

## General Airspeed Terminology and Symbols

<b>CAS</b>	Calibrated Airspeed means the indicated speed of an aircraft corrected for position and instrument error, Calibrated airspeed is equal to true airspeed in standard atmosphere as sea level.
<b>KCAS</b>	Calibrated Airspeed expressed in Knots
<b>GS</b>	Ground Speed - the speed of an airplane relative to the ground.
<b>IAS</b>	Indicated Airspeed- the speed of an aircraft as shown on the airspeed indicator when corrected for instrument error. IAS values assume zero instrument errors.
<b>KIAS</b>	Indicated Airspeed expressed in Knots
<b>TAS</b>	True Airspeed is the airspeed of an airplane relative to undisturbed air, which is the CAS corrected for altitude, temperature and compressibility.
<b>VA</b>	Maneuvering Speed is the maximum speed at which application of full available aerodynamic control will not overstress the aircraft
<b>KTAS</b>	True Airspeed expressed in knots
<b>VFE</b>	Maximum flap extended speed – highest permissible with wing flaps in a prescribed extended position
<b>VLE</b>	Maximum Landing Gear Extended Speed is the maximum speed at which an aircraft can be safely flown with the landing gear extended.
<b>VLO</b>	Maximum Landing Gear Operating Speed is the maximum speed at which the landing gear can be safely extended or retracted.
<b>VMCA</b>	Air Minimum Control Speed is the minimum flight speed at which the airplane is directionally controllable as determined in accordance with Federal Aviation Regulations. Airplane certification conditions include one engine becoming inoperative and wind milling; not more than a 5° bank towards the operative engine; takeoff power on operative engine; landing gear up- flaps in takeoff position; and most rearward CG.
<b>VNE</b>	Never Exceed Speed is the speed limit that may not be exceeded at any time.
<b>VNO</b>	Maximum Structural Cruising Speed is the speed that should not be exceeded except in smooth air and then only with caution.
<b>VS</b>	Stalling Speed or the minimum steady flight speed at which the airplane is controllable.
<b>VSO</b>	Stalling Speed or the minimum steady flight speed at which the airplane is controllable in the landing configuration.
<b>Accelerate-Stop</b>	The distance required to accelerate an airplane to a specified speed and, assuming failure of an engine at the instant that speed is attained to bring the

<b>Distance</b>	airplane to a stop.
<b>Route Segment</b>	A part of a route. Each end of that part is identified by (1) a geographical location, or (2) a point at which a definite radio fix can be established.