

AIRPLANE FLIGHT
THIS DOCUMENT MUST BE KEPT IN AIR

CAA IDENT. NO. 1182H
AERONCA MODEL 15AC

AERONCA AIRCR
MIDDLETON, OHIO

LIMITATIONS

ENGINE; Max. RPM 2700 (145 h.p.)
Min. Idle RPM Limit - 550
Max. Idle RPM Limit - 650
Min. Fuel octane rating - 80

ENGINE MARKINGS

Cool temp. - operate in green arc (100 to 225 F.)
Oil pressure - operate in green arc (30 to 40 psi.)
Tachometer - so not exceed red line
2700 RPM

AIRSPEED (MPH)

Never Exceed	NORMAL
	132 True Indicated Airspeed
Max. structural Cruise	105 True Indicated Airspeed
Maneuvering	91 True Indicated Airspeed

MAX. WEIGHT:

FLIGHT LOAD FACTORS:
Max. Positive +3.8
Max. Negative (No inverted maneuvers approved)

NOTE: Maneuvers involving approach to stalling angle or full or rapid application of elevator, rudder or aileron, should be confined to speeds below maneuvering speed.

MANUAL
LANE AT ALL TIMES

NORMAL CATEGORY

APPROVED SEPT. 22, 1948
F. C. CORPORATION
CINCINNATI, OHIO

C.G. RANGE (Datum: Wing L.E.)

Normal Category: Front Limit
(+12.1 in.) (18.40% MAC) @ 1600#
Str. Line to (+14.5 in) (22.1%
MAC) @ 2050#
Rear Limit (24.3 in) (37.2% MAC)
@ 2050#

NOTE: It is the responsibility of the airplane owner and pilot to insure proper loading of the airplane.

ACROBATICS:

No acrobatic maneuvers including spins approved

AIRSPEED INSTRUMENT MARKINGS:

- (a) Radial RED line (never exceed speed)
- (b) YELLOW arc - operate with caution and only in smooth air.
(Max. Struct. Cr. to never exceed)
- (c) Green arc - normal operating range (Stall to Max. Struct. Cruise)

PROCEDURES

- (a) Mixture Control Operations - Use full rich mixture for all landing and take off operations.
- (b) Priming - Advance throttle three times to prime engine.

AIRPLANE PERFORMANCE

The performance figures were obtained during CAA Type Tests and may be realized under conditions indicated with the airplane and engine in good condition and with average pilot technique. The figures are those for operation in no-wind condition from paved runways at a gross weight of 2050 lbs., with a fixed pitch-wood propeller (Dia.: 76 in. max., 71 in. min., static rpm: 2440 max. 2340 min.). Allowance must be made in operating under different conditions. Take-off and climb performance is improved with a fixed pitch metal propeller (McCauley 1A170; Dia. 76 in. max., 74 in. min.; static rpm 2320).

ITEM	ALT. (ft.)	OUTSIDE AIR TEMP.- F					
		0°	26°	40°	60°	80°	100°
TAKE-OFF DIST. (ft.)	S.I.	1155	1268	1383	1509	1617	1791
Dist. reqd. to t.o & climb to 50 ft. @ 70 mph	/	2000	1389	1511	1636	1758	1909
Full throttle	/	4000	1669	1798	1969	2150	2302
	/	6000	2096	2349	2573	2862	3134
							3464
LANDING DIST. (ft.)	S.I.	1663	1715	1769	1826	1879	1940
Dist. reqd. to land from 50 ft. and stop	/	2000	1755	1815	1871	1935	2000
Approach 74 mph.	/	4000	1860	1929	1990	2022	2122
NORMAL RATE OF CLIMB (ft./min.) @ 70 mph	S.I.	6000	1978	2050	2121	2195	2265
Full throttle	/	2000	626	605	588	570	552
	/	4000	545	527	509	491	474
	/	6000	468	450	431	413	397
							380
							306

Stalling Speeds (mph)

(Power Off)

Angle of Bank

Stall Speed

0° 20° 40° 50° 60°

57 58.7 65 71.3 80.4

Weight and Balance: Refer to Weight Statement furnished with each airplane

THIS IS AN EXACT COPY OF ORIGINAL AIRPLANE FLIGHT MANUAL CAA APPROVED
SEPT. 23, 1948