

SERVICE

MEMO

Service Memo No. 45

GENERAL SPECIFICATIONS (Commercial Models)

PIPER CUB SUPER CRUISER

A. T. C. No. 725-1

MODEL: J5C-100

TYPE: Three place, closed, land, high wing monoplane

ACCOMMODATION: Enclosed cabin with single seat forward and side-by-side seat behind; dual controls; rear control detachable; door on right side of cabin; baggage compartment (11 x 12 x 26) aft of rear seat; capacity - 41 lbs.

AIRFRAME SPECIFICATIONS:

Length Overall	22 ft. 6 in.	Rudder Area	6.76 sq. ft.
Height Overall	6 ft. 10 in.	Stabilizer Area	15.10 sq. ft.
Span	35 ft. 5.5 in.	Elevator Area	11.68 sq. ft.
Cord	63 in.	Empty Weight	860 lbs.
Wing Area (Incl. Ailerons)	179.3 sq. ft.	Useful Load	890 lbs.
Aileron Area	19.2 sq. ft.	Gross Weight	1550 lbs.
Fin Area	4.70 sq. ft.	Wing Loading	8.64 lbs. per sq. ft.
		Power Loading	15.5 lbs. per H.P.

POWER PLANT: One Lycoming O-235-2, four cylinder horizontally opposed air cooled engine completely enclosed in hinged cowling, 100 h.p. at sea level; fuel capacity - 20 US gals. (also available with 38 US gals.); oil capacity - 2 gals.; fuel consumption - 8 gals. per hour at cruising; propeller - Sensenich, wood, fixed, diameter - 74 inches.

PERFORMANCE: Top speed - 110 mph. at 3000 ft.; cruising speed - 95 mph. at 3000 ft.; landing speed (stalling) - 45 mph., climb at sea level - 650 ft. per min.; service ceiling - 16,000 ft.; normal range - (38 gals. - 431 miles) 20 gals. - 238 miles; gliding ratio 9 to 1.

CONSTRUCTION: Wings: USA 35B mod. airfoil section; wood spars, nicral ribs, wood tip bow, aluminum leading edge, fabric covered, strut braced.

Fuselage: Warren truss, 4 steel tube longerons, fabric covered.

Tail surfaces: Steel tube structure, fabric covered.

Landing gear: Fixed divided type. Two side vees and half-axles hinged to cabane enclosed in fuselage, rubber shock cords.
Tread - 74.5 in., Hayes wheels - 841 (8.00 x 4 tires):
hydraulic expander tube brakes.

Tail Unit: Three leaf spring, steerable wheel.