

# W&B / PREFLIGHT COMPUTATIONS – Generic Twin

ITEM	WEIGHT	×	ARM	=	MOMENT ÷ 1000
Basic Empty Weight		×		=	
Front Seats 1, 2		×		=	
Middle Seats 3, 4		×		=	
Rear Seats 5-7		×		=	
Front Baggage					
Nacelle Baggage		×		=	
Rear Baggage		×		=	
Other					
Other					
Zero Fuel Weight*					
Mains (_____ gal. Max.)					
Aux. (_____ gal. Max.)					
<b>TOTALS</b>					
<b>TAKEOFF</b> Weight (MTOW)	WEIGHT	×	ARM	=	MOMENT

TAKEOFF CG OK? Y / N	FWD	MID	AFT		
Fuel Burn Mains		×		=	
Fuel Burn Auxiliaries		×		=	
<b>TOTALS LANDING</b>	WEIGHT		ARM		MOMENT

LANDING CG OK?	FWD	MID	AFT
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<b>PERFORMANCE:</b>	Pressure Altitude: _____	Temp: _____ °F
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Worst Case Scenario (WCS) (based on MTOW, 100°F, 5000' pressure altitude, 5 kts tailwind):  
 WCS T.O. over 50' obstacle (2 Eng.): \_\_\_\_\_; WCS T.O. 1 Engine: \_\_\_\_\_  
 WCS Climb Rate (2 Eng.): \_\_\_\_\_; WCS Climb Rate 1 Engine: \_\_\_\_\_

Today's Values:	CHART	%	PILOT	=	REALITY
Normal Takeoff Distance over 50 ft.	_____ ft	×	___	=	_____ ft
Accelerate Stop Distance (Decision Speed: _____)	_____ ft	×	___	=	_____ ft
Single Engine Takeoff Distance	_____ ft	×	___	=	_____ ft
Single Engine Climb Rate	_____ fpm	×	___	=	_____ fpm
Single Engine Service Ceiling	_____ ft	×	___	=	_____ ft
Landing Distance over 50 ft.	_____ ft	×	___	=	_____ ft

<b>FUEL MANAGEMENT:</b>	TOTAL USEABLE FUEL AVAILABLE THIS FLIGHT – MAINS (OUTBOARDS):	_____ gal.
	TOTAL USEABLE FUEL AVAILABLE THIS FLIGHT – AUX. (INBOARDS):	_____ gal.

In-Flight Fuel Management								
FUEL TANKS	Start Time	End Time	Elapsed Time	GPH	Fuel Used	Fuel Remaining	Start Taxi Takeoff	Fuel Remaining
OUTBOARDS	:	:	:		-		- 4 gal.	
INBOARDS	:	:	:		-		N/A	

## "V" SPEEDS

**Emergency & Critical:**

V<sub>MC</sub> \_\_\_\_\_ Kts

V<sub>SSE</sub> \_\_\_\_\_ Kts

V<sub>XSE</sub> \_\_\_\_\_ Kts

V<sub>YSE</sub> \_\_\_\_\_ Kts

V<sub>FE (0°-27°)</sub> \_\_\_\_\_ Kts

V<sub>LE</sub> \_\_\_\_\_ Kts

Best Glide \_\_\_\_\_ Kts

V<sub>A (\_\_\_\_\_ lbs.)</sub> \_\_\_\_\_ Kts

V<sub>A (\_\_\_\_\_ lbs.)</sub> \_\_\_\_\_ Kts

**Normal Takeoff:**

Flaps set \_\_\_\_\_ °

V<sub>R</sub> \_\_\_\_\_ Kts

V<sub>y</sub> \_\_\_\_\_ Kts

V<sub>rc</sub> \_\_\_\_\_ Kts

**Max Performance Takeoff:**

Flaps set \_\_\_\_\_ °

V<sub>R</sub> \_\_\_\_\_ Kts

V<sub>X</sub> \_\_\_\_\_ Kts

V<sub>Y</sub> \_\_\_\_\_ Kts

V<sub>RC</sub> \_\_\_\_\_ Kts

\*A specific zero fuel weight may not have been established for every aircraft.