

MODELS: General Dynamics (Consolidated Vultee) (Barkley-Grow) T8P-1, 10 PCL-SM

T.C. NUMBER: ATC 662

Engines	2 P&W Wasp Jr. SB with one 4-1/2 N and one 9 N ¹ damper each
Fuel	80 minimum octane, 87 minimum octane for take-off
Placard limits	Maximum, except take-off (Sea Level) 34.5 in. Hg., 2200 rpm (400 hp) (Straight line manifold pressure variation with altitude to 5000 ft.) 53.5 in. Hg., 2200 rpm (400 hp)
	Take-off (one minute) 36.5 in. Hg., 2300 rpm (450 hp)
Placard speeds	Landplane: Level flight or climb - 209 mph True Ind. Glide or dive - 270 mph True Ind. Flaps extended - 117 mph True Ind. Seaplane: Level flight or climb - 193 mph True Ind. Glide or dive - 248 mph True Ind. Flaps extended - 117 mph True Ind.
Placard ceiling	Landplane - 0 ft. usable in standard air at 8750 lbs. with either engine inoperative and the inoperative propeller idling in high pitch Seaplane - 0 ft. usable in standard air at 9200 lbs. with either engine inoperative and the inoperative propeller idling in high pitch
Fuel capacity	156 gallons (two tanks in each wing)
Oil capacity	16 gallons (two tanks, 8 gallons each) (-163)
No. passengers	8 (2 at -15, 2 at -61, 2 at -94, 2 at -129) (crew at -168) (See NOTE 1)
Baggage	430 lbs. (Nose compartment 250 lbs. (-228); aft of cabin compartment 180 lbs. (+21) (includes anchor and line 30 lbs. and ladders 23 lbs. when carried)
Standard weight	Landplane - 8750 lbs. (See NOTES 3 and 4) Seaplane - 9200 lbs.
C.G. limits	Landplane (-137.2) and (-125.4)

Seaplane (-137.3) and (-127.2)
 MAC - 91.42 in. L.E. MAC (-154.4)
 Approved Type Certificate No. 662
 1 and up manufactured prior to 10/25/40 eligible.
 Approval expired that date due to sale to
 Vultee Aircraft, Inc. (now Consolidated-Vultee)

EQUIPMENT: (Datum is front face of the rear cabin bulkhead) (* Means net increase) (See NOTE 6)

Class I:

(a) Landplane

101.	Two engine ring cowls	51 lbs.	(-204)
102.	Two exhaust collector rings (including carburetor heaters)	110 lbs.	(-191)
103.	Two oil radiators (UAP 5")	21 lbs.	(-166)
104.	Two starters (Eclipse E-160)	71 lbs.	(-184)
105.	Generator (Eclipse D) 25 amp.	22 lbs.	(-191)
106.	Battery (Exide or Electric 6-XT-13-1)	65 lbs.	(-219)
107.	30x13-6 wheels (Goodyear 6HBM) with 6-ply heavy duty tires (27-1/2 lbs. air pressure) (Wheels must be placarded for this tire.)	148 lbs.	(-153)
108.	13.25 in. streamline tail wheel and 6-ply heavy duty tire (40 lbs. air pressure) (Wheel must be placarded for this tire and pressure.)	8 lbs.	(+136)
109.	Shock struts (Aerol SP-325 BG)	65 lbs.	(-153)
110.	Tail wheel shock strut (Warner Aero BG Drawing No. B-1200)	12 lbs.	(+134)
111.	Cabin heaters	20 lbs.	(-143)
112.	Flap control motor (Elec. Spec. HCA-2 .65 hp)	10 lbs.	(-74)
113.	Wheel fairings	47 lbs.	(-153)
114.	Two propellers - Hamilton Standard hubs 2D30, blades 6167A-6 to 6167A-8 inclusive. Wt. 2 propellers or 6106A-12 to 6101A-14 inclusive. Wt. 2 propellers Diameter 9'1/8" maximum, 8'9-3/4" minimum.	316 lbs.	(-219)
116.	Residual fuel and oil	326 lbs.	(-219)
116.	Residual fuel and oil	13 lbs.	(-140)

(b) Seaplane: Items 101 to 106, inclusive, 111, 112, 114 and 115 PLUS

151.	Edo 65-9225A float installation (including water rudders, struts and fairings)	1162 lbs.	(-130)
152.	Seaplane fittings	42 lbs.	(-107)
153.	Auxiliary fin (Drawing Y-160)	6 lbs.	(+136)

Class II:

200.	Miscellaneous items as noted in approved weight and balance report		
201.	Constant speed propeller controls installation	13 lbs.	(-192)
202.	Exhaust analyzer (Cambridge)	11 lbs.	(-175)
203.	Vacuum pumps (2) (Pesco Type B-A-1)	16 lbs.	(-194)
204.	Radio, variable. Structure has been substantiated as follows:		
	(a) In nose compartment	57 lbs.	(-230)
	(b) On floor under pilots' chair	40 lbs.	(-168)
	(c) On floor under co-pilot's chair	40 lbs.	(-168)
	(d) On fuselage roof	10 lbs.	(-123)
	(e) On instrument panel (controls)	17 lbs.	(-196)
	(f) Twin antenna	11 lbs.	(-32)
	(g) Single antenna	10 lbs.	(-123)
	(h) Bonding	26 lbs.	
205.	Miscellaneous instruments	10 lbs.	(-198)
206.	Two flares and brackets (3 min.)	50 lbs.	(+42) or (-217)
207.	Two landing lights (A & W, type A-7) and passing light	3 lbs.	(-161) or (-253)
208.	Pressure fire extinguisher (Richlux CO-2 -- 7-1/2 lb. charge)	29 lbs.	(-216)
209.	Toilet equipment	30 lbs.	(-5)
210.	Radio shielding	28 lbs.	(-196)
211.	30 gallon nacelle fuel tank (1 or 2)	21 lbs. each	(-133)
212.	Two oil radiators (UAP 6")	5 lbs.*	(-166)
213.	Battery (Exide 6PHM-13)	11 lbs.*	(-219)
214.	Three place divan	74 lbs.	(-104)
215.	Rear partition and doors	25 lbs.	(-46)
216.	Closet (clothing)	8 lbs.	(-24)

217. Food compartment 34 lbs. (-57)

Class III:

301. Shock struts
(a) Clev. Pneu. Tool Co. No. 7881 14 lbs.* (-153)
(b) Clev. Pneu. Tool Co. No. 7887 32 lbs.* (-153)
302. Pilots compartment hatch (Drawing 2-F-064) 3 lbs.* (-221)

NOTE 1. Serial Nos. 1 and 2 are eligible as 8-place aircraft only. Placard lavatory door for these serial numbers, "Not to be occupied during take-off or landing", unless otherwise substantiated by pertinent weight and balance report.

NOTE 2. Eligible for export as follows, subject to inspection for equipment specified in Chapter XII of Inspection Handbook: (10/25/40)

- (a) Canada
- Landplane
- Skiplane - not eligible. However, structure of serial numbers 3 and up complies with Canadian ski gear requirements when modified in accordance with Drawing LX-1731-D. Serial Nos. 4 and up incorporate these modifications. Cleveland shock strut No. 7881 (Item 301a) must be used with roll-on type skis and No. 7887 (Item 301b) must be used with streamline type.
Seaplane - maximum standard weight 9200 lbs.
(b) All other countries except Australia and Great Britain.

NOTE 3. Serial No. 1 eligible as landplane only at 8250 lbs. standard weight with the following:

- (a) Split flap under fuselage.
(b) Certain castings of aluminum alloy instead of magnesium alloy.
(c) Adjustable trim tabs on both rudders.
(d) C.G. limits (-137.2) and (-123.4).

NOTE 4. Serial No. 2 eligible as landplane only at 9250 lbs. standard weight. (C.G. limits (-137.2) and (-123.4). Serial No. 2 and up may have extensions on rudder and right aileron adjustable trim tabs.

NOTE 5. Placard one wing tank filler neck or cap: "87 minimum octane fuel only." Placard fuel tank selector valve to use this tank for take-off and landing.

NOTE 6. Weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be submitted for each aircraft with original inspector's report and each subsequent report covering change in such equipment.