

THIS DOCUMENT MUST BE KEPT IN AIRPLANE AT ALL TIMES

CESSNA AIRCRAFT COMPANY

WICHITA, KANSAS

A. Identification

C.A.A. Approved
Approval Basis CAR 04a
January 2, 1948

C _____

MODEL 120 & 140 LANDPLANE (C-85)

AIRPLANE FLIGHT MANUAL

Limitations

The following limitations are to be observed in the operation of this airplane equipped with Continental C85-12 or C85-12F engine.

Engine Limits - For all operations 2575 R.P.M. (85 H.P.)

Fuel - 73 Minimum Octane Aviation Gasoline

(Capacity two tanks 12 1/2 gallons each -- 25 total)

- Propeller - (a) Wood Fixed Pitch-Static R.P.M. at maximum permissible throttle setting -- not more than 2110 R.P.M., not less than 1885 R.P.M. (Diameter - not over 74 inches, not less than 72.5 inches)
- (b) McCauley 1A90 Static R.P.M. at maximum permissible throttle setting -- not more than 2300, not less than 2100. (Diameter not more than 71 inches, not less than 69.5 inches.) Avoid continuous operation between 1950 and 2170.
- (c) For other approved installations see Aircraft Specification, A-768.

Power Plant Instrument -

- (a) Oil Temperature - unsafe above 225°F (Red Line)
- (b) Tachometer - Do not exceed rated engine speed 2575 R.P.M. (Red Line)
- (c) Fuel quantity gauge - Do not take off on a fuel tank less than 1/4 full.

Airspeed Limits -

- (True Indicated Airspeed) -
- | | |
|----------------------|-----------------------------|
| Never Exceed | 140 MPH (Red Line) |
| Caution Range | 115 to 140 MPH (Yellow Arc) |
| Normal Operation | 50 to 115 MPH (Green Arc) |
| Flap Operating Range | 45 to 82 MPH (White Arc) |

Flight Load Factors -

High or low angle of attack ± 4.57 ; Inverted Flight - 2.26
Flaps down $40^\circ \pm 1.97$.

Maximum Weight - 1450 Lbs.

C.G. Range - (+13.5) 22% M.A.C. to (+17.7) 29.2% M.A.C.

Datum Leading Edge of Wing

M.A.C. 59 inches, L.E. M.A.C. +0.5

Leveling Means - Top Edge of sheet along fuselage side aft of door.

Limitations Notes -

1. Intentional Spins with flaps extended are prohibited.
2. No acrobatic maneuvers approved except those listed. Recommended entry speeds shown.
Chandelle 100; Steep Turn 90; Stalls, (Except Whip Stalls); Lazy Eight 100; Spins, use power to enter.
3. In the execution of all maneuvers avoid the abrupt use of controls.
4. It is the responsibility of the pilot and operator to see that the weight and balance are within limitations.

Procedures:

Apply carburetor heat when gliding at less than half throttle specifically when making a landing.

Approved By: _____

Director,
Aircraft & Components Service

Date: March 26, 1948