-8 (Cessna dwg. No. 0422007) | 6 lb. | (+44) | ----- | ----- |
| 304. Landing light - G.E. 4509 (Cessna dwg. No. 0523000-2) | 2 lb. | ----- | (+32) | (+32) |
| 305. Generator - 25 amp. (Delco-Remy No. 1101879, Continental No. 40734) Must be installed with Continental No. 531325 Drive Gear | 14 lb. | (-6) | (-6) | (-6) |
| *306. Generator - 35 amp. (Delco-Remy No. 1101880 or No. 1101898) Eligible only on engines with dampened crankshafts. | 19 lb. | (-6) | (-6) | (-6) |
| *307. Voltage regulator, Delco-Remy No. 1118385 | | Neglect Weight | | |

Interior Equipment

| | | | | |
|---|-------|------|------|------|
| 401. Cabin heater valve assembly | 1 lb. | (-2) | (-2) | (-2) |
| 402. (a) FAA Approved Airplane Flight Manual and pertinent revisions applicable to the particular model, serial number, and landing gear installation | | | | |
| (b) FAA Approved Supplement No. 1 to Airplane Flight Manual (pertinent to winterization equipment, Item 105, designed for 0552000 and 0552001 engine cowls) | | | | |
| (c) FAA Approved Supplement No. 2 to Airplane Flight Manual (pertinent to Koppers propeller installation, Item 4) | | | | |
| (d) FAA Approved Airplane Flight Manuals (Skiplane) dated April 24, 1948 (Model 170) and December 3, 1948 (Model 170A) | | | | |
| (e) The following supplement to Airplane Flight Manual is required for all skis listed except for ski Item 208(a) which is covered by Item 402(d) above. "PERFORMANCE WITH SKIS INSTALLED <u>Takeoff and Landing:</u> Under the most favorable conditions of smooth packed snow at temperatures approximately 30°F. skiplane takeoff distance is approximately 10 percent greater than the distance shown for the landplane. Skiplane landing distance is approximately 20 percent greater than that shown for the landplane. In applying the performance data, caution should be exercised in that lower temperatures or other snow conditions will increase the ski friction and hence increase the takeoff run and either increase or decrease the landing run. <u>Climb Performance:</u> The skiplane rate of climb is approximately 50 feet per minute less than the landplane." | | | | |
| (f) FAA Approved Airplane Flight Manual for Model 170B, dated September 28, 1950. | | | | |
| * (g) FAA Approved Supplement to Airplane Flight Manual dated March 15, 1950 (Model 170A) (landplane) or December 30, 1955 (Model 170B) (landplane). (Pertinent to Franklin 6A4-165-B3 engine installation, Item 111.) | | | | |
| (h) FAA Approved Airplane Flight Manual for Model 170B seaplane dated October 29, 1951. | | | | |
| (i) FAA Approved Supplement No. 3 to Airplane Flight Manual. (Pertinent to Winterization Equipment, Item 105, designed for 0552002 engine cowl). | | | | |
| * (j) FAA Approved Airplane Flight manual Supplement for Models 170A and 170B dated July 5, 1955. (Pertinent to McCauley controllable propeller installation, Item 5). | | | | |
| * (k) FAA Approved Airplane Flight Manual Supplement dated November 18, 1955 (Pertinent to auxiliary fuel tank installation, Item 113). | | | | |

| <u>Interior Equipment</u> (cont.) | <u>170</u> | <u>170A</u> | <u>170B</u> |
|--|------------|-------------|-------------|
| * (l) FAA Approved Supplement to Airplane Flight Manual dated October 6, 1955 (Pertinent to Franklin 6A5-164-B3 engine installation in Model 170A and 170B seaplanes). | | | |
| * (m) FAA Approved Airplane Flight Manual Supplement dated January 17, 1957, prepared by Sensenich Corporation, Lancaster, Pennsylvania, pertinent to Sensenich Propeller Installation, Item *6. | | | |
| 403. Blind flying kit. Cessna dwg. No. 0500006 | 5lb. | (+26) | (+26) |
| 404. Cabin heater installation | | | |
| (a) Stewart-Warner Model 977B-1 per Cessna dwg. 0511200 | 10 lb. | ----- | (-7) |
| (b) Stewart-Warner Model 979B-1 per Cessna dwg. 0511231 | 20 lb. | ----- | (+75) |
| *405. Lear Model L-2B (1102B) automatic pilot Model 1404A altitude and controller (optional equipment) installed in accordance with Lear Installation dwg. No. 91467 Model 1350A-1 approach coupler and (optional equipment) installed in accordance with Lear dwg. No. 700130 Items 306 and 307 required with this auto-pilot installation. Following placard required near automatic pilot controller: | 50 lb. | (+75) | (+75) |
| " (1) Do not use auto pilot below 150 feet above terrain in the cruise configuration. | 1.5 lb. | (+138) | (+138) |
| " (2) Do not use auto pilot below 75 feet above terrain in the approach configuration." | | | |
| Servo stall torque measured at the servo on the ground: Aileron 25±5 in. lb., elevator 25±5 in. lb., Rudder 50±5 in. lb., Servo drum pitch diameters for all three axes are 1.375 inches. | | | |
| FAA Approved Airplane Flight Manual Supplement dated October 19, 1951, is required. Revision dated September 2, 1952 (Lear No. 96219) or revision dated November 29, 1954, required when altitude controller installed. Revision dated January 11, 1955, required when approach coupler installed. | | | |
| *406. Fairbanks Aircraft Service Model FAS-1 seat. Installation to be in accordance with Fairbanks Aircraft Service installation instruction dated September 2, 1952 | 15 lb. | (+70) | (+70) |
| *407. Chinook cabin heater, Model AC (eligible only on airplanes equipped with Item 110). Installation must be in accordance with instructions in Bulletin AC-2 dated December 1, 1952, as approved for Dakota Aviation Co., Huron, S. D. | +3 lb. | (+20) | (+20) |
| *408. Javelin A-2 single axis automatic pilot installed according to Javelin dwg. No. 725. | 18 lb. | (+110) | (+110) |
| *409. Javelin rudder trim according to Javelin dwg. No. 719 (sheets 1 and 2 5 lb. revised April 14, 1955) and Instructions dated March 1955. Airplane Flight Manual Supplement for Javelin Rudder Trim dated May 20, 1955, required. | (+123) | (+123) | (+123) |
| *410. Deleted November 26, 1957. Now covered by STC SA1-107 | | | |
| *411. Lear ARCON Model A according to Lear dwg. No. 703437 or dwg. No. 702090. Lear Flight Manual Supplement for Lear "Arcon" dated February 16, 1955, required. | 12 lb. | (+96) | (+96) |
| *412. Type 69A112 Gyro-Stabilizer installed according to Globe Industries, Inc. Installation Manual No. 503 dated July 1955. Servo cable slip clutch forces 7 to 12 lb. measured at pilot's control. Placard required near automatic control controller: "Do not use Auto pilot during Takeoff and Landing Within 75 feet of ground." | 15 lb. | ----- | (+99) |

| <u>Miscellaneous (not listed above)</u> | | <u>170</u> | <u>170A</u> | <u>170B</u> | |
|---|---|------------|-----------------------|-------------|--------------------------|
| 601. | Flares, three 1 1/2 PF-11 International | 18 lb. | (+98) | (+98) | (+98) |
| 602. | Gran portable stretcher installation | | | | |
| | (a) Provision for stretcher, Cessna dwg. 0511003 | | elig. | elig. | elig. |
| | (b) Gran portable stretcher (stored location) | 17 lb. | (+95) | (+95) | (+95) |
| | Note: The stretcher is adjustable for use at two lengths of approximately 72 and 64 inches. The co-pilot's seat may not be occupied with the stretcher extended to 72 inches, the co-pilot's seat back serving as the stretcher's forward support. However, with the stretcher shortened to 64 inches the co-pilot's seat may be occupied, if so desired. The last sentence of the normal category placard specified in NOTE 2 is not applicable with this item installed. Instead, the maximum ** allowable baggage is limited for each aircraft as determined by weight and balance check for the most rearward C.G. limit with the stretcher occupied at (+73) and with the co-pilot's seat unoccupied. The following placard must be installed in the baggage compartment: "Maximum baggage <u>**</u> lb. with stretcher installed." | | | | |
| 603. | Provision for camera per drawing No. 0510010 Maximum allowable weight for the camera and attachments is 92 lb. at (+72). Camera operator's stool to be placarded: "No Seat during Takeoff or Landing." making the airplane two-place when installed. | | | | Use actual weight change |
| 604. | Venturi installation in accordance with Cessna dwg. 0511010A | 10 lb. | (+17) | (+17) | (+17) |
| 605. | Heated pilot installation in accordance with Cessna dwg. 0511051 | 1 lb. | (+12) | (+12) | (+12) |
| *606. | Spray system installation in accordance with Yingling Aircraft, Inc. dwg. Y-200 and installation instructions. | +84 lb. | ----- | (+33) | ----- |
| | Spray fluid | | ----- | (+57) | ----- |
| 607. | Stall warning kit in accordance with Cessna dwg. 0511062 | | elig. | elig. | elig. |
| 608. | Deleted November 30, 1951 | | | | |
| 609. | Model 170A dorsal fin (eligible on Model 170) | | | | |
| *610. | Whitaker Model CWS-53 "Wingspray" installation instructions CWS-15 (less fans and brushes) | 90 lb. | ----- | (+35) | ----- |
| *611. | Woychik retractable lifting handles, Woychik Aircraft Equipment (Middleton, Wisc.), dwg. Nos. 50 and 50A | 14 oz. | (+172) | (+172) | (+172) |
| *612. | Metal Plating of Wings. Model 170 eligible when wings are covered with metal skin per Technical Instruction Report No. 101440 by Birtcraft Engineering Co., 11826 Cherry Ave., Inglewood, California | | Use actual wt. change | ----- | ----- |
| 613. | Omitted | | | | |
| *614. | Metal skin installed in accordance with Met-Co-Aire, Fullerton, California, dwg. No. 7108 | | | | Use actual weight change |

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system).

The certificated empty weight and corresponding center of gravity location must include unusable fuel at 19 lb. at (+53) for Model 170 and 30 lb. at (+46) for Model 170A and Model 170B (above values are included in total fuel capacity). When Item 113, 18 gallon auxiliary fuel tank, is installed an additional 3 lb. unusable fuel at (+99) must be included.

NOTE 2. (a) The following placards must be displayed in front of and in clear view of the pilot:

Model 170

"This airplane must be operated as a normal or utility category airplane in compliance with the Airplane Flight Manual."

NORMAL

"No acrobatic maneuvers including spins approved. With two people in the rear seat both front seats must be occupied."

UTILITY

"No acrobatic maneuvers approved except those listed in the Airplane Flight Manual. Baggage compartment and rear seat must not be occupied."

Models 170A and 170B:

"This airplane must be operated as a normal or utility category airplane in compliance with the Airplane Flight Manual."

NORMAL

"No acrobatic maneuvers including spins approved."

UTILITY

"No acrobatic maneuvers approved except those listed in the Airplane Flight Manual. Baggage compartment

"Both tanks on for takeoff and landing." and rear seat must not be occupied."

Models 170A and 170B (Seaplanes)

"Retract Water Rudder During Takeoff and Landing."

Model 170B Seaplane

"Intentional Spins Prohibited" (Normal and Utility Categories)

(b) The following placard must be displayed in the baggage compartment:

"Maximum Baggage 120 lb. For additional loading instructions see Weight and Balance Data."

(c) The following placard must be displayed in front of and in clear view of the pilot for those aircraft with Items Nos. 208(g) and 208(h) installed:

"Do not extend or retract skis while in motion on the ground."

.....END.....