

Weight and Balance Report  
 PA-25-235 N8519L  
 S/N 25-4937  
 May 20, 2020

ITEM	WEIGHT	ARM	MOMENT
Airplane Weight (includes 2 gals. unusable fuel)			
From Weight & Balance Report Dated 12-20-2002	1502.0	87.25	131206.5
Remove: Narco AT-165VSR Transponder	-2.0	130.0	-260.0
Install: Stratus ESG with WAAS GPS Antenna	3.8	130.0	494.0
<u>Empty Weight and C.G. with 2 gals. Unusable Fuel</u>	1503.8		131440.5
Empty Weight 1503.8 Lbs. Center of Gravity 87.40" aft of datum or 9.40" aft of wing leading edge			

MOST FORWARD C.G. LOADING CONDITION 120 LB PILOT WITH FULL FUEL

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1503.8		131440.5
Oil (12 Quarts)	23.0	30.0	690.0
Fuel (36 Gallons)	216.0	63.0	13608.0
Pilot	120.0	135.0	16200.0
Hopper Load	0	93.0	0
TOTALS	1862.8		161938.5

Weight and C.G. in limits at 1862.8# and 86.93" (middle of range)

MOST FORWARD C.G. LOADING CONDITION 180 LB PILOT WITH FULL FUEL

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1503.8		131440.5
Oil (12 Quarts)	23.0	30.0	690.0
Fuel (36 Gallons)	216.0	63.0	13608.0
Pilot	180.0	135.0	24300.0
Hopper Load	0	93.0	0
TOTALS	1922.8		170038.5

Weight and C.G. in limits at 1922.8# and 88.43" (middle of range)

MOST FORWARD C.G. LOADING CONDITION 240 LB PILOT WITH FULL FUEL

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1503.8		131440.5
Oil (12 Quarts)	23.0	30.0	690.0
Fuel (36 Gallons)	216.0	63.0	13608.0
Pilot	240.0	135.0	32400.0
Hopper Load	0	93.0	0
TOTALS	1982.8		178138.5

Weight and C.G. in limits at 1982.8# and 89.84" (near aft limit)

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MOST REARWARD C.G. LOADING CONDITION 120 LB PILOT WITH 7 GALLONS FUEL

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1503.8		131440.5
Oil (12 Quarts)	23.0	30.0	690.0
Fuel (7 Gallons)	42.0	63.0	2646.0
Pilot	120.0	135.0	16200.0
Hopper Load	0	93.0	0
<b>TOTALS</b>	<b>1688.8</b>		<b>150976.5</b>

Weight and C.G. in limits at 1688.8# and 89.4" (near aft limit)  
 This is **MINIMUM FUEL (7 gallons)** for a 120 lb pilot

MOST REARWARD C.G. LOADING CONDITION 180 LB PILOT WITH 14 GALLONS FUEL

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1503.8		131440.5
Oil (12 Quarts)	23.0	30.0	690.0
Fuel (14 Gallons)	84.0	63.0	5292.0
Pilot	180.0	135.0	24300.0
Hopper Load	0	93.0	0
<b>TOTALS</b>	<b>1790.8</b>		<b>161722.5</b>

Weight and C.G. in limits at 1784.8# and 90.30" (**AT AFT LIMIT**)  
 This is **MINIMUM FUEL (14 gallons)** for a 180 lb pilot

MOST REARWARD C.G. LOADING CONDITION 240 LB PILOT WITH 31 GALLONS FUEL

ITEM	WEIGHT	ARM	MOMENT
Empty Weight	1503.8		131440.5
Oil (12 Quarts)	23.0	30.0	690.0
Fuel (31 Gallons)	186.0	63.0	11718.0
Pilot	240.0	135.0	32400.0
Hopper Load	0	93.0	0
<b>TOTALS</b>	<b>1952.8</b>		<b>176248.5</b>

Weight and C.G. in limits at 1952.8# and 90.25" (**AT AFT LIMIT**)  
 This is **MINIMUM FUEL (31 gallons)** for a 240 lb pilot

Weight and Balance computed by Ronald N Ridenour 1985138A&P\_\_\_\_\_