

New

American Champion Aircraft Corp.
Rochester, Wisconsin

FAA Approved
Airplane Flight Manual
Citabria Aurora Model 7ECA

This manual is eligible only for 7ECA aircraft, serial numbers 1355-95 and up.

Registration Number: N608AC

Serial Number: 1356-95

**This manual is part of the required equipment
and must remain in the airplane at all times.**

Approved: Joseph C. Mass

Royce Prather

Manager, Chicago Aircraft Certification Office

Date: 11/01/00

Revisions:

Letter	By	Date	Revisions	Pages Affected
A	JKM	1/4/96	Corrected Typos, Added Revision Table, Rearranged Sections	All
B	JKM	10-13- 2000	Revised to include new 1750 lbs. gross weight changes and limitations	All

Citabria Model 7ECA

Flight Operations

All 7ECA models are approved in the Normal and Acrobatic Category. Day or night flight in VFR conditions only is approved providing the aircraft is equipped with the required equipment and is in operating condition as specified under Part 91 of the Federal Air Regulations. Flight into known icing condition is prohibited

<u>Airspeed Limitations</u>	<u>CAS (mph)</u>
Never Exceed (red line)	162
Caution Range (yellow arc)	120 - 162
Maximum Structural Cruise.....	120
Normal Operating Range (green arc).....	50 - 120
Maneuvering @ 1750.....	120
Stall Speed	52
Best Rate of Climb Speed	77

CAS - Calibrated airspeed is indicated airspeed corrected for installation and instrument error

Weight and Balance Limits

Consult aircraft records for weight and balance data for this aircraft.

Aircraft Weight and Center of Gravity Range (inches)

<u>Weight</u>	<u>Normal Category</u>	<u>Acrobatic Category</u>
1750 lbs. maximum	14.2 - 19.2	14.2 - 16.3
1325 lbs. or less	10.5 - 19.2	10.5 - 16.3

All measurements are aft of the datum line which is the wing leading edge. Center of gravity limits have straight line variation between these points.

Flight Load Factors (1750 lbs. normal or acrobatic category)

Positive Load Factor+ 5.0 g's maximum
Negative Load Factor.....- 2.0 g's maximum

Do not exceed 135 mph IAS during negative g-load condition.
Do not perform acrobatics in turbulent air.

11/01/00

Citabria Model 7ECA

Maneuvers**Landplane Approved For Only The Following Acrobatic Maneuvers**

Maneuver	Entry Speed IAS	
	MPH	Knots
Chandelle, Lazy Eight	120	104
Barrel or Slow Roll	120	104
Immelmann	145	126
Loop or Clover Leaf	140	122
Split S	80	70
Snap Roll	85	74
Hammerhead Turn	140	122
Cuban Eight	145	126
Spin	Slow Deceleration	

Do not exceed +5.0 or -2.0 g-load factor. Do not exceed 135 mph IAS during negative g-load condition. Do not perform acrobatics in turbulent air. Caution: negative g flight will cause loss of oil and oil pressure. Use of flaps during acrobatics is prohibited. To recover from spin use full opposite rudder and neutralize elevator.

Powerplant Limitations

Engine, Lycoming	O-235-K2C
Rated Horsepower (HP / RPM)	118 / 2800 Takeoff 115 / 2700 Max. Continuous
Fuel, Aviation Grade, Min. Octane	91 / 96
Tachometer	
Normal Range (green arc - RPM)	1800 - 2700
Takeoff (5 min) (yellow arc - RPM)	2700 - 2800
Maximum (red line - RPM)	2800
Cylinder Head Temperature	
Maximum (red line - °F)	500

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Powerplant Limitations (Continued)

Oil Temperatures

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

Oil Pressure

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

Other Operating Information

Occupy front seat when flying solo.

Fuel 35 gal. useable, fuel 'on' when handle is down.

Maximum baggage - 100 lbs. Do not carry baggage during aerobatics.

Folding rear seat, seat back restrainer cable must be connected before flight unless rear control stick is removed.

Turn off strobe lights when taxiing in vicinity of other aircraft or during flight through clouds, fog, or haze. Standard position lights to be on for all night operations.

Alternator output circuit breaker located on cross member behind instrument panel.

Emergency door hinge release - pull pin, pull lever

Left window may be used as an alternate emergency exit - force window outward past forward stop mechanism.

Do not open forward left side window above 130 mph, or above 90 mph if the window is full opening.

Service battery every 50 hours of normal flight. Service every 10 hours of acrobatic flight

11/01/00

Citabria Model 7ECA

Noise Characteristics

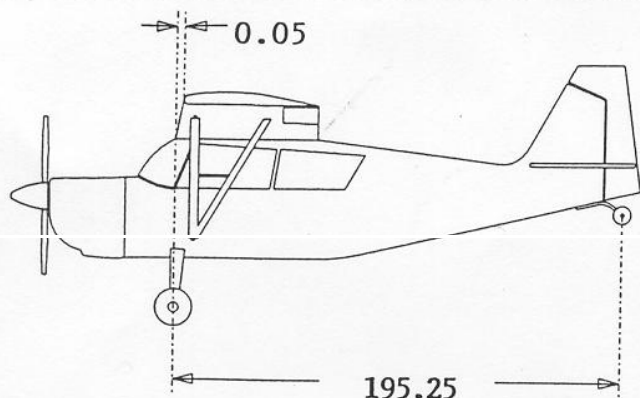
The noise level for this airplane measured in accordance with FAR 36, Appendix G is 67.0 dB(A) at full throttle.

The noise level for this airplane measured in accordance with ICAO, Annex 16, Chapter 10, Appendix 6 is 71.24 dB(A) at full throttle.

No determination has been made by the Federal Aviation Administration that the noise levels of this airplane are or should be acceptable or unacceptable for operation at, into, or out of, any airport.

AMERICAN CHAMPION AIRCRAFT CORPORATION
ROCHESTER, WISCONSIN 53167

WEIGHT AND BALANCE WORKSHEET



MODEL NUMBER 7ECA

SERIAL NUMBER 1356-95

IDENTIFICATION NUMBER N608AC

DATE DECEMBER 14, 1995

SIGNED Mark Lead

Aircraft Leveling Means: Drop plumb line from wing leading edge so that it is 10.18 inches forward of front face fuselage wing strut fitting.

Weight Actual 1143.2

1. Left Wheel Weight: 539.6 lbs. Right Wheel Weight: 535.6 lbs.
2. Tail Wheel Weight 68 lbs.
3. Total Aircraft Weight (Full Oil):

(195.25 in.) X (68 lbs.)

C.G. = _____ - (0.05 in.) = 11.564 L.E. in Aft
(1143.2 lbs.)

	WEIGHT (lbs.)	ARM (in.)	MOMENT (in. lbs.)
Aircraft Weight With Full Oil	<u>1143.2</u>	<u>11.564</u>	<u>13219.965</u>
Subtract Drainable Oil	<u>-11.25</u>	<u>-36</u>	<u>+405</u>
Add 1 Gallon Useable Fuel	<u>+6</u>	<u>+15</u>	<u>+90</u>
TOTALS	<u>1137.95</u>	<u>XXXXXXXX</u>	<u>13714.965</u>

Aircraft Empty C.G. 12.05 in. aft datum

Useful Load 506.8 lbs.

Datum: Wing Leading Edge

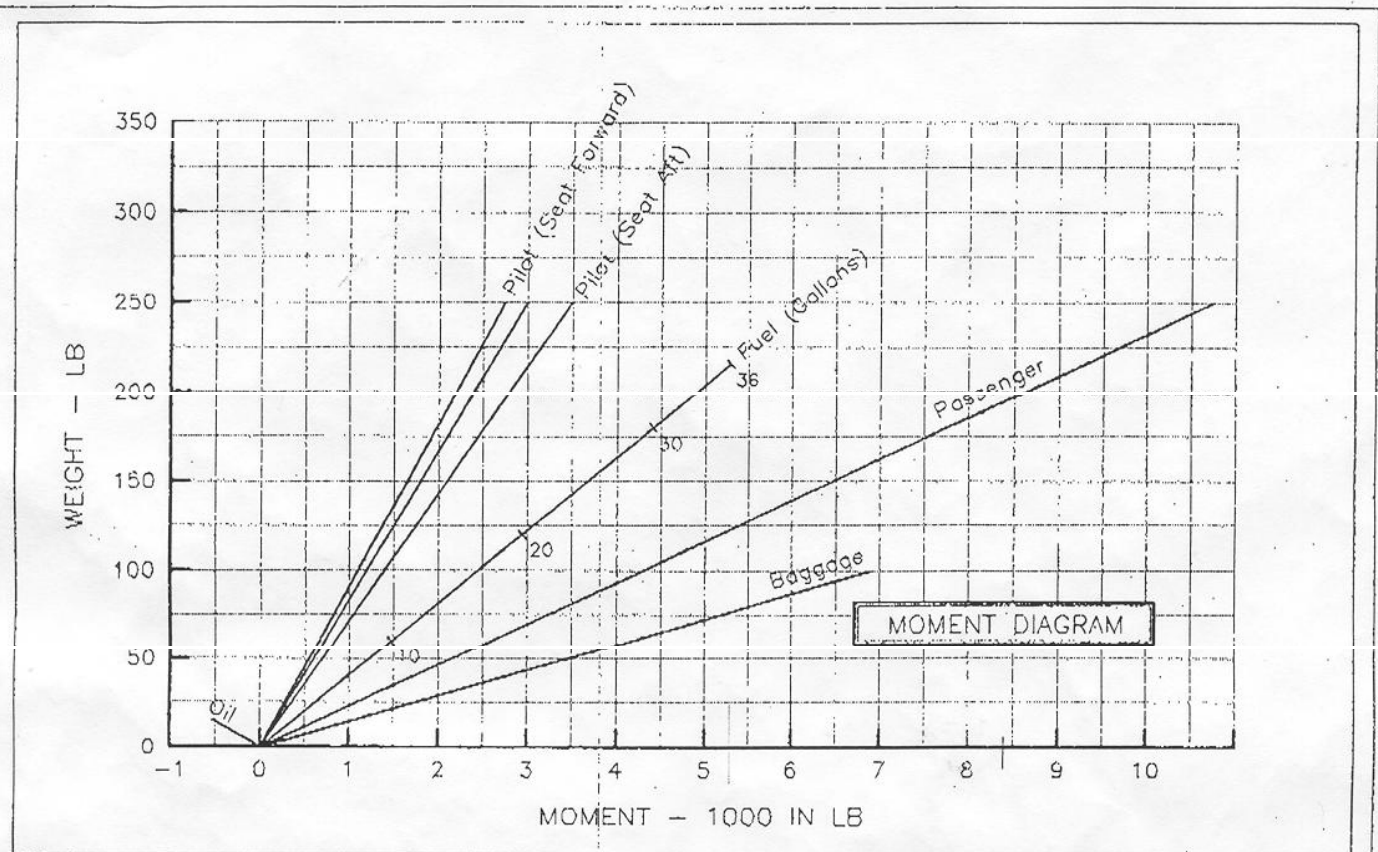
CENTER OF GRAVITY LIMITS:

NORMAL CATAGORY	(+ 14.2 in.)	To	(+19.2 in.)	At 1650 lbs.
	(+ 10.5 in.)	To	(+19.2 in.)	At 1325 lbs or less
ACROBATIC CATAGORY	(+ 14.2 in.)	To	(+17.3 in.)	At 1650 lbs. or less
	(+ 10.5 in.)	To	(+16.3 in.)	At 1325 lbs or less

Straight line variation between points given

LOADING SCHEDULE 7ECA

REVISED: 1-03-01



Add weights and moments of items in MOMENT DIAGRAM to airplane empty weight and moment. (negative oil moment). Locate intersection of total weight and moment on AIRPLANE LOADING ENVELOPE. Any point falling within the envelope meets all balance requirements.

