

Full + 2 Pilots

Full fuel+2 People					
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	est.	200	108.75	21750.00	
Passenger	est.	150	108.75	16312.50	
Fuel	(65.2 gals)	398.7	83.51	33295.44	
Oil	12qts	0	36.5	0.00	
Baggage	est.	50	132.2	6610.00	
Other	includes one headsets	0	0	0.00	
TOTAL WT	sum of column	2497.3	597.52	210369.09	84.24
Empty wt.	1698.6				
Max gross wt	2500				
useful load	801.4				
useful remaining	2.7				
Datum =	derived with plumb bobs				
C.G. this flight	84.24				
C.G. range, inches	79.65 - 87.88				
C.G. range, % MAC	10.0% - 28.5%				
C.G. range %					
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

--	--	--	--	--	--

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	
TOTAL	sum of column	2244.2	1573.52	182387.19	81.27
Max Gross	2500				
useful remaining	255				
Datum	derived with plumb bobs				
C.G. this flight	0.00				
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				

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	
TOTAL WT	sum of column	2044.2	1573.52	160637.19	78.58
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	
TOTAL WT	sum of column	1888.95	1573.52	147672.27	78.18
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
TOTAL WT	sum of column	2205.5	1573.52
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

Most Aft

Moment	C.G., in.
117084.38	
15316.78	
21750.00	
21750.00	
5010.60	
0.00	
13220.00	
0.00	
-1872	
-121.9	
-1587.9	
-724.5	
-865	
-249	
-231.6	
592.5	
189072.36	85.73

After GPS Upgrade-Empty					
N 23P	April 1st, 2018	Weight	Arm	Moment	C.G., in.
Main gear		1248.9	93.75	117084.375	
Nose gear		449.7	34.06	15316.782	
Pilot		0	108.75	0	
Passenger	none	0	108.75	0	
Fuel	empty	0	83.51	0	
Oil, inc empty wt	12qts	0	36.5	0	
Baggage	none	0	132.2	0	
Other	includes one headsets	0	0	0	
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	
TOTAL	sum of column	1645.5	1573.52	127341.757	77.39
Empty wt.		1645.5			
gross weight		2500			
Gross weight, Landing		2500			
useful load		854.5			
C.G. this flight		77.39			
C.G. in % MAC					
C.G. range, inches	79.65 - 87.88				
C.G. range, % MAC	10.0% - 28.5%				
C.G. range %					
Ref datum is 60" fwd of cowl split					
first flew	12/24/98				