

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

G-15 Revision 1 LAISTER-KAUFFMANN LK-10A (Army TG-4A) LK-10B July 19, 1949

GLIDER SPECIFICATION NO. G-15

Manufacturer Laister-Kauffmann Aircraft Corporation
5660 Oakland Avenue
St. Louis 10, Missouri

I - Model LK-10A (Army TG-4A - See NOTE 1) 2 PCLM Approved June 8, 1945

Type	Class I				
Airspeed limits	Glide or Dive	126 mph True Ind.			
	Airplane tow	126 mph True Ind.			
	Spoilers open	105 mph True Ind.			
	Auto-winch tow	72 mph True Ind.			
C.G. range	(-1.7) to (+5.7)				
Empty weight C.G. position	(+11.3) (See NOTE 1(a)(4))				
Maximum weight	875 lbs.				
No. of seats	2 (One at (-30.5) and one at (+18.0))				
Baggage	None				
Control surface movements	Elevator trim tab [See NOTE 1 (a) (1)]	Up	15°	Down	15°
	Elevator [See NOTE 1(a) (2)]	Up	15°	Down	25°
	Aileron	Up	23°	Down	12°
	Rudder trim tab	Right	15°	Left	15°
	Rudder	Right	27°	Left	27°
	Spoilers	Up	80°	Down	0°
Serial Nos. eligible	4 to 78, inclusive (AAF 42-43679 to 42-43753, respectively) and 79 to 153, inclusive (AAF 42-53022 to 42-53096, respectively)				
Required equipment	Items 201 (a) or (b), 202, 401, 402, 405 and 601				

Page No.	1	2	3	4
Rev. No.	1	1	1	1

II - Model LK-10B 2 PCLM Approved June 8, 1945

Type	Class I		
Airspeed limits	Glide or dive	126 mph True Ind.	
	Airplane tow	126 mph True Ind.	
	Spoilers open	105 mph True Ind.	
	Auto-winch tow	72 mph True Ind.	
C.G. range	(-1.7) to (+5.7)		
Empty weight C.G. position	(+11.3)		
Maximum weight	875 lbs.		
No. seats	2 (One at (-30.5) and one at (+18.0))		
Baggage	None		
Control surface movements	Elevator trim tab	Up 15°	Down 15°
	Elevator	Up 15°	Down 25°
	Aileron	Up 23°	Down 12°
	Rudder	Right 27°	Left 27°
	Spoilers	Up 80°	Down 0°
Serial Nos. eligible	154 and up		
Required equipment	Items 201 (b) 202, 401, 402, 405 and 601		

Specifications Pertinent to All Models

Datum	Center line of main wing spar
Leveling means	Forward face of main wing attaching fitting is vertical.
Certification basis	Glider Type Certificate No. 15
Production basis	None. Prior to original certification of each model LK-10B glider with serial number above 155, 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.
Equipment:	A plus (+) or minus (-) sign preceding the weight of an item indicates net weight change when that item is installed.

		<u>LK-10A</u>	<u>LK-10B</u>
Landing Gear			
201.	(a) 6.00-6 wheels (Fireston 6C2HB) (Formerly Shinn Devices) with 4-ply tires and brakes (Serial Nos. 4 to 55, inclusive.)	17 lbs.	(-4) -
	(b) 6.00-6 wheels (Goodyear L6MBS) with 4-ply tires and brakes (Serial Nos. 56 and up)	17 lbs.	(-4) (-4)
202.	Tail wheel		X X
Interior Equipment			
401.	Airspeed indicator (front cockpit)	1 lb.	(-44) (-44)
402.	Airspeed pitot		
	(a) System	1 lb.	(-43) (-43)
	(b) Tube (right side of fuselage) (See NOTE 1(a) (5))		X X
403.	Extra instruments (a) Front cockpit	6 lbs.	(-44) -
	(b) Rear cockpit	7 lbs.	(+ 5) -
404.	Venturi (Bank and Turn)	1 lb.	(+39) -
405.	Safety belt (Army model B-11 or other approved type)		X X
Miscellaneous (Not listed above)			
601.	Ballast (See NOTE 1(a) (4))		(-72) (-72)
602.	Rudder trim tab		X -

- NOTE 1. (a) Army model TG-4A is eligible for certification as LK-10A when converted in accordance with the following (see Laister-Kauffmann's Service Bulletin No. 1 for instructions):
- (1) Left elevator tab made inoperative.
 - (2) Restrict up-elevator travel to 15°.
 - (3) Disconnect electrical system, remove dry batteries and position light bulbs.
 - (4) Permanently install sufficient ballast at (-72) to obtain an empty weight C.G. location at approximately 11.3 in. aft of datum with at least the following equipment:
Safety belts in front and rear cockpits.
Airspeed indicator and pitot system.
 - (5) Install airspeed pitot tube on right side of fuselage; pitot tube on nose of fuselage should be removed or made inoperative.
 - (6) Aileron cable rigging and elevator tab play must be in accordance with manufacturer's rigging instructions.
- (b) The manufacturer will furnish the owner with necessary placards covering maximum permissible operating airspeeds, rigging diagram and instructions, revised name plates, and instructions covering glider conversion (Service Bulletin No. 1).
- (c) A kit to accomplish the items of conversion (see (a) above), in accordance with Service Bulletin No. 1 can be purchased from Laister-Kauffmann.
- (d) Each glider must be weighed to determine its weight and balance and Loading Instructions must also be provided (see (a)(4) above and NOTE 2 below).
- (e) Upon completion of the conversion to certificated status, the manufacturer's new name plate should be installed. The original or any succeeding name plate should not be removed from the glider.

NOTE 2. The following placards must be installed in full view of the pilot:

(a) <u>For Rear Pilot Weight of</u>	<u>Front Pilot Weight Shall Not be Less Than</u>
220 lbs.	150 lbs.
200 lbs.	143 lbs.
180 lbs.	136 lbs.

NOTE: These weights include parachutes.

(b) Solo from front seat only.

NOTE 3. University of Illinois "Flat Top" Version

- (a) Army model TG-4A is eligible for certification as LK-10A "Flat Top" when converted according to the applicable portions of Laister-Kauffmann Service Bulletin No. 1 and the University of Illinois Glider Club Service Bulletin No. 2.
- (b) Model LK-10A is eligible when modified according to the University of Illinois Glider Club Service Bulletin No. 2.
- (c) The following placards must be installed in full view of the pilots for gliders modified according to (a) or (b) above: (Front and Rear)

(1) <u>For Rear Pilot Weight of</u>	<u>Front Pilot Weight Shall Not be Less Than</u>
209 lbs.	174 lbs.
200 lbs.	170 lbs.
180 lbs.	163 lbs.

Note: These weights include parachutes.

- (2) Solo front seat only. 222 lbs. maximum front pilot solo unless rear seat is temporarily ballasted 1.5 times the amount of excess of front pilot over 222 lbs.

(3) Do not exceed -	Glide or dive	112 mph
	Airplane tow	112 mph
	Spoilers open	94 mph
	Auto-winch tow	72 mph

- (d) C.G. range for gliders modified according to (a) or (b): (-1.7) to (+4.6).

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