

FEDERAL AVIATION AGENCY

A-696
 Sheet 1
 Revision 14
 UNIVERSAL
 (Taylorcraft)
 BC
 BCS
 BC-65
 BCS-65
 BCL2-65 (Army L-2H)
 BCS12-65
 BCL2-B
 BCS12-D
 BCL2-BL
 BCS12-DL
 BCL2D-85
 BCS12D-4-85
 BCS12D-4-85
 December 7, 1960

AIRCRAFT SPECIFICATION NO. A-696

Type Certificate Holder Universal Aircraft Industries
 P. O. Box 5306
 Denver 17, Colo.

I - Model BC, 2 PGLM, Approved August 24, 1938; Model BCS, 2 PCSM, Approved April 5, 1939

Engine	Continental A-50-1 (See Item 308A for optional engines)
Fuel	73 min. octane aviation gasoline
Engine limits	For all operations, 1900 rpm (50 hp)
Airspeed limits	Landplane: Level flight or climb 105 mph (91 knots) True Ind. Glide or dive 131 mph (114 knots) True Ind. Seaplane: Level flight or climb 95 mph (83 knots) True Ind. Glide or dive 129 mph (112 knots) True Ind.
Propeller limits	Diameter: Maximum 83 inches.
C.G. range	Landplane: (+14.5) to (+19.7) Seaplane: (+15.1) to (+19.4)
Empty weight	Landplane: (+15.3) to (+18.5)
C.G. range	Seaplane: (+15.9) to (+18.3) 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.
Maximum weight	Landplane: 1100 lbs. (Ser. Nos. 1407 and up are eligible at 1150 lbs.) Seaplane: 1228 lbs.
No. seats	2 (+23)
Maximum baggage	30 lbs. (+40)
Fuel capacity	12 gals. (-9). See Item 312 for auxiliary tank.
Oil capacity	1 gal. (-21).
Control surface movements	Elevators 25° Up 27° Down Rudders 26° Right 26° Left Ailerons Not available
Serial Nos. eligible	1001 and up
Required equipment	In addition to pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed: Landplane: Items 101, 102, 103, 104, 105 and 317(a). Seaplane: Items 103, 104, 105 and 151.

This is a copy of the specifications for the BCL2D and other models. The latest copy of this specification should be consulted. It may be obtained from the Office of Aviation Information, Washington.

II - Model BC-65, 2 PCLM, Approved July 22, 1939; Model BCS-65, 2 PCSM, Approved Oct. 7, 1939
 (Same as Model BC except engine installation)

Engine	Continental A-65-1 (See Item 308B for optional engines)
Fuel	73 min. octane aviation gasoline
Engine limits	For all operations, 2350 rpm (65 hp)
Airspeed limits	Landplane: Level flight or climb 105 mph (91 knots) True Ind. Glide or dive 131 mph (114 knots) True Ind.
	Seaplane: Level flight or climb 95 mph (83 knots) True Ind. Glide or dive 129 mph (112 knots) True Ind.
Propeller limits	Static rpm at full throttle - A-65-1 engine: not over 2300, not under 2070 Optional engines: not over 2250, not under 2070 No additional tolerance permitted.
	Diameter: (landplane) - not over 83 in., not under 70 in. (seaplane) - not over 79 in., not under 70 in.
C.G. range	Landplane: (+14.5) to (+19.7) Seaplane: (+15.1) to (+20.1)
Empty weight	Landplane: (+15.3) to (+18.5) Seaplane: (+15.9) to (+19.0)
C.G. range	When empty weight 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.
Maximum weight	Landplane: 1100 lbs. (Serial Nos. 1407 and up are eligible at 1150 lbs.) Seaplane: 1228 lbs. (Serial Nos. 1432 and up are eligible at 1278 lbs.)
No. seats	2 (+23)
Maximum baggage	30 lbs. (+40)
Fuel capacity	12 gals. (-9). See Item 312 for auxiliary tank.
Oil capacity	1 gal. (-21)
Control surface movements	Elevators 27° Up 25° Down Rudder 26° Right 26° Left Ailerons Not available
Serial Nos. eligible	1001 and up
Required equipment	In addition to pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed: Landplane: Items 101, 102, 103, 104, 105 and 317(a). Seaplane: Items 103, 104, 105 and 151.

III - Models BC12-65 (Army L-21) and BCS12-65, 2 PCL-3M, Approved April 7, 1941

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

Engine	Continental A-65-7 (See Item 308C for optional engines).
Fuel	73 min. octane aviation gasoline
Engine limits	For all operations, 2300 rpm (65 hp)
Airspeed limits	Landplane: Level flight or climb 105 mph True Ind.
	Glide or dive 140 mph True Ind.
	Seaplane: Level flight or climb 95 mph True Ind.
	Glide or dive 129 mph True Ind.
Propeller limits	Static rpm at full throttle: not over 2250, not under 2070. No additional tolerance permitted.
	Diameter: not over 72 in., not under 70 in.
C.G. range	Landplane: (+14.2) to (+20.0)
	Seaplane: (+14.2) to (+20.0) with Edo floats (Item 151) (+14.6) to (+20.0) with Heath floats (Item 320)
Empty weight C.G. range	Landplane: (+14.8) to (+17.9)
	Seaplane: (+14.8) to (+18.3) with Edo floats (Item 151) (+15.2) to (+18.3) with Heath floats (Item 320)
Maximum weight	Landplane: 1200 lbs.
	Seaplane: 1278 lbs.
No. seats	2 (+23)
Maximum baggage	Landplane: 50 lbs. (+40)
	Seaplane: 30 lbs. (+40)
Fuel capacity	18 gals. (12 gals. in fuselage (-9) and 6 gals. in wing (+24))
Oil capacity	1 gal. (-21)
Control surface movements	Elevators 27° up 25° down
	Elevator tab 25° up 30° down
	Ailerons 25° up 25° down
	Rudder 26° right 26° left
Serial Nos. eligible	2401, 2501, 2503, 2504, 2529 and up and all AAF numbers. Use Manufacturer's numbers if available.
Required equipment	Landplane: 101, 102, 103, 104, 105, 108 and 317(e) Seaplane: 103, 104, 105, 108 and 151.

IV - Model BC12-D, 2 PCLM, Approved Nov. 23, 1945; Model BCS-12D, 2 PCSM, Approved Feb. 19, 1946.

(Same as Model BC12-65 except for alternate tail surface, revised aileron travel, alternate one piece windshield and other miscellaneous structural and non-structural changes.)

(Model BC12-D1 eligible as Model BC12-D when Items 106 and 107 and 6 gal. right hand wing tank are installed.)

Engine	Continental A-65-8 (See Item 308D for optional engines).
Fuel	73 min. octane aviation gasoline
Engine limits	For all operations, 2300 rpm (65 hp)
Airspeed limits	Landplane: Level flight or climb 105 mph True Ind.
	Glide or dive 140 mph True Ind.
	Seaplane: Level flight or climb 95 mph True Ind.
	Glide or dive 129 mph True Ind.
Propeller limits	Static rpm at full throttle: not over 2250, not under 2070. No additional tolerance permitted.
	Diameter: Not over 72 in., not under 70 in.
C.G. range	Landplane: (+14.2) to (+20.0)
	Seaplane: (+14.2) to (+20.0) with Edo floats (Item 151) (+14.6) to (+20.0) with Heath floats (Item 320)

Empty weight C.G. range	Landplane: (+14.8) to (+17.9) Seaplane: (+14.8) to (+18.3) with Edo floats (Item 151) (+15.2) to (+18.3) with Heath floats (Item 320) 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.
Maximum weight	Landplane; 1200 lbs. Seaplane: 1278 lbs.
No. seats	2 (+23)
✓ Maximum baggage	Landplane: 50 lbs. (+40) (MARE 20/15) Seaplane: 30 lbs. (+40)
Fuel capacity	18 gals. (12 gal. fuselage tank at -9 and 6 gal. wing tank at +24).
Oil capacity	1 gal. (-21)
Control surface movements	Elevators 27° up 25° down Elevator tab 25° up 30° down Ailerons 23° up 23° down Rudder 26° right 26° left
Serial Nos. eligible	6402 and up.
Required equipment	Landplane: 101, 102, 103, 104, 105, 108 and 317(a). Seaplane: 103, 104, 105, 108 and 151.

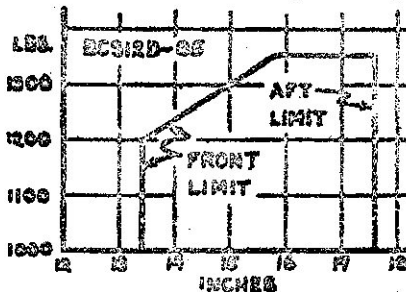
V - Model BCL2-D1 and BCS-12D1, 2 PCL-SM. Approved September 10, 1946

(Same as Models BCL2-D except for elimination of left hand door (Item 106), parking brake (Item 107) and 6 gal. R/H wing tank.)
(Model BCL2-D1 eligible as Model BCL2-D when Items 106 and 107 and 6 gal. right hand wing tank are installed.)

Engine	Continental A-65-8 (See Item 308D for optional engines).
Fuel	73 min. octane aviation gasoline
Engine limits	For all operations, 2300 rpm (65 hp)
Airspeed limits	Landplane: Level flight or climb 105 mph True Ind. Glide or dive 140 mph True Ind. Seaplane: Level flight or climb 95 mph True Ind. Glide or dive 129 mph True Ind.
Propeller limits	Static rpm at full throttle: not over 2250, not under 2070. No additional tolerance permitted.
C.G. range	Diameter: not over 72 in., not under 70 in. Landplane: (+14.2) to (+20.0) Seaplane: (+14.2) to (+20.0) with Edo floats (Item 151) (+14.6) to (+20.0) with Heath floats (Item 320)
Empty weight C.G. range	Landplane: (+14.8) to (+17.9) Seaplane: (+14.8) to (+18.3) with Edo floats (Item 151) (+15.2) to (+18.3) with Heath floats (Item 320) When Empty weight 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.
Maximum weight	Landplane: 1200 lbs. Seaplane: 1278 lbs.
No. seats	2 (+23)
Maximum baggage	Landplane: 50 lbs. (+40) Seaplane: 30 lbs. (+40)
Fuel capacity	12 gals. (-9)
Oil capacity	1 gal. (-21)
Control surface movements	Elevators 27° up 25° down Elevator tab 25° up 30° down Ailerons 23° up 23° down Rudder 26° right 26° left
Serial Nos. eligible	6402 and up.
Required equipment	Landplane: 101, 102, 103, 104, 105, 108 and 317(a). Seaplane: 103, 104, 105, 108 and 151.

VI - Models EC120-S5 and EC5120-S5, 2 PCL-SM, Approved September 30, 1948
(Same as Model EC12-S except for increased power and gross weight, fuel system changes, auxiliary wing fuel tank, revised wing fittings, and minor structural changes.)

Engines Continental C85-8P
Fuel 50 min. octano aviation gasoline
Engine limits For all operations, 2575 rpm (85 hp)
Airspeed limits Landplane: Level flight or climb 105 mph (92 knots) True Ind.
Glide or dive 142 mph (124 knots) True Ind.
Seaplane: Level flight or climb 95 mph (83 knots) True Ind.
Glide or dive 128 mph (111 knots) True Ind.
Propeller limits with Item 103(f) Static rpm at maximum permissible throttle setting (No additional tolerance permitted):
Landplane: not over 2390, not under 2100.
Seaplane: not over 2310, not under 2010 (Exceptional: not under 2100 with Item 151a)
Diameter - Landplane: not over 72 in., not under 68 in.
Seaplane: not over 72 in., not under 70 in.
C.G. range Landplane: (+14.2) to (+20.0)
Seaplane: (+15.8) to (+17.6) at 1351 lbs.
(+13.4) to (+17.6) at 1200 lbs. or less
Straight line between points given.



Empty weight C.G. range Landplane: (+14.8) to (+17.9)
Seaplane: (+13.7) to (+15.1)
When Empty Weight 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.
Maximum weight Landplane: 1280 lbs.
Seaplane: 1351 lbs.
No. seats 2 (+23)
Maximum baggage Landplane: 50 lbs. (+40)
Seaplane: 30 lbs. (+40)
Fuel capacity 18 gals. (12 gal. tank in fuselage at -9 and 6 gal. tank in wing at +24)
Oil capacity 4 1/2 qts. (-21)
Control surface movements Elevators 27° up 25° down
Elevator tab 25° up 30° down
Ailerons 23° up 23° down
Rudder 26° right 26° left
Serial Nos. eligible 12001 and up.
Required equipment Landplane: Items 101, 103(f), 104, 105, 108, 302 and 317(a)
Seaplane: Items 103(f), 104, 105, 108 and 151.

M O V E - 10

VII - Model 2012-85 and 2012-85, 2 PCL-SM. Approved July 13, 1949
 (Same as Model 2012-85 except for engine, baggage compartment, side windows and sky-lights)

Engine	Continental C85-12P
Fuel	80 min. octane aviation gasoline
Engine limits	For all operations, 2575 rpm (85 hp)
Airspeed limits	Landplane: Level flight or climb 105 mph (91 knots) True Ind. Glide or dive 142 mph (124 knots) True Ind.
	Seaplane: Level flight or climb 95 mph (83 knots) True Ind. Glide or dive 128 mph (111 knots) True Ind.
Propeller limits: with Item 103(f)	Static rpm at maximum permissible throttle setting (No additional tolerance permitted): Landplane: not over 2390, not under 2100 Seaplane: not over 2330, not under 2010 (Exception: Not under 2100 with Item 151a).
C.G. range	Diameter - Landplane: not over 72 in., not under 68 in. Seaplane: not over 72 in., not under 70 in.
	Landplane: (+14.2) to (+20.0) Seaplane: (+15.8) to (+17.6) at 1351 lbs. (+13.4) to (+17.6) at 1200 lbs. or less Straight lines between points given.) (See Figure under Section VI)
Empty weight C.G. range	Landplane: (+14.9) to (+16.3) Seaplane: (+13.8) to (+14.3) When Empty Weight 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.
Maximum weight	Landplane: 1260 lbs. Seaplane: 1351 lbs.
No. seats	2 (+23)
Maximum baggage	Landplane: 30 lbs. (+70) Seaplane: 30 lbs. (+70)
Fuel capacity	18 gals. (12 gal. tank in fuselage at -9 and 6 gal. tank in wing at +24)
Oil capacity	4½ qts. (-30)
Control surface movements	Elevators 27° up 25° down Elevator tab 28° up 30° down Ailerons 23° up 23° down Rudder 26° right 26° left
Serial Nos. eligible	4-13010 and up
Required equipment	Landplane: Items 101, 103(f), 104, 105, 108, 302 and 517(a). Seaplane: Items 103(f), 104, 105, 108 and 151.

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Specifications Pertinent to All Models

Datum	Leading edge of wing
Leveling means	Upper surface of horizontal stabilizer
Certification basis	Type Certificate No. 696 (CAR 1a)
Production basis	None. Prior to original certification, a 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, subject to the provisions of MOP 2-4, except as follows: Canada - Landplane and seaplane eligible with the exception of model BC12-D1. Model BC12-D1 eligible provided auxiliary door (Item 106) is installed. - Skiplane not eligible: however, structure complies with Canadian requirements as follows: (1) At 1100 lbs. 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 and 1200 lbs. 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 item indicates net weight change when that item is installed. 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 FAA monitored or approved quality control system, and therefore conformity must be determined if the item is not identified by a Form ACA-186, PMA or other evidence of FAA production approval.

Propellers and Propeller Accessories103. Propellers

- (a) Approved wood (fixed or adjustable pitch).
(See static limits under individual models and Item 151(a) for minimum static rpm limits for models BCS12D-85 and BCS12D-4-85)
- 10 lbs. All except BCL12D-4-85
BCL12D-4-85 & 2
BCS12D-4-85 BCS12D-4-85
(-46) (-50)
- (b) Beech R003 controllable, hub R-002-101 or R-003-100, blades R-002-205-72.
Diameter 72 in. Pitch at 27 in. sta.:
Low 11-3/4°, high 17-3/4°. (Pitch limits under individual models are not applicable to these propellers.)
Includes Beech mechanical propeller control.
- +20 lbs. BC-65, BCL12-65
BCL12-D & BCL12-D1
(-47)
- (c) McCauley 1A90 with the following limits:
Static rpm at maximum permissible throttle setting:
Landplane: Not over 2210, not under 1960.
Seaplane: Not over 2210, not under 2070.
No additional tolerance permitted.
Diameter: Not over 74 in., not under 72.5 in.
- +21 lbs. BC-65, BCS-65,
BCL12-D, BCS12-D,
BCL12-D1 & BCS12-D1
(-46)
- (d) Hartzell ground adjustable, hub HA-12U, blades 7414 to 6814 or 7214M to 6814M.
Eligible at diameter and static rpm limits shown above for fixed pitch wood models.
- 18 lbs. All except BCL12D-4-85
BCL12D-4-85 &
BCS12D-4-85 BCS12D-4-85
(-46) (-50)
- (e) McCauley 1A90 with the following limits:
Static rpm at maximum permissible throttle setting: Not over 2250, not under 2070.
No additional tolerance permitted.
Diameter: Not over 74 in., not under 72.5 in.
- 21 lbs. BCL12-65
(-46)
- (f) Lewis 111CK-45 or any other fixed pitch wood propeller eligible for the engine power and speed and meeting static rpm and diameter limits noted for the various models eligible.
- 10 lbs. BCL12D-85 BCL12D-4-85
&
BCS12D-85 BCS12D-4-85
(-46) (-50)
- (g) McCauley 1A90 with the following limits:
Static rpm at maximum permissible throttle setting: Not over 2350, not under 2170.
No additional tolerance permitted.
Diameter: Not over 71 in., not under 69.5 in.
- +21 lbs. BCL12D-85 BCL12D-4-85
&
BCS12D-85 BCS12D-4-85
(-46) (-50)
- *(h) Sensenich M74CK, fixed pitch metal.
Static at max. permissible throttle setting:
Landplane: Not over 2210, not under 1960.
Seaplane: Not over 2210, not under 2070.
No additional tolerance permitted.
Diameter: Not over 74 in., not under 72.5 in.
- 21 lbs. BC-65
BCL12-D BCS-65
BCL12-D1 BCS12-D
BCL12-65 BCS12-D1
(-46) (-50)
- *(i) Sensenich M74CK-2 fixed pitch metal.
Static at max. permissible throttle setting:
Not over 2350, not under 2170.
No additional tolerance permitted.
Diameter: Not over 72 in., not under 70 in.
- 21 lbs. BCL12D-85 BCL12D-4-85
BCS12D-85 BCS12D-4-85
(-46) (-50)

Engines and Engine Accessories - Fuel and Oil Systems

No aircraft of these models shall be eligible for original certification with single ignition engines after August 1, 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 August 1, 1941.

104. Carburetor air heater (Dwg. EC-L601)
108. Enclosed engine cowl (All except EC, ECS, EC-65, ECS-65)
109. McDowell starter installation (EC-12D, ECS-12D and EC12D-85) 11 lbs. (-34)
(EC-A6014 nose cowl must be installed)
110. McDowell starter installation using horizontal operating handle 13 lbs. (-34)
(EC12-D and ECS12-D)
111. Exhaust muffler, Ryan Aero. Co. Dwg. No. 52112 2 lbs. (-40)
(With Items 308B(a) and (b) only)
112. Oil filter, Fram PB-5, Kit No. 510. Weight includes 1 qt. oil. 4 lbs. (-20)
(a) Fram Installation Dwg. No. 61544 (EC, ECS, EC12-65, EC12S-65)
(b) Fram Installation Dwg. No. 61524 (EC12D, ECS12-D, EC12-D1 & ECS12-D1)
113. Starter (Delco Remy 1109656) (EC12D-4-85 only) 16 lbs. (-24)
308. Engines (Continental, see Engine Specs. Nos. 190 and 205) (-33)
- A. Models EC and ECS
- (a) A-50-2 +6 lbs.
- (b) A-50-3 or A-50-8 +10 lbs.
- (c) A-50-4 +3 lbs.
- (d) A-50-5 +13 lbs.
- (e) A-50-7 No weight change
- B. Models EC-65 and ECS-65
- (a) A-65-3, A-65-3J, A-65-S or A-65-8J +10 lbs.
Engine limits: For all operations, 2300 rpm (65 hp)
- (b) A-65-7 or A-65-7J No weight change
Engine limits same as (a)
- C. Models EC12-65, ECS12-65
- (a) A-65-7J, A-65-8, A-65-8F, A-65-8J No weight change
Engine limits same as B(a)
- D. Models EC12-D, ECS12-D, EC12-D1, ECS12-D1
- (a) A-65-8F, A-65-8J
Engine limits same as B(a)
312. Auxiliary 6 gal. fuselage fuel tank installation (Fuel arm +35) 8 lbs. (+30)
(EC, ECS, EC-65 and ECS-65)
313. Enclosed type engine cowl (Dwg. EL-L628) (EC, ECS, EC-65 and ECS-65) 9 lbs. (-18)
315. Revised engine mount (Dwg. EC65-A128) (For engines incorporating integral rubber bushings) Neglect weight change

Landing Gear and Floats

101. Two main wheels, 6.00-6, Type III, Firestone 6C4 9 lbs. (+2)
102. Tail skid
107. Parking brake 1 lb. (-9)
151. Edo float installation
- (a) Model 60-1320 floats 165 lbs. (+20)
Auxiliary fin (required on all models except ECS12D-85 and EC12D-4-85 unless the seaplane aft C.G. limit for maximum weight is reduced to +18.9). (When propeller Item 103(a) or 103(f) is installed on models ECS12D-85 and EC12D-4-85 the minimum static rpm limit is increased to not under 2100 rpm.)
As an alternate method of installing these floats, Taylorcraft clamp-on fuselage fittings, Parts Nos. 2554, 2555 and 2556 may be used. 4 lbs. (+176)
- (b) Model 92-1400 floats 181 lbs. (+19)
Auxiliary fin (required on all models except ECS12D-85 and EC12D-4-85). 4 lbs. (+176)

201. Two main wheel-brake assemblies, 6.00-6, Type III
 (a) Cleveland Aircraft Products Co. Model 6.00 DBB Wheel Assembly No. C-38500HMA Brake Assembly No. C-7000 +4 lbs. (+2)
302. Tail wheel assemblies (+193)
 (a) 6x2.00 steerable with brake-Barter +5 lbs.
 (b) 6x2.00 steerable-Aircraft Associates +3 lbs.
 (c) 6x2.00 full swiveling-Firestone Industrial +3 lbs.
 (d) 6x2.00 steerable-Lake State Products 5-40-31 +4 lbs.
 (e) 6x2.00 steerable-Heath +2 lbs.
 (f) Maule SFS-12, SS-12, SFS-12, SFS-1-2-P8 +4 lbs.
 (g) Steerable - Lang (formerly Decker) D-501 3 lbs.
 (h) Scott Model 3-24B, steerable, full swiveling 6 lbs.
304. Two main wheel-brake assemblies, 6.00-6, Type III Firestone Model 6C9HB +4 lbs. (+2)
 305. Wheel streamlines (Dwg. A-9015 or A-9016) 6 lbs. (+2)
- *316. Skis (Eligible on any airplanes of these models provided the propeller installation meets the minimum 9 in. ground clearance. 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) Use actual wt. change
- (a) Marston 1200 (Maximum 1200 lbs.)
 (b) Air Transport 1220-480 (Maximum 1220 lbs.)
 (c) Air Transport 1224-580-1 (Maximum 1220 lbs.)
 (d) Federal SC-1 (Maximum 1400 lbs.)
 (e) Piper S-1000 (Maximum 1200 lbs.)
 (f) Jennings TY-2 (Maximum 1200 lbs.)
 (g) Federal SA-1 (Maximum 1200 lbs.)
 (h) Aviation Service B (Maximum 1650 lbs.)
 (i) Richards 1-B (Maximum 2220 lbs.)
 (j) Washington Aircraft 1200 (Maximum 1200 lbs.)
 (k) Heath 655 (Maximum 1210 lbs.)
 (l) Federal SC-2 (Maximum 1650 lbs.)
 (m) Aviation Service A (Maximum 1100 lbs.)
 (n) Federal SA-1A (Maximum 1300 lbs.)
 (o) Jacobsen (formerly Escanaba) EAS-100 (Maximum 1200 lbs.)
 (p) Richards 1-A (Maximum 1600 lbs.)
 (q) Marston MFS-1600 (Maximum 1600 lbs.)
 (r) Heath 725 (Maximum 1450 lbs.)
 (s) Aero. Sales & Service AS-6.00 (Maximum 1320 lbs.)
 (t) Jack Carr Service 16 (Maximum 1600 lbs.)
 (u) Fairbanks MF-5 (Maximum 1310 lbs.)
 (v) Heath 725A (Maximum 1450 lbs.)
 (w) Federal SK4-1 (Maximum 1400 lbs.)
 (x) Call S2 (Maximum 1800 lbs.)
 (y) Federal A-1500 (Maximum 1500 lbs.), Federal Instal. Dwg. 11R232
 (z) Federal A-1500A (Maximum 1500 lbs.), Federal Instal. Dwg. 11R232
 (aa) Federal A-1850 (Maximum 1850 lbs.), Federal Instal. Dwg. 11R232
 (ab) Federal A-2000 (Maximum 2000 lbs.), Federal Instal. Dwg. 11R232
 (ac) Federal A-2000A (Maximum 2000 lbs.), Federal Instal. Dwg. 11R232
 (ad) Federal CA-1850-6 (Max. 1850 lbs.), Federal Instal. Dwg. 11R232
 (ae) Wesco A-15, Western Aircraft Equipment Co. Dwgs. 148, 202, 203.
 (af) Wesco A-20, Western Aircraft Equipment Co. Dwgs. 148, 202, 203.

- 317. Two main wheel tires, 6.00-6, Type III with regular tubes
 - (a) 2-ply rating 12 lbs. (+0)
 - (b) 4-ply rating +5 lbs. (+2)
- 320. Earth L401 float installation, 172 lbs. including auxiliary fan, 4 lbs. (+176) (DCS12-B and DC3-12TH only) +122 lbs. (+25)
- 321. Wheel fenders, Consolidair Model 16 (Consolidair installation Dwg. No. 0329). 10 lbs. (+2)

Electrical Equipment

- 310. Battery and Box
 - (a) 6 volt 9 lbs. (+10)
 - (b) 12 volt 15 lbs. (+10)
 - (c) 12 volt. (DC12D-4-85 and DC312D-4-85) 15 lbs. (+70)
- 319. Position lights
 - (a) Grines B (6 volt) 2 lbs. (+77)
 - (b) Grines D (6 volt) (DC12-D, DC12D-85 and DC312-D only)
 - (c) Grines D (12 volt) (DC12D, DC12D-85, DC312D-85, DC12D-4-85 and DC312D-4-85)
- 322. Generator (Daleco-Remy 1101576) (DC12D-4-85 and DC312D-4-85 only) 10 lbs. (-24)
- 323. Voltage regulator (Daleco-Remy 1110923) (DC12D-4-85 and DC312D-4-85) 1 lb. (-18)

Interior Equipment

- 305. Wheel type control
- 306. Cabin heater (Taylorcraft DC-1606 or DC-1630)
- 314. Stick type control 2 lbs. (-22)
Neglect weight change

Miscellaneous (not listed above)

- 106. Auxiliary door +5 lbs. (+25)

NOTE 1. 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.

NOTE 2. Left hand wing tank eligible as 6 gal. auxiliary on all models except DC3-85 and DC12D-85.

....END....

A-65-1,-3,-5,-6,-7
A-65-8(0-170-3, 0-170-7), -8A, -8F, -8PJ
A-65-9(0-170-5, -9A, -9B, -9C)
A-65-12, -12A, -12F, -12P
A-65-14, -14A, -14F, -14P

March 29, 1957

AIRCRAFT ENGINE SPECIFICATION

Engines of models described herein conforming with this specification and approved data on file with the Civil Aeronautics Administration are rated as airworthy for use in certificated aircraft in accordance with pertinent aircraft specifications and applicable portions of the Civil Air Regulations provided they are installed, operated and maintained as prescribed by the manufacturer.

Manufacturer	Continental Motors Corporation Muskegon, Michigan						
Model A-65	-1	-3, -6	-7	-8, -9	-12	-14	
Type	HRCA	--	--	--	--	--	
Rating:							
Max. continuous, hp, rpm, at sea level	65-2350-S.L.	65-2300-S.L.	--	--	--	--	
pressure altitude							
Takeoff, (5 min.) hp, rpm at full throttle	65-2350	65-2300	--	--	--	75-2675	
Fuel (Minimum grade aviation gasoline)	73	--	--	--	--	80	
Lubricating Oil:							
Ambient Air temperature, °F	Oil Grade						
Below 32	SAE 20	--	--	--	--	--	
32 - 70	SAE 30	--	--	--	--	--	
70 - 100	SAE 40	--	--	--	--	--	
Over 100	SAE 50	--	--	--	--	--	
Bore and stroke, in.	3.875 x 3.625	--	--	--	--	--	
Displacement, cu. in.	171	--	--	--	--	--	
Compression ratio	6.3:1	--	--	--	--	--	
Weight (dry), lbs. (See NOTE 3)	163	173, 176	163	170, 173	171	170	
C.O. location							
Fwd. of mounting face, in.	6.8	6.2	6.8	6.2	--	--	
Below prop. shaft, in.	1.2	1.5	1.2	1.5	--	--	
Propeller shaft (See NOTE 2 for flanged type), SAE No.	0(Taper)	--	--	--	--	--	
Carburetor (See NOTE 2 for injectors)	Stromberg MA-S341 or MA-S38 carburetor with 1-1/4 in. venturi or Marvel MA-3-PA carburetor with 1-7/32 in. venturi	--	--	--	--	--	
Ignition Magnets	Single Scintilla SF-4L or Eissmann AM-4	Dual Scintilla SF-4R or Eissmann AM-4	Single Scintilla SF-4L or Eissmann AM-4	Dual Scintilla S4HE-20, -21, SF-4R, S4HE-20 or S4HE-21; Eissmann LA-4 or AM-4; Case b-CAMA or b-CANE; (with impulse coupling on Eissmann and Case magnets retard 25°)	Dual Scintilla S4HE-20, -21, SF-4R, S4HE-21; Eissmann LA-4 or AM-4 (with impulse coupling retard 25°)	Dual Scintilla S4E-20, -21, SF-4R, S4E-20 or S4E-21; Eissmann LA-4 or AM-4; Case b-CAMA or b-CANE; (with impulse coupling on Eissmann and Case magnets retard 25°)	
Timing, °BTC	30	--	--	--	--	--	
Spark Plugs	BO HR2, HR2S, H17, H17S, 705, 706R, 706SR, 706S, H4H5-S; Champion IC-118, M-31A, M-26, C-26, C-26S, C-27, C-27S, 62S; Auto-Lite 18A-1, B4, B4S, SF-2E, SF-2H; Decker D26; Safir B-57; AC A88, 388, SB38	--	--	--	--	--	
Oil sump, capacity (qts.)	Net - 4 1/2	--	--	--	--	--	
Exhaust port	Up	--	Down	--	--	--	
NOTES	1,3,5,6	1,2,3,5,6	1,3,5,6	1,2,3,4,5,7,8	1,2,3,5,6	1,2,3,5,7	

"--" indicates "same as preceding model."
"---" indicates "not applicable"

This is a copy of the specifications for the Continental A-65-8, the engine used on the BCL2D. Consult latest copy.

AIRCRAFT ENGINE SPECIFICATION - Continental A-65 Series

Certification basis Type Certificate No. 205
Production basis Production Certificate No. 7

NOTE 1. Maximum permissible cylinder head, barrel and oil inlet temperatures, 550°F, 350°F and 220°F, respectively.

NOTE 2. The following additional models of A-65 series engines are also eligible:

Engine Model	Characteristic Component	Dry weight increase, lbs.
A-65-8J, -9J, -9J	High Model Fuel Injector or Excessive Model Air	4
A-65-12J, -14J	Excessive Model Fuel Injector	4
A-65-8F, -9F, -12F, -14F	Flanged propeller shaft	1
A-65-8F, -9F, -12F, -14F	Flanged propeller shaft and fuel injector as above	4 or 5

NOTE 3. Engine serial numbers lower than 340793 incorporate a crankcase for use with conical rubber shock mountings. With SPUR magnetos add 5 lbs. to dry weight. With Case magnetos add 4 lbs. For the -1 engine add 3 lbs. for the SPUR magento.

NOTE 4. Military models O-170-3 and O-170-5 are identical to models A-65-8 and A-65-9 respectively. Model O-170-7 same as -3 except for improved valves and valve guides, pistons and piston rings; also provisions for Anselley 75 and Beach R-022 propellers. When these military engines are installed in certificated aircraft, the appropriate civil model designation and T. C. 205 should be included on the engine measurements.

NOTE 5. The following typical accessories are eligible as noted at the indicated additional weight:

Accessory	Weight, lbs.
Starter	16
Relapse Type 635 (Electric-models A-65-6 and -9, F and J only)	18
Relapse Type 2-80 (Electric-models A-65-6 and -9, F and J only)	14
Bussor Type I (Mechanical-models A-65-6 and -9, F and J only)	16
Delco-Remy CMC No. 50209 (Electric-model A-65-12, F and J only)	10
Delco-Remy CMC No. 10135 (Model A-65-12, F and J only)	4
Fuel Pump (provisions optional)	2
AC type CP 8527	3
AC type 1523843 or 34L3 (CMC No. 4552)	3
Miscellaneous	3
Oil Filter, Pesa P2-500 (CAF No. 10581)	3
Air Filter and Scoop Box, A-5812 or A-40522	4
Radio Salsading	
Harrison Oil Indicator Model H2131-9 (CMC No. 40601 - Models 12, J and F only)	

NOTE 6. Approvals for models A-65-1, -3, -6, -6S, -7 and -7J expired November 17, 1941. No engines of these models manufactured after that date or with serial nos. above the following are eligible for use in certificated aircraft:

Model	Serial No.
A-65-1	37927
A-65-3	38159
A-65-6	38302
A-65-6J	37286
A-65-7	51507

NOTE 7. Model A-65-14 differs from A-65-8 only in that it incorporates special pistons, rocker arms and exhaust valves, seats and guides.

NOTE 8. Model A-65-12 differs from A-65-8 only in that O-75-12 type crankcase and accessories section are incorporated.