

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

LTC-16 Revision 3
HOLMBERG AERIAL SURVEY (Curtiss)
Army O-52
August 21, 2015

TYPE CERTIFICATE DATA SHEET NO. LTC-16

This data sheet (formerly Specification L-16-2) which is part of Limited Type Certificate No. 16, prescribes conditions and limitations under which the product for which the retype certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder Holmberg Aerial Survey
Washington, DC

I. - Model Army O-52 (Curtiss) (Limited Category), approved May 6, 1947

<u>Engine</u>	Pratt & Whitney R-1340-51
<u>Fuel</u>	91 minimum octane aviation gasoline
<u>Engine Limits</u>	Maximum, except take-off (Sea level) 34.0 in. Hg., 2200 rpm (550 hp) (5000 ft.) 32.5 in. Hg., 2200 rpm (550 hp)
	Take-off (five minutes) 36.0 in. Hg., 2250 rpm (600 hp)
<u>Propeller</u>	Hamilton Standard 3D40-271 hub; 6167A-18 blades 8'0" diameter, 1Q12 governor
<u>Airspeed Limits</u>	Glide or dive – 270 mph
<u>Maximum Weight</u>	5360 lbs.
<u>C.G. Range</u>	23.8 percent MAC to 29.8 percent MAC
<u>Datum</u>	Station 0 at firewall
<u>MAC</u>	64 inches L.E. MAC wing root leading edge
<u>Other Operating Limitations</u>	Army T.O. No. AN-01-25DA-1
<u>Certification Basis</u>	Limited Type Certificate No. 16 (CAR 9 effective 11/21/46)
<u>Production Basis</u>	None may be produced under this approval.
<u>Export Eligibility</u>	Not eligible for a Certificate of Airworthiness for Export

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Equipment

No equipment other than engine and propellers are specified. However, 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 C.A.A. representative, and in such form that it can be attached to the C.A.A. Operation Limitations.

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

- (a) In full view of 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."
- (b) In the cockpit in full view of the pilot:
"Outside loop, inverted flight, inverted spin, spin of more than 3 turns prohibited."
"Avoid continuous operation in the range between 1750 rpm and 2000 rpm."

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. AN-01-25DA-1 except for limitations specifically called out in Aircraft Specification AL-16 in which case the values given in the Specification must be observed. A copy of Army Technical Order AN-01-25DA-1 and Aircraft Specification AL-16 must be carried during flight." In all cases it will be the responsibility of the applicant to secure copies of the Army Technical Orders. The C.A.A. does not have these documents available for distribution.

NOTE 4. If any repairs or modifications are made prior to and/or subsequent to NL certification, it is the responsibility of the owner to furnish sufficient evidence to a C.A.A. representative to show that the modified airplane maintains the same degree of airworthiness as the original. The C.A.A. 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 C.A.A.

NOTE 5. Prior to obtaining certification for night operation, the following modifications to the exterior lighting must be made in order to comply with the general requirements of the Civil Air Regulations:

- (1) Position Lights
 - (a) Wing Tip - If Type A-7 or A-8 light assemblies are installed, they must be replaced with type certificated light assemblies. If type A-9 (AN-3033-10 or AN-3033-5 through -8) light assemblies are installed, they may be satisfactorily modified by painting the sand blasted portion of the inner surface of the AN-1042-3 and -4 covers black. The AN-3033-1 through -4 light assemblies are satisfactory without modification.
 - (b) Tail - The Type D-1 (AN-3091-1 through -3) and the Type D-2 (AN-3092-1 through -3) light assemblies are unsatisfactory and must be replaced with type certificated units.

- (2) Position Light Installation
The position lights shall be installed to comply with the requirements of the CAR, Parts 15.2 and 03.538.
- (3) Position Light Circuit and Control
The position lights (wing tips and tail) shall be controlled by one SPST switch. The circuit should be protected by its own fuse or circuit breaker. The individual wing tip and tail light switches with dim and bright positions shall be removed and the dimming resistors presently installed shall be disconnected.
- (4) Other Exterior lights
With the exception of the landing lights, any other exterior lights are not required and may be removed if so desired.

NOTE 6. On August 21, 2015 a search of all FAA files and records was conducted and no type design records were found.

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.

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