

COULTER AVIATION

P.O. Box A, MEEKER, CO. 81641 (970) 878-5045

AIRCRAFT WEIGHT & BALANCE

March 04, 2014

CESSNA 182T S/N18281770

N2012Y

Aircraft Weighed with Zero fuel and no speed fairings on landing gear and 8 quarts of oil.

<u>LEFT WHEEL</u>	<u>683 lbs.</u>	<u>TARE -0-</u>	<u>683 lbs.</u>
<u>RIGHT WHEEL</u>	<u>676 lbs.</u>	<u>TARE -0-</u>	<u>676 lbs.</u>
<u>NOSE WHEEL</u>	<u>617 lbs.</u>	<u>TARE -0-</u>	<u>617 lbs.</u>
	TOTAL WEIGHT		1976 lbs.

$X = \text{ARM} = \frac{(A) - (\text{Nose Wt.}) \times (\text{Inches from Nose Wheel to Main Wheels})}{\text{Weight}} = \text{ARM OF WEIGHTED C.G. (INCHES AFT OF DATUM)}$

$$\frac{(59.125'') - (617 \text{ lbs.}) \times (66.5'')}{1,976 \text{ lbs.}} = 38.36 \text{ INCHES AFT of datum}$$

AIRCRAFT EMPTY WEIGHT WITH ZERO FUEL AND 8 QUARTS OF OIL.

+ 1976 lbs. ARM + 38.36" MOMENT + 75799.36

AIRCRAFT EMPTY WEIGHT 1,976 lbs. C.G. + 38.36 MOMENT+ 75799.36

USEFUL LOAD = 1124 lbs.

Example: Empty weight of 1,976 lbs., moment of 75799.36 inch lbs.

	<u>WEIGHT</u>	<u>ARM IN INCHES</u>	<u>MOMENT IN THOUSANDS OF IN. LBS.</u>
EMPTY WEIGHT (LICENSED) WITH OIL	1,976.0	+ 38.36	+ 75.79
PILOT & FRONT SEAT PASSENGER	340	+ 37.00	+ 12.6
2 MIDDLE SEAT PASSENGERS	300	+ 75.00	+ 22.5
Fuel 80 Gallons	<u>480</u>	+ <u>51.45</u>	+ <u>24.7</u>
TOTALS	3096 lbs	43.79	135.59

AIRCRAFT MAX TAKEOFF WEIGHT 3100 LBS

Lance A. Coulter

Signature



Certificate Number 3338423 IA