

# Aircraft Basic Empty Weight and Balance

**Date: December 18, 2013**

**Model: C172N**

**Aircraft Serial: 17273578**

**Registration: N1966F**

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.

Scale S1 reading = 651 lbs.    Right main wheel    Tare = 0 lbs.    Net weight = 651 lbs.  
Scale S2 reading = 650 lbs.    Left main wheel    Tare = 0 lbs.    Net weight = 650 lbs.  
Scale S3 reading = 497 lbs.    Nose wheel        Tare = 0 lbs.    Net weight = 497 lbs.

Aircraft weighed with **full fuel (54 gallons), 7 qt. Indicated Engine Oil**, wheel pants / fairings 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 = 58.375

Scale S2 arm = 58.375

Scale S3 arm = (6.625) (as measured)

**Total empty weight as stated = 1798**

**CG empty weight = 40.41**

**Total moment = 72653.25**

Less usable fuel 50 gallons = (300) lbs @ arm 48 = (14400) moment

Total weight less fuel as specified = 1498 lbs.

CG less fuel as specified = 38.89 as weighed

Total moment = 58253.25

## 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

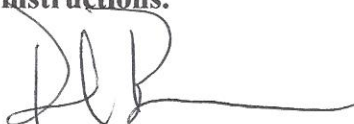
(+39.8) to (+45.5) at 2220 lbs.

(+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. See "weight and balance section" for loading instructions.**

David Beaver AP3097750IA



Beaver Air Services & Equipment, Inc.