

MODELS: Ryan ST-A, 1 or 2 POLM

T.C. NUMBER: 571

Engine	Menasco Pirate C-4 (See also Item 202.)
Placard limits	Maximum, except take-off -- in.Hg., 2175 rpm (125 hp) Take-off (one minute) -- in.Hg., 2175 rpm (125 hp)
Propeller	Maximum permissible diameter 106 inches
Placard speeds	Level flight or climb - 125 mph True Ind. Glide or dive - 166 mph True Ind.
Fuel capacity	24 gallons (one tank in fuselage) (-10.5)
Cil capacity	2 or 2-1/2 gallons (-27)
No. passengers	1 (+14.5) (See NOTES 2 and 5.)
Baggage	40 lbs. (single compartment between cockpits) (+31) (See NOTE 2)
Standard weight	1600 lbs.
C.G. limits	(+11.0) and (+14.7) (Measured horizontally with engine bearers level) (See NOTE 6)
Specification basis	Approved Type Certificate No. 571
Serial numbers	103 and up manufactured prior to 7/24/41 eligible. Approval expired as of that date.

EQUIPMENT: (Datum is wing leading edge) (* Means net increase)

Class I:			
101.	Wheel streamlines (See NOTE 7)	15 lbs.	(+3)
102.	3 inch wheels (Goodyear 3MBA or 3LMBA) with brakes and 18x8-3 tires		(-2)

103.	(a) Front seat cushions	3 lbs.	(+14.5)
	(b) Rear seat cushions	3 lbs.	(+65)
104.	Wiring for position lights	1 lb.	
105.	8 inch streamline tail wheel		(+170)
106.	Partial span split trailing edge flaps manually operated		
107.	Elevator trailing edge tabs manually operated		
108.	Propeller - wood (eight bolt hub repaired)		(-62)

Class II:

201.	Radio	22 lbs.	
202.	Menasco D-4 engine (with down draft carburetor) (See Model ST-A drawing list for details of installation)	19 lbs.*	(-39)
203.	Carburetor air heater (Ryan Drawing 7-167)	4 lbs.	(-41)

Class III:

301.	Battery (in baggage compartment)	Maximum 40 lbs.	(+31)
302.	Wing landing lights	3 lbs.	
303.	Flap operating mechanism, lever type (replacing standard worn gear type)	No weight change	
304.	Parachutes - one or two	20 lbs. each	
305.	Dual instruments in front cockpit		(0)
306.	Cockpit enclosure	21 lbs.	(+39.5)
307.	Starter		
	(a) Electric (Eclipse Y-150) including cables	23 lbs.	(-21)
	(1) Bonding and shielding	3 lbs.	
	(2) Booster and solenoid		
	(b) Heywood pump	10 lbs.	(-21)
	tank and plumbing	24 lbs.	(+31)
308.	Dual controls (removable type)	4 lbs.	(-8)
309.	New type wheel streamlines	Net decrease 6 lbs.	(+3)

NOTE 1. Placard fuel selector valve as follows:

"Always take-off and land with fuel feeding from reserve."

NOTE 2. Single place type approved also. (Front seat and front seat controls removed; auxiliary 16-1/2 gallon fuel tank, 2-1/2 gallon oil tank, hand wobble pump 3 lbs., and additional baggage compartment over auxiliary fuel tank installed.) Net increase in weight 26 lbs. Baggage 53 lbs. (decrease 20 lbs. when parachute is carried).

NOTE 3. This model same as model ST (ATC 541) except for change in engine.

NOTE 4. Eligible for export as follows subject to inspection for equipment specified in Chapter XII of Inspection Handbook (2/15/38):

- (a) Canada
 - Landplane
 - Skiplane - not eligible.
- (b) All other countries.

NOTE 5. Placard front cockpit as follows:

"When operated as single place airplane, pilot must occupy rear seat."

NOTE 6. All aircraft also eligible with C.G. limits of (+11.0) and (+16.3) provided an elevator bungee is installed in accordance with Ryan Drawing SK-257, change C, and the elevator cables are adjusted to provide exactly 29 degrees up travel and approximately 26 degrees down travel.

NOTE 7. Item 101 is considered optional equipment which may be installed or removed, subject to inspection and check of C.G. limits.