



**UNIVERSITY OF OKLAHOMA**  
**PA-44 Weight and Balance / Performance Sheet**

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

V <sub>S</sub>	V <sub>MC</sub>	V <sub>SO</sub>	V <sub>X</sub>	V <sub>XSE</sub>	V <sub>Y</sub>	V <sub>YSE</sub>	V <sub>a/Vo</sub>	V <sub>FE</sub>	V <sub>LE</sub>	V <sub>NE</sub>
57	56	55	82	82	88	88	POH	111	140	202

V <sub>REF</sub>		V <sub>LO</sub>		V <sub>R</sub>
Flaps up: 80-90	Flaps Down: 75-85	UP: 109	DOWN: 140	Normal: 75 / Short: 70

**Weight and Balance**

ITEM	WEIGHT X	ARM =	MOMENT
Basic Empty Weight			
Pilot and Front Passenger		80.5	
Passengers—Rear Seats		118.1	
Baggage (200 Lbs. Limit)		142.8	
Equals Zero Fuel Weight			
Fuel [108 gallons Max. Usable]		95.0	
Equals Ramp Weight (3816 lb. Max.)			
(Taxi Burn-off)	-16.0	95.0	-1520
Equals Take-off Weight			
(Fuel Consumed in Flight)		95.0	
Equals Landing Weight			
Maximum Take-off Weight: <b>3800 lbs.</b> ⇨ Forward C.G. Limit: <b>84.0</b> Aft C.G. Limit: <b>93.0</b> Maximum Landing Weight: <b>3800 lbs.</b> *Verify that both Take off and Landing Weights and Moments are Within Limits (Use POH)			

**Surface Weather**

Wind.....  
Visibility.....  
Sky Conditions..  
Temperature.....  
Altimeter.....

**Compute**

Pressure Alt.....  
Density Alt.....  
X-Wind.....  
Head Wind.....

\*Demonstrated X-Wind Component: 17 kts.

**Additional Weather**

Temp. @ TPA..  
[Use standard lapse rate]

**Winds and Temp. Aloft:**

3000'...  
6000'...  
9000'...  
12000'...  
Interpolate for Cruise Alt.

TAS @ Cruise Alt.\_\_\_\_\_

**Weight Shift Change Formula:**

$$\frac{\text{Big Weight}}{\text{Little Weight}} = \frac{\text{Big Distance}}{\text{Little Distance}}$$

Big Weight = Gross Weight  
Big Distance = How far item is moved  
Little Weight = Item being moved  
Little distance =How far CG must move

**Fuel = 6 lbs. / Gal.**

**Temperature Conversion:**

C = (F - 32) X 5/9

F = (1.8 X C) + 32

**Performance**

Accelerated Stop Distance		Single Engine Service Ceiling	
Take-off Distance		Single Engine Absolute Ceiling	
Take-off Distance Over 50' obstacle		Landing Distance Over 50' obstacle	
M.E. Rate of Climb—Gear Down		Landing Distance	
M.E. Rate of Climb—Gear Up		<b>Traffic Pattern Altitude</b>	
Multi Engine Service Ceiling		Pressure Altitude @ TPA	
Multi Engine Absolute Ceiling		Density Altitude @ TPA	
Single Engine Rate of Climb		Single Engine Rate of Climb @ TPA	

OU Flight Risk Assessment Tool – RISK FORM (FRAT)				Fly As A Champion!	
21-May-2024					
Points to apply→	1	2	3	4	5
Risk Area					RATING
Crew	Dual w/CFI	Two Pilots	Solo		
Rest in last 24 hours	>8 hours	6.1 to 8 hours	5.1 to 6 hours	4.1 to 5 hours	<4 hours
Sleep was restful	Yes		Partially		No
Health	No issues		Recovering		Health Issues
Last use of medicine	>48 hours		25 to 48		12 to 24
8-12 hrs Alcohol	None		Some 9-12		Some 8-9
	NO ALCOHOL 8 hours prior!				
Heat Index	<95	95 to 99	100 to 104		>105
External stressors	Few		Several		Many
Flight Type	VFR	MVFR	IFR		LIFR
Day or Night	Day		Night Full Moon		No Moon
Visibility	> 5 Miles	3-5 Miles	< 3 Miles		< 1 Mile
Ceiling	>10,000	5K - 9K	3K - 4K	1K - 2K	<1K
Winds	<10 kts	10-15 kts	>15 kts	>20 kts	>30 kts
X wind actual	0-5 kts		6-10 kts		>16 kts
X wind fcst	* If increasing with time beyond 15 kts must talk with CFI				
WX Stability	Stable		Slow deter		Possible Rapid
Destination	Familiar			Unfamiliar	
	* If Unfamiliar - Solo - must discuss with CFI				
OU Variant acft	Crm 1-11, 13	TAA, CRM 21	Crm 37, 38, 39		
Aircraft Mx Status	Clean		Recent Write up		
Hours in type	>200	151-200	100-150	50-99	<50
Flight hrs last 90 days	>20	15 to 20	10 to 14	5 to 9	<5
Total Flight Time	>500	251-500	100-250	20-99	<20
Read NOTAMS and PRF	Yes				No
TOTAL RISK SCORE →					
No unusual hazards. Use normal flight planning & establish personal mins & operating procedures					22 - 45
Some additional Risk - Talk to Your CFI and Dispatcher about Risk areas. Conduct flight planning with extra care. Review personal mins and operations procedures - mitigate risk areas if possible. (change airport/change planes/etc) YELLOW AREA					46 - 51 Or 5 in any row
Higher Risk. Must get approval of Sup. of Ops/fleet for flight. Conduct flight planning w/extra care. Review elements to ID those that could be modified to reduce risk. Develop contingency plans before takeoff for items. Decide before flight on alt. and consider special precautions to take. Consider delaying flight until risk conditions are reduced. RED AREA					>51 Or two 5's
Reference FAA.Gov Risk Management Handbook					
PIC Signature :		If Yel or Red: Assistant Chief Sign:			
CFI Name (Print):		PRF#			