

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A-720
Revision 5
Rankin
CP-55
CP-65
LP-65
FP-65
CS-65
March 8, 2017

TYPE CERTIFICATE DATA SHEET NO. A-720

Type Certificate Holder: Bradley Rankin
27166 Jet Road
Marysville, MO 64468

Type Certificate Holder Record: Joe Rankin d/b/a Rankin Aircraft transferred to
Bradley Rankin on March 8, 2017

I. Model CP-55, 2-PCLM

Engine Continental A-50-8
See Item 201(a) for optional engines

Engine Limits For all operations, 1900 rpm (50 hp)

Airspeed Limits Level flight or climb 102 mph (89 knots) True Ind.
Glide or dive 138 mph (120 knots) True Ind.

Propeller Limits Status rpm at maximum permissible throttle setting:
Not over 1875, no under 1670. No additional tolerance permitted.
Diameter: not over 85 in., not under 70 in.

C.G. Range (+10.5) to (+19.9)

Empty Weight (+15.8) to (+16.4)
If empty weight C.G. falls within this range, it is unnecessary to check critical
forward and aft C.G. positions. This range is not valid for non-standard
arrangements.

Maximum Weight 1160 lbs.

No. of Seats 2 (+8 and +36)

Maximum Baggage 40 lbs. (+52)

Fuel Capacity 13 ½ gal (-16)

Oil Capacity 1 gal (-31)

Serial No. Eligible 651 and On (manufactured prior to January 8, 1946)

Required Equipment In addition to the pertinent required basic equipment specified in CAR 4a, the
following items of equipment must be installed:
101, 102, 103, 104, 105, 106, 107, 108

Not eligible for original certification with single ignition engine after
August 1, 1941

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II. Model CP-65, 2-PCLM; CS-65, 2-PCSM

(CP-65 same as CP-55 except for engine installation)

Engine	Continental A-65-8 See Item 201(b) for optional engines		
Engine Limits	For all operations, 2300 rpm (65 hp)		
Airspeed Limits	Landplane:	Level flight or climb	102 mph (89 knots) True Ind.
		Glide or dive	138 mph (120 knots) True Ind.
	Seaplane:	Level flight or climb	97 mph (84 knots) True Ind.
		Glide or dive	135 mph (117 knots) True Ind.
Propeller Limits	Status rpm at maximum permissible throttle setting:		
	Landplane:	Not over 2165, no under 1860.	
		Diameter: not over 85 in., not under 68 in.	
	Seaplane:	Not over 1975, no under 1750.	
		Diameter: not over 76 in., not under 73 ¾ in.	
C.G. Range	Landplane:	(+10.5) to (+19.9)	
	Seaplane:	(+11.0) to (+18.7)	
Empty Weight	Landplane:	(+15.8) to (+16.4)	
	Seaplane:	(+14.5) to (+17.4) provided placard: "Solo from front seat only," otherwise none.	
	If empty weight C.G. falls within the given range, it is unnecessary to check critical forward and aft C.G. positions. This range is not valid for non-standard arrangements.		
Maximum Weight	Landplane:	1200 lbs.	
	Seaplane:	1325 lbs.	
No. of Seats	2 (+8 and +36)		
Maximum Baggage	40 lbs. (+52)		
Fuel Capacity	13 ½ gal (-16)		
Oil Capacity	1 gal (-31)		
Serial No. Eligible	Landplane:	651 and On	
	Seaplane:	981 and On (manufactured prior to January 8, 1946)	
Required Equipment	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed:		
	Landplane:	101, 102, 103, 104, 105, 106, 107, 108	
	Seaplane:	101, 102, 103, 104, 105, 151, 152, 153, 154	
		Not eligible for <u>original</u> certification with single ignition engine after August 1, 1941	

III. Model LP-65, 2-PCLM

(Same as CP-55 except for engine installation)

Engine	Continental O-145-B2 See Item 201(c) for optional engines
Engine Limits	For all operations, 2550 rpm (65 hp)
Airspeed Limits	Level flight or climb 102 mph (89 knots) True Ind. Glide or dive 138 mph (120 knots) True Ind.
Propeller Limits	Status rpm at maximum permissible throttle setting: Not over 2425, no under 2225. No additional tolerance permitted. Diameter: not over 87.6 in., not under 67 in.,
C.G. Range	(+10.5) to (+19.9)
Empty Weight	(+15.8) to (+16.4) If empty weight C.G. falls within this range, it is unnecessary to check critical forward and aft C.G. positions. This range is not valid for non-standard arrangements.
Maximum Weight	1200 lbs.
No. of Seats	2 (+8 and +36)
Maximum Baggage	40 lbs. (+52)
Fuel Capacity	13 ½ gal (-16)
Oil Capacity	1 gal (-37)
Serial No. Eligible	651 and On (manufactured prior to January 8, 1946)
Required Equipment	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed: 101, 102, 103, 104, 105, 106, 107, 108

IV. Model FP-65, 2-PCLM

(Same as CP-55 except for engine installation)

Engine	Franklin 4AC-176-82 See Item 201(d) for optional engines
Engine Limits	For all operations, 2200 rpm (65 hp)
Airspeed Limits	Level flight or climb 102 mph (89 knots) True Ind. Glide or dive 138 mph (120 knots) True Ind.
Propeller Limits	Static rpm at maximum permissible throttle setting: Not over 2190, no under 2075. No additional tolerance permitted. Diameter: not over 72 in., not under 69 in.,
C.G. Range	(+10.5) to (+19.9)
Empty Weight	(+15.8) to (+16.4) If empty weight C.G. falls within this range, it is unnecessary to check critical forward and aft C.G. positions. This range is not valid for non-standard arrangements.

IV. Model FP-65, 2-PCLM (cont'd)

Maximum Weight	1200 lbs.
No. of Seats	2 (+8 and +36)
Maximum Baggage	40 lbs. (+52)
Fuel Capacity	13 ½ gal (-16)
Oil Capacity	5 qts (-37)
Serial No. Eligible	651 and On (manufactured prior to January 8, 1946)
Required Equipment	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed: 101, 102, 103, 104, 105, 106, 107, 108

Specifications Pertinent to all Models

Datum	Wing leading edge
Leveling means	Top fuselage cross tubes on left hand side of airplane just aft of rear seat and just forward of instrument panel
Certification basis	Type Certificate No. 720 (CAR 4a requirements)
Export eligibility	Eligible for export to all countries subject to the provisions of MOP 2-4, except as follows: (a) Canada: Landplane: eligible Skiplane: not eligible. However, structure complies with Canadian requirements for ski installation with max ski height of 8 ½ in. and a max overhang of 1 15/16 in. to outer face of brake plane. Seaplane: max weight 1320 lbs
Equipment	A plus (+) or minus (-) sign preceding the weight of an item of equipment 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 (*). 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 an FAA monitored or approved quality control system, and therefore attention should be paid to the workmanship and conformity with pertinent data called for in this specification.

Propellers and Propeller Accessories

101.	Propeller – wood, fixed or adjusted pitch, with hub	
	CP series	16 lbs (-49)
	LP series	12 lbs (-50)
	FP series	11 lbs (-51)

Specifications Pertinent to all Models (cont'd)**Propellers and Propeller Accessories** (cont'd)

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|------|---|--------------|
| 109. | Propeller – Sensenich M74CK, fixed pitch metal | |
| | (a) Model M74CK (CP-65 landplane only) | 21 lbs (-49) |
| | Static rpm at maximum permissible throttle setting: | |
| | Not over 2165, no under 1860 | |
| | No additional tolerance permitted | |
| | Diameter: not over 74 in., not under 72 in. | |
| | (b) Model M74CK (LP-65 with Lycoming O-145-B1 engine) | 21 lbs (-50) |
| | Static rpm at maximum permissible throttle setting: | |
| | Not over 2425, no under 2225 | |
| | No additional tolerance permitted | |
| | Diameter: not over 72 in., not under 68 in. | |

Engine and Engine Accessories: Fuel and Oil System

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|------|----------------------------|-----------------------|
| 102. | Engine cowl | |
| | CP series | 9 lbs (-40) |
| | LP and FP series | 10 lbs (-36) |
| 103. | Two exhaust manifolds | |
| | CP series | 5 lbs (-35) |
| | LP and FP series | 4 lbs (-36) |
| 104. | Carburetor heating | |
| | CP series | 3 lbs (-40) |
| | LP and FP series | 3 lbs (-35) |
| 105. | Firewall – terneplate | 10 lbs (-22) |
| 201. | Engines | |
| | (a) Model CP-55 | |
| | (1) Continental A-50-7 | 10 lbs (-27) |
| | (b) Model CP-65 and CS-65 | |
| | (1) Continental A-65-7 | 10 lbs (-27) |
| | (2) Continental A-65-9 | +3 lbs (-27) |
| | (c) Model LP-65 | |
| | (1) Lycoming O-145-B1 | -11 lbs (-27) |
| | (d) Model FP-65 | |
| | (1) Franklin 4AC-176-B1 | -7 lbs (-27) |
| | (21) Franklin 4AC-176-B3 | Neglect weight change |
| 202. | Firewall – stainless steel | -5 lbs (-22) |
| 207. | Cabin heater | 1 lb (-28) |
| 210. | Engine primer | 1 lb (-11) |
| 220. | Cowl flaps | 2 lbs (-23) |

Landing Gear and Floats

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|------|--|---------------|
| 106. | 6.00.6 wheels | |
| | (a) Shinn 6C2 or 6C4 (Type I gear) | 7 lbs (+3) |
| | (b) Shinn 6C5 (Type II gear) | 7 lbs (-1) |
| | 107.2-ply tires and tubes | |
| | (c) Type I gear | 16 lbs (+3) |
| | (d) Type II gear | 16 lbs (-1) |
| 108. | Tail skid spring and shoe | 5 lbs (+193) |
| 151. | Edo 60-1320 floats and struts | 172 lbs (+16) |
| 153. | Water rudder control system | 3 lbs (+55) |
| 203. | Tail wheels | |
| | (a) 6x2.00 full swivel with special spring | +4 lbs (+195) |
| | (b) 6x2.00 steerable with special spring | +5 lbs (+195) |
| | (c) 3 3/8 solid rubber | +2 lbs (+195) |
| 209. | 4-ply tires and tubes | |
| | (a) Type I gear | +2 lbs (+3) |
| | (b) Type II gear | +2 lbs (-1) |
| 211. | Wheel streamlines | |
| | (a) Type I gear | 10 lbs (+6) |
| | (b) Type II gear | 10 lbs (+2) |

Specifications Pertinent to all Models (cont'd)**Landing Gear and Floats** (cont'd)

217.	Parking brake	1 lb (0)
218.	6.00.6 wheels with brakes	
	(a) Shinn 6C2HB or 6C4HB (Type I gear)	+7 lbs (+3)
	(b) Shinn 6C5HB (Type II gear)	+7 lbs (-1)
221.	Skis	use actual weight change
	(a) Federal SC-1	
	(b) Richards 1A	
	(c) Escanaba EAS-100	

Electrical Equipment

204.	Battery installation in engine compartment (reading 324L or 333L)	16 lbs (-29) 3 lbs (-15)
215.	Shielding	2 lbs (+60)
216.	Boating	2 lbs ea (+5)
219.	Landing light (wing leading edge) one or two	

Interior Equipment

206.	Rear instrument case with instruments	9 lbs (+22)
213.	Skylight	Neglect weight change
214.	Emergency exit	2 lbs (+21)

Miscellaneous (not listed above)

152.	Auxiliary seaplane fin (dwg. 1510)	3 lbs (+169)
154.	Seaplane structural changes noted in Change D, Dwg. A-658: Change A, Dwg. 1201, Note 7 Dwg. 1200: Change J, Dwg. 1506 and Dwg. 1712	
205.	Stainless metal striping	3 lbs (+45)

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).

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