

# Aircraft Basic Emp' Weight and Balance

**Date: May 9, 2016**

**Model: C172N**

**Aircraft Serial: 17273068**

**Registration: N369RJ**

Aircraft weighed this date IAW Cessna TCDS 3A12, POH/AFM weight and balance section and AC43.13-1B section 2, utilizing calibrated wheel weighing scales as equipped this date.

Scale S1 reading = 660 lbs. Right main wheel Tare = 0 lbs. Net weight = 660 lbs.  
Scale S2 reading = 647 lbs. Left main wheel Tare = 0 lbs. Net weight = 647 lbs.  
Scale S3 reading = 473 lbs. Nose wheel Tare = 0 lbs. Net weight = 473 lbs.

Aircraft weighed with **full fuel (43 gallons), 7 qt. Indicated Engine Oil**, wheel pants installed and no other portable equipment installed. Front seats in full forward position. Aircraft leveled longitudinally and laterally as specified in AFM.

Scale S1 arm = 58.625

Scale S2 arm = 58.625

Scale S3 arm = (6.1) (as measured)

**Total weight as stated = 1780**

**CG stated weight = 41.4**

**Total moment = 73737.6**

Less usable fuel 40 gallons = (240) lbs @ arm 48 = (11520) moment

**Total empty weight less useable fuel = 1540 lbs.**

CG empty weight specified = 40.40

Total moment = 62217.6

## C.G. Range

Landplane

Normal category

(+38.5) to (+47.3) at 2300 lbs.

(+35.0) to (+47.3) at 1950 lbs. or less

Utility category

(+35.5) to (+40.5) at 2000 lbs.

(+35.0) to (+40.5) at 1950 lbs. or less

Seaplane (Edo 89-2000 or 89A2000 floats)

Normal category

(+39.8) to (+45.5) at 2220 lbs.

(+36.4) to (+45.5) at 1825 lbs. or less

Straight line variation between points given.

**It is the responsibility of the airplane owner and pilot to assure that the airplane is properly loaded. Maximum allowable gross weight is 2300 pounds in normal category. See "weight and balance section" for loading instructions.**

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