

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

A-694  
Revision 27  
LUSCOMBE  
8 8D  
8A 8E  
8B 8F  
8C T-8F

June 23, 2021

AIRCRAFT SPECIFICATION NO. A-694

Type Certificate Holder	Luscombe Aircraft Corporation 3301 Turner Road Jamestown, New York 14701
Type Certificate Record Holder	Luscombe Aircraft Corporation 842 Forest Glen Rd., #932 Twin Peaks, California 92391  Good Earthkeeping Organization, Inc. 1612 Jenks Drive Corona, California 92880  Team Luscombe, LLC 241 South Washington Street Chandler, Arizona 85225 (Transferred ownership of A-694 to Good Earthkeeping Organization, Inc. on October 21, 2011)  The Don Luscombe Aviation History Foundation, Inc. P.O. Box 63581 Phoenix, Arizona 85082  Larsen Luscombe Corporation Alaska International Corporation Surety Credit Corporation Silvaire Aircraft Company Temco Aircraft Corporation
<b><u>I - Model 8, 2 PCLM (Normal Category), Approved August 11, 1938</u></b>	
Engine	Continental A-50-1 (see item 126A for optional engines). Not eligible for original certification with single ignition engine
Fuel	73 minimum octane aviation gasoline
Engine limits	For all operations, 1900 r.p.m. (50 hp.)
Propeller limits	Maximum permissible diameter, 79in.
Airspeed limits	Level flight or climb 115 m.p.h. (100 knots) True Ind. Glide or dive 145 m.p.h. (126 knots) True Ind.
C.G. range	(+13.6) to (+18.4)
Empty weight C.G. range	<u>Forward limits</u> (+13.8) with item 105. (+13.4) with items 105 and 106. (+12.3) with items 101 and 105. (+15.9) with items 102. (+14.8) with items 101 and 102. When empty weight C.G. falls within pertinent range, computation of critical fore and aft C.G. positions in unnecessary. Ranges are not valid for non-standard arrangements except as noted.
Maximum weight	1200 lb.
No. of seats	2 (+20)
Maximum baggage	55 lb. (+40)
Fuel capacity	14 gal. (+40). See items 101, 102 and 106 for optional tanks.
Oil capacity	4 qt. (-24)
Control surface movements	Elevators Up 29° Down 27° Rudder Right 32° Left 32° Ailerons (not available)
Serial Nos. eligible	833 and up (see NOTE 3 for S/N 801 thru 833)
Required equipment	Items 6, 104, 201 and 203.

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**II – Model 8A, 2 OCL-SM (Normal Category), Approved March 27, 1939**

Same as model 8 except engine installation. Also eligible with all metal wings, with either .016 or .020 aluminum alloy skin covering and .016 skin covering for ailerons per Luscombe dwg. 082201. For .016 skin, no weight increase is necessary. For .020 skin the weight is increased 15 lb. at (+20).

Engine	Continental A-65-1 (see item 126.B for optional engines.) Not eligible for original certification with single ignition engine.			
Fuel	73 minimum octane aviation gasoline 80 minimum octane required for seaplane (with item 212 installed)			
Engine limits	For all operations, 2350 r.p.m. (65 hp)			
Propeller limits	Maximum permissible diameter: (Landplane) 79 in. (Seaplane with item 204) 85 in. (Seaplane with item 212, see propeller item 2 (f).			
Airspeed limits	(Landplane) Level flight or climb 115 m.p.h. (100 knots) True Ind. Glide or dive 145 m.p.h. (126 knots) True Ind. (Seaplane) Level flight or climb 109 m.p.h. (95 knots) True Ind. Glide or dive 145 m.p.h. (126 knots) True Ind.			
C.G. range	(Landplane) (+13.6) to (+19.0). When bungee is replaced by elevator trim tab (dwg. 48589) following range must be used: (+13.6) to (+18.8) (Seaplane) (+15.4) to (+18.3)			
Empty wt. C.G. range	Landplane	Seaplane (With item 204)	Seaplane (With item 212)	Fuel Tank Installation
	<u>Forward limits</u>			
	(+11.6)	(+14.0)	(+14.0)	Item 105, or 101 and 105 or 105 and 106.
	(+12.3)	(+14.7)	(+14.7)	Item 102 or 112.
	(+12.2)	(+14.4)	(+14.4)	Item 115.
	<u>Rear limits</u>			
	(+14.8)	(+15.1)	(+14.4)	Item 105.
	(+13.7)	(+14.2)	(+14.4)	Item 101 and 105.
	(+14.5)	(+14.9)	(+14.0)	Item 105 and 106.
	(+17.0)	(+17.0)	(+17.5)	Item 102.
	(+17.3)		(+16.7)	Item 112.
	(+16.9)	(+16.7)	(+15.7)	Item 115.
	When empty weight C.G. falls within the pertinent range, computation of critical fore and aft C.G. position is unnecessary. Ranges are not valid for non-standard arrangements except as noted.			
Maximum weight	(Landplane) 1200 lb. See NOTE 6 for 1260lb. (Seaplane with item 204) 1260lb. (Seaplane with item 212) 1350lb.			
No. of seats	2 (+20)			
Maximum baggage	75 lb. (+40)			
Fuel capacity	14 gal. (+40). Placard required: "Full carburetor air heat required for takeoff and landing." The reason for this placard is that during takeoff acceleration and initial high-angle-of-attack climb, the fuel flow may not be adequate for proper operation. Application of full carburetor heat in this case helps overcome the possible deficiency of fuel flow during takeoff. Carburetor ice is not a basic consideration in requiring this placard. (See also items 101, 102, 106, 111, 112, and 115 for optional tanks.).			
Oil capacity	4 qt. (-24)			
Control surface movements	Elevators	Up 29°	Down 27°	
	Rudder	Right 32°	Left 32°	
	Aileron	Up 25°	Down 25°	
	Elevator tab (required for seaplane with item 212)	Up 14°	Down 28°	
Serial Nos. eligible	833 and up (see NOTE 3 for S/N 801 thru 833)			
Required equipment	(Landplane)	Items 6, 104, 124, 201, 203		
	(Seaplane with item 204)	Items: 6, 104, 122, 124, 204, 605, 606		
	(Seaplane with item 212)	Items: 2(f), 104, 122, 124, 204, 605, 606		



**III – Model 8B, 2 PCLM (Normal Category), Approved March 18, 1940**

Same as model 8 except engine installation

Engine	Lycoming O-145-B1 (see item 126.C. for optional engines) Not eligible for original certification with single ignition engine.			
Fuel	73 minimum octane aviation gasoline			
Engine limits	For all operations, 2550 r.p.m. (65 hp.)			
Propeller limits	Static r.p.m. at maximum permissible throttle settings: not over 2500, not under 2060. No additional tolerance permitted. Diameter: Not over 79 in, not under 68 in.			
Airspeed limits	Level flight or climb 115 m.p.h. (100 knots) True Ind. Glide or dive 145 m.p.h. (126 knots) True Ind.			
C.G. range	(+13.6) to (+19.0). When bungee is replaced with elevator trim tab (dwg. 48589) following range must be used: (+13.6) to (+18.8)			
Empty wt. C.G. range	<u>Forward limits</u> (+11.6) with item 105, or 101 and 105. (+12.2) with item 102, or 101 and 102.			
Empty wt. C.G. range	<u>Rear limits</u> (+14.8) with item 105. (+13.7) with items 101 and 105. (+17.0) with item 102. (+15.9) with items 101 and 102. When empty weight C.G. falls within pertinent range, computation of critical fore and aft C.G. positions is unnecessary. Ranges are not valid for non-standard arrangements except as noted.			
Maximum weight	1200 lb.			
No. of seats	2 (+20)			
Maximum baggage	55 lb. (+40)			
Fuel capacity	14 gal. (+40). (see items 101 and 102 for optional tanks).			
Oil capacity	5 qt. (-24)			
Control surface movements	Elevators	Up 29°	Down 27°	
	Rudder	Right 32°	Left 32°	
	Aileron (not available)			
Serial Nos. eligible	833 and up (see NOTE 3 for S/N 801 thru 832)			
Required equipment	Items 6, 104, 201, 203.			

**IV – Model 8C, 2PCL-SM (Normal Category), Approved June 17, 1940**

Same as model 8 except engine installation.

Engine	Continental A-7508J (see item 126. for optional engines).		
Fuel	73 minimum octane aviation gasoline		
Engine limits	For all operations, 2600 r.p.m. (75 hp.)		
Propeller limits	Static r.p.m. at maximum permissible throttle settings (no additional tolerance permitted): (Landplane) not over 2450, not under 1950. (Seaplane) not over 2450, not under 2060. Diameter: (Landplane) not over 79 in., not under 68in. (Seaplane) not over 85 in., not under 68 in.		
Airspeed limits	(Landplane) Level flight or climb	115 m.p.h. (100 knots)	True Ind.
	Glide or dive	145 m.p.h. (126 knots)	True Ind.
	(Seaplane) Level flight or climb	109 m.p.h. (95 knots)	True Ind.
	Glide or dive	145 m.p.h. (126 knots)	True Ind.
C.G. range	(Landplane) (+13.6) to (+19.0). When bungee is replaced by elevator trim tab (dwg. 48589) following range must be used: (+13.6) to (+18.8) (Seaplane) (+15.4) to (+18.3)		

Empty wt. C.G. range	<u>Landplane</u>	<u>Seaplane</u>	<u>Fuel Tank Installation</u>
	<u>Forward limits</u>		
	(+11.6)	(+14.0)	Item 105, or 101 and 105 or 105 and 106. Item 102 or 101 and 102
	(+12.3)	(+14.7)	
	<u>Rear limits</u>		Item 105.
	(+14.8)	(+14.0)	Item 101 and 105.
	(+13.7)	( * )	Item 105 and 106.
	(+14.5)	( * )	Item 102.
	(+17.0)	(+16.1)	Item 101 and 102
	(+15.9)	( * )	
	(*each case must be checked when item 101 or 106 is installed) When empty weight C.G. falls within pertinent range, computation of critical fore and aft C.G. positions unnecessary. Ranges are not valid for non-standard arrangements excepted as noted.		
Maximum weight	(Landplane) 1200 lb. See NOTE 4 regarding higher weights).		
	(Seaplane) 1260 lb.		
No. of seats	2 (+20)		
Maximum baggage	55 lb. (+40)		
Fuel capacity	14 gal. (+40). See items 101, 102 and 106 for optional tanks.		
Oil capacity	4 qt. (-24)		
Control surface movements	Elevator	Up 29°	Down 27°
	Rudder	Right 32°	Left 32°
	Ailerons (not available)		
Serial Nos. eligible	833 and up (see NOTE 3 for S/N 801 thru 832)		
Required equipment	(Landplane)	Items: 6, 104, 201 and 203	
	(Seaplane)	Items: 6, 104, 122, 204, 605 and 606	

#### **V – Model 8D, 2 PCL-SM (Normal Category), Approved October 24, 1941**

Same as Model 8C except for increased maximum weight, wing covering with intermediate or "Grade A fabric, revised fuel system and addition of elevator trim tab replacing bungee. The seaplane model has special engine cooling baffles.

Engines	Continental A-75-8J (see item 126.E. for optional engines)		
Fuel	73 minimum octane aviation gasoline		
Engine limits	For all operations, 2600 r.p.m. (75 hp)		
Propeller limits	Static r.p.m. at maximum permissible throttle setting (no additional tolerance permitted).		
	(Landplane) not over 2450, not under 2060.		
	(Seaplane) not over 2325, not under 2225.		
	Diameter: (landplane and seaplane) maximum 72 in., minimum 70 in.		
Airspeed limits	(Landplane)	Level flight or climb	115 m.p.h. (100 knots) True Ind.
		Glide or dive	145 m.p.h. (126 knots) True Ind.
	(Seaplane)	Level flight or climb	109 m.p.h. (95 knots) True Ind..
		Glide or dive	145 m.p.h. (126 knots) True Ind.
C.G. range	(Landplane) (+13.6) to (+19.0).		
	(Seaplane) (+14.5) to (+17.6)		

Empty wt. C.G. range	<u>Landplane</u>	<u>Seaplane</u>	<u>Fuel Tank Installation</u>
	<u>Forward limits</u>		
	(+12.3)	(+13.5)	Item 102, or 101 and 102
	(+11.3)	(+12.6)	Item 105, or 101 and 105
	<u>Rear limits</u>		
	(+17.2)	(+15.1)	Item 102
	(+16.3)	(+14.2)	Item 101 and 102
	(+14.5)	(+12.6)	Item 105
	(+13.5)	( * )	Item 101 and 105
	(*each case must be checked separately when items 101 and 105 are installed in the seaplane). When the empty weight C.G. falls within the pertinent range, computation of the critical fore and aft C.G. positions is unnecessary. Ranges are not valid for non-standard arrangements except as noted.		
Maximum weight	(Landplane) 1310 lb.		
	(Seaplane) 1375 lb.		
No. of seats	2 (+20)		

Maximum baggage	55 lb. (+40)				
Fuel capacity	23 gal. (two 11-1/2 gal. tanks in weight at +20). (see items 101 and 105 for optional tanks).				
Oil capacity	4 qt. (-24)				
Control surface movements	Elevators	Up	29°	Down	27°
	Rudder	Right	32°	Left	32°
	Ailerons (not available)				
Serial Nos. eligible	(Landplane) 1807 and up				
	(Seaplane) 1885 and up				
Required equipment	(Landplane) Items 6, 104, 201 and 203				
	(Seaplane) Items 6, 104, 122, 204, 605 and 606				

**VI – Model 8E, 2PCLM (Normal Category), Approved December 11, 1946; 2 PCSM (Normal Category),**

**Approved May 13, 1948**

Similar to model 8D except for increased maximum weight, increased horsepower and minor structural changes. Model 8E was formerly designated as Model 8E Optional. It will not be necessary to revise the aircraft operation record to indicate this change in model.

Engine	Continental C-85-12 (see item 126.F. for optional engines)				
Fuel	73 minimum octane aviation gasoline, except 80 minimum octane required for seaplane with item 204 or 212				
Engine limits	For all operations, 2575 r.p.m. (85 hp.)				
Propeller limits	(Landplane) Static r.p.m. at maximum permissible throttle settings, not over 2255, not under 1970. No additional tolerance permitted. (Seaplane) See item 2(e) under “ Propeller and Propeller Accessories”				
Airspeed limits	(Landplane)	Level flight or climb	115 m.p.h. (100 knots) True Ind.		
		Glide or dive	145 m.p.h. (126 knots) True Ind.		
	(Seaplane)	Level flight or climb	109 m.p.h. ( 95 knots) True Ind.		
		Glide or dive	145 m.p.h. (126 knots) True Ind.		
C.G. range	(Landplane) (+13.6) to (+16.8) (Seaplane) (+14.6) to (+16.7) (with item 204 or 212)				
Empty wt. C.G. range	<u>Landplane</u>	<u>Seaplane</u>	<u>Fuel Tank Installation</u>		
	<u>Forward limits</u>				
	(+12.3)	(+13.3)	Item 102, or 109, or 111 or 115		
	<u>Rear limits</u>				
	(+13.7)	(+13.3)	Items 102, or 109, or 111		
	(+13.1)	(+13.3)	Item 115		
	When empty weight C.G. falls within the pertinent range, computation of critical fore and aft C.G. positions is necessary. Ranges are not valid for non-standard arrangements excepted as noted.				
Maximum weight	(Landplane) 1400 lb. (Seaplane) with item 204) 1375 lb. (Seaplane with 212) 1470 lb.				
No. of seats	2 (+20)				
Maximum baggage	75 lb. (+40)				
Fuel capacity	25 gal. (two 12-1/2 gal. tanks in wings at +20) (see also items 102, 111, 112, and 115 for optional tanks).				
Oil capacity	5 qt. (-24)				
Control surface movements	Elevators	Up	28°	Down	29.5°
	Rudder	Right	28°	Left	28°
	Ailerons	Up	25°	Down	25°
	Elevator tab (landplane)	Up	14°	Down	25°
	Optional	Up	10°	Down	33°
	Elevator tab (seaplane)	Up	7°	Down	41°
Serial Nos. eligible	833 and up when converted in accordance with pertinent provisions of Luscombe Service Department Letter of August 4, 1947.				
Required equipment	(Landplane)	Items 6, 104, 205 and 206			
	(Seaplane with item 204)	Items 2(e), 104, 113, 204, 605 and 606			
	(Seaplane with item 212)	Item 2(e), 104, 113, 212 and 605			

**VII – Model 8F, 2 PCLM (Normal Category), Approved May 25, 1948; 2 PCSM (Normal Category), Approved July 26, 1948**

Same as model 8E except engine installation. For conversion of model 8E to 8F airplanes in addition to changes noted below, cowling modification per Luscombe E.O. No. 2167 against dwg. 086085 is required.

Engine	Continental C-90-12F (see item 126.G. for optional engines)		
Fuel	80 minimum octane aviation gasoline		
Engine limits	For all operations, 2475 r.p.m. (90 h.p.)		
Propeller limits	(Landplane) See items 4(a) and 5. (Seaplane) See item 4(b).		
Airspeed limits	(Landplane) Level flight or climb	115 m.p.h. (100 knots)	True Ind.
	Glide or dive	145 m.p.h. (126 knots)	True Ind.
	(Seaplane) Level flight or climb	109 m.p.h. (95 knots)	True Ind.
	Glide or dive	145 m.p.h. (126 knots)	True Ind.
C.G. range	(Landplane) (+13.6) to (+16.8) (Seaplane with item 204 or 212) (+14.6) to (+16.7)		
Empty wt. C.G. range	<u>Landplane</u>	<u>Seaplane</u>	<u>Fuel Tank Installation</u>
	<u>Forward limits</u>		
	(+12.2)	(+13.8)	Item 109 or 102
	(+12.3)	(+13.9)	Item 111 or 112
	<u>Rear limits</u>		
	(+13.2)	(+15.5)	Item 102 or 109
	(+13.4)	(+15.8)	Item 111
	(+13.3)	(+15.8)	Item 112
	When empty weight C.G. falls within the pertinent range, computation of critical fore and aft C.G. positions is necessary. Ranges are not valid for non-standard arrangements except as noted.		
	(Landplane) 1400 lb.		
Maximum weight	(Seaplane with item 204) 1375 lb.		
	(Seaplane with item 212) 1470 lb.		
No. of seats	2 (+20)		
Maximum baggage	75 lb. (+40)		
Fuel capacity	25 gal. (see also item 102, 111 and 112 for optional tanks)		
Oil capacity	5 qt. (-24)		
Control surface movements	Elevators	Up 28°	Down 29.5°
	Rudder	Right 28°	Left 28°
	Aileron	Up 25°	Down 25°
	Elevator tab (landplane)	Up 10°	Down 33°
	Elevator tab (seaplane)	Up 7°	Down 41°
Serial Nos. eligible	1925 thru 6800, S-1 and up		
Required equipment	(Landplane) Items 4(a), 114, 205, and 206 (size 6.00-6 only)		
	(Seaplane with item 204) Items 4(b), 113, 114, 204, 605 and 606		
	(Seaplane with item 212) Items 4(b), 113, 114, 212 and 605		

**VIII – Model T-8F, 2 PCLM (Restricted and Standard Categories), Approved June 14, 1948**

Same as model 8F except tandem seats, tandem controls, cabin fuselage structure and canopy, landing gear axle moved two inches forward, minor changes in electrical system and fuel system, battery relocated, hydraulic brakes, dorsal fin.

Engines	Continental C-90-12F (see item 126 for optional engines)		
Fuel	80 minimum octane aviation gasoline		
Engine limits	For all operations, 2475 r.p.m. (90 h.p.)		
Propeller limits	See item 4(a) or (b)		
Airspeed limits	Level flight or climb	115 m.p.h.	True Ind.
	Glide or dive	145 m.p.h.	True Ind.
C.G. range	(+12.1) to (+18.1)		

Empty weight C.G. range	When empty weight C.G. falls within this range, computation of critical fore and aft C.G. Positions is unnecessary. Range is not valid for non-standard arrangements except as indicated. Installation of fixed ballast per Luscombe dwg. 481364 not to exceed 30 lb. is approved at (+63) and is placarded: "Removal requires weight and balance check."		
Maximum weight	1400 lb. (for crop sprayer, see NOTE 8)		
No of seats	1 (1 +15, 1 +47). Placard required: "Solo from front seat only."		

Maximum baggage	None				
Fuel capacity	30 gal. (see items 109 and 111 for optional tanks)				
Oil capacity	5qt. min. (-24)				
Control surface movement	Elevators	Up	24°	Down	23°
	Elevator control tab	Up	10°	Down	41°
	Rudder	Right	18°	Left	18°
	Aileron	Up	13°	Down	14°
Serial Nos. eligible	6058 thru 6800, ST-1 and up				
Required equipment	Items 4(a) or (b), 114, 205, 206(g) and 213				

### **Specifications Pertinent to All Models**

Datum	Wings leading edge
Leveling means	Top of horizontal splice plate on side of fuselage
Certification basis	Part 4a of the Civil Air Regulations Type Certificate No. 694 issued August 11, 1938
Production basis	None. Prior to original certification of any aircraft manufactured after January 2, 1951, an FAA representative must perform a detailed inspection for workmanship, materials conformity with the approved technical data, and a check of flight characteristics.
Export eligibility	Eligible to all countries subject to the provisions of Advisory Circular 21-2 effective July 16, 1965, except as follows: (a) Canada – Landplane, seaplane and skiplane eligible.

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

Special Note: So that all equipment items must be in their proper categories, the following items were renumbered as follows:

<u>1/</u>	Item 6 was formerly item 101.
<u>2/</u>	Item 101 was formerly item 201.
<u>3/</u>	Item 102 was formerly item 203.
<u>4/</u>	Item 103 was formerly item 204.
<u>5/</u>	Item 125 was formerly item 208.
<u>6/</u>	Item 126 was formerly item 302.
<u>7/</u>	Item 127 was formerly item 307.
<u>8/</u>	Item 128 was formerly item 312.
<u>9/</u>	Item 129 was formerly item 313.
<u>10/</u>	Item 201 was formerly item 102.
<u>11/</u>	Item 203 was formerly item 103.
<u>12/</u>	Item 204 was formerly item 151.
<u>13/</u>	Item 205 was formerly item 301.
<u>14/</u>	Item 206 was formerly item 303.
<u>15/</u>	Item 207 was formerly item 308.
<u>16/</u>	Item 208 was formerly item 310.
<u>17/</u>	Item 209 was formerly item 311.
<u>18/</u>	Item 210 was formerly item 315.
<u>19/</u>	Item 301 was formerly item 205.
<u>20/</u>	Item 303 was formerly item 206.
<u>21/</u>	Item 402 was formerly item 209.
<u>22/</u>	Item 403 was formerly item 304.
<u>23/</u>	Item 607 was formerly item 210.

### **Propeller and Propeller Accessories**

1. Propeller – Beech controllable R002 or R003 for Models 8A 8C and 8D landplanes only.

- (a) Hub R002-101 or R003-100 +12 lb. (-48)  
 Blades R002-205-72 or R003-235-72 (Model 8C)  
 Blades R003-201-72T or R003-231-72T (Models 8A and 8D)  
 Diameter: not over 71 in., not under 70.5 in.  
 Pitch settings at 27 in. sta.:  
     high 19°, low 13° (Model 8A)  
     high 19.5°, low 13.5° (Model 8C)  
     high 18.5°, low 12.0° (Model 8D)



- |      |  |              |
|------|--|--------------|
| (b)  | Control mechanism  | 1 lb. (-24)  |
| <br> |  |              |
| 2.   | Propeller – McCauley 1A90  |              |
| (a)  | For Model 8C (landplane and seaplane) with A-75-8J engine with following limits:<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2330, not under 2110<br>No additional tolerance permitted.<br>Diameter: not over 71 in., not under 69.5 in.   | 21 lb. (-45) |
| (b)  | For Model 8A (landplane and seaplane with item 204 floats) with A-65-8J, -8FJ, -3J, -7J, -9J and -9FJ engines with the following limits:<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2145, not under 1940<br>No additional tolerance permitted.<br>Diameter: not over 74 in., not under 72.5 in.   | 21 lb. (-45) |
| (c)  | For Model 8A with A-65-8, -8F, -3, -7, -9 and -9F engines with the following limits:<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2145, not under 2045 (with fuselage tank)<br>not over 2145, not under 1940 (with wing tank)<br>No additional tolerance permitted.<br>Diameter: not over 74 in., not under 72.5 in.  | 21 lb. (-45) |
| (d)  | For Model 8D with the following limits (landplane only)<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2330, not under 2110<br>No additional tolerance permitted.<br>Diameter: not over 71 in., not under 69.5 in.  | 21 lb. (-45) |
| (e)  | For Model 8A seaplane with item 212 floats – 1A90-CF-7144 or any other McCauley 1A90-CF propeller which meets the following limits:<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2190, not under 2090<br>No additional tolerance permitted.<br>Diameter: not over 71 in., not under 69.5 in.  | 21 lb. (-45) |
| (f)  | For Model 8A seaplane with item 212 floats. Any 1A90-CF propeller which meets the following limits:<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2170, not under 2070<br>No additional tolerance permitted.<br>Diameter: not over 74 in., not under 72.5 in.<br>(This propeller change dictated by undesirable vibrations in the static r.p.m. range with the model 1A90-CF-7142. McCauley Service Bulletin No. 12, dated June 2, 1949, covers the same subject). | 21 lb. (-45) |
| (g)  | For Model 8E landplane – 1A90-CF-7144 or any other 1A90-CF propeller which meets the following limits:<br>Static r.p.m. at maximum permissible throttle setting:<br>not over 2255, not under 2000<br>No additional tolerance permitted.<br>Diameter: not over 71 in., not under 69.5 in.   | 21 lb. (-45) |
| 3.   | Propeller – Hartzell ground adjustable HA-12U (for 8B, 8C, 8D and 8E only)<br>Hub Model – HA-12UO or HA-12UF<br>Blades – 7414 to 6814 or 7214M to 6814M<br>Eligible at diameter and station r.p.m. limits shown for fixed pitch wood models (items 6).   | 18 lb. (-45) |
| 4.   | Propeller – McCauley 1B90  |              |
| (a)  | For models 8F and T-8F landplanes – 1B90-CM-7154 or any other 1B90-CM propeller which meets the following limits:<br>Static r.p.m. at maximum permissible throttle settings:<br>not over 2100, not under 2000<br>No additional tolerance permitted.<br>Diameter: not over 71 in., not under 69.5 in.   | 21 lb. (-45) |
| (b)  | For models 8F seaplane and T-8F landplane – 1B90-CM-7347 or any other 1B90-CM propeller which meets the following limits:<br>(1) For model 8F seaplane   | 21 lb. (-45) |

Static r.p.m. at maximum permissible throttle setting: not over 2210, not under 2110 No additional tolerance permitted.	
(2) For model T-8F landplane Static r.p.m. at maximum permissible throttle setting: not over 2350, not under 2250 No additional tolerance permitted. Diameter: not over 73 in., not under 70 in.	
(c) For model T-8F landplane with C-90-12FJ engine – 1B90-CM-7345 or any other 1B90-CM propeller which meets the following limits: Static r.p.m. at maximum permissible throttle setting: not over 2370, not under 2270 No additional tolerance permitted. Diameter: not over 72.5 in., not under 71.5 in. (Engine item 116 required with this installation)	21 lb. (-45)
5. For model 8F landplane – Lewis propeller model L77CK-47 or any other fixed pitch wood propeller which is eligible for the engine power and speed and meets the following limits: Static r.p.m. at maximum permissible throttle settings: not over 2125, not under 2025 No additional tolerance permitted. Diameter: not over 72. in., not under 71 in. (Engine item 116 required with this installation)	13 lb. (-45)
<u>1/6.</u> Propeller – wood (fixed or adjustable pitch) (Models 8A, 8b, 8C, 8D, 8E and 8F)	17 lb. (-45)
<u>Engines and Engine Accessories – Fuel and Oil Systems</u>	
<u>2/101.</u> Five gal. auxiliary fuel tank installation Placard required on instrument panel: “Auxiliary fuel not to be used as reserve.”	14 lb. (+40)
<u>3/102.</u> Two 11.5 gal. metal wing fuel tanks (+20) and revised fuel system Replacing 14 gal. fuselage tank system (models 8, 8A, 8B, 8C, 8E and 8F)	+13 lb. (+40)
<u>4/103.</u> Exhaust mufflers	
(a) Twin mufflers E.D.L. type A4 (models 8A, 8C, 8D only)	9 lb. (-22)
(b) Aero muffler type A3A (model 8B only)	5 lb. (-22)
(c) Kay muffler – heater exhaust system per Luscombe dwg. 086142 (models 8E, 8F, T-8F). a 5 qt. oil tank only can be used with this item due to clearance considerations.	
(d) Hanlon-Wilson model 207 muffler-heater exhaust system per Luscombe dwg. 086149 (models 8A, 8E, 8F, T-8F)	
(e) Davis Silencer Co. model D-85-90-L for Luscombe 8E, 8F, T-8F, installed per Davis Silencer Co. dwg. D-65-90L.	3 lb. (-20)
(f) Davis Silencer Co. model D-65-75 for Luscombe 8, 8A, 8C, 8D, installed per Davis Silencer Co. dwg. D-65-90L.	2 lb. (-20)
104. Carburetor air heater (not applicable to Continental “J” engines)	
105. 14 gal. fuselage fuel tank system (model 8D with this change requires installation of injector type engines unless item 107 is installed.	17 lb. (+36)
106. Two 4.5 gal. Timm auxiliary wing fuel tanks, Timm dwgs. 2 and 18 or Aero Services dwgs. 102 and 103 (models 8, 8A, 8C)	11 lb. (+19)
107. Engine-driven fuel pump and hand-operated Chevrolet wobble pump	+7 lb. (-21)
108. Starter, Delco-Remy EX-30012 (model 8E only)	16 lb. (-22)
109. Two 12.5 gal. wing tank replacing 11.5 gal. wing tanks (models 8A, 8E, 8F, T-8F)	+2 lb. (+20)
110. Starter, Righter engine ring model A-1 (Righter instln. dwg. 10600) (models 8, 8A, 8C, 8D only)	7 lb. (-35)
111. Two 15 gal. bladder type wing fuel cells (models with all metal wings – 8A, 8E, 8F, T-8F)	9 lb. (+18)
112. One 15 gal. bladder type wing fuel cell in right wing (models with all metal wings – 8A, 8E, 8F)	5 lb. (+18)
113. Modified engine cowling, Luscombe dwg. 58740	
114. Carburetor air heater per Luscombe dwg. 09607, Rev C. (models 8A, 8E, 8F, T-8F). Not required on Continental injector engines.	No weight change
115. One 12.5 gal. metal wing tank (models with all metal wings, 8A, 8E)	10 lb. (+20)
116. Center baffle cowl in accordance with Luscombe dwg. 58739-4 (required with propeller items 4(c) and 5 and engine item 126.H.(2))	No weight change
117. Starter, Delco-Remy 1109656 (models 8E, 8F, T-8F)	16 lb. (-22)

118.	Fram oil filter, Fram instln. sheet No. 61517 (models 8A, 8E)	5 lb. ( 0)
119.	Blast tube instln. (Luscombe dwg. 481415)	No weight change
120.	Cowl assembly for model T8F with Continental C-90-12FJ engine (Luscombe dwg. 081411)	No weight change
121.	Injector fuel system instln. (model T-8F only)	No weight change
	(a) Luscombe dwg. 081413	
	(b) Luscombe dwg. 081425	
122.	Modified engine cowl, dwg. 48720	
123.	Swing-over engine mount per Luscombe dwg. 581268, installed per Luscombe dwg. 581267 (models 8A, 8C, 8D, 8E, 8F, T-8F)	No weight change
124.	Pressure vent fuel cap (Luscombe dwg. 486021) required for fuselage tank. Model 8A airplanes with Wally Trim wing fuel tanks must also have Luscombe pressure cap on both main and wing unless equipped with injector engines.	No weight change
<u>5/125.</u>	Engines shielding	2 lb. (-34)
<u>6/126.</u>	Engines (not eligible for original certification with single ignition engines)	
	A. <u>Model 8</u> (Continental, per Engine Spec. No. 190)	(-32)
	(1) A-50-2	+6 lb.
	(2) A-50-3 or A-50-8	+10lb.
	(3) A-50-4	+3 lb. (-32)
	(4) A-50-5 or A50-9	+13 lb.
	(5) A-50-6	+16 lb.
	(6) A-50-7	No weight change
	B. <u>Model 8A</u> (Continental, per Engine Spec. No. 205)	(-32)
	(1) A-65-1J – engine limits same as for A-65-1	
	(2) A-65-3 or A-65-3J (engine limits for all operations, 2300 r.p.m. 65 hp.)	+10 lb.
	(3) A-65-6 or A-65-7J (engine limits same as (2))	+13 lb.
	(4) A-65-7 or A-75-7J (engine limits same as (2))	No weight change
	(5) A-65-8, or A-65-8F or A-65-8FJ (injector engines equipped with high model A injector)	+10 lb.
	Engine limits same as (2)	
	(6) A-65-9, A-65-9F, A-65-9J or A-65-9FJ (injector engines equipped with high model A injector)	+13 lb.
	C. <u>Model 8B</u> (Lycoming, per Engine Spec. No. 210)	(-33)
	(1) O-145-B2	+11
	(2) O-145-B3	+14 lb.
	D. <u>Model 8C</u> (Continental per Engine Spec. No. 213)	(-32)
	(1) A-75-9J	+3 lb.
	(2) A-75-9 (with item 102 or 107 only)	+3 lb.
	(3) A-75-8 (with item 102 or 107 only)	No weight change
	(4) A-75-6 (with item 102 or 107 only)	+3 lb.
	E. <u>Model 8D</u> (Continental per Engine Spec. No. 213)	(-32)
	(1) A-75-8	No weight change
	(2) A-75-9 or A-75-9J	+3 lb.
	F. <u>Model 8E</u> (Continental per Engine Spec. No. 233)	
	(1) C-85-12F	No weight change
	(2) C-85-8F	-2 lb. (-32)
	G. <u>Model 8F</u> (Continental per Engine Spec. No. 252)	
	(1) C-90-8F	-4 lb. (-32)
	H. <u>Model T-8F</u> (Continental per Engine Spec. No. 252)	
	(1) C-90-8F	
	(2) C-90-12FJ (item 4)c), 119, 120, 121, required)	No weight change
	When this engine and two tanks are installed, placard panel:	
	“1. Use left tank for takeoff and until at least three-fourths fuel is expended.	
	2. Use right tank until expended.	
	3. Use left tank thereafter.”	
<u>7/127.</u>	Engine mount per dwg. 48147 (for engines not incorporating integral rubber shocks)	No weight change
<u>8/128.</u>	Hummer starter, model X (models 8A, 8B, 8C, 8D only)	12 lb. (+4)
	Engines mount tubes from upper engine points to lower firewall attach point must be 5/8 x .035	
<u>9/129.</u>	Starter, Eclipse type 635 model 3	18 lb. (-22)
<u>10/130.</u>	Model 8E and 8F. Lycoming O-320 or O-320-A1A engine; McCauley 1C172/MGM 7462	Use act. wt. change

Propeller; Prestolite ALK5001S4UO alternator; and fuel filler cap with forward facing vent in accordance with STC SA344CE. STC SE5CE required to install alternator on engine.  
 "Instructions for installation of Lycoming O-320 Engine in Luscombe 8E and 8F Airplanes," all drawings listed therein, and wiring diagram for Prestolite 35 amp AC alternator required.

#### Landing Gear and Floats

- 11/201. 3-in. wheel (Goodyear 3LNBM) with 16 X 7-3 tires 21 lb. (+3)
- 12/203. Tail Skid
- 13/204. Float installation – Edo 60-1320, 170 lb. +109 lb. (+25)  
 (Including water rudder and auxiliary fin).  
 Installation in accordance with Luscombe dwg. 08732C for 8A, 8E, 8F,  
 and dwg. 58725 for 8C, 8D. Following is applicable to this installation:  
 (a) Rear strut float attachment fittings station 4 must conform to Luscombe dwg. 58730C  
 (b) Placard required:  
 (1) On fuselage skin over hosting lugs:  
 "Spreader-bar must be used during hoisting."
- 14/205. Tail wheel assemblies  
 (a) Luscombe, 3 in. +2 lb. (+179)  
 (b) Universal Alloy G-4 or GLD-4 or GLD-19 +4 lb. (+181)  
 (c) Luscombe, 6 in. (dwg. 48338)  
 (d) Health G1A, 6 in., steerable +4 lb. (+181)  
 (e) Scott 3-24-B, 6 X 2.00, steerable 6 lb. (+183)  
 (f) Maule SFS-1-4 or SAFS-14 6 lb. (+183)  
 (g) Decker D-501, steerable. Installation requires modified rudder in accordance  
 with either (1) or (2) or NOTE 7. 6 lb. (+183)  
 (h) Maule SFS-1-4-P8 7 lb. (+183)
- 15/206. Wheels (Silflex cantilever landing gear instln. moves the location of the main wheels 2 in.  
 forward resulting in a location from datum of + 1. See item 213 for Silflex landing gear). (+3)  
 (a) 3 in. with brakes (Goodyear 3LMBM) and Use act. wt. change  
 (1) 16 X 7-3 tires (4-ply)  
 (2) 18 X 8-3 tires (4-ply)  
 (b) 6.00-6 with brakes (Shinn 6C5B) and 4-ply tires Use act. wt. change  
 (c) 6.00-6 (Cleveland model 6.00 CMB) with 6.00-6 4-ply rating tire casing and regular tube. Use act. wt. change  
 Wheel assembly No. D48500  
 Brake assembly No. C7000  
 (d) 6.00-6 (Goodyear model L6MBD) with 6.00-6 4-ply rating tire casing and regular tube. Use act. wt. change  
 Wheel assembly No. 511413M  
 Brake assembly No. 511254A  
 (e) 6.00-6 (Goodrich, formerly Hayes model 600M) with Use act. wt. change  
 6.00-6 4-ply rating tire casing and regular tube.  
 Wheel assembly No. D-3-47MD  
 Brake assembly No. D-2-129  
 (f) 6.00-6 (Goodrich, formerly Hayes model 609M) with Use act. wt. change  
 6.00-4 4-ply rating tire casing and regular tube  
 Wheel assembly No. D-2-129  
 (g) 6.00-6 (Goodrich, model 610M) with 6.00-6 4-ply rating tire casing and regular tube Use act. wt. change  
 Wheel assembly No. D-2-129  
 Brake assembly No. D-2-129  
 (h) 6.00-6 (Goodyear model C16HBM) castoring, with +34 lb. (+1)  
 6.00-6 4-ply rating tire casing and regular tube  
 Wheel and brake assembly No. 266Ax36-15 & -16. Instln. must conform to  
 Luscombe dwg. SK4206 and Goodyear dwg. 280Ax20.
- 16/207. Parking brake
- 17/208. Wheel streamlines (old gear) 10 lb. (+3)  
 (with Silflex dear location) 10 lb. (+1)
- 18/209. Skis (eligible on any airplane of these models provided the propeller installation meets the  
 minimum ground clearance. The maximum weight for the skiplane will be the same for the  
 corresponding landplane or that shown in parenthesis after each ski model, whichever is less) Use act. wt. change  
 (a) Marston MFS-1600 (max. 1600 lb.)  
 (b) Jacobsen (or Escanaba) EAS-100 (max. 1200 lb.)  
 (c) Heath 655 (max. 1310 lb.)

- (d) Air Transport 1220-480 (max. 1220 lb.)
- (e) Air Transport 1460-580 (max. 1460 lb.)
- (f) Federal 8A-1 (max. 1200 lb.)
- (g) Federal 8C-1 (max. 1400 lb.)
- (h) Marston MFS-1200 (max. 1200 lb.)
- (i) Federal SA-2 (max. 1400 lb.)
- (j) Federal SC-2 (max. 1650 lb.)
- (k) Heath 725 (max. 1450 lb.)
- (l) Richards 1-B (max. 2220 lb.)
- (m) Call S2, S6 or S7 installed per Call Aircraft Co. dwg. 1006, Change A, and 1014, Change A. (S2 max. wt. 1800 lb., S6 max. wt. 1450 lb., S7 max. wt. 1850lb.)
- (n) Federal A1500, instln. dwg. 11G169
- (o) Federal A1500A, instln. dwg. 11G169
- (p) Federal A1850, instln. dwg. 11G169
- (q) Federal A2000, instln. dwg. 11G169
- (r) Federal A2000A, instln. dwg. 11G169
- (s) Federal CA1850-6, instln. dwg. 11G169
- 19/210. Decker wheel assy. P/N P1001 in kit form, 2 per airplane (old gear) 12 lb.  
with Siflex gear location (+3)  
with Siflex gear location (+1)
- 211. Brake pedal, R.H. instln. (Luscombe dwg. 485069) 1 lb. (-12)
- 212. Float instln., Edo 92-1400 water rudder and auxiliary fin. Instln. shall conform to Luscombe dwg. 08732 for model 8A, dwg. 08731 for model 8E and dwg. 08741 for model 8F. The following is applicable to this instln.: 178 lb. (+20)
  - (a) Rear strut float attachment fittings and fuselage frame reinforcements at fuselage station 4 must conform to Luscombe dwg. 58730-C.
  - (b) Placards and markings required:
    - (1) Red radial line to be inscribed on oil temperature gauge at 220°F. (model 8E only).
    - (2) On fuselage skin near hoisting lugs add placard:  
"Spreader-bar must be used during hoisting."
  - (c) Fixed elevator tab 58401-6, item 606, must be added to right-hand elevator and bent down 30°; (model 8A only).
- 213. Luscombe Siflex cantilever landing gear assy. No. 083310. This installation moves the location of the main landing gear wheels 2 in. forward resulting in a location from datum of (+1). This landing gear is not interchangeable with the original landing gear but may be used on all Luscombe model 8 airplanes S/N 5920 and up. No weight change

#### Electrical Equipment

- 20/301. Landing lights
  - (a) One Grimes ST-750 (item 303(b) or (c) with item 305(b) required ) 5 lb. (+12)
  - (b) Two G.E. lamps No. 4509 (on all metal wing only) (item 314 with 305(b), (c) or (d) required) 4 lb. (+4)
- 21/303. Generator, wind-driven
  - (a) 6 v. Air-Lite 8 lb. (+3)
  - (b) 12 v. Air-Lite 11 lb. (+3)
  - (c) 12 v. Air Associates 8 lb. (+3)
- 305. Battery installation
  - (a) 6 v. 10 a. hr. (Exide 3-AC-7-1) 14 lb. (-15)  
or 11 lb. (+55)
  - (b) 12 v. 10 a. hr. (Exide 6-AC-7-1) 19 lb. (+55)
  - (c) 12 v. 24 a. hr. (5 hour rate) 24 lb. (+55)
  - (d) 12 v. 14 a. hr. (5 hour rate) 17 lb. (+52)
  - (e) 12 v. 25 a. hr. (Willard AW 12-25) 21 lb. (-20)
- 309. Lear two-way radio instln. per dwg. 48167 and 28157 20 lb.
- 314. Generator, engine-drive
  - (a) Delco-Remy model 1101876, P/N 40435 (models 8E, 8F, T-8F) 10 lb. (-22)

#### Interior Equipment

- 401. Luscombe FAA Approved Airplane flight Manual relative to the model T-8F crop sprayer (restricted) and model T-8F (standard) (required with item 602 in the restricted category – see NOTE 8)

22/402. Soundproofing	8 lb. (+27)
23/403. Cabin heater	2 lb. (-22)

Miscellaneous (not listed above)

601. Weight shifter device, model CGS-2B, manufactured by Aircraft Devices Co., Wings Field, Ambler, Pa. (models 8, 8A, 8B, 8C, 8D) The following is applicable to this item: (a) Install per Aircraft Devices Co., dwg. 7025 and placard in accordance with dwg. 355B. (b) Is fuselage fuel tank is installed, modify tank per dwg. 3048, placard per dwg. 367 and change fuel filter cap capacity markings from 14 gal. to 12 gal. (c) The weight of the instln. is 20 lb.; with weight in forward position arm is (+52) and with weight in aft position arm is (+126).	
602. Crop spraying equipment per Luscombe dwg. 088200 (see NOTE 8 for restrictions)	Use act. wt. change
603. Flap, Luscombe dwg. 082300, Change A (model T-8F, metal wing only)	Use act. wt. change
604. Flap in accordance with Luscombe instln. dwg. 082301, Change A, or Luscombe kit instln. dwg. 582302, Change A. All model 8 series with metal wings eligible. Add placard to instrument panel: "Do not lower flaps above 90 m.p.h. TIAS."	Use act. wt. change
605. Corrosion proofing (Luscombe Report 915)	
606. Elevator tab, dwg. 58700, Change F (deflection 30° downward except when indicated otherwise)	
24/607. Goodrich abrasion shoes – stabilizer	5 lb. (+153)

NOTE 1. Current weight and balance report together with list of equipment included in certificated empty weight, and loading Instructions when necessary, must be provided for each aircraft at the time of original certification.

NOTE 2. The following placards must be installed on the instrument panel or other location as noted below:

- (a) When item 101 is installed: "Auxiliary fuel not to be used as reserve."
- (b) For model T-8F: "Solo from front seat only."
- (c) When item 126.H.(1) and two tanks are installed:
  1. Use left tank for take-off and unit at least three-fourths fuel is expended.
  2. Use right tank until expended.
  3. Use left tank thereafter."
- (d) Deleted.
- (e) When item 204 or 212 is installed, following placard on fuselage skin near hoisting lugs: "Spreader-bar must be used during hoisting."
- (f) When item 604 is installed: "Do not lower flaps above 90 m.p.h. TIAS."
- (g) All model 8A airplanes equipped with carbureted Continental A-65 engines and fuselage mounted fuel tank, the following placard is required to be installed on the instrument panel in plain view of the pilot!

Placard required: "Full carburetor air heat required for takeoff and landing." The reason for this placard is that during takeoff acceleration and initial high-angle-of-attack climb, the fuel flow may not be adequate for proper operation. Application of full carburetor heat in this case helps overcome the possible deficiency of fuel flow during takeoff. Carburetor ice is not a basic consideration in requiring this placard.

NOTE 3. Serial Nos. 801 thru 832, model 8, 8B or 8C, eligible as above except as follows:

Baggage	40 lb.
Maximum weight	1130 lb.
C.G. range	(+13.6) to (+17.9)
Empty wt. C.G. range	(+11.1) to (+13.1) (with item 105 fuel tank)

When empty weight C.G. falls within pertinent range, computation of critical fore and aft C.G. positions is unnecessary. Ranges are not valid for non-standard arrangements except as noted.

The serial numbers also eligible at increased maximum weight, baggage capacity, C.G. range, as for Nos. 833 and up when reinforcement at front spar strut point extended as indicated on dwg. 28212, Change B, and dwg. 08203, Change C, and when 3/16 in. rivets are used as part 18030. Permanent trailing edge on elevator required per dwg. 58401, Change A.

NOTE 4. Model 8C, S/N 1804 and up, eligible for increased maximum weight with following limitations:

Wing coving should be either intermediate or grade "A" fabric.

Maximum weight

Landplane 1310 lb.

Seaplane (when equipped with special engine cooling baffles) 1375 lb.

C.G. range

Landplane (+13.6) to (+19.0)

Seaplane (+14.5) to (+17.6)

Empty wt. C.G. range

Forward limits:

Landplane

(+12.3)

(+11.3)

Seaplane

(+13.5)

(+12.6)

Fuel Tanks Installed

Item 102, or 101 and 102

Item 105, or 101 and 105

Rear limits:

Landplane

(+17.2)

(+16.3)

(+14.5)

(+13.5)

Seaplane

(+15.1)

(+14.2)

(+12.6)

( \* )

Fuel Tanks Installed

Item 102

Item 101 and 102

Item 105

Items 101 and 105

(\*each case must be checked separately when items 101 and 105 are installed in the seaplane.)

When empty weight C.G. falls within pertinent range, computation of critical fore and aft

C.G. positions is unnecessary. Ranges are not valid for non-standard arrangements except as noted.

Propeller limits (a) Static r.p.m.

Landplane – maximum 2450, minimum 2060

Seaplane – maximum 2325, minimum 2225

No additional tolerance permitted.

(b) Diameter – not over 72 in., not under 70 in.

Airspeed limits Landplane

Level flight or climb 115 m.p.h., True Ind.

Glide or dive 145 m.p.h., True Ind.

Seaplane

Level flight or climb 109 m.p.h., True Ind.

Glide or dive 145 m.p.h., True Ind.

Engine limits For all operations

2600 r.p.m. (75 hp.)

Model 8C, S/N 1803 and below, also eligible at the increased maximum weight contingent upon compliance with the following provisions:

(a) Limitations as shown above for propeller, engine, C.G. and airspeeds.

(b) Addition of reinforcement part 481022 ahead of tail tray, as shown on dwg. 08043, Change P.

(c) Change oleo fluid to Univis 90, SAE 20W, Mobilube 90 or equivalent and include the following placard on the arm of the landing gear adjacent to the oleo: "Fill oleo strut with SAE 20W, Univis 90 or Mobilube 90 oil."

(d) Installation of landing gear shackle hinge pin heat treated to 125,000 lb. per sq. in.

(e) Wing covering should be with intermediate or grade "A" fabric.

NOTE 5. Elevator trim tab, dwg. 48589, may replace bungee with the following C.G. range for models 8A (1200 lb. max. wt. see NOTE 6), 8B, 8C: (+13.6) to (+18.75) (weight change negligible).

NOTE 6. Model 8A aircraft are also eligible at 1260 lb. max. wt. with control surface travel and C.G. range limited as follows:

Elevators Up 25° Down 26°

Rudder Right 28° Left 30°

Ailerons Up 25° Down 25°

Elevator tab Up 14° Down 28°

or (optional) Up 10° Down 33°

C.G. range (+13.6) to (+18.8)

Empty wt. C.G. range

Forward limits (+10.0) (with item 105, or 101 and 105, or 105 and 106)

(+12.3) (with item 102 or 112)

(+12.2) (with item 115)

Rear limits (+15.3) (with item 105)

- (+14.2) (with item 101 or 105)
- (+15.0) (with item 105 or 106)
- (+17.5) (with item 102)
- (+16.7) (with item 112)
- (+16.4) (with item 115)

When empty wt. C.G. falls within the pertinent range, computation of critical fore and aft C.G. positions is unnecessary. Ranges are not valid for non-standard arrangements except as noted.

NOTE 7. The following rudders are also approved for models 8 thru 8E, landplane or seaplane:

- (1) The original rudder assembly, dwg. 08403) modified in accordance with Luscombe dwg. SK-5170.
- (2) The "square" rudder assembly in accordance with Luscombe dwg. 08492.

NOTE 8. Model T-8F aircraft approved for a maximum weight of 1470 lb. In the restricted category prior to October 11, 1950, as a sprayer and converted in accordance with Luscombe dwg. 088200 may continue to be operated at that weight. Such aircraft must be operated and converted in accordance with item 401 (Luscombe FAA Approved Flight Manual). Required equipment in this configuration: items 4(b), 113, 114, 205, 206(g), 401 and 602. All original certification in the restricted category after October 11, 1950, must be in accordance with Part 8 of the Civil Air Regulations effective October 11, 1950.

- END-