

No. seats	5 (two front at -14, three rear at +36)		
Maximum baggage	350 lbs. (300 lbs. aft of cabin at +65: 50 lbs. on cabin baggage shelf at +65)		
Fuel capacity	120 gals. (two 60 gal. wing tanks at +21.5). See Item 207 for auxiliary fuel tank.		
Oil capacity	10 gal. (two nacelle tanks, 5 gal. each) (-34) ((-27) when Item 209 is installed)		
Control surface movements	Elevator	25° up	25° down
	Elevator tab	5° up	18° down
	Aileron	25° up	25° down
	Rudder	25° right	25° left
	Rudder tab	25° right	25° left
	Wing flaps		35° or 40° down (See Item 605 for increased travel)
Serial Nos. eligible	1000 to 1029, 1100 and up and all AAF and Navy numbers. Use manufacturer's number if available. See NOTE 2 for required modifications for conversion of military models.		
Required equipment	Items 101; 102; 103; 104; 105; 106(a) or (b); 107(a) or (b); 108; 109; 110; 111; 112; 113; 114; 115(a) or (b); 117; 118; 119; 401 (when maximum weight exceeds 5,100 lb.); 601 or 602, and 603 or 604.		

SPECIFICATIONS PERTINENT TO ALL MODELS

Datum	Centerline of top of front spar. Datum is marked on fuselage front spar fitting, at bottom of spar
Leveling means	Lugs located on left side of baggage compartment
Certification basis	Type Certificate No. 722 (CAR 4a)
Production basis	None. Prior to original certification a CAA representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data, and a check of the flight characteristics.
Export eligibility	Eligible for export to all countries, subject to the provisions of ASR 312 (MOP 2-4 contains the same information) except as follows: (a) Canada - Landplane - eligible - Skiplane - not eligible (b) Great Britain and Australia - Serial Nos. 1001 to 1029, 1100 and up
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 preceded by an asterisk (*). The asterisk denotes that approval has been obtained by other than the aircraft manufacturer.

Propellers and Propeller Accessories

103.	Two propellers controllable metal (Ham. Std. hubs 2B20, blades 6135A-15 or 6135A-16. Dia. 7'9-1/8" max., 7'6-7/8" min. For interchangeable blade models see Propeller Specification No. 255 (NOTE 6). Low pitch setting 12° or 13°, high pitch setting 27° or 28°.)	208 lb. (-75)
104.	Two constant speed propeller controls - Hamilton Standard 1A4-G5	8 lb. (-43)
121.	Two Montgomery Spinners for Hamilton Standard 2B20 Propeller	15 lb. (-75)
208.	Two propellers (incl. hub) - any fixed pitch wood which is eligible for the engine power and speed and which meets the following limits: Static r.p.m. at maximum permissible throttle setting: Not over 1950, not under 1810. No additional tolerance permitted. Diameter: Not over 97 in., not under 87 in. for T-50 Diameter: not over 93 in., not under 87 in. for AT-17 and UC-78 (Note S & S propeller 210E, 93 in. dia., 76 in. pitch, meets the above limits and is eligible.)	-132 lb. (-75)

Engines and Engine Accessories - Fuel and Oil System

101.	Two engine cowls (NACA type with baffles and inner cowl)	72 lb. (-55)
102.	Two exhaust collector rings	22 lb. (-51)
105.	Two starters (Eclipse E-80 or J-1)	39 lb. (-42)
115.	Fuel pumps - engine-driven:	
	(a) (1) Two Pesco M400 (may be replaced by Items 120 or 223)	1.5 lb. ea. (-38)
	and (2) Either two Pesco R-400BLH or 2P-R400BLYA	2.5 lb. ea. (-45)
	or (b) Four Pesco R-400BLH or 2P-R400BLYA	2.5 lb. ea. (-45)
116.	Engine shielding (both engines)	20 lb. (-59)
117.	Two oil strainer (Jacobs)	2 lb. ea. (-41)
118.	Two carburetor air scoop assemblies	4 lb. ea. (-51)
119.	Two carburetor air heaters	6 lb. ea. (-51)
120.	One AN-4009 wobble pump (replaces two Pesco M400 pumps in Item 115(a))	3 lb. (-14)
205.	Vacuum pumps and optional oil separator:	
	(a) Pesco 194-B or Romec RD4500	4 lb. (-45)
	(b) Pesco B-2A	4 lb. (-38)
206.	Cabin heater with:	
	(a) Muff on only one engine	5 lb. (-32)
	(b) Muff on both engines	10 lb. (-32)
207.	Auxiliary fuel tank:	
	(a) 39 gal.	25 lb. (+34)
	(b) 30 gal.	20 lb. (+34)
209.	Revised engine mounts, nacelles and landing gears - (Dwgs. 51215, 51067 and 51102, and 51174 respectively)	5 lb. (-20)
212.	Two oil dilution installations	2 lb. (-34)
213.	Two oil heater muff system installations	5 lb. (-36)
214.	Lux twin engine fire extinguisher system	24 lb. (0)
219.	Two oil hopper tank installations	4 lb. (-27)
220.	Two oil radiator installations forward of firewall	19 lb. (-35)
221.	Two air mazes (Carburetor intake)	5 lb. (-69)
223.	Romec F4B fuel pump (Each Romec F4B pump may replace one Pesco M400 in Item 115(a))	No weight change
225.	Mixture analyzer:	
	(a) Indicator	2 lb. (-37)
	(b) Cells and tubing (Cambridge) - two required	5 lb. ea. (-30)
*226.	Engines - 2 Lycoming R-680-E3	+12 lbs. (-54)
	Limits (91 min. octane fuel):	
	Maximum continuous, 2200 rpm (285 hp)	
	Take-off (one minute), 2300 rpm (300 hp)	
	With Ham. STd. 2B20/6135A-9 to -15 propeller (diameter 98.75" maximum, 91.0" minimum) with constant speed governor (Item 104)	
	Pitch settings at 42 in. sta:	
	(with 6135A-9 blades) Low 8°, High 20° or Low 11°, High 26°	
	(with 6135A-15 blades) Low 14°, High 26°	
	Eligible only on aircraft incorporating the 5,700 lb. wings (Item 604).	
	An approved engine mount must be used and the lower members of the rear nacelle truss just aft of the front spar and forward of the middle cluster joint must be adequately reinforced.	
	Item 403 required in lieu of Item 401.	
	The installation of this item has been approved for Serv-Aero Engineering, P.O. Box 478, Dos Palos, California. This company has CAA approval of a conversion kit consisting of structural drawings AE-LC100 and AE-LC200 describing the required modification to the engine mount and nacelle, installation instructions, and photographs identifying their exhaust collector rings, engine cowling and carburetor air heaters.	
227.	Two (2) Davis aircraft exhaust silencers Model D-450-78	14 lbs. (-50)

228. Engines - 2 Jacobs R-755A2 No weight change
 Limits (80 minimum octane fuel)
 Maximum continuous, 28 in.Hg., 2200 rpm (285 hp)
 Take-off (one minute), 2200 rpm (300 hp)
 With Hamilton Standard 2B20/6135A-15 propeller (diameter 93-1/8 in. max.,
 91-1/8 in. minimum) with constant speed governor (Item 104)
 Pitch settings at 42 in. sta:
 Low 12.5°, High 27°
 Eligible only on airplanes having 5,700 lb. wings (Item 604)
 and oil radiator installations (Item 220).
 Item 404 required in addition to Item 401.

Landing Gear

109. 7.50-10 wheels (Goodyear 10HBM) with 8.50-10, 6-ply, H.D. tires
 and 7.50-10 tubes (wheels must be placarded for these tires) 80 lbs. (-19)
110. 12.5 in. smooth contour tail wheel with 4-ply tire and tube 10 lbs. (+279)
111. Two landing gear struts (Bendix R-107-2423-E; 65000 or 67650) 44 lbs. (+16)
112. Manual landing gear retracting mechanism 3 lbs. (-10)
113. Landing gear operating motor (Eclipse Y-150 or 455) 19 lbs. (-10)
204. 8.50-10 puncture-proof tubes +11 lbs. (-19)
210. Co-pilot's brakes 3 lbs. (-48)
222. 7.50-10 wheels (Hayes 751A) with 8.50-10, 6-ply, H.D. tires
 and 7.50-10 tubes (wheels must be placarded for these tires) +9 lbs. (-19)
- *229. Skis - Federal Model A-5800 Use actual weight
 Installation to be in accordance with Federal Aircraft Works Dwg. 11G265A.

Electrical Equipment

106. One generator - engine-driven:
 (a) Eclipse LV-180 (15 amp., 12 volt) 16 lbs. (-45)
 or (b) Leece-Neville L-3 (25 amp., 24 volt) 24 lbs. (-45)
107. Battery - 75 lb. maximum (variable location (-16), (+6), (+10)) Use actual weight
 (a) 12 volt system - min. 33 amp. hr. (5 hr. rate)
 (b) 24 volt system - min. 17 amp. hr. (5 hr. rate)
108. Battery box 7 lbs.
202. Landing lights:
 (a) Two Grimes ST-1220 14 lb. (-6) or (+9)
 (b) Two Grimes Type B-3 or G-300 114 lbs. (+9)
216. Generator - engine-driven
 (a) Eclipse 309 (25 amp., 12 volt) (replacing Item 106(a)) +5 lbs. (-45)

Interior Equipment

201. Flares:
 (a) Four 1 1/2 minute with case 20 lbs. (+116)
 (b) Three 1 1/2 minute with case 15 lbs. (+116)
 (c) One 3 minute with case 23 lbs. (+116)
215. Bucket seat with upholstery (replacing standard seat 15 lbs. at (-9)) -8 lbs. (-10)

401. CAA Approved Operating Manual, latest revision of Cessna Report No. 260 (NOTE: This does not take the place of the Form ACA-309)
- *402. Cabin heater - Surface Combustion Heater Package, Model 15. 18 lbs. (+8)
Surface Combustion Installation and Service Instructions JL52-116 as amended 1-10-47. (This item not eligible for new installations after April 1, 1951)
403. CAA Approved Operating Manual (Servo-Aero Engineering). Required with Item 226 in lieu of Item 401.
404. CAA Approved Operating Manual Supplement (Jacobs Aircraft Engine Co.) dated April 10, 1952. This supplement may be obtained from Jacobs Aircraft Engine Co., Pottstown, Pa. (Required with Item 228.)
- Miscellaneous (not listed above)
114. Flap motor (Dumore Type KL) 6 lbs. (+46)
211. Turret top windows +2 lbs. (-20)
218. Flap motor (Dumore EI-YD or E2-YD or E2Y2P)- 3 lbs. (+49)
224. Two flap motors (Dumore EI-YD) No weight change
601. Unbalanced elevator (no balance area at tip of elevator ahead of hinge line) with balance weight on elevator walking beam
602. Balanced elevator with elevator bungee spring installed and horizontal stabilizer incidence set in accordance with Cessna Dwg. No. 10002-14
603. 5,100 lb. wing. See NOTE 3 for means of identifying wing.
604. 5,700 lb. wing. See NOTE 3 for means of identifying wing.
605. New flap limit switch brackets and revised adjustment of flap limit switches, in accordance with Cessna Dwg. No. 10002-28 and Service Bulletin No. 99 providing increase in flap travel from 35° (old setting) to 40° (new setting)
- *606. Large cargo door and interior flooring. Install in accordance with Decatur Aviation Co. Dwg. 1 through 12. Use actual wt. change
- *607. Large access door and cargo floor. Install in accordance with Rapidair, Inc., Springfield, Missouri installation instructions, photographs and Dwg. No. 100-1, Sheets one through eight, dated December 4, 1953, "Easy Access Cargo and Ambulance Door - Cessna T-50" and Dwg. No. 101-1, Sheets one through eleven, dated December 5, 1953, "Cessna T-50 Cargo Floor."
Note: Loading to be in accordance with weight control provisions. Use actual wt. change

NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, 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 C.G. limits were determined with the landing gear extended. The airplane must be loaded so that its C.G. position with the landing gear extended is always between the limits shown.

NOTE 2. Army models AT-17 and UC-78 Series and Navy JRC-1 airplanes are eligible for certification under the conditions outlined below. These airplanes are similar to the model T-50 except for revised wing structure, power plant installation, 24 volt electrical and battery installations, revised rear seat, revised safety belt attachments, fuselage members at windshield eliminated, revised landing gear structure, balanced type elevators, and various items of Army equipment such as generators, batteries, instruments, safety belts (B-11), landing lights, flap motor(s), fuel pumps, oil radiators, etc.

Prior to certification all Army models AT-17 and UC-78 Series, and Navy JRC-1 airplanes must be modified as follows:

- (a) Replacement and rewiring of master switch. (Reference: Cessna Dwg. No. 10002-4).
- (b) Removal of navigation light resistors. (Reference: Cessna Dwg. No. 10002-4).
- (c) Replacement of navigation light switches. (Reference: Cessna Dwg. No. 10002-4).
- (d) Add sealing plates for selector valve box. (Reference: Cessna Dwg. No. 10002-3).
- (e) Replace present tail light with Grimes model C tail light.
- (f) Install a placard reading: "Intentional Spinning Prohibited."

- (g) Modify horizontal tail surfaces to comply with either Item 601 or Item 602.
- (h) Install the following placard on the instrument panel in full view of the pilot: "This Airplane shall be operated in accordance with the CAA Approved Operating Manual (Part I). This Manual shall be carried in the pilot's compartment at all times." (See Item 401 or 403).
- (i) Upon completion of conversion to certificated status it should be ascertained that the manufacturer's serial number and original date of manufacture are shown on the original name plate or an additional name plate with this information may be added.
- (j) Add etched datum plate on fuselage front spar fitting on bottom of spar.
- (k) If AN-3033-5 to -8 wing tip lights are installed the sand blasted area on the inside of the streamlined glass cover should be painted black. As an alternative the streamlined glass cover may be replaced by a glass globe and a streamlined metal cover which can be obtained from the light manufacturer.
- (l) Inspect the leading edges of all wings by removing the nacelle cowling forward of the front spar and the inspection plate from the rib on the first nose rib assembly outboard of the nacelle. If the rib spacing in the leading edge is approximately 4 inches the wing is satisfactory. If the rib spacing is approximately 8 inches the wing must be modified in accordance with Cessna Service Bulletins No. 40 dated February 24, 1943, and No. 48 dated August 20, 1943, revised May 1, 1944.

- NOTE 3. (a) In order to determine whether the airplane is eligible for certification at a maximum weight in excess of 5,100 lbs., the wings can be identified by the following salient features:
- (1) 5,700 lb. wings have a laminated (8 to 10-ply) birch plywood reinforcement on the rear face of the rear spar (instead of a spruce block found on the 5,100 lb. wing) extending continuously through the center section from nacelle to nacelle. Ends of this plywood plate are scarfed out just inboard of each nacelle bearing block.
 - (2) Continuous plywood flanges 1 to 1 1/2 x 1/16 inch are found on both sides of the lower cap strip of wing ribs between the front and rear spar on 5,700 lb. wings.
 - (3) The diagonal in the nose ribs of the 5,700 lb. wing is 5/16 x 7/16 instead of 5/16 x 5/16 found in the 5,100 lb. wing.
- (b) Wings identified by the above specifications are wing assemblies No. 55700 and when installed, the airplane may be certificated at a maximum weight of 5,400 or 5,700 lbs. depending upon the items installed as specified under "Maximum Weight" on Page 1 of this specification.
- (c) Wings with the rear spar and reinforcing plate on the rear face made of spruce block only are wing assemblies No. T-50100 or 53600. These are not eligible for weights in excess of 5,100 lb.
- (d) When the airplane is certificated the 1/2 inch red letters immediately forward of the Army markings on the trailing edge of the wing which read "Max. gross weight 5,200 lb." or "5,300 lb." or "5,700 lb." should be removed from the wing.

NOTE 4. Model T-50 (also exported RCAF T-50) airplanes having wing leading edges modified in accordance with Cessna Service Bulletin No. 48 except for the leading edge cover of 1/16 3-ply birch plywood laid with the face grain spanwise are considered to be suitably modified.

NOTE 5. Aircraft eligible for 5,700 lbs. maximum weight which were certificated in restricted category for dusting, spraying, seeding, etc., prior to October 11, 1950, may continue to be operated with the following limitations:

- (a) Maximum take-off weight 6270 lbs.
Maximum maneuvering speed 125 mph True Ind.
- (b) The following placard must be installed in full view of the pilot:
"Maximum maneuvering speed 125 mph."

All original certification in the restricted category after October 11, 1950, must be in accordance with CAR and CAM 8.

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