

Control surface movements (measured from surface chord line)	Rudder	Left 28° + or -2°	Right 28° + or -2°
	Elevator	Up 15° + 2° -0°	Down 20° + 2° -0°
	Elevator tab	Up 7.5° + 2.5° -0°	Down 21° + 2° -0°
	Aileron	Up 30° + 3° -0°	Down 20° + 3° -0°
	Rudder Tab	Left 30° + or -2°	Right 30° + or -2°

Manufacturer's Serial
Numbers 2, 3, 4, 5, 7, 9, 11, 12, 13

II - Model TSC-1A1, 2PCAmM (Normal Category), Approved 23 September 1971

Engine	Lycoming O-320-A3B (Carburetor setting 10-3678-32)		
Fuel	80/87 minimum grade aviation gasoline		
Engine limits	For all operations, 2700 r.p.m. (150 hp.)		
Propeller and propeller limits	Hartzell Model HC-C2YL-1B/7663-4 2 bladed metal Pitch setting at 30 in. station: Low 12° High 27.5° Diameter: Maximum 72" minimum 70"; no further reduction permitted Governor: Hartzell F-2-6A		
Airspeed limits (CAS)	*Vne (Never exceed speed)	123 mph (107 knots)	
	*Vno (Maximum structural cruising speed)	97 mph (84 knots)	
	*Va (Design maneuvering speed)	97 mph (84 knots)	
	Vlo (Maximum speed for landing gear operation)	100 mph (87 knots)	
	Vle (Maximum speed for landing gear extended)	123 mph (107 knots)	
	Side windows open	110 mph (96 knots)	
	*See NOTE 2.		
Center of Gravity (C.G.) range (Landing gear extended)	+103.5 to +107.8 at 2200 lb. +103.1 to +108.4 at 2100 lb. +102.3 to +109.7 at 1900 lb. or less Straight line variation between points given (Moment change due to landing gear retraction, plus 860 in.-lb.)		
Empty weight C.G. range	+110.2 to +112.7 When the empty weight C.G. falls within the range given, complete computations of critical fore and aft C.G. positions are unnecessary. Range is not valid for non-standard arrangements.		
Datum	Bow of airplane, Hull Sta. 0; located 91.5 in. forward of wing leading edge at side of hull.		
Leveling means	Entrance sill, left or right side.		
Maximum weight	2200 lb. for land operations 2100 lb. for water operations		
Number of seats	2 at (+71)		
Maximum baggage	230 lb. at (+96)		
Fuel capacity	46 gal. at (+103.0) 40.6 gal. usable (standard 2 tank system) 70.5 gal. at (+103) wing tanks (+118) hull tank, 64.6 gal. usable (3 tank system) (see NOTE 1 for data on system fuel and oil)		
Oil capacity	2 gal. at (+126) 6 qt. usable		
Control surface movements (measured from surface chord line)	Rudder	Left 28° + or -2°	Right 28° + or -2°
	Elevator	Up 15° + 2° -0°	Down 20° + 2° -0°
	Elevator tab	Up 7.5° + 2.5° -0°	Down 21° + 2° -0°
	Aileron	Up 30° + 3° -0°	Down 20° + 3° -0°
	Rudder tab	Left 30° + or -2°	Right 30° + or -2°
Manufacturer's Serial Numbers	1, 6, 8, 10, 14 through 21, 23		

III - Model TSC-1A2, 2PCAmM (Normal Category), Approved June 28, 1973

Engine	Lycoming O-320-A3B (Carburetor setting 10-3678-32)		
Fuel	80/87 minimum grade aviation gasoline		
Engine limits	For all operations, 2700 r.p.m. (150 hp.)		
Propeller and propeller limits	Hartzell Model HC-C2YL-1B/7663-4 2 bladed metal Pitch setting at 30 in. station: Low 12° High 27.5° Diameter: Maximum 72" minimum 70"; no further reduction permitted Governor: Hartzell F-2-6A		
Airspeed limits (CAS)	*Vne (Never exceed speed)	123 mph (107 knots)	
	*Vno (Maximum structural cruising speed)	97 mph (84 knots)	
	*Va (Design maneuvering speed)	97 mph (84 knots)	
	Vlo (Maximum speed for landing gear operation)	100 mph (87 knots)	
	Vle (Maximum speed for landing gear extended)	123 mph (107 knots)	
	Side windows open	110 mph (96 knots)	
	Vfe (Maximum speed for flaps extended)	90 mph (78 knots)	
	*See NOTE 2.		
Center of Gravity (C.G.) range (Landing gear extended)	+102.8 to +107.4 for all weights to 2200 pound max. gross weight (Moment change due to landing gear retraction, plus 860 in.-lb.)		
Empty weight C.G. range	+110.2 to +112.7 When the empty weight C.G. falls within the range given, complete computations of critical fore and aft C.G. positions are unnecessary. Range is not valid for non-standard arrangements.		
Datum	Bow of airplane, Hull Sta. 0; located 91.5 in. forward of wing leading edge at side of hull.		
Leveling means	Entrance sill, left or right side.		
Maximum weight	2200 lb. for land and water operations		
Number of seats	2 at (+71), 1 at (+96)		
Maximum baggage	230 lb. at (+96)		
Fuel capacity	46 gal. at (+103.0) 40.6 gal. usable (std 2 tank system) 70.5 gal. at (+103) wing tanks (+118) hull tank, 64.6 gal. usable (3 tank system) (see NOTE 1 for data on system fuel and oil)		
Oil capacity	2 gal. at (+126) 6 qt. usable		
Control surface movements (measured from surface chord line)_	Rudder	Left 28° + or -2°	Right 28° + or -2°
	Elevator	Up 21° + or -2°	Down 17° + or -2°
	Elevator tab	Up 16° + or -2°	Down 30° + or -2°
	Aileron	Up 30° + 3° -0°	Down 20° + 3° -0°
	Rudder tab	Left 30° + or -2°	Right 30° + or -2°
	Flap		Down 15° + 2° -0°
Manufacturer's Serial Numbers	22, 24 and subsequent, IFR operation approved per note 2 (a) (8).		
Certification basis	Federal Aviation Regulations Part 23, effective 1 February 1965 and Amendments 23-1 through 23-6.		
Production basis	None. Prior to original certification of each aircraft, 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.		
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required: Stall warning indicator installed per TAC drawing No. 1-6715		

- (b) On top surface of landing gear retraction mechanism housing:
"RAISE PIVOT TO LOWER GEAR IN WATER. LOWER PIVOT PRIOR TO WATER TAKE OFF."
- (c) On top surface of landing gear retraction mechanism housing:
"NOTE: IF GEAR IS INADVERTENTLY LOWERED IN FLIGHT WITH PIVOT UP, BLEED AIR CYLINDERS TO RETRACT GEAR."
- (d) On or adjacent to air cylinder:
"CAUTION"
"PRESSURIZED AIR CYLINDER. RELEASE PRESSURE BEFORE REMOVING.
AFTER INSTALLATION INFLATE TO 300 PSI WITH NITROGEN OR AIR WITH GEAR DOWN."
- (e) On or adjacent to baggage compartment:
"BAGGAGE LIMIT, 60 LB. WITH PILOT AND PASSENGER, 230 LB. WITH PILOT ONLY."
- (f) Adjacent to fuel filler cap:
"23.0 GALLON CAPACITY 80/87 OCTANE (WING TANKS)
24.5 GALLON CAPACITY 80/87 OCTANE (HULL TANK)."
- (g) Adjacent to fuel control valve:
"FUEL VALVE 20.3 GAL. USABLE (STANDARD 2 TANK SYSTEM)
FUEL VALVE 24 GAL. USABLE (SINGLE TANK AND 3 TANK SYSTEM)."
- (h) Such that horizontal bar on placard is 10.38 in. above side window sill.
"MAXIMUM WINDOW OPENING IN FLIGHT."
- (i) Adjacent to light switches on instrument panel:
"WARNING: TO AVOID OPTICAL ILLUSION AND SEVERE VERTIGO, TURN ANTI-COLLISION LIGHTS OFF UPON ENTERING CLOUDS, FOG OR HAZE."
- (j) Adjacent to cabin heater controls (Janitrol model B-1500, P/N 99C42):.
"WARNING: WAIT 2 MINUTES AFTER TURNING HEATER OFF BEFORE TURNING OFF HEATER MASTER SWITCH."
- (k) Beneath the left and right fuel quantity gages on the instrument panel:
"THE 2.7 GALLONS OF UNUSABLE FUEL IN EACH WING TANK WHEN QUANTITY INDICATOR READS ZERO CANNOT BE SAFELY USED IN FLIGHT."
- (l) On the selector valve plate for the three tank system (Model TSC-1A2 only):
"CAUTION: USE HULL FUEL FIRST"

In addition to the placards specified above, the prescribed operating limitations indicated by an asterisk (*) under Section I, II and III of this data sheet must also be displayed by permanent markings.

NOTE 3. None

NOTE 4. Model TSC-1A Type Certificate issued 28 August 1969 for a maximum gross weight of 1850 lb. Maximum gross weight of 1900 lb. approved 9 December 1969.

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