

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

NAME:	
DATE:	

$\mathbf{v}_{\mathbf{s}}$	V_{MC}	Vso	Vx	VXSE	$\mathbf{V}_{\mathbf{Y}}$	Vyse	$\mathbf{V}_{\mathbf{A}}$	$\mathbf{V}_{\mathbf{FE}}$	$\mathbf{V}_{ ext{LE}}$	V_{NE}
57	56	55	82	82	88	88	112-135	111	140	202

Vref			$\mathbf{V}_{\mathbf{LO}}$	$\mathbf{V}_{\mathbf{R}}$		
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 (N380U)	2652.3	86.4312	229241.6
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: **3800 lbs.** ⇒ Forward C.G. Limit: **84.0** Aft C.G. Limit: **93.0**

Maximum Landing Weight: 3800 lbs.

*Verify that both Take off and Landing Weights and Moments are Within Limits (Use POH)

Surface Weather	Additional Weather
Wind	Temp. @ TPA
Visibility	[Use standard lapse rate]
Sky Conditions	
Temperature	Winds and Temp. Aloft:
Altimeter	3000'
Compute	6000'
Pressure Alt	9000' 12000'
Density Alt	Interpolate for Cruise Alt.
X-Wind	interpolate for erange rate.
Head Wind	
*Demonstrated X-Wind Component: 17 kts	TAS @ Cruise Alt

Weight Shift Change Formula:

Big Weight **Big Distance** Little Weight = 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.

 $\frac{\textbf{Temperature Conversion:}}{C = (F - 32) \ X \ 5/9}$ 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	Traffic Pattern Altitude
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 A	ssessment 1	rool – RISK I	FORM (FRAT)		Fly As A Cha	mpionl
21-May-2024						
Points to apply—>	1	2	3	4	5	RATING
<u>Risk Area</u>						
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	Y≊		Partially		No	
Health	No issues		Recovering	1	Health Issues	
Last use of medicine	>48 hou <i>r</i> s		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	3 K - 4K	1K-2K	<1K	
Winds	<10 km	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	g with time beyo	ond 15 kts must ta	k with CFI		
WX Stability	Stable		Slow deter		Possible Rapid	
Destination	Pamiliar			Unfamiliar		
	* If Unfamilia	r - Solo - must o	fiscuss 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	5 CORE				>	
No unu sual hazards. U	se normal fligt	nt planning & es	tablish personal m	ins & operating	procedures	22 - 45
Some additional Risk -	Talk to Your C	Fland Dispatch	erabout Riskarea	5.		46 - 51
Conduct flight plannin	g with extra c	are. Review pe	rsonal mins and op	erations proce	dures -	Or 5 in
mitigate risk areas if possible. (change airport/change planes/etc) YELLOW AREA						any row
Higher Risk Must get approval of Sup. of Ops/fleet for flight. Conduct flight planning w/extra care.						>51
Review elements to ID those that could be modified to reduce risk. Develop contingency plans						Or two 5's
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						
Reference FAA.G ov Risk Management Handbook						
PIC Signature: If Yel or Red: Assistant Chief Sign:						
CFIName (Print):			P RF#			