

MODELS: Curtiss-Wright (Army) P-40L and P-40N (Approved 5/8/47)

SPECIFICATION NUMBER: L-18-2

(Eligible for Certification in Limited Category only.)

(Holder of Limited Type Certificate: B.C. Reed, 499 Prospect Terrace, Pasadena, CA)

Engine	P-40N Allison V-1710-81, -99 or -115 P-40L V-1650-1 or V-1710-73
Fuel	Grade 100/130
Engine limits	V-1710-81, -99, and -115: Maximum, except take-off (Sea level) 38 in. Hg., 2600 rpm (870 hp) (14,600 ft.) 38 in. Hg., 2600 rpm (1000 hp) Take-off (Sea level) 52 in. Hg., 3000 rpm (1200 hp) V-1650-1: Maximum, except take-off (low blower) (9500 ft.) 44.2 in. Hg., 2650 rpm (1080 hp) Maximum, except take-off (high blower) (16,000 ft.) 44.2 in. Hg., 2650 rpm (1010 hp) Take-off (Sea level) (low blower) 46 in. Hg., 3000 rpm (1300 hp) V-1710-73: Maximum, except take-off (11,000 ft.) 38 in. Hg., 2600 rpm (1000 hp) (Sea level) 38 in. Hg., 2600 rpm (880 hp) Take-off (sea level) 51 in. Hg., 3000 rpm (1325 hp)
Propeller	Curtiss 0532D hub, 89303-24W blades, 11'0" diameter
Airspeed limits (See NOTE 2)	Glide or dive 485 mph
Maximum weight	8260 lbs.
C.G. range	19 percent MAC (gear down) to 30 percent MAC (gear up)
Datum	101.5 inches forward of jog point on leading edge of wing, or 108.3 inches forward of wing jack point
MAC	81.6 inches, L.E. MAC +102.2 inches
Other Operating limitations	Army Technical Order AN-01-25CN-1 (for P-40N) Army Technical Order AN-01-25CH-1 (for P-40L)
Certification basis	Limited Type Certificate No. 18 (CAR 9 effective 11/21/46)
Production basis	None may be produced under this approval
Export eligibility	Not eligible for a Certificate of Airworthiness for Export

EQUIPMENT:

No equipment other than engines and propellers are specified. However, such equipment as required by Civil Air Regulations Part 43.30 for the particular operation authorized for NC aircraft must be installed. Also, any additional equipment necessary for the proper operation of the aircraft. In addition, the aircraft may incorporate such military equipment (except armament) as was originally incorporated in the type for military or naval service. Additional equipment may be installed as can be substantiated on the basis that it presents no obvious hazard to safety.

NOTE 1. Weight and Balance Report including list of equipment included in the certificated empty weight must be submitted for each aircraft. Army or Navy weight records in current condition may be submitted in lieu of an actual weight. The equipment list need include no more than the following:

- a. Required equipment as defined under "EQUIPMENT" above.
- b. Additional items as may be reasonably considered removable and are so located or of such weight that their removal or addition could noticeably affect the weight and balance of the aircraft. Items built into the aircraft structure need not be listed. The equipment list must be prepared by the applicant for the approval of the certificating CAA representative, and in such form that it can be attached to the CAA Operation Limitations.

NOTE 2. The following placards must be prominently displayed in the positions

indicated:

- a. In full view of all passengers: "This is a military type aircraft and under the Civil Air Regulations shall not be used for the carriage of passengers or cargo for compensation or hire." The placard and lettering shall be of a type which can be read easily from any seat in the cabin.
- b. In the cockpit in full view of the pilot:
 - "Do not lower landing gear above 175 mph."
 - "Do not lower flaps above 140 mph."
 - "Do not execute snap rolls above 140 mph."
 - "Do not execute slow rolls above 285 mph."
 - "Acrobatics prohibited: inverted flight, intentional spins, outside loops."

NOTE 3. The following statement must appear on the Operation Limitations:
"This airplane must be operated at all times within the limitations set forth in Army Technical Order No. (insert correct T.O. number) except for limitations specifically called out in Aircraft Specification AL-18 in which the values given in the specification must be observed. A copy of the pertinent Army Technical Orders and Aircraft Specification AL-18 must be carried during flight." In all cases it will be the responsibility of the applicant to secure a copy of the correct Technical Orders. The CAA does not have these documents available for distribution.

NOTE 4. If any repairs or modifications are made prior to or subsequent to NL certification, it is the responsibility of the owner to furnish sufficient evidence to a Civil Aeronautics Administration representative to show that the modified airplane maintains the same degree of airworthiness as the original. The CAA can give no technical assistance on such matters since complete structural data for NL aircraft are not required by Part 9 and therefore are not available in the CAA.

NOTE 5. For certification for night flying the following must be accomplished:

- a. Replace the wing position lights with certificated units or satisfactorily modify the lights if pertinent.
NOTE: Type A-9 wing position lights (AN-3033-5 through -8) may be satisfactorily modified by painting the inside frosted portion of the cover black. Type A-9 (AN-3033-1 through -4) are satisfactory without modification.
- b. Replace the tail light with a certificated unit.
- c. If "Bright and Dim" conditions are provided for the position lights, either the resistors should be disconnected from the circuits and a single-pole-single-throw switch should be used to replace the two single-pole-double-throw switches presently installed for wing-tip and tail lights, or the switches should be placarded to indicate that only the "bright condition" should be used. In either case the tail light and wing-tip lights should operate on one switch.

No original NL airworthiness certificates may be issued after 8/31/48. The list of mandatory changes required prior to original certification may be obtained from CAA Aircraft Service, Washington 25, D.C. Attn: A-298.