

**SECTION 6**  
**WEIGHT AND BALANCE**

**PA-28-181, ARCHER III**

MODEL PA-28-181 ARCHER III

Airplane Serial Number 2881545

Registration Number N869TA

Date 05/23/2022

**AIRPLANE BASIC EMPTY WEIGHT**

Item	Weight (Lbs)	C.G. Arm x (Inches Aft of Datum)	= Moment (In-Lbs)
Standard Empty Weight* <del>Computed</del> <sup>Actual</sup>	1699.4	89.3309	151806.2
Optional Equipment	93.8	96.8124	9081.0
Basic Empty Weight	1793.2	89.7222	160887.2

\*The standard empty weight includes full oil capacity and 2.0 gallons of unusable fuel.

**AIRPLANE USEFUL LOAD**

(Ramp Weight) - (Basic Empty Weight) = Useful Load

Normal Category (2558 lbs) - ( 1793.2 lbs) = 764.8 lbs.

Utility Category (2138 lbs) - ( 1793.2 lbs) = 344.8 lbs.

THIS BASIC EMPTY WEIGHT, C.G. AND USEFUL LOAD ARE FOR THE AIRPLANE AS CERTIFIED AT THE FACTORY. REFER TO APPROPRIATE AIRCRAFT RECORD WHEN ALTERATIONS HAVE BEEN MADE.

**WEIGHT AND BALANCE DATA FORM**

Figure 6-5

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**ISSUED: December 22, 2017**

**SECTION 6**  
**WEIGHT AND BALANCE**

**PA-28-181, ARCHER III**

	Weight (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty Weight			
Pilot and Front Passenger		80.5	
Passengers (Rear Seats)*		118.1	
Fuel (48 Gallon Maximum)		95.0	
Baggage (200 Lbs. Maximum)*		142.8	
Ramp Weight (2558 Lbs. Normal, 2138 Lbs. Utility Maximum)			
Fuel Allowance For Engine Start, Taxi and Run Up	-8	95.0	-760
Takeoff Weight (2550 Lbs. Normal, 2130 Lbs. Utility Maximum)			

Totals must be within approved weight and C.G. limits. It is the responsibility of the airplane owner and the pilot to ensure that the airplane is loaded properly. The Basic Empty Weight C.G. is noted on the Weight and Balance Data Form (Figure 6-5). If the airplane has been altered, refer to the Weight and Balance Record for this information.

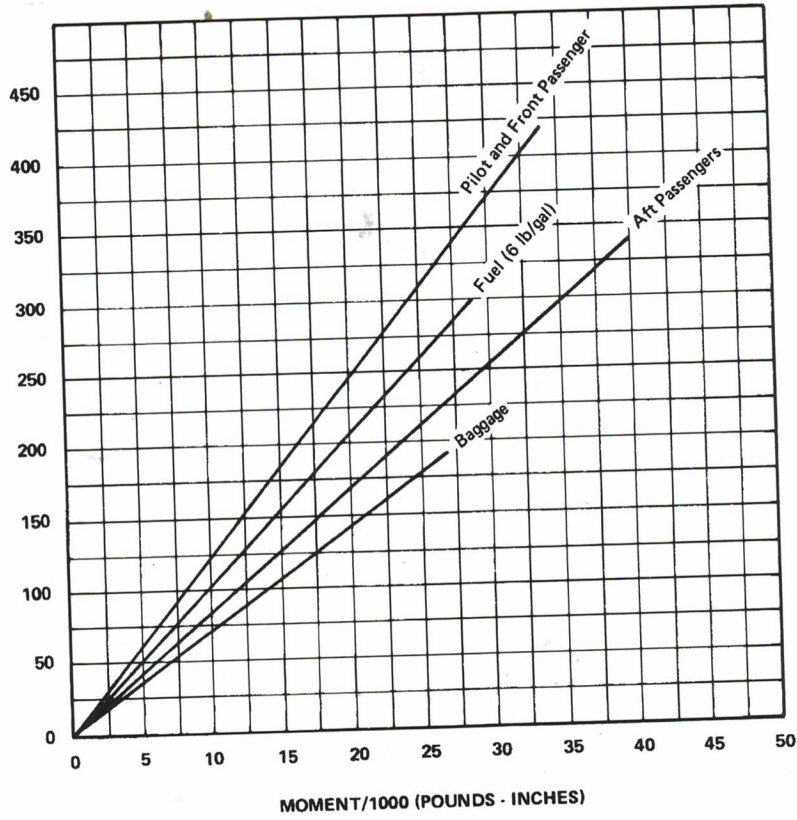
\*Utility Category Operation - No baggage or rear passengers allowed.

**WEIGHT AND BALANCE LOADING FORM**

Figure 6-11

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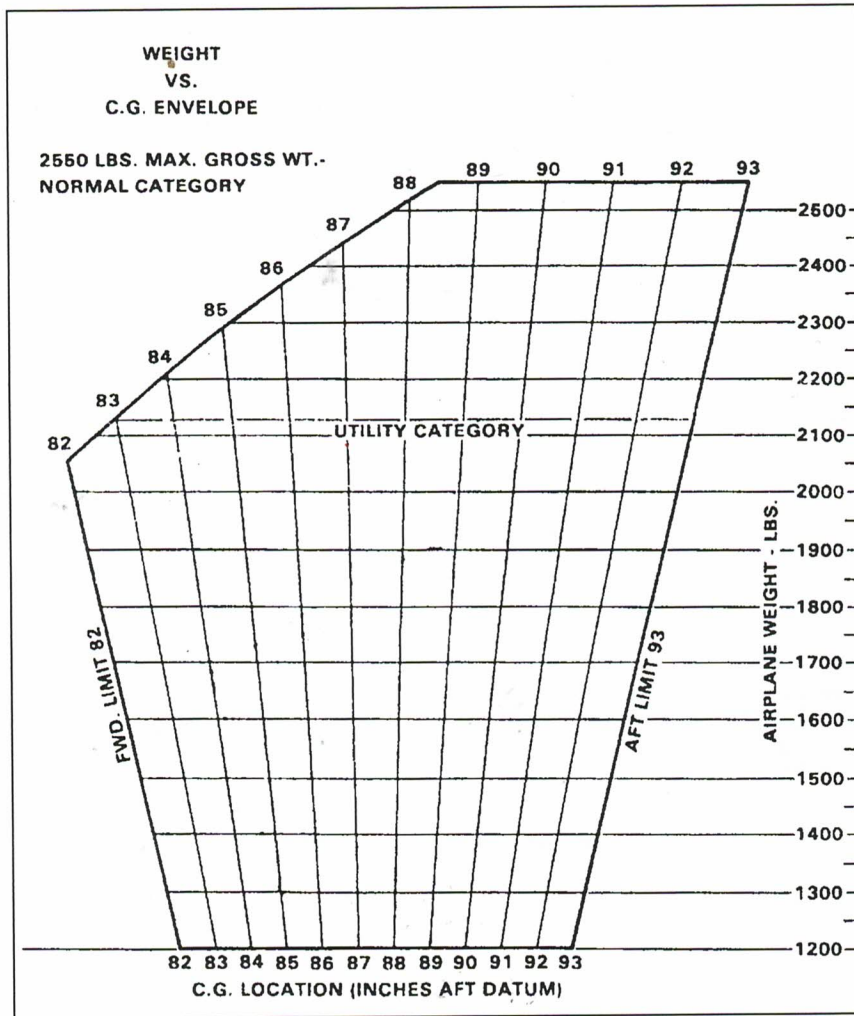
**ISSUED: December 22, 2017**



LOADING GRAPH  
Figure 6-13

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C.G. RANGE AND WEIGHT  
Figure 6-15