

UNITED STATES OF AMERICA  
DEPARTMENT OF COMMERCE - CIVIL AERONAUTICS ADMINISTRATION  
**CERTIFICATE OF AIRWORTHINESS**

1. NATIONALITY AND REGISTRATION MARKS <b>N1472E</b>		2. AIRCRAFT AIRWORTHINESS CLASSIFICATION <b>STANDARD</b>
3. This Certificate of Airworthiness is issued pursuant to the Civil Aeronautics Act of 1938 as amended. The aircraft identified hereon is considered airworthy when maintained and operated in accordance with the Civil Air Regulations and applicable aircraft Operation Limitations.		
4. This Certificate will remain in effect as long as the aircraft is maintained in accordance with Part 43 of the Civil Air Regulations unless surrendered, suspended, revoked, or a termination date is otherwise established by the Civil Aeronautics Board.		
5. DATE OF ISSUANCE <b>12-4-56</b>	6. CAA REPRESENTATIVE <b>R. O. ROYAL</b>	7. DESIGNATION NO. <b>FW 2-191</b>
8. Any alteration or misuse of this Certificate is punishable by a fine of not exceeding \$1,000 or imprisonment not exceeding 3 years, or both.		

GO 16-72803-1

Form ACA-1362B (8-57)

**REGISTRATION NOT TRANSFERABLE**

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF AIRCRAFT REGISTRATION		This certificate must be in the aircraft when operated.
NATIONALITY AND REGISTRATION MARKS <b>N 1472E</b>		AIRCRAFT SERIAL NO. <b>7AC-5035</b>
MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT <b>AERONCA 7AC</b>		
ICAO Aircraft Address Code: <b>50137524</b>		
ISSUED TO	SCHWANTZ CHARLES MACON THOMAS SCHWANTZ SHAREE MARK CHU [REDACTED] AZLE TX 76020-1850	This certificate is issued for registration purposes only and is not a certificate of title. The Federal Aviation Administration does not determine rights of ownership as between private persons.
	Partnership	
It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Title 49, United States Code, and regulations issued thereunder.		
DATE OF ISSUE <b>July 31, 2021</b>	EXPIRATION DATE <b>July 31, 2024</b>	ADMINISTRATOR [REDACTED]

AC Form 8050-3 (10/2019) Supersedes previous editions

760201850 F009

U.S. Department of Transportation  
**Federal Aviation Administration**



U.S. POSTAGE PITNEY BOWES



ZIP 73169 \$ 000.51<sup>0</sup>  
02 4W  
0000375833 AUG 05 2021

Civil Aviation Registry  
P.O. Box 25504  
Oklahoma City, OK 73125-0504

Official Business  
Penalty for Private Use \$300

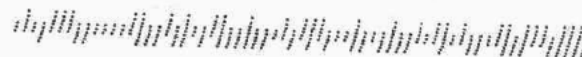
AC Form 8050-3 (10/2010) Supersedes previous edition

1472E

TO: SCHWANTZ CHARLES MACON THOMAS  
[REDACTED]  
AZLE TX 76020-1850



U.S. Department of Transportation  
**Federal Aviation Administration**



DUPLICATE 7/24/51

UNITED STATES OF AMERICA  
DEPARTMENT OF COMMERCE  
CIVIL AERONAUTICS ADMINISTRATION

## OPERATION LIMITATIONS

ENGINE	MAKE	MAKE	NATIONALITY AND REGISTRATION MARKS	
	MODEL	MODEL	SERIAL NO.	TYPE CERT. NO.
	Continental	Aeromca	NO 1473	
	A65-8F	7AC	7AC 5031	759

ENGINE AND AIR SPEED LIMITS NOT TO BE EXCEEDED  
(All Values Are Maximum and Are NOT RECOMMENDED OPERATING LIMITS)

## ENGINE LIMITS

## TRUE INDICATED AIR SPEED

	MINUTES	ALTITUDE	IN. HG.	R. P. M.	HP.	MIN. OCT.		M. P. H. LAND	M. P. H. SEA
TAKE-OFF							CLIMB OR LEVEL FLIGHT		
SEA LEVEL	ALL OPERATIONS	TO		2300	65	73	GLIDE OR RIVE (Smooth Entry)	95	
ALTITUDE	FROM						FLAPS EXTENDED	129	

MAXIMUM EXCEPT TAKE-OFF

## TAKE-OFF WEIGHT

## LANDING WEIGHT

LAND	SEA	LAND	SEA
1220		1220	

## C. G. LIMITS

LAND	SEA
10.9 to 21.5	

## WEIGHT

SEE WEIGHT AND BALANCE DATA FOR LOADING INFORMATION

## DATUM

Wing leading edge  
LIMITATIONS

INSPECTOR OF DEFENSE SIGNATURE

DESIG. NO.

DATE

September 11, 1946

CHIEF, AIRCRAFT DIVISION

ADDITIONAL LIMITATIONS

YES ☐NO ☒

(IF YES—SEE OVER)

THIS FORM MUST BE AVAILABLE IN THE AIRCRAFT WHEN OPERATED



# Aircraft Weight & Balance as of 4-22-91

for

Champ 7AC, N172E, s/n 7AC-5835

## Equipment List-

TCDS Item#	Equipment	Weight	Arm
1	Prop, Metal	26 lbs.	-52
101	Carb Air Heater	2 lbs.	-42
102	Carb Air Scoop	2 lbs.	-47
201	Main Landing Wheels	32 lbs.	0
202	Tail Wheel Assy.	7 lbs.	+186

Optional wheel pants not installed when weighed.

Results of weighing aircraft with full fuel & 3 qts. oil:

Weighing Point	Scale Reading	Tare	Net Weight
Right Main	432 lbs.	-2 lbs.	430 lbs.
Left Main	443 lbs.	-2 lbs.	441 lbs.
Tail Wheel	148 lbs.	-85 lbs.	63 lbs.

Aircraft as weighed: 934 lbs.

R X L

As weighed C.G. =  $-D + \left( \frac{\text{R} \times \text{L}}{\text{W}} \right) =$

63 X 197

$-.5 + \left( \frac{\text{63} \times \text{197}}{\text{934}} \right) = -.5 + 13.3 = 12.8$

As weighed C.G. = 12.8 inches aft of Datum.

## Empty Weight & C.G.-

	Weight	X	Arm =	Moment
Aircraft as Weighed	+934.0		+12.8	+11955
Less Oil (3 qts)	-5.0		-33.0	+ 185
Less Fuel (12 gal)	-72.0		-15.0	+ 1080
Aircraft Empty Wt.:	856.4			13220
Aircraft Empty Wt.: C.G. ....			+15.44	

Aircraft Useful Load: 363.6 lbs.

Aircraft Gross Weight.....: 1220 lbs.

Aircraft Loaded C.G. Range: (+10.9) to (+21.5)

This weight and balance / equipment list supercedes all previous ones.

Craig McGough  
A&P

Aircraft Weight & Balance as of 4-22-91  
for

Champ 7AC, N1472E, s/n 7AC-5835

Aircraft Useful Load: 363 lbs.

Aircraft Gross Weight: 1220 lbs.

Aircraft Loaded C.G. Range: (+10.9) to (+21.5)

Typical Aircraft Weight & Balance Calculation-

	Weight	X Arm	=	Moment
Aircraft	856.4	+15.44		13220
Fuel 12 Gal.	72.0	-15.0		-1080
Oil 3 Qts.	5.6	-33.0		-185
Front Seat	135	+11.5		1552
Rear Seat	140	+42.0		5880
Baggage	10	+64.0		640
=====				
Loaded Weight:	1219 lbs.			20027
Loaded C.G....:		16.43		

	Weight	X Arm	=	Moment
Aircraft	856.4	+15.44		13220
Fuel 12 Gal.	72.0	-15.0		-1080
Oil 3 Qts.	5.6	-33.0		-185
Front Seat	240	+11.5		2760
Rear Seat	0	+42.0		0
Baggage	0	+64.0		0
=====				
Loaded Weight:	1174 lbs.			14715
Loaded C.G....:		12.53		

	Weight	X Arm	=	Moment
Aircraft	856.4	+15.44		13220
Fuel 12 Gal.	72.0	-15.0		-1080
Oil 3 Qts.	5.6	-33.0		-185
Front Seat	0	+11.5		0
Rear Seat	240	+42.0		10080
Baggage	0	+64.0		0
=====				
Loaded Weight:	1174 lbs.			22035
Loaded C.G....:		18.76		

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

			A-759
			Revision 73
			American Champion
			(Bellanca)
			(Champion)
			(Aeronca)
	7AC		
	7ACA	7EC	7GCB
	S7AC	S7EC	7GCBA
(L-16A)	7BCM	7ECA	7GCBC
(L-16B)	7CCM	7FC	7HC
	S7CCM	7GC	7JC
	7DC	7GCA	7KC
	S7DC	7GCAA	7KCAB
			February 9, 2011

AIRCRAFT SPECIFICATION NO. A-759

Type Certificate Holder: American Champion Aircraft Corp.  
[REDACTED]  
Rochester, WI 53167

Type Certificate Holder Record: Aeronca Aircraft Corporation transferred TC A-759 to  
Champion Aircraft Corporation on July 19, 1954

Champion Aircraft Corporation transferred TC A-759 to  
Bellanca Aircraft Corporation on March 15, 1971

Bellanca Aircraft Corporation transferred TC A-759 to  
Champion Aircraft Company, Inc. on November 1, 1982

Champion Aircraft Company, Inc. transferred TC A-759 to  
Tetelestai, Inc. on October 11, 1988

Tetelestai transferred TC A-759 to  
FRA Enterprises, Inc. on December 27, 1988

FRA Enterprises, Inc. transferred TC A-759 to  
American Champion Aircraft Corp. on May 30, 1989

I - Model 7AC, 2 PCLM (Normal Category), Approved October 18, 1945  
(See NOTE 4 for optional engines and conversions to other models)

Engine	Continental A-65-8 (see item 115 for Lycoming O-235-C)
Fuel	73 minimum grade aviation gasoline
Engine Limits	For all operations, 2300 r.p.m. (65 hp.)
Airspeed Limits	Level flight or climb 95 m.p.h. (83 knots) True Ind. Glide or dive 129 m.p.h. (112 knots) True Ind.
Propeller Limits (For fixed pitch wood propeller)	Static rpm at maximum permissible throttle setting: Not over 2250, not under 1960. No additional tolerance permitted. Diameter: not over 72 in., not under 70 in.
C.G. Range	(+10.9) to (+21.5)
Empty wt. C.G. Range	(+14.1) to (+17.9) standard arrangement (+14.1) to (+15.0) when item 106(a) installed. When empty weight C.G. falls within the range given, it is not necessary to compute critical fore and aft C.G. positions. This range valid for standard arrangement only.
Maximum Weight	1220 lb.
No. of Seats	2 (1 at +11.5, 1 at +42)
Maximum Baggage	40 lbs. at +64. See NOTE 2 for baggage placard.
Fuel Capacity	13 gal. at -15.
Oil Capacity	4 qt. at -33.

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Control Surface Movements	Elevator	Up	25 <sup>0</sup>	Down	15.5 <sup>0</sup>
	Elevator Trim Tab	Up	20 <sup>0</sup>	Down	34.5 <sup>0</sup>
	Ailerons	Up	28.5 <sup>0</sup>	Down	18 <sup>0</sup>
	Rudder	Right	24 <sup>0</sup>	Left	25 <sup>0</sup>
Serial Nos. Eligible	7AC-1 and up.				
Required Equipment	Items 1, 101, 102, 201, 202.				

II - Model S7AC, 2 PCSM (Normal Category), Approved February 27, 1947  
(Same as 7AC except for float installation)

Engine	Continental A-65-8				
Fuel	80 minimum grade aviation gasoline				
Engine Limits	For all operations, 2300 r.p.m. (65 hp.)				
Airspeed Limits	Level flight or climb	90 m.p.h. (78 knots)	True Ind.		
	Glide or dive	121 m.p.h. (105 knots)	True Ind.		
Propeller Limits	Static rpm at maximum permissible throttle setting:				
(For fixed pitch propeller)	Not over 2200, not under 1960. No additional tolerance permitted.				
	Diameter: not over 76 in., not under 70 in.				
C.G. Range	(+10.9) to (+19.5)				
Empty wt.					
C.G. Range	(+13.6) to (+15.7) not valid when item 106(a) installed. When empty weight C.G. falls within this range, it is not necessary to compute critical fore and aft C.G. positions. This range valid for standard arrangement only.				
Maximum Weight	1320 lb.				
No. of Seats	2 (1 at +11.5, 1 at +42)				
Maximum Baggage	40 lbs. at +64. See NOTE 2 for baggage placard.				
Fuel Capacity	13 gal. at -15.				
Oil Capacity	4 qt. at -33.				
Control Surface Movements	Elevator	Up	25 <sup>0</sup>	Down	15.5 <sup>0</sup>
	Elevator Trim Tab	Up	20 <sup>0</sup>	Down	34.5 <sup>0</sup>
	Ailerons	Up	28.5 <sup>0</sup>	Down	18 <sup>0</sup>
	Rudder	Right	24 <sup>0</sup>	Left	25 <sup>0</sup>
Serial Nos. Eligible	7AC-1 and up.				
Required Equipment	Items 1, 101, 102, 204(a) or (b), 205(a), 205(c)				

III - Model 7BCM (Army L-16A), 2 PCLM (Normal Category), Approved September 16, 1947

Same as 7AC except for powerplant installation. See NOTE 4 for conversion from Model 7AC.

Engine	Continental C-85-8, -8F, -8J or -8FJ		
Fuel	80 minimum grade aviation gasoline		
Engine Limits	For all operations, 2575 r.p.m. (85 hp.)		
Airspeed Limits	Level flight or climb	95 m.p.h. (83 knots)	True Ind.
	Glide or dive	129 m.p.h. (112 knots)	True Ind.
Propeller Limits	Static rpm at maximum permissible throttle setting:		
(For fixed pitch wood propeller)	Not over 2450, not under 2200. No additional tolerance permitted.		
	Diameter: not over 72 in., not under 70 in.		
C.G. Range	(+10.4) to (+19.7)		
Empty wt.			
C.G. Range	(+13.2) to (+15.5) valid only for standard arrangement. When empty weight C.G. falls within this range, it is not necessary to compute critical fore and aft C.G. positions.		
Maximum Weight	1220 lb.		
No. of Seats	2 (1 at +11.5, 1 at +42). Placard: "Solo from front seat only."		
Maximum Baggage	50 lbs. at +64.		



### Weight and Balance N1472E

Item	Weight	Arm	Moment
Airplane	856.4	15.44	13222.82
Fuel	72	-15	-1080
Oil	5.6	-33	-184.8
Front	282	11.5	3243
Back	229.6	42	9643.2
Baggage	0	64	0
Total	1445.6		24844.22
Max TOW	1220		
		CG	17.19
Over Max	225.6	CG Limits	10.9 to 21.5

### Density Altitude Calculator

Elevation	<input checked="" type="radio"/> feet	<input type="radio"/> m	<input type="text" value="720"/>
Air Temperature	<input type="radio"/> deg F	<input checked="" type="radio"/> deg C	<input type="text" value="27"/>
Altimeter Setting	<input checked="" type="radio"/> in Hg	<input type="radio"/> hPa	<input type="text" value="29.94"/>
Dew Point	<input type="radio"/> deg F	<input checked="" type="radio"/> deg C	<input type="text" value="23"/>
<input type="button" value="Calculate"/> <input type="button" value="Reset"/>			
Density Altitude	<input type="text" value="2610"/> feet	<input type="text" value="796"/> m	
Absolute Pressure	<input type="text" value="29.17"/> in Hg	<input type="text" value="987.8"/> hPa	
Air Density	<input type="text" value="0.0708"/> lb/ft <sup>3</sup>	<input type="text" value="1.134"/> kg/m <sup>3</sup>	
Relative Density	<input type="text" value="92.58"/> %	<input type="text" value="92.58"/> %	
Estimated AWOS	<input type="text" value="2300"/> feet	<input type="text" value="701"/> m	