



## CRITICAL NUMBERS: C172 C-GKYA

OPERATING SPEEDS	SPEEDS
Normal Takeoff	80 KTS
Best Rate of Climb	72 KTS (@ 2000 AGL)
Best Angle of Climb (Obstacles)	60 KTS (@2000 AGL)
Enroute Normal	70-80 KTS
Balked Approach (Overshoot)	FLAPS 20 65 KNOTS
Base Turn:	80 KTS
Normal Approach & Landing (0° Flaps)	60-70 with Flaps
Normal Approach & Landing (Flaps 30°)	55-65 (We recommend 60-65)
Steep Turns	Min. 95 knots
Precautionary Landing Procedures	75 & 10 Flaps
Forced Approach (Best Glide Speed)	65 KTS
<b>RANGES:</b>	
Caution Range	128-169 KTS
Normal Operating Range	47-128 KTS
Flap Operating Range	45-85 KTS
Maximum Demonstrated Crosswind	15 KTS at 90 °
<b>PERFORMANCE</b>	
Approx. Economy Cruise Speed	100 knots
Approx. Takeoff Roll based on Notes in POH.	1,000'
Max Range:	600 nm.
Service Ceiling	14,200'

CRITICAL NUMBERS	QUANTITY	
Stall Speed: $V_s$ No Flaps, No Power	47 KTS	
Stall Speed: $V_{so}$ With Full Flaps, No Power	41 KTS	
Best Glide Speed (no Flaps)	65 KTS	
Caution Range	128-160 KTS	
$V_{NE}$ : Never Exceed Speed	160 KTS	
Maximum Structural Cruising Speed	128 KTS	
Maximum Flap Extension Speed	85 KTS	
<b>Balked Approach (Overshoot)</b>		
Maneuvering Speed (Max. Speed in which guaranteed maximum control inputs, ie. Fly below this speed in turbulence etc.)	<b>WEIGHT</b>	<b>SPEED</b>
	2300 lbs.	97 KTS
	1950 lbs.	89 KTS
1600 lbs.	80 KTS	
Flight School Recommend MIN. SLOW SPEED	65 KTS	
MTOW (Max. Take Off Weight) Normal Category	2300 lbs.	
MTOW (Max. Take Off Weight) Utility Category	2000 lbs.	
<b>EQUIPMENT</b>		
Propeller Type:	Fixed Pitch.	
Avionics:	G3X, G5, GNX 375, GTN650 Xi.	
Engine Type and BHP:	Lycoming O-320-H2Hd	
Ramp Weight:		
Landing Weight:	2400 Normal Category 2100 Utility Category	
Useful Load:	915.80 lbs.	