

Full + 2 Pilots

Full fuel+2 People					
<b>N 23P</b>	<b>Dec. 12th 1998</b>	<b>Weight</b>	<b>Arm</b>	<b>Moment</b>	<b>C.G., in.</b>
<b>Main gear</b>		1248.9	93.75	117084.38	
<b>Nose gear</b>		449.7	34.06	15316.78	
<b>Pilot</b>	est.	200	108.75	21750.00	
<b>Passenger</b>	est.	150	108.75	16312.50	
<b>Fuel</b>	(65.2 gals)	398.7	83.51	33295.44	
<b>Oil</b>	12qts	0	36.5	0.00	
<b>Baggage</b>	est.	50	132.2	6610.00	
<b>Other</b>	includes one headsets	0	0	0.00	
<b>TOTAL WT</b>	sum of column	2497.3	597.52	210369.09	84.24
<b>Empty wt.</b>	1698.6				
<b>Max gross wt</b>	2500				
<b>useful load</b>	801.4				
<b>useful remaining</b>	2.7				
<b>Datum =</b>	derived with plumb bobs				
<b>C.G. this flight</b>	84.24				
<b>C.G. range, inches</b>	79.65 - 87.88				
<b>C.G. range, % MAC</b>	10.0% - 28.5%				
<b>C.G. range %</b>					
Ref datum is 60" fwd of cowl split					
first flew	12/24/98				
	Scale A	Scale B	Total		
Empty	449.7	1248.7	1698.4		
W/ 40 gals	491.55	1450.9	1942.45		
w/65.2	502.8	1594.5	2097.3		

Full + 2 Pilots

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Full + 1 Pilot

After GPS Full fuel+ 1 Person					
N 23P	Dec. 12th 1998	Weight	Arm	Moment	C.G., in.
Main gear		1248.9	93.75	117084.38	
Nose gear		449.7	34.06	15316.78	
Pilot		200	108.75	21750.00	
Passenger	none	0	108.75	0.00	
Fuel	(65.2 gals)	398.7	83.51	33295.44	
Oil	12qts	0	36.5	0.00	
Baggage	none	0	132.2	0.00	
Other	includes one headsets	0	0	0.00	
Removed Battery		-26	72	-1872	
Removed Vac Pump		-2.3	53	-121.9	
Removed att,hsi,wires. & More		-20.1	79	-1587.9	
Removed Slaving Amp		-4.5	161	-724.5	
Removed Gyro		-5	173	-865	
Removed Magnamometer		-1.5	166	-249	
Removed VOR/LOC Amp		-1.2	193	-231.6	
Install GTN-650 + 2x G-5 instr.		7.5	79	592.5	
<b>TOTAL</b>	<b>sum of column</b>	<b>2244.2</b>	<b>1573.52</b>	<b>182387.19</b>	<b>81.27</b>
<b>Max Gross</b>	<b>2500</b>				
<b>useful remaining</b>	<b>255</b>				
<b>Datum</b>	<b>derived with plumb bobs</b>				
<b>C.G. this flight</b>	<b>0.00</b>				
<b>C.G. range, inches</b>	<b>79.65 - 87.88</b>				
<b>C.G. range, % MAC</b>	<b>10.0% - 28.5%</b>				
Ref datum is 60" fwd of cowl split					
first flew	12/24/98				

Full + 1 Pilot

Original weigh CAFE	Scale A	Scale B			
Empty	449.7	1248.7	1900.6		
W/ 40 gals	491.55	1450.9	1942.45		
w/65.2	502.8	1594.5	2097.3		

N23P Full Fuel

Full fuel-After GPS Upgrade					
N 23P	Dec. 12th 1998	Weight	Arm	Moment	C.G., in.
Main gear		1248.9	93.75	117084.38	
Nose gear		449.7	34.06	15316.78	
Pilot		0	108.75	0.00	
Passenger	none	0	108.75	0.00	
Fuel	(65.2 gals)	398.7	83.51	33295.44	
Oil	12qts	0	36.5	0.00	
Baggage	none	0	132.2	0.00	
Other	includes one headsets	0	0	0.00	
Removed Battery		-26	72	-1872	
Removed Vac Pump		-2.3	53	-121.9	
Removed att,hsi,wires. & More		-20.1	79	-1587.9	
Removed Slaving Amp		-4.5	161	-724.5	
Removed Gyro		-5	173	-865	
Removed Magnamometer		-1.5	166	-249	
Removed VOR/LOC Amp		-1.2	193	-231.6	
Install GTN-650 + 2x G-5 instr.		7.5	79	592.5	
<b>TOTAL WT</b>	<b>sum of column</b>	<b>2044.2</b>	<b>1573.52</b>	<b>160637.19</b>	<b>78.58</b>
Empty wt.	1698.6				
Max gross wt	2500				
useful load	801.4				
useful remaining	455.8				
C.G. this flight	78.58				
C.G. range, inches	79.65 - 87.88				
C.G. range, % MAC	10.0% - 28.5%				
Ref datum is 60" fwd of cowl split					

N23P Full Fuel

first flew	12/24/98				
Original Weigh CAFE	Scale A	Scale B			
Empty	449.7	1248.7			
W/ 40 gals	491.55	1450.9			
w/65.2	502.8	1594.5			

N23P 40 GAL

After GPS Upgrade-40 Gal					
N 23P	Dec. 12th 1998	Weight	Arm	Moment	C.G., in.
Main gear		1248.9	93.75	117084.38	
Nose gear		449.7	34.06	15316.78	
Pilot		0	108.75	0.00	
Passenger	none	0	108.75	0.00	
Fuel	(40 gals)	243.45	83.51	20330.51	
Oil	12qts	0	36.5	0.00	
Baggage	none	0	132.2	0.00	
Other	includes one headsets	0	0	0.00	
Removed Battery		-26	72	-1872	
Removed Vac Pump		-2.3	53	-121.9	
Removed att,hsi,wires. & More		-20.1	79	-1587.9	
Removed Slaving Amp		-4.5	161	-724.5	
Removed Gyro		-5	173	-865	
Removed Magnamometer		-1.5	166	-249	
Removed VOR/LOC Amp		-1.2	193	-231.6	
Install GTN-650 + 2x G-5 instr.		7.5	79	592.5	
<b>TOTAL WT</b>	<b>sum of column</b>	<b>1888.95</b>	<b>1573.52</b>	<b>147672.27</b>	<b>78.18</b>
Empty wt.	1698.6				
Max gross wt	2500				
useful load	801.4				
C.G. this flight	78.18				
C.G. range, inches	79.65 - 87.88				
C.G. range, % MAC	10.0% - 28.5%				
Ref datum is 60" fwd of cowl split					
first flew	12/24/98				

N23P 40 GAL

Original Weigh CAFE	Scale A	Scale B			
Empty	449.7	1248.7	1698.4		
W/ 40 gals	491.55	1450.9	1942.45		
w/65.2	502.8	1594.5	2097.3		



Most Aft

Most Aft= 2 People+100lbs			
10Gal 400 LB Pilot	4/3/18	Weight	Arm
Main gear		1248.9	93.75
Nose gear		449.7	34.06
Pilot	est.	200	108.75
Passenger	est.	200	108.75
Fuel	10 gals	60	83.51
Oil	12qts	0	36.5
Baggage	est.	100	132.2
Other	includes one headsets	0	0
Removed Battery		-26	72
Removed Vac Pump		-2.3	53
Removed att,hsi,wires. & More		-20.1	79
Removed Slaving Amp		-4.5	161
Removed Gyro		-5	173
Removed Magnamometer		-1.5	166
Removed VOR/LOC Amp		-1.2	193
Install GTN-650 + 2x G-5 instr.		7.5	79
<b>TOTAL WT</b>	<b>sum of column</b>	<b>2205.5</b>	<b>1573.52</b>
Empty wt.	1698.6		
Max gross wt	2500		
useful load	801.4		
useful remaining	294.5		
Datum	derived with plumb bobs		
C.G. this flight	85.73		
C.G. range, inches	79.65 - 87.88		
C.G. range, % MAC	10.0% - 28.5%		
Ref datum is 60" fwd of cowl split			
first flew	12/24/98		
Original weigh CAFE	Scale A	Scale B	Total
Empty	449.70	1248.70	1698.40
W/ 40 gals	491.55	1450.90	1942.45
w/65.2	502.80	1594.50	2097.30



After GPS Upgrade-Empty					
<b>N 23P</b>	<b>April 1st, 2018</b>	<b>Weight</b>	<b>Arm</b>	<b>Moment</b>	<b>C.G., in.</b>
<b>Main gear</b>		1248.9	93.75	117084.375	
<b>Nose gear</b>		449.7	34.06	15316.782	
<b>Pilot</b>		0	108.75	0	
<b>Passenger</b>	none	0	108.75	0	
<b>Fuel</b>	empty	0	83.51	0	
<b>Oil, inc empty wt</b>	12qts	0	36.5	0	
<b>Baggage</b>	none	0	132.2	0	
<b>Other</b>	includes one headsets	0	0	0	
<b>Removed Battery</b>		-26	72	-1872	
<b>Removed Vac Pump</b>		-2.3	53	-121.9	
<b>Removed att, hsi, wires. &amp; More</b>		-20.1	79	-1587.9	
<b>Removed Slaving Amp</b>		-4.5	161	-724.5	
<b>Removed Gyro</b>		-5	173	-865	
<b>Removed Magnamometer</b>		-1.5	166	-249	
<b>Removed VOR/LOC Amp</b>		-1.2	193	-231.6	
<b>Install GTN-650 + 2x G-5 instr.</b>		7.5	79	592.5	
<b>TOTAL</b>	<b>sum of column</b>	<b>1645.5</b>	<b>1573.52</b>	<b>127341.757</b>	<b>77.39</b>
<b>Empty wt.</b>		<b>1645.5</b>			
<b>gross weight</b>		<b>2500</b>			
<b>Gross weight, Landing</b>		<b>2500</b>			
<b>useful load</b>		<b>854.5</b>			
<b>C.G. this flight</b>		<b>77.39</b>			
<b>C.G. in % MAC</b>					
<b>C.G. range, inches</b>	79.65 - 87.88				
<b>C.G. range, % MAC</b>	10.0% - 28.5%				
<b>C.G. range %</b>					
Ref datum is 60" fwd of cowl split					
first flew	12/24/98				