

SPECIFICATIONS

and

PERFORMANCE

Rec'd  
5-31  
1944  
100

E-1. AIRCRAFT SPECIFICATIONS—ALL MODELS

MODEL	7ECA	7GCAA Package A	7GCBC Package C	7GCBC 115hp	7GCBC EDO 2000 Floats	7KCAB Package B
Number of Seats	2	2	2	2	2	2
Lycoming Engine, Make, Model	0-235-C1	0-320-A2B	0-320-A2B	0-235-C1	0-320-A2B	10-320-E2A
Hp @ rpm	115-2800	150-2700	150-2700	115-2800	150-2700	150-2700
Propeller (McCauley)	1C90CLM	1C172AGM	1C172AGM	1C90CLM	1C172AGM	1C172AGM
Gross Weight, lbs.	1650	1650	1650	1650	1800	1650
Empty Weight, lbs.*	1034	1107	1136	1063	1290	1128
Useful Load, lbs.	616	543	514	587	510	522
Useful % of Gross Weight	37.3	32.9	31.2	35.6	28.3	31.6
Standard Fuel Capacity, gals.	26	39	39	39	39	39
Optional Fuel Capacity, gals.	39					
Oil Capacity, qts.	6	8	8	6	8	8
Stall Speed, mph	51	51	50	50	53	51
Stall Speed, Flaps mph			45	45	48	
Top Speed, mph	117	130	128	116	112	130
Cruise Speed @ 75% hp, mph-Alt.	112-7500	125-8000	125-8000	112-7500	103-7500	125-8000
Range @ 75% hp., gals.-miles.-hrs.	39-728-6.5	39-537-4.3	39-537-4.3	39-728-6.5	39-450-4.3	39-537-4.3
Fuel Consumption @ 75% hp, gph	6	9	9	6	9	9
Rate of Climb, mph-fpm	73-725	73-1120	70-1145	73-775	70-800	73-1120
Service Ceiling, feet	12,000	17,000	17,000	12,000	16,000	17,000
Take-off Run, ft. (Seconds)	450	375	296	425	12 (Sec.)	375
Take-off Over 50 ft. Obstacle, ft.	890	630	525	860		630
Landing Roll, ft.	400	400	310	310		400
Landing Dist. over 50 ft. Obst., ft.	775	755	690	690		775
Wing Area, sq. ft.	165	165	170.2	170.2	170.2	
Wing Loading, lbs. per sq. ft.	10.0	10.0	9.7	9.69	10.6	
Power Loading, lbs. per hp	14.3	11.0	11.0	14.3	12.0	
Baggage Capacity, lbs.	100	100	100	100	100	

NOTE: Performance is for gross weight at sea level unless noted.

\* Average With Standard Equipment.

**POWERPLANT LIMITATIONS**

Aircraft Model	7ECA	76CAA, 76CBC	7KCAB
Engine, Lycoming	0-235-C1	0-320-A2B or A2D	AE10-320- E2A, -E2B
Rated Horsepower (hp/rpm)	115/2800	150/2700	150/2700
Fuel, Aviation Grade, Min. Octane Approved For Continuous Use	80/87 100LL	80/87 100/130	80/87 100/130

**Tachometer**

Normal Range (green arc, rpm)	1800-2800	1800-2700	1800-2700
Maximum (red line, rpm)	2800	2700	2700

**Cylinder Head Temperature**

Normal Range (green arc, °F)	90-500	90-500	90-500
Maximum (red line, °F)	500	500	500

**Oil Temperatures**

Normal Range (green arc, °F)	100-245	100-245	100-245
Maximum (red line, °F)	245	245	245

**Oil Pressure**

Normal Range (green arc, psi)	60-100	60-100	60-100
Caution Range (yellow arc, psi)	25-60	25-60	25-60
Maximum (red line, psi)	100	100	100
Minimum (red line, psi)	25	25	25

**Fuel Pressure**

Normal Range (green arc, psi)	N/A	N/A	12-45
Maximum (red line, psi)	N/A	N/A	45
Minimum (red line, psi)	N/A	N/A	12

wheels

STALL SPEEDS — MPH CAS

MODELS	ANGLE OF BANK			
	0°	20°	40°	60°
7ECA	51	53	58	72
7KCAB	51	53	58	72
76CAA	51	53	58	72
76CBC FLAPS UP	50	52	57	71
76CBC FLAPS DOWN	45	46	51	64

NOTES: 1) Gross Weight 1650 Lbs.

2) Power Off.

VS - (50-52) wheels  
 VSO - (45-47) wheels

VSO x 1.3 = (61.1) wheels  
 ON Final Low Spd

FLAATS

Vs - 55

Vso - 50

Vso x 1.3 = 65.0  
 (50 x 1.3)

NO CHART  
 FOR FLOATS 4-3

Citabria

FUEL

Type - Aviation Grade 80/87 Minimum Octane, or 100/130 Octane  
 Quantity - 36 Gals. (18 gals. in each tank)  
 - 35 Gals. Usable (17.5 gals. in each tank)  
 (100/130 must be low lead for 7ECA)

OIL

Type - Aviation Grade (See engine manufacturer's specifications)  
 Quantity - 8 Qts. (6 qts. - 7ECA)  
 - 6 Qts. Aerobatic Minimum

Viscosity

AVERAGE AMBIENT AIR TEMPERATURE

Above 60° F  
 30° - 50° F SAE 40 or 50  
 0 - 70° F SAE 40  
 Below 10° F SAE 30 or 40  
 SAE 30

GRADE