

MACO JYM, 1 OR 3 POLE, 2-361

Engine Wright R-975 330 hp
 Fuel 97 gals.
 Oil 7-1/2 gals.
 No. passengers None or 2
 Baggage 75 lbs. (Pass. type)
 504 lbs. (Cargo type)
 Standard weight 3100 lbs.
 Spec. basis Aero. Bulletin 7A, Section 3
 Serial Nos. J-3185, 3001, D-3 and D-3
 eligible.
 Class I equipment: Starter; Adj. metal propeller.
 Class III equipment: Battery; Wing root fairing.

MACO KMF, 3 POLE, ATC 313

Engine Kinner K-6 100 hp
 Fuel 32 gals.
 Oil 3 gals.
 No. pass. 2
 Baggage 15 lbs.
 Standard weight 1938 lbs.
 Spec. basis Approved Type Certificate No. 313
 Serial Nos. 3223 and up mfrd. prior to 9-1-33
 eligible. Approval expired as of
 that date.
 Class I equipment: Starter (Keywood); Wood propeller;
 Tail wheel or skid.
 Class III equipment: Adj. metal propeller, net increase
 8 lbs.; Wheel streamlines 16 lbs.

MACO MHV, 3 POLE, ATC 333

Engine Menasco Pirate C-4 125 hp
 Fuel 32 gals.
 Oil 3 gals.
 No. pass. 2
 Baggage 15 lbs.
 Standard weight 1938 lbs.
 Spec. basis Approved Type Certificate No. 333
 Serial Nos. 3408 and up mfrd. prior to 9-30-39
 eligible. Approval expired as
 of that date.
 Class I equipment: Starter (Keywood); Adj. metal
 propeller; Tail wheel or skid.
 Class III equipment: Wood propeller, net decrease
 29 lbs.; Wheel streamlines 16 lbs.

5-20751

MACO OEC, 4 PCLB, ATC 468

Engine Kinner C-5 210 hp
Fuel 50 gals. (Two in center section at 25 gals.)
Oil 4 gals.
No. pass. 3
Baggage 57 lbs. (14 lbs. tools in compt. under rear seat. Compt. rear of rear passenger seat 43 lbs.)

Standard weight 2700 lbs.
Spec. basis Approved Type Certificate No. 468
Serial Nos. 3576 and up mfrd. prior to 4-1-34 eligible. Approval expired as of that date.

Class I equipment: Battery (Hot shot); Starter (Heywood); 8.50-10 wheels; Wood propeller; "Throw-over" or "Y" type control column.

Class III equipment: Propeller - adj. metal, net increase 37 lbs.; 40 gal. fuel capacity (2 in center section at 20 gals.); Wheel streamlines 18 lbs.; Metal wing root fairing 7 lbs.; Landing lights; Additional instruments; Flares - one minute parachute; Ambulance equipment 20 lbs.

NOTE 1. Serial No. 3620 eligible with fuel capacity of 66 gals. (Two at 25 gals. and extra 16 gal. tank in lower right wing). Weight including wobble pump 25 lbs.

MACO PBA, 2 PO-CLB, ATC 464

Engine Jacobs LA-1 170 hp
Fuel 40 gals. (2 in center section at 20 gals.)
Oil 4 gals.
No. pass. 1
Baggage 178 lbs. (Front compt. tools and baggage 142 lbs., rear compt. baggage 36 lbs.)

Standard weight 2250 lbs.
Spec. basis Approved Type Certificate No. 464
Serial Nos. 3586 and up mfrd. prior to 4-1-34 eligible. Approval expired as of that date.

Class I equipment: Engine ring cowl 11 lbs.; Battery (hot shot) 10 lbs.; Starter (Heywood); 7.50-10 wheels; Wood propeller.

Class III equipment: Adj. metal propeller, net increase 18 lbs.; Coupe top 20 lbs.; Landing lights; Flares; Wing root fairing.

MACO PBF, 5 POLB, ATC 491

Engine Jacobs LA-1 170 hp
Fuel 40 gals. (Two tanks in center section at 20 gals.)
Oil 4 gals.
No. pass. 2
Baggage 95 lbs. (Front 15 lbs., rear 80 lbs.)

Standard weight 2300 lbs.
Spec. basis Approved Type Certificate No. 491
Serial Nos. 3518 and up mfrd. prior to 9-1-34 eligible. Approval expired as of that date.

Equipment: (* Means net increase)

Class I: Engine ring cowl 12 lbs.; Battery (Hot shot) 10 lbs.; Starter (Heywood); 6.50-10 wheels with 8.50-10 tires; Tail skid; Fixed metal propeller; Wing spoilers on leading edge of upper wings.

Class II: Wood propeller, net decrease 11 lbs.
Class III: Adj. metal propeller, 20 lbs.; 10x3 or 8 in. streamline tail wheel; 7.50-10 tires.

MACO PCF, 3 PCLB, ATC 455

Engine Jacobs LA-1 170 hp
Fuel 40 gals.
Oil 4 gals.
Nos. pass. 2
Baggage 90 lbs. (Front cockpit 15 lbs. for tools, baggage compt. 75 lbs.)

Standard weight 2300 lbs.
Serial Nos. 3557 and up mfrd. prior to 10-15-33 eligible. Approval expired as of that date.

MACO PCF, (continued)

Equipment: (* Means net increase)
Class I: Engine ring cowl 11 lbs.; Battery (Hot shot) 10 lbs.; Starter (Heywood); 7.50-10 wheels; Propeller - wood.
Class III: Wheel streamlines 20 lbs.; Propeller - adj. metal 29 lbs.*

NOTE 1. Eligible for use in acrobatic stages of Civilian Pilot Training secondary course when operated in accordance with "Instructions for the Operation of Maco PCF in the acrobatic stages of the Civilian Pilot Training Program Secondary Course" issued by Civilian Pilot Training.

MACO PDC, 4 PCLB, 2-388

Engine Jacobs LA-1 170 hp
Fuel 40 gals.
Oil 4-1/4 gals.
No. pass. 3
Baggage 15 lbs.

Standard weight 2558 lbs.
Spec. basis Aero Bulletin 7A, Section 3
Serial Nos. 3512 only eligible
Class I equipment: Engine ring cowl 10 lbs.; Battery (Hot shot) 10 lbs.; Starter (Heywood); Seal-air-wheels (Warner); Propeller - adj. metal.
Class III equipment: Propeller - wood, net decrease 20 lbs.

MACO PLA, 2 PO-CLB, ATC 502

Engine Jacobs LA-1 170 hp
Fuel 40 gals. (Two 20 gal. tanks in center section)
Oil 4 gals.
No. pass. 1
Baggage 188 lbs. (Rear compt. 36 lbs.; Front compt. 150 lbs.)

Standard weight 2300 lbs.
Spec. basis Approved Type Certificate No. 502
Serial Nos. 3714 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

Equipment: (* Means net increase)

Class I: Propeller - wood; Engine ring cowl; Battery (Hot shot); Starter (Heywood); 6.50-10 wheels with 7.50-10 tires; 8 in. streamline tail wheel.
Class II: Extra 20 gal. fuselage fuel tank 18 lbs.; Coupe top 18 lbs.; Adj. metal propeller 16 lbs.*
Class III: Wheel streamlines 23 lbs.; Landing lights 11 lbs.; Bank of 6 flares 15 lbs.; Wing root fairing 7 lbs.

MACO PSO, 3 PCLB, ATC 339

Engine Jacobs LA-1 170 hp
Propeller Adj. metal
Fuel 63 gals.
Oil 6 gals.
No. pass. 2
Baggage None

Standard weight 2441 lbs.
Spec. basis Approved Type Certificate No. 339
Serial Nos. 3221 only eligible. Approval expired 7-1-32.

WACO QCF, 3 POL-SB, ATC 416

Engine Continental A-70 165 hp
 Fuel 40 gals.
 Oil 3-3/4 gals.
 No. pass. 2
 Baggage Landplane 90 lbs. (Includes tools 15 lbs.
 Seaplane 65 lbs.) and anchor 15 lbs.)
 Standard weight Landplane 2300 lbs.
 Seaplane 2380 lbs.
 Spec. basis Approved Type Certificate No. 416
 Serial Nos. Landplane 3453 and up mfrd. prior to 9-30-39
 eligible. Approval expired as of that
 date.
 Seaplane 3554 and up mfrd. prior to 9-30-39
 eligible. 3453 to 3553 eligible when
 fuselage members are changed to conform
 to serial No. 3554.

Equipment: (* Means net increase)

Class I; Engine ring cowl 11 lbs.; Battery (hot shot)
 10 lbs.; Starter (Heywood) 35 lbs.; Propeller - wood;
 6.50-10 or 7.50-10 wheels and tail wheel or skid
 (Landplane); Edo L-2260 floats (Seaplane).
 Class III; Propeller - adj. metal 29 lbs.*; Starter
 (electric) 19 lbs.*; Wheel streamlines 16 lbs.;
 Engine mount lengthened two inches; Skis - Federal
 SA-4, use actual weight.

NOTE 1. Eligible for use in acrobatic stages of Civilian
 Pilot Training secondary course when operated in ac-
 cordance with "Instructions for the Operation of
 Waco QCF in the acrobatic stages of the Civilian Pilot
 Training Program Secondary Course" issued by Civilian
 Pilot Training.

WACO QDC, 4 PCLB, ATC 412

Engine Continental A-70 165 hp
 Fuel 40 gals.
 Oil 4-1/4 gals.
 No. pass. 5
 Baggage 94 lbs. incl. tools 14 lbs.
 Standard weight 2652 lbs.
 Spec. basis Approved Type Certificate No. 412
 Serial Nos. 3454 and up mfrd. prior to 9-30-39
 eligible. Approval expired as of
 that date.

Equipment: (* Means net increase)

Class I; Propeller - wood; Engine ring cowl; Starter
 (Heywood); Battery (Hot shot)
 Class III; Propeller - adj. metal; Starter (Electric).

WACO Q80, 3 POLB, ATC 337

Engine Continental A-70 165 hp
 Fuel 63 gals.
 Oil 7 gals.
 No. pass. 2
 Baggage 60 lbs.
 Standard weight 2586 lbs.
 Spec. basis Approved Type Certificate No. 337
 Serial Nos. 3133 only eligible.

WACO RBA, 2 PO-CLB, ATC 466

Engine Warner Scarab 125 hp
 Fuel 40 gals. (Two 20 gal. tanks in center
 section)
 Oil 3-1/4 gals.
 No. pass. 1
 Baggage 131 lbs. (Front compt. 96 lbs. incl.
 7 lbs. tools, rear compt. 36 lbs.)
 Standard weight 1985 lbs.
 Spec. basis Approved Type Certificate No. 466
 Serial Nos. 3585 and up mfrd. prior to 4-1-34
 eligible. Approval expired as
 of that date.

Equipment: (* Means net increase)

Class I; Engine ring cowl 6 lbs.; Starter (Heywood);
 Battery (Hot shot); 6.50-10 wheels; Propeller - wood.
 Class III; Winter top 20 lbs.; Propeller - adj. metal
 9 lbs.*; Wheel streamlines 16 lbs.

WACO RNF, 3 POL-SB, ATC 311

Engine Warner Scarab 125 hp
 Fuel 32 gals.
 Oil 3 gals.
 No. pass. 2
 Baggage 15 lbs.
 Standard weight Landplane 1938 lbs.
 Seaplane 2226 lbs.
 Spec. basis Approved Type Certificate No. 311
 Serial Nos. Landplane 3222 and up mfrd. prior to
 9-30-39 eligible. Approval
 expired as of that date.
 Seaplane 3318, 3335 and up mfrd.
 prior to 9-30-39 eligible.
 Approval expired as of that
 date. (See NOTE 1)

Equipment: (* Means net increase)

Class I; Starter (Heywood); Propeller - wood;
 Tail skid; Edo L floats (seaplane).
 Class III; Propeller - adj. metal 15 lbs.* Engine
 ring cowl 17 lbs.; Wheel streamlines 16 lbs.;
 Edo 44-2425 floats (Use actual weight);
 Detachable engine mount, no change in weight;
 Bendix W4 "Army Type" adjustable rear seat
 (Dwgs. 9940, 9941 and 9942), no change in
 weight; Skis - Federal SA-4, use actual weight;
 Tail wheel.

NOTE 1. Seaplanes must have:

- Anchor carried in rear cockpit secured to Pilot's
 seat. (Weight of anchor 10 lbs., included in
 pay load.)
- Fairing strips above upper longerons out away
 to allow 3/4 inch additional negative stabilizer
 travel.
- Auxiliary fin attached to bottom of fuselage
 immediately below regular fin.

NOTE 2. Eligible for use in acrobatic stages of Civilian
 Pilot Training secondary course when operated in ac-
 cordance with "Instructions for the Operation of
 Waco RNF in the acrobatic stages of the Civilian Pilot
 Training Program Secondary Course" issued by Civilian
 Pilot Training.

WACO RNF, 3 POLB, 2-311

Engine Warner Scarab 125 hp
 Fuel 32 gals.
 Oil 4 gals.
 No. pass. 2
 Baggage 15 lbs.
 Standard weight 1900 lbs.
 Spec. basis Aero. Bulletin 7A, Section 3
 Serial Nos. 3258 and 3393 only eligible.

Equipment: (* Means net increase)

Class I; Airwheels; Tail wheel or skid; Starter
 (Heywood); Oil tank and lines installed with felt.
 Class III; Wheel streamlines 16 lbs.

WACO BSHD, 2 PCLB, TC 545

Engine P&W Wasp Jr. TB 420 hp
 Fuel 87 gals. (Two tanks - one 54 gal. in fuselage and one 33 gal. fuselage belly tank)
 Oil 8 gals.
 No. passengers 1
 Baggage 100 lbs.
 Standard weight 3400 lbs.
 Spec. basis Type Certificate No. 545 (Aero. Bulletin 7A requirements)
 Serial Nos. 3814 and up eligible per NOTE A
 EQUIPMENT: (* Means net increase)
 Class I: Engine ring cowl 26 lbs.; Wheel streamlines 24 lbs.; Radio and shielding 36 lbs.; Landing lights 11 lbs.; Battery 42 lbs.; Three 1½ min. flares 17 lbs.; Starter 30 lbs.; Generator 26 lbs.; 6.50-10 wheels with 8.50-10 6-ply tires (Wheels must be placarded for these tires); Coupe top; 10.5 in. streamline tail wheel; Cockpit ventilator; propeller - adj. metal; Wing spoilers on upper wings.
 Class III: Instruments for rear cockpit 10 lbs.; Two 8 gal. wing fuel tanks (use actual weight); Cockpit heater.

NOTE A. Each aircraft manufactured after January 27, 1942, must, prior to original certification, satisfactorily pass:
 (a) An inspection for workmanship, materials and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished.
 (b) A final inspection of the completed aircraft.
 (c) A check of flight characteristics.

WACO BSHD-A, 2 PCLB, TC 561

Engine P&W Wasp Jr. TB
 Placard limits Maximum, except take-off -- in. Hg.,
 2200 rpm (420 hp)
 Take-off (one minute) -- in. Hg.,
 2200 rpm (420 hp)
 Placard speeds Level flight or climb 187 mph True Ind.
 Glide or dive 228 mph True Ind.
 Fuel 90 gals. (Two tanks - fuselage front
 56 gals. and fuselage belly 35 gals.)
 Oil 8 gals.
 No. pass. 1
 Baggage 150 lbs. (Aft of cockpit) (Pay load may be increased 40 lbs. for parachutes)
 Standard weight 3800 lbs.
 S.G. limits (-14.7) and (-3.9)
 Spec. basis Type Certificate No. 561 (Aero. Bulletin 7A requirements)
 Serial Nos. 3954 and up eligible per NOTE A
 EQUIPMENT: (Datum is most fwd. point of leading edge of lower wing) (* Means net increase)
 Class I.
 101. Engine ring cowl 36 lbs.
 102. Wheel streamlines 25 lbs.
 103. Radio 23 lbs.
 104. Landing lights 11 lbs.
 105. Battery - front of fuselage 42 lbs.
 106. Flares 17 lbs.
 107. Starter 30 lbs.
 108. Generator 26 lbs.
 109. Coupe top
 110. 6.50-10 wheels (Autofan model B) with 8.50-10 tires
 111. 10.5 in. streamline tail wheel (Goodyear)
 112. Propeller - adjustable metal
 Class II.
 200. Miscellaneous items as noted in approved weight and balance report.
 Class III.
 301. One or two extra 10 gal. fuel tanks in upper wings 10 lbs. each
 302. Thermocouples 5 lbs.

NOTE A. Each aircraft manufactured after January 27, 1942, must, prior to original certification, satisfactorily pass:
 (a) An inspection for workmanship, materials and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished.
 (b) A final inspection of the completed aircraft.
 (c) A check of flight characteristics.

WACO UBF, 2 FO-CLB, ATC 479

Engine Continental R-670 210 hp
 Fuel 40 gals. (Two 20 gal. tanks in center section)
 Oil 4 gals.
 No. pass. 1
 Baggage 165 lbs. (Rear compt. 36 lbs., front compt. 128 lbs.)
 Standard weight 2250 lbs. (See NOTE 1)
 Spec. basis Approved Type Certificate No. 479
 Serial Nos. 3585 and up mfrd. prior to 6-1-34 eligible. Approval expired as of that date.

Equipment: (* Means net increase)

Class I; Wood propeller; Engine ring cowl 12 lbs.; Battery (Hot shot); Starter (Heywood); 6.50-10 wheels.
 Class III; Adj. metal propeller 25 lbs.*; Coupe top 20 lbs.*; Wheel streamlines 18 lbs.; Landing Lights; Flares; Wing root fairing; Extra 20 gal. fuel tank installed above front baggage compt. 18 lbs.; Skis - Darling 4600 (Use actual weights)

NOTE 1. Standard weight of serial Nos. 3613 and up may be increased to 2300 lbs. provided:

- (a) Serial Nos. 3613 to 3631 have lower diagonal fuselage member in right side truss between stations 2 (firewall station) and 3 reinforced by .064 dural channel.
 (b) Serial Nos. 3632 and up have vertical member at station 2 (both sides) and above diagonal member increased from 7/8 x .035 to 7/8 x .049.

WACO UBF, 3 POL-SE, ATC 475

Engine Continental R-670 210 hp
 Fuel 40 gals. (Two 20 gal. tanks in center section)
 Oil 4 gals.
 No. pass. 2
 Baggage Landplane 65 lbs. } (See NOTE 1)
 Seaplane 77 lbs. }
 Standard weight Landplane 2300 lbs.
 Seaplane 2635 lbs.
 Spec. basis Approved Type Certificate No. 475
 Serial Nos. 3606 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

Equipment: (*Means net increase)

Class I;
 A. Landplane; Propeller - wood; Engine ring cowl 12 lbs.; Battery (Hot shot) 10 lbs.; Starter (Heywood); 7.50-10 wheels; Tail skid.
 B. Seaplane; Propeller - adj. metal; Engine ring cowl 12 lbs.; Battery (Hot shot) 10 lbs.; Starter (Heywood); Edo M-2665 floats and auxiliary fin.
 Class II: (Landplane and Seaplane) Battery 25 lbs.; (Seaplane) Extra 15 gal. fuselage fuel tank 14 lbs.
 Class III;
 A. Landplane; Landing lights 17 lbs.; Three 1 minute flares 9 lbs.; Wheel streamlines 20 lbs.; Propeller - adj. metal 25 lbs.*; Extra 15 gal. fuselage fuel tank 14 lbs.; 10x5 or 8 in. streamline tail wheel, no change in weights.
 B. Seaplane; None

NOTE 1. Seaplane pay load may be increased 60 lbs. for three parachutes. Seaplane baggage includes 20 lbs. for anchor and rope. Maximum capacities of baggage compartments:

Front compt.; Landplane 15 lbs., Seaplane 14 lbs.
 Rear compt.; Landplane 50 lbs., Seaplane 63 lbs.

WACO UBF (Continued)

NOTE 2. Serial No. 3618 eligible as 1 POLB with the following:

Fuel 70 gals. (Two 20 gal. center section tanks and two 15 gal. fuselage tanks)
 No. pass. None
 Baggage 140 lbs. (Front compt.)
 Standard weight 2300 lbs.
 Equipment; Engine ring cowl 12 lbs.; Radio 18 lbs.; Two "B" batteries and one "A" (wet) battery 41 lbs.;
 Three one-minute flares 8 lbs.; Starter (Heywood) Heater 3 lbs.; Adj. metal propeller.

NOTE 3. Eligible for use in acrobatic stages of Civilian Pilot Training secondary course when operated in accordance with "Instructions for the operation of Waco UBF in the acrobatic stages of the Civilian Pilot Training Program Secondary Course" issued by Civilian Pilot Training.

WACO UEC, 2-418I - SPECIFICATIONS PERTINENT TO ALL SERIAL NOS.:

Engine Continental R-670 210 hp
 Oil 5 gals.
 No. pass. 3
 Spec. basis Aero. Bulletin 7A, Section 3

II - SERIAL NO. 3636, 4 PCL-SB:

Fuel 70 gals. (One each in right and left upper wing at 25 gals. each and one right lower wing 20 gals.)
 Baggage Landplane 64 lbs. (14 lbs. tools in compt. under rear seat, 50 lbs. in compt. rear of rear passenger seat)
 Seaplane 89 lbs. (Incl. anchor and rope 35 lbs., baggage compt. 54 lbs.)
 Standard weight Landplane 2700 lbs.
 Seaplane 3250 lbs.

Equipment: Engine ring cowl; Starter (Heywood); Battery (Hot shot); (Seaplane) Edo P-3300 floats, wing spoilers on both upper wings extending from strut to tip, and auxiliary fin.

III - SERIAL NO. 3627, 4 PCSB:

Fuel 50 gals.
 Baggage 89 lbs. (incl. anchor, rope and tools 35 lbs.)
 Standard weight 3110 lbs.

Equipment: Engine ring cowl; Battery (Hot shot); Starter (Heywood); Propeller - adj. metal; Edo P-3300 floats; Wing spoilers as on serial No. 3636; Auxiliary fin beneath fuselage and two auxiliary fins on stabilizer.

IV - SERIAL NO. 3683, 4 PCSB:

Fuel 70 gals.
 Baggage 89 lbs. (incl. anchor, rope and tools 35 lbs.)
 Standard weight 3250 lbs.

Equipment: Landing lights 17 lbs.; Battery 26 lbs.; Flares 12 lbs.; Radio 27 lbs.; Wing root fairing 10 lbs.; Leather upholstery 15 lbs.; Engine ring cowl; Starter (Heywood); Propeller - adj. metal; Edo P-3300 floats; Wing spoilers as on serial No. 3636; Large tail plane.

V - SERIAL NO. 3644, 4 PCSB:

Fuel 70 gals.
 Baggage 54 lbs. (Rear of cabin)
 Standard weight 3250 lbs.

Equipment: Engine ring cowl; Starter (Heywood); Landing lights 17 lbs.; Battery 60 lbs.; Three 1-1/2 minute flares 12 lbs.; Heater; Propeller - adj. metal; Edo P-3300 floats; Wing spoilers as on serial No. 3636; Model UIC seaplane vertical tail surfaces.

WACO UEC, 4 PCLB, ATC 467

Engine Continental R-670 210 hp
 Fuel 50 gals. (One 25 gal. tank in each right and left upper wing)
 Oil 4 gals.
 No. pass. 3
 Baggage 64 lbs. (14 lbs. tools in compt. under rear seat, 50 lbs. in compt. rear of rear passenger seat)

Standard weight 2700 lbs.
 Spec. basis Approved Type Certificate No. 467
 Serial Nos. 3576 and up mfrd. prior to 4-1-34 eligible. Approval expired as of that date.

WACO UEC, (Continued)Equipment: (* Means net increase)

Class I: Engine ring cowl 12 lbs.; Battery (hot shot); Starter (Heywood); 6.50-10 wheels with 8.50-10 tires; Tail wheel; Propeller - wood.
 Class III: 70 gal. fuel capacity (Two 35 gal. wing tanks) 18 lbs.*; 5 gal. oil capacity, no change in weights; 40 gal. fuel capacity (Two 20 gal. tanks in center section), no change in weights; Wheel streamlines 18 lbs.; Metal wing root fairing 7 lbs.; Landing lights; Additional instruments; One-minute parachute flares; Ambulance equipment 20 lbs.; Propeller - adj. metal 25 lbs.*; Skis (Use actual weight) - Fairbanks MF-2.

WACO UIC, 4 PCL-SB, ATC 499

Engine Continental R-670 210 hp
 Fuel 50 gals. (Two 25 gal. tanks in wings)
 Oil 4 gals.
 No. pass. 3
 Baggage Landplane 100 lbs. (Incl. tools 14 lbs.)
 Seaplane 135 lbs. (incl. anchor and rope 20 lbs. and tools 15 lbs., 100 lbs. in rear baggage compt.)
 Standard weight Landplane 2800 lbs.
 Seaplane 3250 lbs.
 Spec. basis Approved Type Certificate No. 499
 Serial Nos. 3713 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

Equipment: (* Means net increase)Class I:

A. Landplane: Engine ring cowl; Starter (Heywood); Battery (Hot shot) 10 lbs.; Heater; Propeller - wood; 7.50-10 wheels and tires; 10x3 or 8 in. streamline tail wheel.
 B. Seaplane: Engine ring cowl; Starter (Heywood); Battery (Hot shot) 10 lbs.; Heater; Propeller - adj. metal; Edo P-3300 floats; Seaplane type fin (17.7 sq. ft.) and rudder (7.3 sq. ft.); Wing spoilers or vee shaped strips four ft. long attached to leading edge of both upper wings (inboard end of strips 12 in. inboard from interplane strut).

Class III:

A. Landplane: Propeller (a) Fixed metal 11 lbs.* or (b) Adj. metal 32 lbs.*; 70 gal. fuel and 5 gal. oil capacities 18 lbs.*; Wheel streamlines 23 lbs.; Wing root fairing ("o") 10 lbs.; Generator 26 lbs.; Air brake installation on interplane struts 10 lbs.; Battery 31 lbs.; Bank of five one-minute flares 13 lbs.; Landing lights 11 lbs.; Radio 30 lbs.; Litter 14 lbs.; Leather upholstery 15 lbs.; 6.50-10 wheels; Skis (Use actual weights); Federal SA-6 or Wash. 3600 Aircraft
 B. Seaplane: Propeller - fixed metal, net decrease 21 lbs.

WACO UKC, UKC-S, UKS-S, VKC, VKC-S, VKS-S; ATC 528

I - SPECIFICATIONS PERTINENT TO ALL MODELS:

Fuel	50 gals. (Two 25 gal. tanks in upper wings)
Oil	4 gals.
No. pass.	3 or 4 (See NOTE 3)
Baggage	Landplane 100 lbs. (incl. tools 14 lbs.)
(See NOTE 3)	Seaplane 109 lbs. (incl. anchor, rope and tools carried under passenger seats: 35 lbs. with P-3500 floats and 25 lbs. with 38-3430 floats)
Standard weight	Landplane 2850 lbs. (Serials 3838 to 3855)
	3000 lbs. (Serials 3856 and up)
	(See NOTE 4)
	3250 lbs. (See NOTE 4)
	Seaplane 3250 lbs.
C.G. limits	Landplane (-14.4) and (-2.4)
	Seaplane (-12.7) and (-3.7)
Serial Nos.	3838 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

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

Class I:	
A. Landplane	
101. Engine ring cowl	23 lbs.
102. Starter (Haywood)	
103. Heater	
104. Battery	10 lbs.
105. 8 in. streamline tail wheel	
106. 6.50-10 wheels (Autofan) with 7.50-10 tires (Wheels must be placarded for these tires)	
107. Wing root fairing	
108. Propeller - wood	42 lbs.
B. Seaplane: Items 101 to 104 and 107 PLUS	
151. Edo P-3500 or 38-3430 floats with water rudders	
152. Seaplane type fins (upper per Dwg. 19261 and fin underneath fuselage per Dwg. 19262) and rudder per Dwg. 19484	
153. Air brakes	10 lbs.
154. Propeller - adj. metal	
Class II:	
200. Miscellaneous items as noted in approved weight and balance report.	
201. Miscellaneous radio equipment (in excess of item 316)	
202. Ambulance equipment (litter)	12 lbs.
Class III:	
301. Landing lights (Grimes retractable)	11 lbs.
302. Wheel streamlines	24 lbs.
303. Propeller	
(a) Adj. metal	29 to 37 lbs.* (-79)
(b) Fixed metal	10 lbs.* (-79)
304. Flares (a) Three 1½ minute	17 lbs. (+70)
(b) Five 1 minute	13 lbs. (+70)
305. Fuel tank installations	
(a) 70 gal. capacity (One 35 gal. tank in each upper wing)	18 lbs.*
(b) 100 gal. capacity (Landplane only) (One 35 gal. tank in each upper wing and one 15 gal. tank in each lower wing)	53 lbs.*
306. 5 or 6½ gal. oil tank	No change in weight
307. Shielding	11 lbs.
308. Air brakes (flaps)	10 lbs.
309. Misc. extra instruments	
310. Engine crankcase cooling disc (mounted on fwd. part of engine crankcase)	3 lbs.
311. Paint (a) Black and vermilion (over gunmetal grey, aluminum or blue)	30 lbs.*
(b) White and French grey (over gunmetal grey, aluminum or blue)	45 lbs.*
312. 7.50-10 cactus proof tubes	10 lbs.
313. Tail wheel lock	
314. Extra door and wing walk	16 lbs.
315. "R" type control column	5 lbs.*
316. Radio (30 lbs. provided C.G. of installation is between rear seat and instrument board).	

5-21314

WACO UKC, etc. (Continued)

NOTE 1. Eligible for export as follows, subject to inspection for equipment specified in Chapter XII of Inspection Handbook: (April 7, 1937)

- (a) Canada - Landplane
Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation when special landing gear per Waco Dwg. 20496 and 20497 is installed.
Seaplane - serial Nos. 4265 and up.
Maximum standard weight 3250 lbs.
Amphibian - not eligible.
- (b) Great Britain provided wing spar root fittings are reinforced, upper and lower wing rear spar reinforcement extended and the rear interplane struts increased in size in accordance with approved technical data (Mfr's. affidavit required.)
- (c) All other countries except Australia.

NOTE 2. All airplanes eligible as amphibian type provided weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, is submitted for each aircraft with original inspector's report and each subsequent report covering changes in such equipment.

Standard weight 3500 lbs.

C.G. limits (-9.0) and (-4.5)

Class I equipment: Seaplane type fins (upper per Dwg. 19261 and fin underneath fuselage per Dwg. 19262) and rudder per Dwg. 19484; Edo 49-3800 floats; Other equipment included in weight and balance report.

NOTE 3. Five-place airplanes must have:

- (a) Additional safety belt installed on rear passenger seat.

- (b) Baggage capacity reduced to 75 lbs. unless actual weight and balance shows a lesser restriction necessary.

NOTE 4. Serial Nos. 3856 and up eligible at standard weight of 3250 lbs. with the following:

- (a) Landing gear per Waco Dwg. 20497 and structural changes outlined in pages 8 and 9 of Waco Report 385. (These changes incorporated at factory on serial Nos. 4268 and up.)

- (b) (1) Wing spoilers or
(2) Large size UMF vertical tail surfaces (rudder height 58-9/16 in.)

NOTE 5. Yearly models:

1934 UKC or VKC

1935 UKC-S or VKC-S

1936 UKS-6 or VKS-6

In the case of the 1936 designation:

First letter shows engine

Second letter shows wing

Third letter shows type

Number indicates year.

II - MODELS UKC, UKC-S, UKS-S, 4 OR 5 PCL-S-AmB;

Engine Continental R-670A (R-670, C, E or G)

Placard limits Maximum, except take-off

-- in. Hg., 2000 rpm (210 hp)

Take-off (one minute)

-- in. Hg., 2000 rpm (210 hp)

III - MODELS VKC, VKC-S, VKS-S, 4 OR 5 PCL-S-AmB;

Engine Continental R-670B (R-670D, F or H)

Placard limits Maximum, except take-off

-- in. Hg., 2000 rpm (225 hp)

Take-off (one minute)

-- in. Hg., 2000 rpm (225 hp)

5-21314

WACO UMF, 5 PCLE, ATC 546

Engine	Continental R-670 210 hp
Fuel	50 gals. (Two 25 gal. tanks in center section)
Oil	4 gals.
No. pass.	2
Baggage	98 lbs. (Front 25 lbs., rear 75 lbs.)
Standard weight	2500 lbs.
Spec. basis	Approved Type Certificate No. 546
Serial Nos.	5836 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

Equipment: (* Means net increase)

Class I: Engine ring cowl 25 lbs.; Battery (Hot shot) 10 lbs.; Starter (Electric or Heywood) 30 lbs.; 6.50-10 wheels with 7.50-10 tires (Wheels must be placarded for these tires); 8 in. streamline tail wheel or skid; Propeller - wooden 42 lbs.

Class III: Wheel streamlines 24 lbs.; Radio: (Lear) 28 lbs. or (Westport) 30 lbs.; Shielding 6 lbs.; Landing lights 11 lbs.; Battery 42 lbs.; Three 1½ minute or five 1 minute flares 17 lbs.; Starter (Hand inertia) 20 lbs.; Propeller - adj. metal 37 lbs.*; 12½ gal. fuel tank in wing (use actual weight); Leather upholstery; Misc. equipment such as Sperry Gyro 7 lbs. and Horizon 8 lbs.; Cockpit heater; 15 gal. fuel tank in fwd. part of the fuselage 10 lbs.; Engine crankcase cooling disc (mounted on fwd. part of engine crankcase), 3 lbs.

NOTE 1. Eligible for use in acrobatic stages of Civilian Pilot Training secondary course when operated in accordance with "Instructions for the Operation of Waco UMF in the acrobatic stages of the Civilian Pilot Training Program Secondary Course" issued by Civilian Pilot Training.

WACO UOC, 5 PCLE, ATC No. 568

Engine	Continental R-670A or R-670B
Placard limits	Maximum, except take-off
(R-670A)	-- in. Hg., 2000 rpm (210 hp) Take-off (one minute) -- in. Hg., 2000 rpm (210 hp)
(R-670B)	Maximum, except take-off -- in. Hg., 2000 rpm (225 hp) Take-off (one minute) -- in. Hg., 2000 rpm (225 hp)
Placard speeds	Level flight or climb 158 mph Ind. Glide or dive 214 mph Ind. Flaps extended 112 mph Ind.
Fuel Capacity	50 gals. (Two tanks - one in each upper wing at 25 gals.)
Oil capacity	4 gals.
No. passengers	4 maximum (See NOTE 3)
Baggage	100 lbs. (compartment aft of cabin) (See NOTE 3)
Standard weight	3100 lbs. (Maximum 3350 lbs.) (See NOTE 1)
C.G. limits	(-19.7) and (-7.1)
Specification basis	Approved Type Certificate No. 568
Serial Nos.	3951 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

EQUIPMENT: (Datum is lower wing leading edge) (* Denotes net increase)**Class I.**

101.	Engine ring cowl	
102.	Battery and box (under rear seat)	40 lbs.
103.	Starter (direct electric)	21 lbs.
104.	Generator	12 lbs.
105.	6.50-10 wheels with 7.50-10 4-ply tires (See NOTE 1)	
106.	10.5 inch streamline tail wheel	
107.	Throw-over type control column	
108.	Upper wing flaps - electrically or vacuum operated	
109.	Propeller - wood	46 lbs.

Class II

201.	Miscellaneous items as noted in approved weight and balance report.
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WACO UOC (Continued)**Class III.**

301.	Extra fuel capacity	
(a)	70 gals. (Two tanks at 35 gals. each) and 5 gal. oil capacity	10 lbs.*
(b)	95 gals. (Two tanks at 47½ gals. each) and 6½ gal. oil capacity	18 lbs.*
302.	Landing lights	11 lbs.*
303.	Flares (Three 1½ minute electric)	17 lbs.*
304.	Leather upholstery	7 lbs.*
305.	Litter installation	14 lbs.*
306.	Radio equipment (Installed between firewall and under rear seat) and engine shielding	45 lbs.
307.	Special paint	
308.	Miscellaneous extra instruments	
309.	Propellers	
(a)	Fixed metal (Curtiss 55501)	51 lbs.
(b)	Adjustable metal	78 lbs.
(c)	Controllable metal (Ham. Std., 2B20 hub, 6109 or 6135 series blades)	105 lbs.
(d)	Eclipse automatic metal	125 lbs.
310.	"Y" type control column	4 lbs.*
311.	Aileron tab installation	No change in weight
312.	Large elevators (Dwg. No. 32305)	No change in weight
313.	Heater and ventilator	
314.	Wheel streamlines	24 lbs.*
315.	Extra door and wing walk	16 lbs.*
316.	6.50-10 4-ply tires (See NOTE 1)	8 lbs.*
317.	Ski type landing gear (Waco Dwg. No. 30245)	No change in weight

NOTE 1. (a) Maximum standard weight with 6.50-10 wheels and 7.50-10 4-ply tires is 3100 lbs. Maximum standard weight with 6.50-10 wheels and 8.50-10 4-ply tires is 3350 lbs. (Wheels must be placarded for tires as noted)

(b) Maximum standard weight with wood or adjustable metal propeller is 3200 lbs. Maximum standard weight with controllable or automatic metal propeller is 3350 lbs.

NOTE 2. Eligible for export as follows, subject to inspection for equipment specified in Chapter XII of Inspection Handbook; (January 10, 1939)

(a) Canada - Landplane

Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation when item 317 is installed.

(b) All other countries except Great Britain and Australia.

NOTE 3. 5-place airplanes must have;

(a) Additional safety belt installed on rear seat.

(b) Baggage compartment placarded as follows unless actual weight and balance shows a lesser restriction necessary: "Maximum allowable 100 lbs. Maximum with 3 passengers on rear seat 0 lbs."

5-21399

WACO YKC, YKC-S, YKS-6, ZKS-6 4 or 5 PCL-SB; ATC 533

I - SPECIFICATIONS PERTINENT TO ALL MODELS:

Fuel capacity	50 gals. (Two 25 gal. tanks in upper wings) (-11) (See item 306)
Oil capacity	5 gals. (-44) (See item 307)
No. pass.	2, 3 or 4 (Front -2.5, rear +27) (See NOTE 2)
Baggage	100 lbs. (+49)
Standard weight	Landplane 2850 lbs.) 3000 lbs.) (See NOTE 3) 3250 lbs.) Seaplane 3250 lbs.
C.G. limits	Landplane (-14.4) and (-2.4) Seaplane (-12.7) and (-3.7)
Spec. basis	Approved Type Certificate No. 533
Serial Nos.	3873 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date. (See NOTE 4)
Equipment:	(Datum is lower wing leading edge) (* Means net increase)

Class I:

A. Landplane

101. Engine ring cowl	22 lbs.
102. Starter (direct electric)	20 lbs.
103. Generator	13 lbs.
104. Battery - ahead firewall	42 lbs.
105. Blue paint	
106. Leatherette upholstery	
107. 8 in. streamline tail wheel	(+181)
108. 6.50-10 wheel (Autofan) with 7.50-10 or 8.50-10 tires	(-24) (Wheels must be placarded for these tires)
109. Propeller - wood (fixed pitch)	45 lbs. (-79.5)
110. "Throwover" type control column	
B. Seaplane; Items 101, 104, 109 and 110 PLUS	
151. Edo P-3300 or 35-3430 floats	
152. Large vertical surfaces incl. extra fin underneath fuselage replacing tail wheel	
153. Starter	30 lbs.
154. Generator	10 lbs.
155. Heater	5 lbs. (-51)
156. Wing root fairing	

Class II:

200. Miscellaneous items as noted in approved weight and balance report	
201. Ambulance equipment (litter)	12 lbs. (+97)
202. Radio equipment	
(a) Lear radio compass	44 lbs. (+45)
(b) Transmitter (RCA AVT-7)	26 lbs. (+31)
203. Rear parachutes or parachute type seats	
204. Propeller -	
(a) (YKC, YKC-S, YKS-6) Ham. Std. hub 2B20, blades 6109A-8 to 6109A-16, incl., or 6135A-8 to 6135A-16, incl. Dia. 8' 6" max., 7' 7" min.	104 lbs.

Class III:

301. Landing lights (Grimes retractable)	11 lbs. (+7)
302. Radio equipment - maximum 30 lbs. provided C.G. of installation between (+12) and (+31)	
303. Flexible instrument panel	5 lbs. (-34)
304. Wheel streamlines	24 lbs. (-24)
305. Propeller -	
(a) Adj. pitch metal - Ham. Std.	37 lbs.* (-80)
(b) Fixed pitch metal-Curtiss 55501	9 lbs.* (-80)
306. Fuel capacities	
(a) 70 gal. (Two 35 gal. tanks in upper wings)	18 lbs.* (-11)
(b) 100 gal. (Two 35 gal. tanks in upper wings and two 15 gal. tanks in lower wings)	53 lbs.* (-11)
307. 4 or 6 1/2 gal. oil tank	No change in weight
308. Flares (a) Three 1 1/2 minute	17 lbs. (+70)
(b) Five 1 minute	13 lbs. (+70)
309. Shielding	11 lbs. (-75)
310. Air brakes	10 lbs. (0)
311. Miscellaneous instruments	25 lbs. (-34)

WACO YKC, etc. (Continued)

312. Engine crankcase cooling disc (Mounted on fwd. part of engine crankcase)	5 lbs.
313. Paint	
(a) Gunmetal grey or aluminum	Net decrease 7 lbs. (+27)
(b) French grey	45 lbs. (+27)
314. (a) Heater	5 lbs. (-51)
(b) Ventilator	2 lbs.
315. 7.50-10 cactus proof tubes	10 lbs. (-24)
316. Tail wheel lock	(+87)
317. Extra door and wing walk	16 lbs. (+19)
318. Lux remote fire extinguisher	19 lbs. (+12) or (-48)
319. "Y" type control column	
320. Generator (Eclipse LV-180)	18 lbs.
321. Baggage compt. and door	3 lbs. (+54)
322. Front parachutes or parachute type seats	
323. Oil cooler (Required for model ZKS-6)	
324. Skis	Use actual weight
(a) Washington Aircraft 3600	
(b) Federal 8A-6	

NOTE 1. Eligible for export as follows subject to inspection for equipment specified in Chapter XII of Inspection Handbook: (9-30-39)

(a) Canada - Landplane

Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation when special landing bear per Waco Dwg. 20496 and 20497 is installed.

Seaplane - Serial Nos. 4266 and up eligible. Maximum standard weight 3250 lbs.

(b) Great Britain provided wing spar root fittings are reinforced, upper and lower wing rear spar reinforcement extended and the rear interplane struts increased in size in accordance with approved technical data.

(c) Australia - Serial No. 4634 as landplane only. Others eligible upon receipt of mfrs. affidavit of conformity.

(d) All other countries.

NOTE 2. Five-place airplanes must have:

(a) Additional safety belt installed on rear passenger seat.
(b) Baggage capacity reduced to 70 lbs. unless actual weight and balance shows a lesser restriction necessary.

NOTE 3. (a) Landplanes serial Nos. 3873 to 3877, inclusive, and 3975 not equipped with spoilers are eligible with a maximum standard weight of 2850 lbs.

(b) Landplanes serial Nos. 5878 and up eligible with standard weight of 3000 lbs. These serial Nos. also eligible with standard weight of 3250 lbs. provided:
(1) Landing gear per Waco Dwg. 20497 is installed and structural changes outlined on pages 8 and 9 of Waco report 383 are made and (2) Wing spoilers or model UMP vertical tail surfaces are installed.

NOTE 4. Seaplanes serial Nos. 3873 to 3877, inclusive, and 3975 must have wing spoilers installed in accordance with approved technical data.

NOTE 5. Yearly models: 1934 YKC or ZKS
1935 YKC-S or ZKS-S
1936 YKS-6 or ZKS-6

In the case of the 1936 designation:

First letter shows engine
Second letter shows wing
Third letter shows type
Number indicates year.

II - MODEL YKC, YKC-S and YKS-6:

Engine Jacobs L-4
Placard limits For all operations, 2000 rpm (225 hp)

III - MODEL ZKS-6:

(Same as model YKS-6 except engine and the following:

Item 323 must be installed.)

Engine Jacobs L-6
Placard limits Take-off and climb, 2000 rpm (285 hp)
For all other operations, 1910 rpm (250 hp)

Placard speeds Level flight or climb 140 mph True Ind.
Glide or dive 168 mph True Ind.

Placard fuel valves: 'BOTH TANKS SHOULD BE TURNED TO "ON" POSITION DURING TAKE-OFF, CLIMB AND LANDING OF THIS AIRPLANE.'

J-20153

WACO YKS-7 (ARMY UC-72K) and ZKS-7, TC 626

I - SPECIFICATIONS PERTINENT TO ALL MODELS:

Propeller	Max. permissible dia. 107 in. (for clearance)
Placard speeds	Level flight or climb 140 mph True Ind. Glide or dive 168 mph True Ind.
Fuel capacity	70 gals. (Two 35 gal. tanks in upper wings) (-11.5)
Oil capacity	5 gals. (-44)
No. pass.	4 (1 at -2.5, 3 at +27) (Crew at -2.5)
Baggage	100 lbs. (+45)
Standard wt.	Landplane 3250 lbs. Seaplane 3540 lbs.
C.G. limits	(Landplane) (-14.4) and (-2.5) (Seaplane) (-12.9) and (-3.7)
Cert. basis	Type Certificate No. 626 (Aero. Bulletin 7A requirements)
Prod. basis	None (See NOTE A)
Serial Nos.	4551 and up per NOTE A and all AAF Nos. of model UC-72K
EQUIPMENT:	(Datum is lower wing leading edge) (*Denotes net increase)

Class I:

A. Landplane

101. Engine ring cowl	27 lbs.	
102. Starter (Eclipse E-80)	20 lbs.	(-51)
103. Generator		
(a) (Bosch LE70/12) (YKS-7) (See NOTE 3)	13 lbs.	(-54)
(b) (Eclipse LV-180) (ZKS-7) (See NOTE 3)	18 lbs.	(-54)
104. Battery (Reading ARL-11)	35 lbs.	(-44)
105. 7.50-10 wheels (Hayes 750M) with 8.50-10 tires		
106. 10x3 tail wheel		
107. Oil cooler		
108. Wheel cuffs		
109. Rototex upholstery		
110. Gunmetal gray paint		
111. Propeller - wood (fixed pitch) incl. hub		
(a) Model YKS-7	42 lbs.	
(b) Model ZKS-7	46 lbs.	

B. Seaplane: Items 101, 102, 103, 104, 107, 109, 110 and 111 PLUS

151. Edo model 38-3430 floats with water rudders)	335 lbs*
152. Seaplane type vertical tail surfaces replacing landplane type	

Class II:

200. Miscellaneous items as noted in approved weight and balance report.		
201. Large starter (Eclipse F-141)	10 lbs.*	(-53)
202. Large generator		
(a) (Eclipse D-2)	13 lbs.*	(YKS-7)
(b) (Eclipse LV-180)	8 lbs.*	(ZKS-7) (-54)
(c) (Eclipse G-2)	5 lbs.*	(YKS-7) (-54)
(d) (Eclipse G-2)	8 lbs.*	(YKS-7) (-54)
(e) (ZKS-7)	3 lbs.*	(ZKS-7) (-54)
203. Pressure fire extinguisher	(-36) or (+12)	
204. Oil heater	3 lbs.	
205. Leather upholstery	5 lbs. to 12 lbs.*	(+7)
206. Litter installation	25 lbs.*	(+97)
207. 100 gal. fuel capacity (two 15 gal. tanks in lower wings) and 6½ gal. oil capacity	35 lbs.*	
208. Propeller - Ham. Std. adj. metal		
(a) (YKS-7)	36 lbs.*	(-79)
(b) (ZKS-7)	32 lbs.*	(-79)
209. Rear parachutes or parachute type seats.		
210. Large battery (Exide)	7 lbs.*	(-44)
211. Propeller -		
(a) (YKS-7) Ham. Std. hub 2B20, blades 6109A-6 to 6109A-16, incl., or 6135A-6 to 6135A-16, incl. Dia. 8' 6" max., 7' 7" min.	104 lbs.	

Class III:

301. Wheel streamlines	21 lbs.	(-24)
302. Cactus proof tubes	10 lbs.*	(-28)
303. "Y" type control column (Inspector should specify type installed)	3 lbs.*	(-24)
304. Miscellaneous extra instruments and panel	25 lbs.	(-34)
305. Propeller - Fixed pitch metal (Curtiss 55501)		
(a) (YKS-7)	9 lbs.*	(-79)
(b) (ZKS-7)	5 lbs.*	(-79)

WACO YKS-7, etc. (Continued)

306. Flares (a) Three 1½ minute (b) Five 1 minute	17 lbs. (+70) 13 lbs. (+70)
307. Landing lights (Grimes retractable)	11 lbs. (+7)
308. Engine shielding	11 lbs. (-75)
309. Radio (Under rear passenger seat)	52 lbs. (+27)
310. Extra door and wing walk	16 lbs.* (+19)
311. Special paint	44 lbs.* (+27)
312. Tail wheel lock - neglect increase	
313. Cabin ventilators	3 lbs.*
314. Cabin heater	5 lbs.* (-51)
315. Soundproofing	
316. Air brakes	10 lbs.*
317. (a) Jacobs L-4M engine installation (magneto ignition)	15 lbs.* (YKS-7)
(b) Jacobs L-4MB engine installation (magneto and battery ignition)	8 lbs.* (YKS-7)
(c) Jacobs L-5M engine installation (magneto ignition)	15 lbs.* (ZKS-7)
(d) Jacobs L-5MB engine installation (magneto and battery ignition)	8 lbs.* (ZKS-7)
318. Front parachutes or parachute type seats.	
319. Wide type landing gear - tread 103½ in. (No weight change)	
320. Revised engine cowl (Dwg. 21987)	
321. Revised windshield	
322. Steerable tail wheel (Dwg. 23143)	Neglect wt. increase
323. Skis (Use actual weight)	
(a) Grab and Smith GS-1	
(b) Federal SC-6	

NOTE A. Each aircraft of Models YKS-7 and ZKS-7 manufactured after April 15, 1943, must, prior to original certification satisfactorily pass:

(a) An inspection for workmanship, materials and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished.

(b) A final inspection of the completed aircraft.

(c) A check of the flight characteristics.

NOTE 1. Same as YKS-6 or ZKS-6 (ATC 533) except wing fittings, landing gear moved forward 4 inches, fixed trim tab added to rudder, miscellaneous changes in fuselage and controls.

NOTE 2. Eligible for expert as follows subject to inspection for equipment specified in Chapter XII of Inspection Handbook:

(a) Canada - Landplane

Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation when equipped with special axle per Waco Dwg. No. 20243 and tread with skis is equivalent to that with wheels. Maximum ski height 13 in.

Seaplane - Maximum standard weight 3430 lbs.

(b) All other countries except Australia and New Zealand.

NOTE 3. Item 103 (a) or (b) may be removed when item

317 (a) or (c) is installed.

II - MODEL YKS-7 (UC-72X) DESIGNATION b PCL-SB

Engine Jacobs L-4

Placard limits For all operations, 2000 rpm (225 hp)

III - MODEL ZKS-7 DESIGNATION 5 PCL-SB

(Same as YKS-7 except engine. Empty weight approximately 35 lbs. greater than YKS-7)

Engine Jacobs L-5

Placard limits Take-off and climb, 2000 rpm (285 hp)

For all other operations, 1910 rpm (250 hp)



WACO YMF, 3 POL-SB, ATC 542

Engine Jacobs L-4 225 hp
 Fuel 50 gals. (Two 25 gal. tanks in center section)
 Oil 4 gals.
 No. pass. 2
 Baggage 100 lbs. (Front 25 lbs., rear 75 lbs.)
 Standard weight Landplane 2500 lbs.
 Seaplane 2750 lbs.
 C.G. Limits Seaplane (-11.9) and (-8.6)
 Spec. basis Approved type Certificate No. 542
 Serial Nos. 3944, 3945, 3957 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.
 Equipment: (Datum is lower wing leading edge) (* Means net increase)

Class I; Engine ring cowl 23 lbs.; Battery 42 lbs.; Starter (Heywood or electric) 30 lbs.; Generator 11 lbs.; 6.50-10 wheels with 7.50-10 tires (wheels must be placarded for these tires) and 8 in. streamline tail wheel or skid (landplane); Edo M-2665 floats with water rudders (seaplane); Propeller - wood 42 lbs.
 Class III; Wheel streamlines 24 lbs.; Landing lights 11 lbs.; Three 1½ minute or five 1 minute flares 17 lbs.; Radio (Lear) 26 lbs. or (Westport) 30 lbs.; Shielding 6 lbs.; Generator 15 lbs. *; Leather upholstery; Propeller - adj. metal 37 lbs.* or fixed metal (Curtiss 55501), use actual weight increase; 12½ gal. extra fuel tank in upper wing, use actual weight increase; Engine crankcase cooling disc (mounted on fwd. part of engine crankcase) 3 lbs.

NOTE 1. Deleted (December 17, 1945).

WACO YOC AND YOC-1, ATC 569**I - SPECIFICATIONS PERTINENT TO ALL MODELS**

Placard speeds Level flight or climb 168 mph True Ind.
 Glide or dive 214 mph True Ind.
 Flaps extended 112 mph True Ind.
 Fuel capacity 50 gals. (Two tanks - one in each upper wing at 25 gals.)
 Oil capacity 4 gals.
 No. passengers 4 maximum (See NOTE 3)
 Baggage 100 lbs. (Compartment aft of cabin) (See NOTE 3)
 Standard weight 3350 lbs. (See NOTE 2)
 C.G. limits (-19.7) and (-7.1)
 Specification basis Approved Type Certificate No. 569
 Serial Nos. 3951 and up mfrd. prior to 9-30-39 eligible. Approval expired as of that date.

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

Class I.

101. Engine ring cowl
 102. Battery and box (under rear seat) 40 lbs.
 103. Starter (direct electric) 21 lbs.
 104. Generator 12 lbs.
 105. 6.50-10 wheels with 7.50-10 4-ply tires
 106. 10.5 inch streamline tail wheel
 107. Throw-over type control column
 108. Upper wing flaps - electrically or vacuum operated
 109. Propeller - wood (Fixed pitch) 46 lbs.

Class II.

200. Miscellaneous items as noted in approved weight and balance report.

WACO YOC, etc. (Continued)**Class III.**

301. Extra fuel capacity
 (a) 70 gals. (Two tanks at 35 gals. each) and 5 gal. oil capacity 10 lbs.*
 (b) 95 gals. (Two tanks at 47-1/2 gals. each) and 6-1/4 gal. oil capacity 18 lbs.*
 302. Landing lights 11 lbs.*
 303. Flares (Three 1-1/2 minute electric) 17 lbs.*
 304. Leather upholstery 7 lbs.*
 305. Litter installation 14 lbs.*
 306. Radio equipment (installed between firewall and under rear seat) and engine shielding 45 lbs.
 307. Special paint
 308. Miscellaneous extra instruments
 309. Propellers
 (a) Fixed metal (Curtiss 55501) 51 lbs.
 (b) Adjustable metal 78 lbs.
 (c) Controllable metal (Ham. Std., 2B20 hub, 6109A-9, 6109A-10, 6135A-9 or 6135A-10 blades. Dia. 8'3-1/8" max; 8'-7/8" min.)
 Engine limits for Model YOC-1
 Take-off and climb, 2000 rpm (285 hp)
 For all other operations, 24 in. Hg., 2000 rpm (250 hp)
 310. "Y" type control column 4 lbs.*
 311. Aileron tab installation No change in weight
 312. Large elevators (Dwg. No. 32305) No change in weight
 313. Heater and ventilator
 314. Wheel streamlines 24 lbs.*
 315. Extra door and wing walk 16 lbs.*
 316. 8.50-10 4-ply tires 8 lbs.*
 317. Ski type landing gear (Dwg. No. 20245) No change in weight

NOTE 1. Eligible for export as follows, subject to inspection for equipment specified in Chapter XII of Inspection Handbook; (9-30-39)

(a) Canada - Landplane

Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation when item 317 is installed.

(b) All other countries except Great Britain and Australia.

NOTE 2. (a) Maximum standard weight YOC or YOC-1 with wood propeller is 3200 lbs.
 (b) Maximum standard weight YOC with adjustable metal or fixed metal propeller is 3200 lbs. Maximum standard weight YOC-1 with fixed metal propeller is 3350 lbs.
 (c) Maximum standard weight YOC or YOC-1 with controllable metal propeller is 3350 lbs.

NOTE 3. 5-place airplanes must have;

- (a) Additional safety belt installed on rear seat.
 (b) Baggage compartment placarded as follows unless actual weight and balance shows a lesser restriction necessary:
 "Maximum allowable 100 lbs.
 Maximum with 3 passengers on rear seat 0 lbs."

II - Model YOC Designation 5 PCLB (See NOTE 3)

Engine Jacobs L-4, L-4M, or L-4MB

Engine limits For all operations, 2000 rpm (225 hp)

III - Model YOC-1 Designation 5 PCLB (See NOTE 3)

(Same as model YOC except engine. YOC-1 approximately 20 lbs. heavier than model YOC)

Engine Jacobs L-5, L-5M, or L-5MB

Engine limits Take-off and climb, 2000 rpm (285 hp)

(See item 309c) For all other operations, 1910 rpm (250

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MACO YPF, YPF-6, YPF-7, ZPF-6, ZPF-7; ATC 586**Y - SPECIFICATIONS PERTINENT TO ALL MODELS;**

Placard speeds	Level flight or climb 158 mph True Ind. Glide or dive 214 mph True Ind.
Propeller	Maximum permissible diameter 99 in.
Fuel capacity	50 gals. (2 tanks in center section at 25 gals.) (-13)
Oil capacity	4 gals. (-50)
No. pass.	2 (-4)
Baggage	100 lbs. aft rear cockpit (+89) 25 lbs. fwd. of front cockpit (-23)
Standard weight	Landplane 2650 lbs. Seaplane 2880 lbs.
C.G. limits	Landplane (-12.6) and (-4.0) Seaplane (-14.2) and (-2.8)
Spec. basis	Approved Type Certificate No. 586
Serial Nos.	4250 and up (6 series) and 4650 and up (7 series) mfrd. prior to Feb. 28, 1941 eligible. Approval expired as of that date.

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

Class I.**A. Landplane**

101. Engine ring cowl (See NOTE 3)	28 lbs.
102. Starter (Eclipse E-80)	20 lbs.
103. Battery (Reading ARL-11)	35 lbs.
104. 6.50-10 (Hayes 850H) or 7.50-10 (Hayes 760M) wheels and 7.50-10 tires	
105. 10½ in. streamline tail wheel	
106. Generator	
(a) (Bosch LE-70/12R5) (Y series)	13 lbs. (-47)
(b) (Eclipse LV-180) (Z series)	18 lbs. (-47)
107. Propeller - fixed metal (Curtiss 55501)	55 lbs. (-77)
B. Seaplane (Z series only): Items 101, 102, 103, 106, and 107 PLUS	
151. Edo 45-2880 floats with water rudders	Approx. 237 lbs.*

Class II.

200. Misc. items as noted in approved weight and balance report.	
201. Misc. extra instruments	Maximum 25 lbs. (-21)
202. Propeller	
(a) Automatic metal (1) Y Series	74 lbs.*
(2) Z Series	70 lbs.*

Class III.

301. Wheel streamlines	(a) Pants 25 lbs. (-23) (b) Cuffs 4 lbs. (-23)
302. Landing lights (Grimes retractable)	11 lbs.*
303. Flares (three 1½ minute)	17 lbs.* (+100)
304. One or two extra 12½ gal. fuel tanks in upper wing	ea. 15 lbs.* (-13)
305. 4-3/4 gal. oil tank	No weight change
306. Misc. extra instruments	Max. 25 lbs. (+15)
307. Starter	(a) (Hand inertia) 2 lbs.* (-47) (b) (Eclipse F-141) 10 lbs.* (-47)
308. Generator	
(a) (Eclipse LV-180) (Y Series)	5 lbs.* (-47)
(b) (Eclipse G-2) (Y Series)	8 lbs.* (-47)
(Z Series)	3 lbs.* (-47)
(c) (Eclipse D-2) (Y Series)	13 lbs.* (-47)
(Z Series)	8 lbs.* (-47)
309. Shielding	11 lbs. (-60)
310. Adjustable single front seat	7 lbs.* (-4)
311. Front cockpit cover	6 lbs.* (-4)
312. 3.50-10 tires	5 lbs.* (-18)
313. Cactus proof tubes	10 lbs. (-18)
314. Coupe top	15 lbs.* (+42)
315. Propellers	
(a) Wood (Y Series) Net decrease	9 lbs.
(Z Series) Net decrease	12 lbs.
(b) Adjustable metal	
(Y Series)	27 lbs.*
(Z Series)	23 lbs.*

MACO YPF, ETC. (CONTINUED)

316. Special paint
317. Tail wheel lock
318. Parachutes or parachute type seats
319. Leather upholstery
320. Radio (Seaplane only) 70 lbs. provided C.G. of installation is between upper wing leading edge and baggage compartment

NOTE 1. Eligible for export as follows, subject to inspection for equipment specified in Chapter XIII of Inspection Handbook: (July 12, 1937)

- (a) Canada - Landplane
Skiplane - not eligible
Seaplane - not eligible
- (b) All other countries except Great Britain and Australia.

NOTE 2. 7 Series same as 6 Series except for brake system and miscellaneous structural changes. YPF-6 same as YPF.

NOTE 3. Model YPF-7, serial Nos. 5320 and up, also eligible with upper wing center section outout enlarged, upper wing dihedral eliminated, wide type landing gear (tread 100-3/4 in.), minor structural changes and without ring cowl (item 101).

NOTE 4. Models YPF-6 and ZPF-6 eligible for use in acrobatic stages of Civilian Pilot Training secondary course when operated in accordance with "Instructions for the operation of Maco YPF-6 (or ZPF-6) in the acrobatic stages of the Civilian Pilot Training Program Secondary Course" issued by Civilian Pilot Training.

II - MODELS YPF, YPF-6 AND YPF-7 DESIGNATION 3 POLB:

Engine Jacobs L-4, L-4M (magneto ignition) or L-4MB (magneto and battery ignition)

Placard limits Maximum, except take-off
-- in. Hg., 2000 rpm (225 hp)
Take-off (one minute)
-- in. Hg., 2000 rpm (225 hp)

III - MODELS ZPF-6 AND ZPF-7 DESIGNATION 3 POL-SB:

(Same as models YPF-6 and YPF-7 except engine installation. Empty weight approximately 35 lbs. greater)

Engine Jacobs L-5, L-5M (magneto ignition) or L-5MB (magneto and battery ignition)

Placard limits Maximum, except take-off
-- in. Hg., 2000 rpm (285 hp)
Take-off (one minute)
-- in. Hg., 2000 rpm (285 hp)

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WACO ZGC-7 (ARMY UC-72E), 5 PCLB, ATC 627

Engine	Jacobs L-5, L-5M (magneto ignition) or L-5MB (magneto and battery ignition)
Placard limits	For all operations, 2000 rpm (286 hp)
Propeller	Max. permissible dia. 103 in. (for clearance)
Placard speeds	Level flight or climb 158 mph True Ind. Glide or dive 214 mph True Ind. Flaps extended 100 mph True Ind.
Fuel capacity	70 gals. (Two tanks, one in each wing at 35 gals.) (-14)
Oil capacity	5 gals. (-50)
No. passengers	4 (Front (-13), rear (+22))
Baggage	(Passenger type) 100 lbs. (+52) (Cargo type) 800 lbs. (See Item 203)
Standard weight	3500 lbs. (Serial Nos. 4550 thru 4559) 3800 lbs. (Serial Nos. 4560 and up. Serial Nos. 4550 thru 4559 eli- gible upon receipt of manufac- turer's affidavit of conformity)
C.G. limits	(-18.9) and (-8.0)
Spec. basis	Approved Type Certificate No. 627
Serial Nos.	4550 and up mfrd. prior to 9-30-39 and all AAF Nos. eligible. Approval expired as of 9-30-39.

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

Class I.

101. Engine ring cowl	29 lbs.
102. Landing lights (Grimes retractable)	11 lbs.
103. Starter (direct-electric)	20 lbs.
104. Battery (Reading ARL-11)	35 lbs. (-59)
105. Heater and ventilator	
106. Wheel cuffs	
107. 7.50-10 wheels (Hayes 750M hyd.) with 7.50-10 tubes and 8.50-10 tires (Wheels must be placarded for these tires)	
108. 10.5 in. streamline tail wheel	
109. Throw-over type control column	
110. Generator (Eclipse LV-180)	18 lbs.
111. Standard paint (gunmetal gray)	
112. Oil cooler (Dwg. 20965)	
113. Propeller - fixed pitch metal (Curtiss 55501)	55 lbs. (-92)

Class II.

200. Misc. items as noted in approved weight and balance report.	
201. Air Corps type litter	25 lbs. (+72)
202. Parachute seats - rear	41 lbs. (+27)
203. Cargo type with cargo compt. and large baggage door (See NOTE 2)	36 lbs.*

Class III.

301. (a) 95 gal. fuel capacity (Two tanks at 47½ gals. each)	18 lbs.* (-14)
(b) Additional 25 gal. fuel tank installed under rear seat (including gage and wobble pump) (eligible as 4-place type only)	23 lbs. (+9)
302. 6 or 7½ gal. oil capacity	(-50)
303. Wheel streamlines	22 lbs. (-27)
304. (a) Leather upholstery	12 lbs. (0)
(b) Leather seats	5 lbs. (0)
305. Engine shielding	11 lbs. (-68)
306. Radio equipment	
(a) 94 lbs. provided C.G. of instal- lation is between (-19) and (+41) or	
(b) 56 lbs. between (-19) and (+52) and 38 lbs. between (-19) and (+25)	
307. Special paint	(+17)
(a) Aluminum	No weight change
(b) Blue	7 lbs.*
(c) Black	36 lbs.*
(d) Vermillion	40 lbs.*
(e) White	48 lbs.*
(f) French grey	51 lbs.*
308. Cactus-proof tubes	12 lbs.* (-27)
309. Misc. extra instruments	25 lbs. (-43)

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WACO ZGC-7 (Continued)

310. Pressure fire extinguisher	
(a) 15 lbs. (-45) or,	
(b) 19 lbs. (+7) (tank under rear seat)	
311. Tail wheel lock	Neglect weight increase
312. Flares (three 1½ min., elec.)	17 lbs. (+78)
313. Parachute seats - Front (Waco-Switlik)	30 lbs.* (-13)
314. Extra door and wing walk	16 lbs.* (+19)
315. "Y" type control column	4 lbs.* (-33)
316. Propeller	
(a) Wood (fixed pitch)	Net decrease 9 lbs. (-92)
(b) Ham. Std. hub 2B20, blades 6135A-9 or 6135A-10. Dia. 8'3-1/8" max., 8'7/8" min.	50 lbs.* (-92)
317. Large generator (Eclipse D-2)	26 lbs. (-55)
318. Large starter	(-55)
319. Large battery (Reading AR-9)	15 lbs.* (-59)
320. Vacuum pump	4 lbs. (-53)
321. Precision litter (Carried in baggage compt. as baggage)	25 lbs.
322. Skis	Use actual weight change
(a) Grab and Smith or Wien GS-1	

NOTE 1. Eligible for export as follows, subject to
inspection for equipment specified in Chapter XII of
Inspection Handbook: (9-30-39)

(a) Canada - Landplane

Skiplane - not eligible. However, struc-
ture complies with Canadian require-
ments for ski installation. Max. ski
height 14½ in., max. tread 97½ in.

(b) All other countries.

NOTE 2. Weight and balance report including list of
equipment included in certificated weight empty, and
loading instructions when necessary, must be submitted
for each cargo type aircraft with original inspector's
report and each subsequent report covering changes in
Class I or Class II equipment.

5. 30356

MACO ZVM-7, 4 PCLB, ATC 686

Engine	Jacobs L-5
Placard limits	Maximum, except take-off -- in. Hg., 2000 rpm (285 hp) Take-off (one minute) -- in. Hg., 2000 rpm (285 hp)
Propeller	Maximum permissible diameter 102 in.
Placard speeds	Level flight or climb 168 mph Ind. Glide or dive 214 mph Ind. Flaps extended 100 mph Ind.
Fuel capacity	70 gals. (2 tanks at 35 gals.) (-14)
Oil capacity	6 gals. (-60)
No. passengers	3
Baggage	100 lbs. (+52)
Standard weight	3650 lbs.
C.G. limits	(-13.3) and (-7.8)
Specification basis	Approved Type Certificate No. 686
Serial Nos.	4675 only eligible. Approval expired 9-30-39.

EQUIPMENT: (Datum is lower wing leading edge)
(* Denotes not increase)

Class I.

101. Engine ring cowl	29 lbs. (-77)
102. Starter (Eolipae E-80)	20 lbs. (-55)
103. Generator 18 or 21 lbs.	(-55)
104. Battery (Exide)	42 lbs. (-45)
105. Wheel streamlines (3)	36 lbs.
106. Landing lights	11 lbs. (-23)
107. Oil cooler	5 lbs.
108. Wing root and strut fairing	
109. Landing gear: (Hydraulic brakes)	
(a) Front - 6.50-10 wheel with 7.50-10 tire	
(b) Rear - 7.50-10 wheels with 8.50-10 tires	
(Wheels must be placarded for these tires)	
110. Propeller - Fixed metal (Curtiss Reed 55501)	51 lbs. (-82)
111. Carburetor heater	
112. Throw-over type control column	

Class II.

200. Miscellaneous items as noted in approved weight and balance report.	
201. 25 gal. fuel tank installation (under rear seat in 4 place type only)	25 lbs. (+9)
202. 7 1/2 gal. oil tank	Neglect increase
203. Litter (a) Air Corps type	26 lbs. (+72)
(b) Precision (carried as baggage in baggage compartment)	25 lbs.
204. Parachute seats (a) Rear	41 lbs.* (+27)
(b) Front	30 lbs.* (-13)
205. Extra door and wing walk	16 lbs.* (+19)
206. Larger battery (Reading AR-9)	8 lbs.* (-59)
207. Cargo type with cargo compartment and large baggage door (See NOTE 2)	
208. Tail wheel lock	Neglect increase
209. Cactus-proof tubes	12 lbs. (-27)
210. Vacuum pump	4 lbs. (-53)

Class III.

301. "Y" type control column	4 lbs.* (-33)
302. Additional instruments	40 lbs.* (-43)
303. Optional generator (25 amp.)	8 lbs.* (-55)
304. Optional starter	10 lbs.* (-55)
305. Engine shielding	11 lbs. (-75)
306. Pressure fire extinguisher	15 lbs. (-53)
307. Radio equipment	
(a) 28 lbs. provided that C.G. of installation is between (-43) and (-7.5)	
(b) 58 lbs. provided that C.G. of installation is between (-13.3) and (+25)	
308. Leather upholstery	10 lbs.* (0)
309. Flares (Three 1-1/2 min.)	17 lbs. (+79)
310. Special paint up to 46 lbs.* (+17)	
311. 95 gal. fuel tanks (Two-tanks at 47.5 gals.)	18 lbs.* (-14)

MACO ZVM-7 (Continued)

NOTE 1. Eligible for export as follows subject to inspection for equipment specified in Chapter XIII of Inspection Handbook: (June 21, 1938)

(a) Canada - Landplane

Skiplane - not eligible

(b) All other countries except Australia.

NOTE 2. Weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be submitted for each cargo type aircraft with original inspector's report and each subsequent report covering changes in Class I or Class II equipment.

WATERMAN W-1, 4 POLB, 2-325

Engine Kinner C-5 210 hp
 Fuel 68 gals.
 Oil 4½ gals.
 No. pass. 3
 Baggage None
 Standard weight 3269 lbs.
 Spec. basis Aero. Bulletin 7A, Section 3
 Serial Nos. 1 only eligible

WELCH OW5M (See HARTMANN OW5M)WELCH OW6M (See STEWART OW6M)WHITE NEW STANDARD D-25, 5 POLB, ATC 108

Engine Wright J-5 220 hp
 Propeller Adj. metal
 Fuel 62 gals.
 Oil 5 gals.
 No. pass. 4
 Baggage 130 lbs.
 Standard weight 3400 lbs.
 Spec. basis Approved Type Certificate No. 108
 Serial Nos. 1 to 157 eligible
 Class I equipment; Tail skid
 Class III equipment; Tail wheel, no change in weight;
 90 gal. fuel capacity, use actual weights.
 NOTE 1. The following placard must be placed on the
 instrument panel in full view of the pilot and on
 the airworthiness certificate: "INTENTIONAL SPINS
 PROHIBITED."

WHITE NEW STANDARD D-25, 5 POLB, 2-542

Engine Wright J-5 220 hp
 Propeller Adj. metal
 Fuel 62 gals.
 Oil 5 gals.
 No. pass. 4
 Baggage 130 lbs.
 Standard weight 3400 lbs.
 Spec. basis Aero. Bulletin 7A Section 3
 Serial Nos. All aircraft mfrd. by Ben Jones, Inc.
 between 6-1-35 and Feb. 1938, eligible
 Class I equipment; Tail skid
 Class III equipment; Tail wheel, no change in weight;
 90 gal. fuel capacity, use actual weights.
 NOTE 1. The following placard must be placed on the
 instrument panel in full view of the pilot and on
 the airworthiness certificate: "INTENTIONAL SPINS
 PROHIBITED."

WHITE NEW STANDARD D-25-A, 5 POLB, ATC 224

Engine Wright R-760 250 hp
 Fuel 62 gals.
 Oil 5 gals.
 No. pass. 4
 Baggage 30 lbs.
 Standard weight 3345 lbs.
 Spec. basis Approved Type Certificate No. 224
 Serial Nos. 1 to 205 eligible
 NOTE 1. The following placard must be placed on the
 instrument panel in full view of the pilot and on
 the airworthiness certificate: "INTENTIONAL SPINS
 PROHIBITED."

WHITE NEW STANDARD D-25-B, 1 POLB, 2-557

(Same as New Standard D-27, ATC 110, except engine
 installation and minor structural changes)

Engine Wright Whirlwind R-760E-1
 Placard limits For all operations, 2100 rpm (285 hp)
 Propeller Static rpm at maximum permissible
 throttle setting -
 not more than 1975
 not less than 1750
 Diameter - not more than 115 in.
 not less than 104.2 in.
 Placard speeds Level flight or climb 118 mph True Ind.
 Glide or dive 141 mph True Ind.
 Fuel capacity 62 gals. (Two tanks at 31 gals. in
 center section)(-10)
 Oil capacity 5 gals.

WHITE NEW STANDARD D-25-B (Continued)

No. pass. None
 Baggage None
 Standard weight 3400 lbs.
 C.G. limits (-5.6) and (-3.1)
 Spec. basis Aero. Bulletin 7A, Section 3
 Serial Nos. 159W, 162W, 165W, 166W and 167W
 only eligible
 EQUIPMENT: (Datum is leading edge of lower wing)
 (* Means not increase)

Class I.

101. Propeller - adj. metal (Ham. Std.
 blades AllCl-U, hub 5404) 90 lbs.
 102. Battery 36 lbs.
 103. Starter 20 lbs.
 104. Generator 20 lbs.
 105. 30x5 wheels (Sausedde) with
 36x8 6-ply tires
 106. 4 in. tail wheel (Variety) with
 12x4 tire

Class II.

200. Miscellaneous items as noted in approved
 weight and balance report.

Class III.

None

NOTE 1. The following placard must be placed on the
 instrument panel in full view of the pilot and on
 the airworthiness certificate: "INTENTIONAL SPINS
 PROHIBITED."

NOTE 2. Eligible for export as follows, subject to
 inspection for equipment specified in Chapter XII
 of Inspection Handbook; (September 17, 1942)

- (a) Canada - Landplane
 Skiplane - not eligible.
 (b) All other countries except Great Britain,
 Australia and New Zealand.

WHITTLESEY AVIAN MARK IV-M, 2 POLB, 2-176

Engine Cirrus Mark III 85 hp
 Propeller Wood or adj. metal
 Fuel 28 gals.
 Oil 2½ gals.
 No. pass. 1
 Baggage None
 Standard weight 1679 lbs.
 Spec. basis Aero. Bulletin 7A, Section 3
 Serial Nos. 100 to 110 eligible

ZENITH Z-6-A, 7 PCLB, 2-269

Engine	P & W Wasp C1 420 hp
Fuel	75 gals.
Oil	7 gals.
No. pass.	6
Baggage	None
Standard weight	4595 lbs.
Spec. basis	Aero. Bulletin 7A, Section 3
Serial Nos.	3 and up mfrd. prior to 7-1-40 eligible. Approval expired as of that date.

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