DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A-700 Revision 5 TAYLORCRAFT BL BLS (Army L-2F) BL-65 BLS-65 (Army L-2J) BL12-65 BLS12-65

November 1, 1969

AIRCRAFT SPECIFICATION NO. A-700

Type Certificate Holder: Taylorcraft, Inc.

Connellsville Airport

Connellsville, Pennsylvania 15425

I - Model BL, 2 PCLM, Approved 22 September 1938; Model BLS, 2 PCSM, Approved 10 February 1939

Engine Lycoming O-145-A1 (See Item 308 for optional engines)

Fuel 65 min. octane aviation gasoline.

Engine limits For all operations, 2300 r.p.m. (50 hp.)

Airspeed limits Landplane: Level flight or climb 105 m.p.h.

(True Ind.)

Glide or dive 131 m.p.h.

Seaplane: Level flight or climb 95 m.p.h. Glide or dive 129 m.p.h.

Propeller limits Landplane: diameter - maximum 83 in.

Seaplane: diameter - maximum 79 in.

C. G. range Landplane: (+14.5) to (+19.7)

Seaplane: (+15.1) to (+19.4)

Empty weight C.G. range Landplane: (+15.3) to (+18.5)

Seaplane: (+15.9) to (+18.3)

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.

Maximum weight Landplane: 1100 lb. (Serial No. 1340, 1407 and up eligible at 1150 lb.).

Seaplane: 1228 lb.

No. seats 2 (+23)

Maximum baggage 30 lb. (+40)

Fuel capacity 12 gal. (-9) See item 312 for auxiliary tank.

Oil capacity 1 1/4 gal. (-33)

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Control surface movements Elevators 25° up 27° down

Rudder 26° right 26° left

Ailerons not available

Serial Numbers eligible 1001 and up.

Required equipment Landplane: Items 101, 102, 103, 104 and 105

Seaplane: Items 103, 104, 105, and 151.

II - Model BL-65 (Army L-2F) 2 PCLM, Approved 1 August 1939; Model BLS-65, 2 PCSM, Approved 7 October 1939 (Same as Model BL except engine installation).

Engine Lycoming O-145-B1 (See Item 308 for optional engines).

Fuel 73 min. octane aviation gasoline.

Engine limits For all operations, 2550 r.p.m. (65 hp.).

Airspeed limits Landplane: Level flight or climb 105 m.p.h.

(True Ind.) Glide or dive 131 m.p.h.

Seaplane: Level flight or climb 95 m.p.h.

Glide or dive 129 m.p.h.

Propeller limits Static r.p.m. at full throttle:

Not over 2525, not under 2100. No additional tolerance permitted.

Landplane: Diameter - Not over 83 in., not under 68 in. Seaplane: Diameter - Not over 79 in., not under 68 in.

C. G. range Landplane: (+14.5) to (+19.7)

Seaplane: (+15.1) to (+20.1)

Empty weight C.G. range Landplane: (+15.3) to (+18.5)

Seaplane: (+15.9) to (+19.0)

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.

Maximum weight Landplane: 1100 lb. (Serial No. 1340, 1407 and up eligible at 1150 lb.).

Seaplane: 1228 lb. (Serial No. 1432 and up eligible at 1278 lb.).

No. seats 2 (+23)

Maximum baggage 30 lb. (+40)

Fuel capacity 12 gal. (-9) (See item 312 for auxiliary tank).

Oil capacity 1 1/4 gal. (-33)

Control surface movements Elevators 27° up 25° down

Rudder 26° right 26° left

Ailerons not available

Serial Numbers eligible 1000 and up and all AAF No. Use mfg. No. if available.

Required equipment Landplane: Items 101, 102, 103, 104 and 105

Seaplane: Items 103, 104, 105, and 151.

III - Model BL12-65 (Army L-2J) and BLS12-65, 2 PCL-SM, Approved 7 April 1941.

(Same as BL-65 except for minor structural changes and added elevator trim tab).

Engine Lycoming O-145-B1 (See Item 308 for optional engines).

Fuel 73 min. octane aviation gasoline. Engine limits For all operations, 2550 r.p.m. (65 hp.).

Airspeed limits Landplane: Level flight or climb 105 m.p.h.

(True Ind.) Glide or dive 140 m.p.h.

Seaplane: Level flight or climb 95 m.p.h.

Glide or dive 129 m.p.h.

Propeller limits Range 1: Diameter - not over 70 in., not under 68 in.

Static r.p.m. at full throttle: not over 2350, not under 2050.

No additional tolerance permitted.

Range 2: Diameter - not over 72 in., not under 70 in.

Static r.p.m. at full throttle: not over 2200, not under 2050

No additional tolerance permitted.

C. G. range Landplane: (+14.2) to (+20.0)

Seaplane: (+14.2) to (+20.0) with Edo float (Item 151)

(+14.6) to (+20.0) with Heath float (Item 319)

Empty weight C.G. range Landplane: (+14.8) to (+17.3)

Seaplane: (+14.8) to (+19.1) with Edo float (Item 151)

(+15.2) to (+19.1) with Heath float (Item 319)

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.

Maximum weight Landplane: 1200 lb.

Seaplane: 1278 lb.

No. seats 2 (+23)

Maximum baggage Landplane: 50 lb. (+40)

Seaplane: 30 lb. (+40)

Fuel capacity 18 gal. (12 gal. in fuselage (-9) and 6 gal. in wing (+24)).

Oil capacity 1 1/4 gal. (-33)

Control surface movements Elevators 27° up 25° down

Serial Numbers eligible 2401, 2501, 2503, 2504, 2529 and up and all AAF numbers. Use

manufacturer's number as available.

Required equipment Landplane: Items 101, 102, 103, 104, 105, and 108

Seaplane: Items 103, 104, 105, 108, and 151.

Specifications Pertinent to All Models

Datum Leading edge of wing.

Leveling means Upper surface of horizontal stabilizer.

Certification basis Type Certificate No. 700 (CAR 4a).

Production basis None. Prior to original certification, an FAA 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 except as follows, subject to the

provisions of Advisory Circular 21-2. In addition to Advisory Circular 21-2

the Department of Transport of Canada require the following:

Landplane and seaplane eligible.

Skiplane not eligible. However, structure complies with Canadian requirements as follows:

- (1) At 1100 lb. maximum weight Landing gear per Dwg. B-A50 ski height 10 in., tread 72 in. (centerline of ski 5.19 in. out from center of bolt attaching diagonal streamlined member to axle).
- (2) At 1150 lb. and 1200 lb. maximum weight Landing gear per Dwg. B-A515, ski height 9 in., tread 72 in. (centerline of ski 5.19 in. out from center of bolt attaching diagonal streamline member to axle).

Equipment:

A plus (+) or minus (-) sign preceding the weight of an option item indicates the net weight change between that item and the equivalent required item.

Approval for the installation of all items of equipment listed herein has been obtained by the aircraft manufacturer except those items preceded by an asterisk (*). The asterisk denotes that approval has been obtained by someone other than the aircraft manufacturer. An item marked with an asterisk may not have been manufactured under a CAA monitored or approved quality control system, and therefore attention should be paid to workmanship and conformity with pertinent data called for in this specification.

Propellers and Propeller Accessories

103. Propeller - wood (fixed or adjustable pitch)

10 lb. (-46)

*110. Propeller - Sensenich M74CK-2, fixed pitch metal

21 lb. (-46)

(Lycoming 65 hp. engine only).

Static r.p.m. at maximum permissible throttle setting:

Not over 2400, not under 2250. No additional tolerance permitted.

Diameter: Not over 72 in., not under 68 in.

Engines and Engine Accessories - Fuel and Oil Systems

NOTE: No aircraft of these models shall be eligible for original certification with single ignition engines after 1 August 1941. In addition, no aircraft of these models shall be eligible for recertification with single ignition engines unless such aircraft were either previously certificated with single ignition engines or were originally certificated prior to 1 August 1941.

- 104. Carburetor air heater (BL-L604)
- 108. Enclosed engine cowl (BL12-65 and BLS12-65))
- 109. Oil filter Fram PB-5. Kit No. 520 Fram installation dwg. 61550. (wt. includes 1 qt. of oil)

4 lb. (-20)

308.	Engines, Lycoming (see Engine Specifications E-199 and E-210)	
	(a) O-145-A2 (for Models BL and BLS)	+13 lb. (-32)
	(b) O-145-A3 (for Models BL and BLS)	+15 lb. (-32)
	Engine limits for (a) and (b) - For all operations: 2300 r.p.m. (55 hp.)	
	(c) O-145-B2 (for Models BL-65 and BLS-65 and BLS12-65)	+11 lb. (-32)
	(d) O-145-B3 (for Models BL-65 and BLS-65)	+14 lb. (-32)
312.	Auxiliary 6 gal. fuselage fuel tank installation (Fuel arm (+35))	8 lb. (+30)
	(BL, BLS, BL-65 and BLS-65)	
313.	Enclosed type engine cowl (Dwg. BL-L628) (BL, BLS, BL-65 and BLS-65)	+9 lb. (-18)
Landing	g Gear and Floats	
101.	6.00-6 wheels (Firestone 6C4) with 2-ply tires	21 lb. (+ 2)
102.	Tail skid	5 lb. (+190)
151.	EDO 60-1320 float installation 169 lb.	+115 lb. (+ 22)
	(including fin 4 lb. (+176)	
	NOTE: As an alternate method of installing these floats Taylorcraft clamp-on	
	fuselage fittings parts Nos. 2554, 2555, and 2556 may be used.	
302.	Tail wheel assemblies	(+193)
	(a) 6x2.00 steerable with brake (Baxter)	+5 lb.
	(b) 6x2.00 steerable (Aircraft Associates)	+3 lb.
	(c) 6x2.00 full swiveling (Fire Industrial)	+3 lb.
	(d) 6x2.00 steerable (Lake State Products 5-40-31)	+4 lb.
	(e) 6x2.00 steerable (Heath)	+4 lb.
	(f) Steerable (Decker D-501)	6 lb.
304.	6.00-6 wheel (Firestone 6C4HB) with brakes	+6 lb. (+1)
305.	Wheel streamlines (Dwgs. A-9015 or A-9016)	6 lb. (+2)
309.	Parking brake	1 lb. (-9)
315.	Skis (Eligible on any airplane of these models provided	Use actual weight change
010.	the propeller installation meets the minimum 9 in. ground clearance.	ese actual weight change
	The maximum weight for the skiplane will be the same as for the corresponding	
	landplane or that shown in parenthesis after each ski model, whichever is less.)	
	(a) Marston 1200 (Maximum 1200 lb.)	
	(a) Marston 1200 (Maximum 1200 lb.) (b) Air Transport 1220-480 (Maximum 1220 lb.)	
	(c) Air Transport 1224-580-1 (Maximum 1220 lb.)	
	(d) Federal SC-1 (Maximum 1400 lb.)	
	(e) Piper S-1000 (Maximum 1200 lb.)(f) Jennings TY-2 (Maximum 1200 lb.)	
	(g) Federal SA-1 (Maximum 1200 lb.)	
	(h) Aviation Service B (Maximum 1200 lb.)	
	(i) Richards 1-B (Maximum 2220 lb.)	
	(j) Washington Aircraft 1200 (Maximum 1200 lb.)	
	(k) Heath 655 (Maximum 1210 lb.)	
	(1) Federal SC-2 (Maximum 1650 lb.)	
	(m) Aviation Service A (Maximum 1100 lb.)	
	(n) Federal SA-1A (Maximum 1300 lb.)	
	(o) Jacobsen (Formerly Escanaba) EAS-100 (Maximum 1200 lb.)	
	(p) Richards 1-A (Maximum 2800 lb.)	
	(q) Marston MFS-1600 (Maximum 1600 lb.)	
	(r) Heath 725 (Maximum 1450 lb.)	
	(s) Aero, Sales & Service AS-6.00-6 (Maximum 1320 lb.)	
	(t) Jack Carr Service 16 (Maximum 1600 lb.)	
	(u) Fairbanks MF-5 (Maximum 1310 lb.)	
	(v) Heath 725A (Maximum 1450 lb.)	
	(w) Federal SKT-1 (Maximum 1400 lb.)	
	(x) Call S2 (Maximum 1800 lb.)	
	(y) Federal A-1500 (Maximum 1500 lb.), Federal Instal. Dwg. 11R232	
	(z) Federal A 1500A (Maximum 1500 lb.) Federal Instal. Dwg. 11D232	

Federal A-1500A (Maximum 1500 lb.), Federal Instal. Dwg. 11R232

	(aa) Federal A-1850 (Maximum 1850 lb.), Federal Instal. Dwg. 11R232	
	(ab) Federal A-2000 (Maximum 2000 lb.), Federal Instal. Dwg. 11R232	
	(ac) Federal A-2000A (Maximum 2000 lb.), Federal Instal. Dwg. 11R232	
	(ad) Federal CA-1850-6 (Maximum 1850 lb.), Federal Instal. Dwg. 11R232	
	(ae) Wesco A-15, Western Aircraft Equipment Co. Dwg. 148, 202, 203.	
	(af) Wesco A-20, Western Aircraft Equipment Co. Dwg. 148, 202, 203.	
316.	6.00-6 4-ply tires	Neglect weight change
319.	Heath 1460A float installation, 172 lb., including	+122 lb. (+25)
	auxiliary fin 4 lb. (+176) (BFS12-65 only)	
*320.	Consolidaire Model 16 Wheel Fenders (per airplane)	10 lb. (+2)
	Consolidaire installation Dwg. 0029	
Electri	cal and Radio Equipment	
310.	Battery and box	9 lb. (+10)
311.	Radio installations	
	(a) Receiver (BL, BLS, BL-65 and BLS-65)	9 lb. (+39)
	(b) Receiver (BL12-65 and BLS12-65)	11 lb. (+12)
	(c) Transmitter (BL12-65 and BLS12-65)	9 lb. (+8)
	(d) Reel type trailing antenna (BL12-65 and BLS12-65)	3 lb. (+61)
	(e) "T" type antenna	1 lb. (+40)
	(f) Lear Loop Rotator AML-1 (BL12 and BLS12-65)	
	(g) Lear receiver complete, including receiver AMR-1 5 lb.	
	(+2), dry battery and cable 6 lb. (+20), antenna 1 lb.	
	(+40) (B12 series only)	12 lb. (+14)
	(h) Lear receiver and transmitter complete, including receiver	
	AMR-1 5 lb. (+2), trailing antenna 3 lb. (+61), dry battery	
	and cable 9 lb. (+20) (+B12 series only)	23 lb. (+18)
	(i) Heath receiver complete, including receiver MA-4 7 lb.	
	(+2), dry battery and cable 6 lb. (+20), antenna 1 lb.	44.7
210	(+40) (B12 series only)	14 lb. (+13)
318.	Position lights (Grimes B)	2 lb. (+77)
	r Equipment	
105.	Wheel type control	20.11 (22)
301.	Parachutes (one or two)	20 lb. ea. (+23)
306.	Cabin heater (Taylorcraft BL-L605 OR BL-L629))	2 lb. (+25)
307.	Leather upholstery	+5 lb. (+25)
314.	Stick type control	Neglect weight change
317.	Special instruments (B12 series only)	4.11 (0)
	(a) Bank and turn	4 lb. (0)
	(b) Rate of climb	2 lb. (-4) or (-9)
	(c) Compass	2 lb. (+4)
Miscel	laneous (not listed above)	
200.	Miscellaneous items as noted in approved weight and balance report	
303.	Auxiliary door	+5 lb. (+17)

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).